

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 21:59:59  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

<b>C Number:</b>	C92003
<b>Lock Date:</b>	04/27/1994
<b>Cage Range:</b>	All
<b>Date Range:</b>	All
<b>Reasons For Removal:</b>	All
<b>Removal Date Range:</b>	All
<b>Treatment Groups:</b>	All
<b>Study Gender:</b>	Both
<b>PWG Approval Date</b>	NONE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 21:59:59  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 300	<b>TRT#:</b> 2 <b>DOSE:</b> 9M	<b>SEX:</b> Male <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 735 <b>HISTO:</b> 92-1195-300
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Medulla	* Heart	* Lung	* Lymph Node, Mandibular
* Lymph Node, Mesenteric	* Pancreas	* Pituitary Gland	* Testes
* Thymus	* Urinary Bladder		

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**OBSERVATIONS**

* Adrenal Cortex	Capsule	Hyperplasia	Mild
		Hypertrophy	Mild
* Islets, Pancreatic		Hyperplasia	Marked
* Kidney		Nephropathy	Minimal
* Liver		Hepatocellular Adenoma	
[ Hepatocellular Adenoma TGLS = 3-7 ]			
* Spleen		Hemangiosarcoma	
		Thrombosis	Minimal
[ Hemangiosarcoma TGLS = 1-4 ]			
[ Thrombosis TGLS = 2-4 ]			
* Thyroid Gland	Follicular Cel	Hyperplasia	Mild

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 92003-02  
 Test Type: CHRONIC  
 Species/Strain: Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
 Test Compound: NTP 90 diet study  
 CAS Number: DIET90

Date Report Requested: 10/21/2014  
 Time Report Requested: 21:59:59  
 First Dose M/F: NA / NA  
 Lab: NIEHS

<b>ANIMAL ID:</b> 302	<b>TRT#:</b> 1 <b>DOSE:</b> 7M	<b>SEX:</b> Male <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 734 <b>HISTO:</b> 92-1195-302
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**ORGAN AND ACCOUNTABLE SITE STATUS**

<b>NORMAL</b>			
* Adrenal Medulla	* Heart	* Lymph Node, Mandibular	* Pancreas
* Spleen	* Testes	* Urinary Bladder	

<b>MISSING</b>			
* Pituitary Gland	* Thymus		

<b>OBSERVATIONS</b>			
* Adrenal Cortex	Capsule	Hyperplasia Hypertrophy	Mild Mild
* Islets, Pancreatic		Hyperplasia	Marked
* Kidney		Metaplasia Nephropathy	Osseous, Minimal Minimal
* Liver		Hepatocellular Carcinoma	
[ Hepatocellular Carcinoma TGLS = 1-7 ]			
* Lung		Alveolar/Bronchiolar Adenoma Hepatocellular Carcinoma	Metastatic (Liver)
	Alveolar Epith	Hyperplasia	Moderate
* Lymph Node, Mesenteric		Erythrophagocytosis	Mild
Seminal Vesicle		Hypertrophy	Marked
[ Hypertrophy TGLS = 2-8 ]			
* Thyroid Gland	Follicular Cel	Hyperplasia	Minimal

<b>PRIMARY CAUSE OF DEATH</b>	-
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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 21:59:59  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 303	<b>TRT#:</b> 2 <b>DOSE:</b> 9M	<b>SEX:</b> Male <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 735 <b>HISTO:</b> 92-1195-303
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Medulla	* Lung	* Lymph Node, Mandibular	* Pituitary Gland
* Spleen	* Testes	* Thyroid Gland	* Urinary Bladder

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**OBSERVATIONS**

* Adrenal Cortex	Capsule	Hyperplasia	Mild
* Heart	Coron Artery	Inflammation	Marked
* Islets, Pancreatic		Hyperplasia	Marked
* Kidney		Nephropathy	Mild
* Liver		Hepatocellular Adenoma	
* Lymph Node, Mesenteric		Erythrophagocytosis	Moderate
* Pancreas	Acinus	Degeneration	Focal, Minimal
Seminal Vesicle		Hypertrophy	Moderate
[ Hypertrophy TGLS = 1-7 ]			
* Thymus		Atrophy	Mild

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 21:59:59  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

<b>ANIMAL ID:</b> 306	<b>TRT#:</b> 2 <b>DOSE:</b> 9M	<b>SEX:</b> Male <b>DISP:</b> Natural Death	<b>DAY ON TEST:</b> 717 <b>HISTO:</b> 92-1195-306
<b>ORGAN AND ACCOUNTABLE SITE STATUS</b>			
<b>NORMAL</b>			
* Adrenal Medulla	* Heart	* Lung	* Pancreas
* Spleen	* Testes	* Urinary Bladder	
<b>MISSING</b>			
* Pituitary Gland	* Thymus		
<b>OBSERVATIONS</b>			
* Adrenal Cortex	Capsule	Hyperplasia Hypertrophy	Mild Minimal
* Islets, Pancreatic		Hyperplasia	Marked
* Kidney	Renal Tubule	Dilatation Nephropathy	Mild Minimal
* Liver		Eosinophilic Focus Hepatocellular Adenoma	
	[ Hepatocellular Adenoma TGLS = 1-7 ]		
* Lymph Node, Mandibular		Hyperplasia	Plasma Cell, Marked
* Lymph Node, Mesenteric		Infiltration Cellular	Histiocyte, Minimal
Seminal Vesicle		Hypertrophy	Marked
* Thyroid Gland	Follicular Cel	Hyperplasia	Minimal
<b>PRIMARY CAUSE OF DEATH</b>	- UNCERTAIN		

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 21:59:59  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

<b>ANIMAL ID:</b> 307	<b>TRT#:</b> 2 <b>DOSE:</b> 9M	<b>SEX:</b> Male <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 735 <b>HISTO:</b> 92-1195-307
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**ORGAN AND ACCOUNTABLE SITE STATUS**

<b>NORMAL</b>			
* Adrenal Medulla	* Heart	* Islets, Pancreatic	* Lymph Node, Mandibular
* Pancreas	* Pituitary Gland	* Spleen	* Testes
* Thymus	* Urinary Bladder		

<b>OBSERVATIONS</b>			
* Adrenal Cortex	Capsule	Hyperplasia Hypertrophy	Mild Minimal
* Kidney		Nephropathy	Mild
* Liver		Eosinophilic Focus Hepatocellular Adenoma Hepatocellular Carcinoma	
			[ Hepatocellular Adenoma TGLS = 2-4 ] [ Hepatocellular Carcinoma TGLS = 3-4 ]
* Lung	Alveolus	Alveolar/Bronchiolar Adenoma Infiltration Cellular	Multiple Histiocyte, Marked
			[ Alveolar/Bronchiolar Adenoma TGLS = 4-5 ]
* Lymph Node, Mesenteric		Infiltration Cellular	Histiocyte, Mild
Skin		Melanoma Malignant	
			[ Melanoma Malignant TGLS = 1-7 ]
* Thyroid Gland	Follicular Cel Follicular Cel	Adenoma Hyperplasia	Minimal

**PRIMARY CAUSE OF DEATH** -

Animal Note: L-1 IS IN SKIN OF TAIL NOT THE BONE.

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 21:59:59  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 308	<b>TRT#:</b> 1 <b>DOSE:</b> 7M	<b>SEX:</b> Male <b>DISP:</b> Natural Death	<b>DAY ON TEST:</b> 664 <b>HISTO:</b> 92-1195-308
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**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Heart	* Liver	* Lymph Node, Mandibular	* Lymph Node, Mesenteric
* Pancreas	* Spleen	* Thyroid Gland	* Urinary Bladder

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**MISSING**

* Adrenal Cortex	* Adrenal Medulla	* Pituitary Gland	* Thymus
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**OBSERVATIONS**

* Islets, Pancreatic		Hyperplasia	Marked
* Kidney		Fibrosis	Mild
	Cortex	Mineralization	Mild
Note: TGL 2-NCL			
* Lung		Congestion	Moderate
Seminal Vesicle		Hypertrophy	Marked
[ Hypertrophy TGLS = 1-7 ]			
* Testes		Mineralization	Mild

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**PRIMARY CAUSE OF DEATH** - UNCERTAIN

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Animal Note: FIBROSIS IN KIDNEY IS FOCAL LESION THAT APPEARS TO BE A HEALED INFARCT.

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 92003-02  
Test Type: CHRONIC  
Species/Strain: Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
Test Compound: NTP 90 diet study  
CAS Number: DIET90

Date Report Requested: 10/21/2014  
Time Report Requested: 21:59:59  
First Dose M/F: NA / NA  
Lab: NIEHS

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<b>ANIMAL ID:</b> 310	<b>TRT#:</b> 1 <b>DOSE:</b> 7M	<b>SEX:</b> Male <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 734 <b>HISTO:</b> 92-1195-310
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**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Heart	* Pancreas	* Pituitary Gland
* Spleen	* Testes	* Thyroid Gland	* Urinary Bladder

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**MISSING**

* Lymph Node, Mandibular	* Thymus
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**OBSERVATIONS**

* Adrenal Cortex	Capsule	Hyperplasia Hypertrophy	Mild Moderate
Intestine Large, Cecum [ Hyperplasia TGLS = 3-7 ]		Hyperplasia	Lymphoid, Moderate
* Islets, Pancreatic		Hyperplasia	Marked
* Kidney		Nephropathy	Minimal
* Liver [ Hepatocellular Adenoma TGLS = 1-4,9 ]		Hepatocellular Adenoma	Multiple
* Lung Alveolus [ Alveolar/Bronchiolar Adenoma TGLS = 4-5 ]		Alveolar/Bronchiolar Adenoma Infiltration Cellular	Histiocyte, Marked
* Lymph Node, Mesenteric		Erythrophagocytosis	Mild
Seminal Vesicle [ Hypertrophy TGLS = 5-8 ]		Hypertrophy	Moderate

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PRIMARY CAUSE OF DEATH

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Animal Note: THERE IS NO TGL-2. ENTRY ON THAT LINE WAS AN ERROR.

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\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 21:59:59  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

<b>ANIMAL ID:</b> 311	<b>TRT#:</b> 1 <b>DOSE:</b> 7M	<b>SEX:</b> Male <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 734 <b>HISTO:</b> 92-1195-311
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**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Lung	* Lymph Node, Mandibular	* Pancreas
* Spleen	* Testes	* Urinary Bladder	

**MISSING**

\* Thymus

**OBSERVATIONS**

* Adrenal Cortex	Capsule	Hyperplasia Hypertrophy	Moderate Mild
* Heart		Cardiomyopathy	Minimal
* Islets, Pancreatic		Hyperplasia	Moderate
* Kidney		Nephropathy	Minimal
* Liver		Angiectasis Hemangiosarcoma	Marked
[ Angiectasis TGLS = 4-4 ]			
[ Hemangiosarcoma TGLS = 3-4 ]			
* Lymph Node, Mesenteric		Ectasia Erythrophagocytosis	Mild Mild
Mesentery	Fat	Necrosis	Moderate
[ Necrosis TGLS = 2-8 ]			
* Pituitary Gland	Pars Distalis	Cyst	Minimal
[ Cyst TGLS = 5-2 ]			
Seminal Vesicle		Hypertrophy	Mild
[ Hypertrophy TGLS = 1-7 ]			
* Thyroid Gland	Follicular Cel	Hyperplasia	Minimal

PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 92003-02  
Test Type: CHRONIC  
Species/Strain: Mouse/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA  
Test Compound: NTP 90 diet study  
CAS Number: DIET90

Date Report Requested: 10/21/2014  
Time Report Requested: 21:59:59  
First Dose M/F: NA / NA  
Lab: NIEHS

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ANIMAL ID: 316	TRT#: 1 DOSE: 7M	SEX: Male DISP: Natural Death	DAY ON TEST: 586 HISTO: 92-1195-316
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ORGAN AND ACCOUNTABLE SITE STATUS

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**NORMAL**

* Adrenal Cortex	* Heart	* Pituitary Gland	* Testes
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**MISSING**

* Lymph Node, Mandibular	* Thymus
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**AUTO PRECLUDES DIAG.**

* Adrenal Medulla	* Islets, Pancreatic	* Kidney	* Lymph Node, Mesenteric
* Pancreas	* Spleen	* Thyroid Gland	* Urinary Bladder

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**OBSERVATIONS**

* Liver	Hepatocellular Carcinoma
[ Hepatocellular Carcinoma TGLS = 1-4 ]	
* Lung	Alveolar/Bronchiolar Adenoma Hepatocellular Carcinoma
	Metastatic (Liver)

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PRIMARY CAUSE OF DEATH	- Liver Hepatocellular Carcinoma
CONTRIBUTORY CAUSE OF DEATH	- Lung Hepatocellular Carcinoma Liver

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 21:59:59  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

<b>ANIMAL ID:</b> 318	<b>TRT#:</b> 2 <b>DOSE:</b> 9M	<b>SEX:</b> Male <b>DISP:</b> Natural Death	<b>DAY ON TEST:</b> 713 <b>HISTO:</b> 92-1195-318
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**ORGAN AND ACCOUNTABLE SITE STATUS**

<b>NORMAL</b>	* Heart	* Lung	* Testes	* Thyroid Gland
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**MISSING**  
 \* Thymus

**AUTO PRECLUDES DIAG.**  
 \* Urinary Bladder

**INSUFFICIENT TISSUE**  
 \* Pituitary Gland

<b>OBSERVATIONS</b>				
* Adrenal Cortex	Capsule	Fibrous Histiocytoma	Metastatic (Uncertain Primary Site)	
* Adrenal Medulla		Fibrous Histiocytoma	Metastatic (Uncertain Primary Site)	
* Islets, Pancreatic		Fibrous Histiocytoma	Metastatic (Uncertain Primary Site)	
* Kidney		Necrosis	Marked	
* Liver		Fibrous Histiocytoma	Metastatic (Uncertain Primary Site)	
* Lymph Node, Mandibular		Fibrous Histiocytoma	Metastatic (Uncertain Primary Site)	
* Lymph Node, Mesenteric		Lymphoma Malignant		
[ Lymphoma Malignant TGLS = 1-3 ]		Lymphoma Malignant		
* Pancreas	Acinus	Necrosis	Marked	
* Spleen		Fibrous Histiocytoma	Metastatic (Uncertain Primary Site)	
[ Fibrous Histiocytoma TGLS = 2-4 ]				

<b>PRIMARY CAUSE OF DEATH</b>	- UNCERTAIN
<b>CONTRIBUTORY CAUSE OF DEATH</b>	- Adrenal Cortex Capsule Fibrous Histiocytoma Uncertain Primary Site; Adrenal Cortex Fibrous Histiocytoma Uncertain Primary Site; Adrenal Medulla Fibrous Histiocytoma Uncertain Primary Site; Kidney Fibrous Histiocytoma Uncertain Primary Site; Liver Fibrous Histiocytoma Uncertain Primary Site; Spleen Fibrous Histiocytoma Uncertain Primary Site

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 21:59:59  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

<b>ANIMAL ID:</b> 319	<b>TRT#:</b> 1 <b>DOSE:</b> 7M	<b>SEX:</b> Male <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 734 <b>HISTO:</b> 92-1195-319
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**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Heart	* Lung	* Spleen
* Testes	* Thymus	* Urinary Bladder	

**MISSING**

\* Pituitary Gland

**OBSERVATIONS**

* Adrenal Cortex	Capsule	Hyperplasia Hypertrophy	Mild Mild
* Islets, Pancreatic		Adenoma Hyperplasia	Multiple Marked
* Kidney	Renal Tubule	Dilatation Nephropathy	Mild Mild
[ Dilatation TGLS = 3-6 ]			
* Liver		Eosinophilic Focus Hepatocellular Adenoma	
[ Eosinophilic Focus TGLS = 2-4 ]			
[ Hepatocellular Adenoma TGLS = 1-4 ]			
* Lymph Node, Mandibular		Pigmentation	Mild
* Lymph Node, Mesenteric		Infiltration Cellular	Histiocyte, Minimal
* Pancreas	Acinus	Atrophy Hypertrophy	Minimal Marked
Seminal Vesicle			
[ Hypertrophy TGLS = 4-7 ]			
* Thyroid Gland	Follicle	Cyst	Moderate

PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 92003-02

Test Type: CHRONIC

Species/Strain: Mouse/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: NTP 90 diet study

CAS Number: DIET90

Date Report Requested: 10/21/2014

Time Report Requested: 21:59:59

First Dose M/F: NA / NA

Lab: NIEHS

ANIMAL ID: 321

TRT#: 1

SEX: Male

DAY ON TEST: 734

DOSE: 7M

DISP: Terminal Sacrifice

HISTO: 92-1195-321

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Heart	* Lung	* Lymph Node, Mandibular	* Pancreas
* Pituitary Gland	* Spleen	* Testes	* Urinary Bladder

MISSING

* Adrenal Medulla	* Thymus		
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OBSERVATIONS

* Adrenal Cortex	Capsule	Hyperplasia	Minimal
* Islets, Pancreatic		Hyperplasia	Marked
* Kidney		Nephropathy	Marked
* Liver		Eosinophilic Focus	
		Hemangiosarcoma	
		Hepatocellular Adenoma	
		Hepatocellular Carcinoma	
[ Eosinophilic Focus TGLS = 4-4 ]			
[ Hemangiosarcoma TGLS = 5-4 ]			
[ Hepatocellular Adenoma TGLS = 2-8 ]			
[ Hepatocellular Carcinoma TGLS = 1-4 ]			
* Lymph Node, Mesenteric		Infiltration Cellular	Megakaryocyte, Mild
		Infiltration Cellular	Histiocyte, Mild
Seminal Vesicle		Hypertrophy	Marked
[ Hypertrophy TGLS = 3-7 ]			
* Thyroid Gland	Follicular Cel	Hyperplasia	Minimal

PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 21:59:59  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 323	<b>TRT#:</b> 1 <b>DOSE:</b> 7M	<b>SEX:</b> Male <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 734 <b>HISTO:</b> 92-1195-323
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**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Heart	* Lymph Node, Mandibular	* Pancreas
* Pituitary Gland	* Spleen	* Testes	* Urinary Bladder

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**MISSING**

\* Thymus

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**OBSERVATIONS**

* Adrenal Cortex	Capsule	Hyperplasia	Mild
Intestine Small, Jejunum [ Lymphoma Malignant TGLS = 3-7 ]		Lymphoma Malignant	
* Islets, Pancreatic		Hyperplasia	Marked
* Kidney	Renal Tubule	Dilatation	Moderate
		Nephropathy	Minimal
* Liver		Eosinophilic Focus	
		Hepatocellular Adenoma	
[ Eosinophilic Focus TGLS = 5-4 ] [ Hepatocellular Adenoma TGLS = 4-4 ]			
* Lung		Alveolar/Bronchiolar Adenoma	
* Lymph Node, Mesenteric [ Lymphoma Malignant TGLS = 2-3 ]		Lymphoma Malignant	
Seminal Vesicle [ Hypertrophy TGLS = 1-7 ]		Hypertrophy	Marked
* Thyroid Gland	Follicle	Cyst	Marked

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 21:59:59  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 324	<b>TRT#:</b> 1 <b>DOSE:</b> 7M	<b>SEX:</b> Male <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 734 <b>HISTO:</b> 92-1195-324
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Medulla	* Heart	* Liver	* Lung
* Lymph Node, Mandibular	* Pituitary Gland	* Spleen	* Testes
* Urinary Bladder			

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**MISSING**

\* Thymus

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**OBSERVATIONS**

* Adrenal Cortex	Capsule	Hyperplasia	Minimal
* Islets, Pancreatic		Hyperplasia	Marked
* Kidney	Renal Tubule	Dilatation	Moderate
		Nephropathy	Mild
* Lymph Node, Mesenteric		Erythrophagocytosis	Mild
		Infiltration Cellular	Megakaryocyte, Mild
* Pancreas	Acinus	Atrophy	Minimal
Seminal Vesicle		Infiltration Cellular	Megakaryocyte, Mild
* Thyroid Gland	Follicular Cel	Hyperplasia	Minimal

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 21:59:59  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

<b>ANIMAL ID:</b> 325	<b>TRT#:</b> 2 <b>DOSE:</b> 9M	<b>SEX:</b> Male <b>DISP:</b> Natural Death	<b>DAY ON TEST:</b> 721 <b>HISTO:</b> 92-1195-325
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**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Heart	* Lung	* Lymph Node, Mandibular
* Pancreas	* Pituitary Gland	* Thyroid Gland	* Urinary Bladder

**MISSING**

* Spleen	* Thymus
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**OBSERVATIONS**

* Adrenal Cortex	Capsule	Hyperplasia Hypertrophy	Moderate Moderate
* Islets, Pancreatic		Hyperplasia	Mild
* Kidney	Renal Tubule	Dilatation	Minimal
* Liver		Clear Cell Focus Eosinophilic Focus Hepatocellular Adenoma	
[ Clear Cell Focus TGLS = 2-4 ]			
[ Eosinophilic Focus TGLS = 2-4 ]			
[ Hepatocellular Adenoma TGLS = 1-4 ]			
* Lymph Node, Mesenteric		Erythrophagocytosis	Minimal
Seminal Vesicle		Hypertrophy	Moderate
[ Hypertrophy TGLS = 3-7 ]			
* Testes		Degeneration	Mild

<b>PRIMARY CAUSE OF DEATH</b>	- UNCERTAIN
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\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 21:59:59  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

**ANIMAL ID:** 326

**TRT#:** 2  
**DOSE:** 9M

**SEX:** Male  
**DISP:** Terminal Sacrifice

**DAY ON TEST:** 735  
**HISTO:** 92-1195-326

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Heart	* Lymph Node, Mandibular	* Lymph Node, Mesenteric
* Pancreas	* Pituitary Gland	* Testes	* Thymus
* Thyroid Gland	* Urinary Bladder		

**OBSERVATIONS**

* Adrenal Cortex	Capsule	Hyperplasia	Mild
* Islets, Pancreatic		Hyperplasia	Moderate
* Kidney		Nephropathy	Minimal
* Liver		Clear Cell Focus	
		Hepatocellular Adenoma	
[ Hepatocellular Adenoma TGLS = 2-4 ]			
* Lung		Alveolar/Bronchiolar Adenoma	
* Spleen		Hyperplasia	Lymphoid, Moderate
[ Hyperplasia TGLS = 1-4 ]			

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 21:59:59  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

**ANIMAL ID:** 327

**TRT#:** 2  
**DOSE:** 9M

**SEX:** Male  
**DISP:** Natural Death

**DAY ON TEST:** 645  
**HISTO:** 92-1195-327

**ORGAN AND ACCOUNTABLE SITE STATUS**

**MISSING**

\* Adrenal Cortex                      \* Adrenal Medulla                      \* Pituitary Gland                      \* Thymus

**AUTO PRECLUDES DIAG.**

\* Heart                                      \* Islets, Pancreatic                      \* Kidney                                      \* Liver  
\* Lymph Node, Mandibular              \* Lymph Node, Mesenteric              \* Pancreas                                      \* Spleen  
\* Testes                                      \* Thyroid Gland                              \* Urinary Bladder

**INSUFFICIENT TISSUE**

\* Lung

**OBSERVATIONS**

\* Lung

Note: NEOPLASM, NOS (AUTOLYSIS PRECLUDES FURTHER DIAGNOSIS). TGL 1-NST

**PRIMARY CAUSE OF DEATH**

- UNCERTAIN

Animal Note: LUNG- NEOPLASM, NOS (AUTOLYSIS PRECLUDES FURTHER DX).

Animal Note: ANIMAL TISSUES SEVERELY AUTOLYZED. L-1 IN LIVER NOT DX DUE TO AUTOLYSIS.

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 21:59:59  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 328	<b>TRT#:</b> 2 <b>DOSE:</b> 9M	<b>SEX:</b> Male <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 735 <b>HISTO:</b> 92-1195-328
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**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Heart	* Liver	* Lymph Node, Mandibular
* Lymph Node, Mesenteric	* Pancreas	* Pituitary Gland	* Spleen
* Testes	* Urinary Bladder		

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**MISSING**

\* Thymus

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**OBSERVATIONS**

* Adrenal Cortex	Capsule	Hyperplasia	Mild
Eye		Degeneration	Moderate
[ Degeneration TGLS = 1-7 ]			
Harderian Gland		Adenoma	
[ Adenoma TGLS = 2-7 ]			
* Islets, Pancreatic		Hyperplasia	Mild
* Kidney	Renal Tubule	Dilatation	Moderate
		Nephropathy	Minimal
* Lung		Alveolar/Bronchiolar Adenoma	Multiple
* Thyroid Gland	Follicular Cel	Hyperplasia	Mild

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 92003-02

Test Type: CHRONIC

Species/Strain: Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

Test Compound: NTP 90 diet study

CAS Number: DIET90

Date Report Requested: 10/21/2014

Time Report Requested: 21:59:59

First Dose M/F: NA / NA

Lab: NIEHS

ANIMAL ID: 329

TRT#: 2

SEX: Male

DAY ON TEST: 609

DOSE: 9M

DISP: Natural Death

HISTO: 92-1195-329

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

\* Islets, Pancreatic

\* Lung

\* Lymph Node, Mandibular

\* Pancreas

\* Pituitary Gland

\* Spleen

\* Testes

**MISSING**

\* Adrenal Cortex

\* Adrenal Medulla

\* Thymus

**AUTO PRECLUDES DIAG.**

\* Lymph Node, Mesenteric

**OBSERVATIONS**

\* Heart

Myocardium

Inflammation

Mild

Coron Artery

Mineralization

Minimal

\* Kidney

Nephropathy

Minimal

Note: TGL 3-NCL

\* Liver

Hepatocellular Adenoma

[ Hepatocellular Adenoma TGLS = 1-7 ]

\* Thyroid Gland

Follicle

Cyst

Mild

\* Urinary Bladder

Inflammation

Chronic, Marked

[ Inflammation TGLS = 2-6 ]

PRIMARY CAUSE OF DEATH

- UNCERTAIN

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 92003-02

Test Type: CHRONIC

Species/Strain: Mouse/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: NTP 90 diet study

CAS Number: DIET90

Date Report Requested: 10/21/2014

Time Report Requested: 21:59:59

First Dose M/F: NA / NA

Lab: NIEHS

ANIMAL ID: 331

TRT#: 1

SEX: Male

DAY ON TEST: 707

DOSE: 7M

DISP: Natural Death

HISTO: 92-1195-331

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

\* Adrenal Medulla

\* Lymph Node, Mandibular

\* Pituitary Gland

\* Testes

MISSING

\* Thymus

AUTO PRECLUDES DIAG.

\* Pancreas

\* Urinary Bladder

OBSERVATIONS

\* Adrenal Cortex

Hypertrophy

Mild

\* Heart

Cardiomyopathy

Minimal

\* Islets, Pancreatic

Hyperplasia

Moderate

\* Kidney

Renal Tubule

Dilatation

Mild

Nephropathy

Mild

\* Liver

Hepatocellular Carcinoma

Multiple

[ Hepatocellular Carcinoma TGLS = 1-4,7 ]

\* Lung

Hepatocellular Carcinoma

Metastatic (Liver)

\* Lymph Node, Mesenteric

Erythrophagocytosis

Moderate

Infiltration Cellular

Megakaryocyte, Minimal

\* Spleen

Hematopoietic Cell Proliferation

Moderate

\* Thyroid Gland

Follicular Cel

Hyperplasia

Minimal

PRIMARY CAUSE OF DEATH

- Lung Hepatocellular Carcinoma Liver

CONTRIBUTORY CAUSE OF DEATH

- Liver Hepatocellular Carcinoma

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 21:59:59  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 332	<b>TRT#:</b> 1 <b>DOSE:</b> 7M	<b>SEX:</b> Male <b>DISP:</b> Natural Death	<b>DAY ON TEST:</b> 471 <b>HISTO:</b> 92-1195-332
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Heart	* Testes	* Thymus
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**MISSING**

* Pituitary Gland	* Spleen
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**AUTO PRECLUDES DIAG.**

* Adrenal Medulla	* Islets, Pancreatic	* Kidney	* Lymph Node, Mandibular
* Lymph Node, Mesenteric	* Pancreas	* Thyroid Gland	* Urinary Bladder

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**OBSERVATIONS**

* Adrenal Cortex	Capsule	Hyperplasia	Mild
* Liver		Hepatocellular Adenoma	
[ Hepatocellular Adenoma TGLS = 1-7 ]			
* Lung		Alveolar/Bronchiolar Adenoma	

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<b>PRIMARY CAUSE OF DEATH</b>	- UNCERTAIN
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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 21:59:59  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 333	<b>TRT#:</b> 2 <b>DOSE:</b> 9M	<b>SEX:</b> Male <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 735 <b>HISTO:</b> 92-1195-333
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Medulla	* Heart	* Lymph Node, Mandibular	* Pancreas
* Pituitary Gland	* Spleen	* Testes	* Urinary Bladder

---

**MISSING**

\* Thymus

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**OBSERVATIONS**

* Adrenal Cortex	Capsule	Hyperplasia Hypertrophy	Minimal Minimal
* Islets, Pancreatic		Hyperplasia	Moderate
* Kidney		Nephropathy	Minimal
* Liver		Clear Cell Focus Hepatocellular Adenoma	 Multiple
[ Hepatocellular Adenoma TGLS = 1-4,7 ]			
* Lung		Alveolar/Bronchiolar Adenoma	
* Lymph Node, Mesenteric		Infiltration Cellular	Histiocyte, Minimal
* Thyroid Gland	Follicle	Cyst	Mild

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 92003-02  
Test Type: CHRONIC  
Species/Strain: Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
Test Compound: NTP 90 diet study  
CAS Number: DIET90

Date Report Requested: 10/21/2014  
Time Report Requested: 21:59:59  
First Dose M/F: NA / NA  
Lab: NIEHS

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<b>ANIMAL ID:</b> 335	<b>TRT#:</b> 1 <b>DOSE:</b> 7M	<b>SEX:</b> Male <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 734 <b>HISTO:</b> 92-1195-335
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Medulla	* Liver	* Lymph Node, Mandibular	* Pancreas
* Pituitary Gland	* Testes	* Thymus	* Thyroid Gland
* Urinary Bladder			

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**OBSERVATIONS**

* Adrenal Cortex		Hypertrophy	Mild
* Heart	Myocardium	Mineralization	Minimal
* Islets, Pancreatic		Hyperplasia	Marked
* Kidney	Renal Tubule	Dilatation	Minimal
		Nephropathy	Minimal
* Lung		Alveolar/Bronchiolar Adenoma	Multiple
[ Alveolar/Bronchiolar Adenoma TGLS = 2-5,8 ]			
* Lymph Node, Mesenteric		Infiltration Cellular	Histiocyte, Minimal
Seminal Vesicle		Hypertrophy	Moderate
[ Hypertrophy TGLS = 1-7 ]			
* Spleen		Hyperplasia	Lymphoid, Mild

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 21:59:59  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

<b>ANIMAL ID:</b> 336	<b>TRT#:</b> 1 <b>DOSE:</b> 7M	<b>SEX:</b> Male <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 734 <b>HISTO:</b> 92-1195-336
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**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Heart	* Lung	* Lymph Node, Mandibular
* Pancreas	* Pituitary Gland	* Spleen	* Testes
* Thymus	* Urinary Bladder		

**OBSERVATIONS**

* Adrenal Cortex	Capsule	Hyperplasia Hypertrophy	Moderate Minimal
* Islets, Pancreatic		Hyperplasia	Marked
* Kidney	Pelvis	Hydronephrosis Nephropathy	Moderate Moderate
[ Hydronephrosis TGLS = 2-6 ]			
* Liver		Hepatocellular Adenoma	
* Lymph Node, Mesenteric		Inflammation	Granulomatous, Moderate
[ Inflammation TGLS = 4-3 ]			
Preputial Gland		Hypertrophy	Moderate
[ Hypertrophy TGLS = 1-7 ]			
Seminal Vesicle		Hypertrophy	Marked
[ Hypertrophy TGLS = 3-8 ]			
* Thyroid Gland	Follicular Cel	Hyperplasia	Minimal

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 21:59:59  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 337	<b>TRT#:</b> 2 <b>DOSE:</b> 9M	<b>SEX:</b> Male <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 735 <b>HISTO:</b> 92-1195-337
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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<b>NORMAL</b>			
* Heart	* Kidney	* Lung	* Lymph Node, Mandibular
* Lymph Node, Mesenteric	* Pancreas	* Spleen	* Urinary Bladder
<b>MISSING</b>			
* Adrenal Cortex	* Adrenal Medulla	* Pituitary Gland	* Thyroid Gland
<b>OBSERVATIONS</b>			
* Islets, Pancreatic		Hyperplasia	Marked
* Liver		Clear Cell Focus	Multiple
[ Clear Cell Focus TGLS = 1-4 ]			
Seminal Vesicle		Hypertrophy	Marked
[ Hypertrophy TGLS = 2-7 ]			
* Testes		Mineralization	Minimal
* Thymus	Epithel Cell	Hyperplasia	Moderate
<b>PRIMARY CAUSE OF DEATH</b>	-		

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 21:59:59  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 338	<b>TRT#:</b> 1 <b>DOSE:</b> 7M	<b>SEX:</b> Male <b>DISP:</b> Natural Death	<b>DAY ON TEST:</b> 287 <b>HISTO:</b> 92-1195-338
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**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Heart	* Liver	* Pituitary Gland	* Testes
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**MISSING**

\* Thymus

**AUTO PRECLUDES DIAG.**

* Adrenal Cortex	* Adrenal Medulla	* Islets, Pancreatic	* Kidney
* Lymph Node, Mandibular	* Lymph Node, Mesenteric	* Pancreas	* Spleen
* Thyroid Gland	* Urinary Bladder		

**OBSERVATIONS**

* Lung		Alveolar/Bronchiolar Carcinoma	
	Alveolus	Infiltration Cellular	Histiocyte, Moderate
	[ Alveolar/Bronchiolar Carcinoma TGLS = 1-5 ]		
Pleura		Alveolar/Bronchiolar Carcinoma	Metastatic (Lung)
	[ Alveolar/Bronchiolar Carcinoma TGLS = 2-7 ]		

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**PRIMARY CAUSE OF DEATH** - Lung Alveolar/Bronchiolar Carcinoma

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 21:59:59  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 339	<b>TRT#:</b> 1 <b>DOSE:</b> 7M	<b>SEX:</b> Male <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 734 <b>HISTO:</b> 92-1195-339
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Medulla	* Heart	* Pituitary Gland	* Spleen
* Testes	* Urinary Bladder		

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**MISSING**

* Islets, Pancreatic	* Lymph Node, Mesenteric	* Thymus	* Thyroid Gland
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**OBSERVATIONS**

* Adrenal Cortex	Capsule	Hyperplasia	Moderate
* Kidney	Renal Tubule	Dilatation	Minimal
* Liver		Eosinophilic Focus	Multiple
* Lung		Alveolar/Bronchiolar Adenoma	
* Lymph Node, Mandibular		Infiltration Cellular	Plasma Cell, Moderate
* Pancreas	Acinus	Vacuolization Cytoplasmic	Mild
Seminal Vesicle		Hypertrophy	Marked

[ Hypertrophy TGLS = 1-7 ]

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**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 21:59:59  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 340	<b>TRT#:</b> 2 <b>DOSE:</b> 9M	<b>SEX:</b> Male <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 735 <b>HISTO:</b> 92-1195-340
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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<b>NORMAL</b>			
* Heart	* Lung	* Lymph Node, Mandibular	* Pancreas
* Testes	* Urinary Bladder		
<b>MISSING</b>			
* Adrenal Cortex	* Adrenal Medulla	* Pituitary Gland	* Thymus

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<b>OBSERVATIONS</b>			
* Islets, Pancreatic [ Hyperplasia TGLS = 1-1 ]		Hyperplasia	Moderate
* Kidney		Nephropathy	Mild
* Liver		Angiectasis	Focal, Mild
		Clear Cell Focus	
* Lymph Node, Mesenteric		Infiltration Cellular	Histiocyte, Minimal
Seminal Vesicle [ Hypertrophy TGLS = 2-7 ]		Hypertrophy	Mild
* Spleen		Hemangiosarcoma	
* Thyroid Gland	Follicular Cel	Hyperplasia	Mild

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<b>PRIMARY CAUSE OF DEATH</b>	-
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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 21:59:59  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 341	<b>TRT#:</b> 1 <b>DOSE:</b> 7M	<b>SEX:</b> Male <b>DISP:</b> Natural Death	<b>DAY ON TEST:</b> 729 <b>HISTO:</b> 92-1195-341
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**MISSING**

* Lymph Node, Mandibular	* Pituitary Gland	* Thymus
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**AUTO PRECLUDES DIAG.**

* Adrenal Cortex	* Adrenal Medulla	* Heart	* Islets, Pancreatic
* Kidney	* Liver	* Lung	* Lymph Node, Mesenteric
* Pancreas	* Spleen	* Testes	* Thyroid Gland
* Urinary Bladder			

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**OBSERVATIONS**

Seminal Vesicle	Hypertrophy	Moderate
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**PRIMARY CAUSE OF DEATH** - UNCERTAIN

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Animal Note: SEVERE AUTOLYSIS.

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 21:59:59  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 342	<b>TRT#:</b> 2 <b>DOSE:</b> 9M	<b>SEX:</b> Male <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 735 <b>HISTO:</b> 92-1195-342
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Medulla	* Heart	* Lung	* Lymph Node, Mandibular
* Pancreas	* Pituitary Gland	* Spleen	* Testes
* Thymus	* Urinary Bladder		

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**MISSING**

\* Thyroid Gland

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**OBSERVATIONS**

* Adrenal Cortex	Capsule	Hyperplasia Hypertrophy	Moderate Mild
* Islets, Pancreatic		Hyperplasia	Marked
* Kidney	Renal Tubule	Dilatation	Mild
* Liver		Clear Cell Focus	
* Lymph Node, Mesenteric		Infiltration Cellular	Histiocyte, Minimal
Seminal Vesicle		Hypertrophy	Marked
[ Hypertrophy TGLS = 1-7 ]			

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 21:59:59  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 343	<b>TRT#:</b> 2 <b>DOSE:</b> 9M	<b>SEX:</b> Male <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 735 <b>HISTO:</b> 92-1195-343
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**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Heart	* Lung	* Lymph Node, Mandibular	* Pancreas
* Pituitary Gland	* Spleen	* Testes	* Urinary Bladder

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**MISSING**

* Adrenal Cortex	* Adrenal Medulla	* Thymus	* Thyroid Gland
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**OBSERVATIONS**

* Islets, Pancreatic		Hyperplasia	Marked
* Kidney		Nephropathy	Minimal
* Liver		Clear Cell Focus	
		Eosinophilic Focus	
	Hepatocyte	Necrosis	Marked
Note: TGL 1 INVOLVES NECROSIS WITH FIBROUS ENCAPSULATION, HOWEVER, TERM UNAVAILABLE. [ Necrosis TGLS = 1-7 ]			
* Lymph Node, Mesenteric		Infiltration Cellular	Histiocyte, Mild
Seminal Vesicle		Hypertrophy	Marked
[ Hypertrophy TGLS = 2-8 ]			

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**PRIMARY CAUSE OF DEATH**

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Animal Note: MESENTERY MASS SEEN AT NECROPSY WAS NECROTIC LIVER TISSUE WITH A FIBROUS ENCAPSULATION.

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\* PROTOCOL REQUIRED TISSUE



Experiment Number: 92003-02  
Test Type: CHRONIC  
Species/Strain: Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
Test Compound: NTP 90 diet study  
CAS Number: DIET90

Date Report Requested: 10/21/2014  
Time Report Requested: 21:59:59  
First Dose M/F: NA / NA  
Lab: NIEHS

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<b>ANIMAL ID:</b> 344	<b>TRT#:</b> 2 <b>DOSE:</b> 9M	<b>SEX:</b> Male <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 735 <b>HISTO:</b> 92-1195-344
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Medulla	* Heart	* Lung	* Lymph Node, Mandibular
* Pancreas	* Pituitary Gland	* Spleen	* Testes
* Thyroid Gland	* Urinary Bladder		

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**MISSING**

\* Thymus

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**OBSERVATIONS**

* Adrenal Cortex	Capsule	Hyperplasia Hypertrophy	Minimal Mild
* Islets, Pancreatic		Hyperplasia	Moderate
* Kidney	Renal Tubule	Dilatation	Mild
* Liver	Midzonal	Hepatocellular Adenoma Vacuolization Cytoplasmic	Mild
[ Hepatocellular Adenoma TGLS = 1-4 ]			
* Lymph Node, Mesenteric		Erythrophagocytosis Infiltration Cellular	Moderate Histiocyte, Minimal

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 21:59:59  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

**ANIMAL ID:** 345

**TRT#:** 2  
**DOSE:** 9M

**SEX:** Male  
**DISP:** Natural Death

**DAY ON TEST:** 614  
**HISTO:** 92-1195-345

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

\* Heart

**MISSING**

\* Adrenal Cortex  
\* Lymph Node, Mesenteric  
\* Thymus

\* Adrenal Medulla  
\* Pancreas

\* Islets, Pancreatic  
\* Pituitary Gland

\* Lymph Node, Mandibular  
\* Spleen

**AUTO PRECLUDES DIAG.**

\* Kidney  
\* Urinary Bladder

\* Liver

\* Testes

\* Thyroid Gland

**OBSERVATIONS**

\* Lung

Alveolus

Alveolar/Bronchiolar Adenoma  
Infiltration Cellular  
Hypertrophy

Histiocyte, Moderate  
Moderate

**PRIMARY CAUSE OF DEATH**

- UNCERTAIN

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 21:59:59  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 346	<b>TRT#:</b> 2 <b>DOSE:</b> 9M	<b>SEX:</b> Male <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 735 <b>HISTO:</b> 92-1195-346
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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<b>NORMAL</b>			
* Heart	* Kidney	* Lung	* Lymph Node, Mandibular
* Pancreas	* Spleen	* Testes	* Thyroid Gland
* Urinary Bladder			

---

<b>MISSING</b>			
* Adrenal Medulla	* Lymph Node, Mesenteric	* Pituitary Gland	* Thymus

---

<b>OBSERVATIONS</b>			
* Adrenal Cortex	Capsule	Hyperplasia	Moderate
* Islets, Pancreatic		Hyperplasia	Marked
* Liver		Eosinophilic Focus	
		Hepatocellular Adenoma	
[ Hepatocellular Adenoma TGLS = 2-7 ]			
Seminal Vesicle		Hypertrophy	Marked
[ Hypertrophy TGLS = 1-7 ]			

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<b>PRIMARY CAUSE OF DEATH</b>	-
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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 92003-02  
Test Type: CHRONIC  
Species/Strain: Mouse/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA  
Test Compound: NTP 90 diet study  
CAS Number: DIET90

Date Report Requested: 10/21/2014  
Time Report Requested: 21:59:59  
First Dose M/F: NA / NA  
Lab: NIEHS

ANIMAL ID: 350

TRT#: 2  
DOSE: 9M

SEX: Male  
DISP: Natural Death

DAY ON TEST: 658  
HISTO: 92-1195-350

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

\* Heart \* Lung \* Pancreas \* Testes

MISSING

\* Adrenal Cortex \* Adrenal Medulla \* Lymph Node, Mandibular \* Lymph Node, Mesenteric  
\* Thymus \* Thyroid Gland

AUTO PRECLUDES DIAG.

\* Pituitary Gland \* Spleen \* Urinary Bladder

OBSERVATIONS

\* Islets, Pancreatic Hyperplasia Mild  
\* Kidney Renal Tubule Dilatation Moderate  
\* Liver Nephropathy Mild  
Hepatocellular Adenoma  
Hepatocellular Carcinoma

[ Hepatocellular Adenoma TGLS = 1-4,7 ]

PRIMARY CAUSE OF DEATH - Liver Hepatocellular Carcinoma

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 92003-02  
Test Type: CHRONIC  
Species/Strain: Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
Test Compound: NTP 90 diet study  
CAS Number: DIET90

Date Report Requested: 10/21/2014  
Time Report Requested: 21:59:59  
First Dose M/F: NA / NA  
Lab: NIEHS

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<b>ANIMAL ID:</b> 351	<b>TRT#:</b> 2 <b>DOSE:</b> 9M	<b>SEX:</b> Male <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 735 <b>HISTO:</b> 92-1195-351
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Medulla	* Heart	* Lymph Node, Mandibular	* Lymph Node, Mesenteric
* Pancreas	* Pituitary Gland	* Testes	* Urinary Bladder

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**MISSING**

* Spleen	* Thymus
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**OBSERVATIONS**

* Adrenal Cortex	Capsule	Hyperplasia	Moderate
* Islets, Pancreatic		Hyperplasia	Moderate
* Kidney		Nephropathy	Minimal
* Liver	Hepatocyte, Midzonal	Vacuolization Cytoplasmic	Moderate
* Lung		Alveolar/Bronchiolar Adenoma	
* Thyroid Gland	Follicle	Cyst	Moderate
	Follicular Cel	Hyperplasia	Minimal

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 21:59:59  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 352	<b>TRT#:</b> 1 <b>DOSE:</b> 7M	<b>SEX:</b> Male <b>DISP:</b> Natural Death	<b>DAY ON TEST:</b> 328 <b>HISTO:</b> 92-1195-352
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Medulla	* Heart	* Kidney	* Lung
* Lymph Node, Mandibular	* Lymph Node, Mesenteric	* Pancreas	* Pituitary Gland
* Spleen	* Testes	* Thyroid Gland	* Urinary Bladder

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**MISSING**

\* Thymus

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**OBSERVATIONS**

* Adrenal Cortex	Capsule	Hyperplasia Hypertrophy	Minimal Minimal
* Islets, Pancreatic		Hyperplasia	Moderate
* Liver	Hepatocyte Hepatocyte, Midzonal	Necrosis Vacuolization Cytoplasmic	Moderate Mild

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**PRIMARY CAUSE OF DEATH** - UNCERTAIN

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 21:59:59  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

**ANIMAL ID:** 353

**TRT#:** 2  
**DOSE:** 9M

**SEX:** Male  
**DISP:** Terminal Sacrifice

**DAY ON TEST:** 735  
**HISTO:** 92-1195-353

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Heart	* Lung
* Lymph Node, Mandibular	* Pancreas	* Pituitary Gland	* Spleen
* Testes	* Urinary Bladder		

**MISSING**

\* Thymus

**OBSERVATIONS**

* Islets, Pancreatic		Hyperplasia	Marked
* Kidney	Renal Tubule	Dilatation	Minimal
		Nephropathy	Minimal
* Liver	Bile Duct	Clear Cell Focus	Multiple
		Cyst	Moderate
[ Clear Cell Focus TGLS = 2,3-4 ]			
[ Cyst TGLS = 1-4 ]			
* Lymph Node, Mesenteric		Infiltration Cellular	Histiocyte, Mild
Seminal Vesicle		Hypertrophy	Marked
[ Hypertrophy TGLS = 4-7 ]			
* Thyroid Gland	Follicle	Cyst	Mild
	Follicular Cel	Hyperplasia	Mild

**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 21:59:59  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

**ANIMAL ID:** 354

**TRT#:** 2  
**DOSE:** 9M

**SEX:** Male  
**DISP:** Terminal Sacrifice

**DAY ON TEST:** 735  
**HISTO:** 92-1195-354

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Lung	* Lymph Node, Mandibular	* Lymph Node, Mesenteric
* Pancreas	* Pituitary Gland	* Spleen	* Testes
* Thyroid Gland	* Urinary Bladder		

**MISSING**

\* Thymus

**OBSERVATIONS**

* Adrenal Cortex	Capsule	Hyperplasia	Mild
* Heart	Coron Artery	Inflammation	Mild
* Islets, Pancreatic		Hyperplasia	Moderate
* Kidney		Nephropathy	Mild
* Liver		Hepatocellular Adenoma	
		Mixed Cell Focus	

Note: TGL 3-NCL

[ Hepatocellular Adenoma TGLS = 2-4 ]

[ Mixed Cell Focus TGLS = 1-7 ]

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 21:59:59  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 359	<b>TRT#:</b> 2 <b>DOSE:</b> 9M	<b>SEX:</b> Male <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 735 <b>HISTO:</b> 92-1195-359
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**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

Brain	* Heart	* Lung	* Lymph Node, Mandibular
* Pancreas	* Spleen	* Testes	* Urinary Bladder

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**MISSING**

* Adrenal Cortex	* Adrenal Medulla	* Pituitary Gland	* Thymus
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**OBSERVATIONS**

Brain			
Note: BRAIN DAMAGED BY PROSECTOR, INCORRECTLY NOTED AS GROSS LESION. TGL 1-NCL			
* Islets, Pancreatic		Hyperplasia	Marked
* Kidney		Nephropathy	Minimal
* Liver		Hepatocellular Adenoma	
[ Hepatocellular Adenoma TGLS = 2-7 ]			
* Lymph Node, Mesenteric		Infiltration Cellular	Histiocyte, Mild
Seminal Vesicle		Hypertrophy	Marked
[ Hypertrophy TGLS = 3-7 ]			
* Thyroid Gland	Follicular Cel	Hyperplasia	Minimal

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 92003-02  
 Test Type: CHRONIC  
 Species/Strain: Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
 Test Compound: NTP 90 diet study  
 CAS Number: DIET90

Date Report Requested: 10/21/2014  
 Time Report Requested: 21:59:59  
 First Dose M/F: NA / NA  
 Lab: NIEHS

<b>ANIMAL ID:</b> 361	<b>TRT#:</b> 2 <b>DOSE:</b> 9M	<b>SEX:</b> Male <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 735 <b>HISTO:</b> 92-1195-361
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**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Heart	* Lung	* Lymph Node, Mandibular
* Pituitary Gland	* Spleen	* Testes	* Urinary Bladder

**MISSING**

\* Thymus

**OBSERVATIONS**

* Adrenal Cortex	Capsule	Hyperplasia Hypertrophy	Moderate Minimal
* Islets, Pancreatic		Hyperplasia	Marked
* Kidney		Nephropathy	Minimal
* Liver		Clear Cell Focus Eosinophilic Focus Hepatocellular Adenoma	Multiple Multiple Multiple
[ Clear Cell Focus TGLS = 1-4 ]			
[ Eosinophilic Focus TGLS = 1-4 ]			
[ Hepatocellular Adenoma TGLS = 2,3-4,7 ]			
* Lymph Node, Mesenteric		Infiltration Cellular	Histiocyte, Mild
* Pancreas	Acinus	Cyst	Mild
Seminal Vesicle		Hypertrophy	Marked
[ Hypertrophy TGLS = 4-7 ]			
* Thyroid Gland	Follicle Follicular Cel	Cyst Hyperplasia	Mild Minimal

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 21:59:59  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 362	<b>TRT#:</b> 2 <b>DOSE:</b> 9M	<b>SEX:</b> Male <b>DISP:</b> Natural Death	<b>DAY ON TEST:</b> 710 <b>HISTO:</b> 92-1195-362
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Medulla	* Heart	* Kidney	* Lung
* Pancreas	* Pituitary Gland	* Spleen	* Testes
* Urinary Bladder			

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**MISSING**

* Lymph Node, Mandibular	* Thymus
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**OBSERVATIONS**

* Adrenal Cortex	Capsule	Hyperplasia	Moderate
* Islets, Pancreatic		Hyperplasia	Moderate
* Liver		Eosinophilic Focus	
	Hepatocyte	Necrosis	Mild
* Lymph Node, Mesenteric		Infiltration Cellular	Histiocyte, Mild
* Thyroid Gland	Follicle	Cyst	Mild

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<b>PRIMARY CAUSE OF DEATH</b>	- UNCERTAIN
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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 21:59:59  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 363	<b>TRT#:</b> 2 <b>DOSE:</b> 9M	<b>SEX:</b> Male <b>DISP:</b> Natural Death	<b>DAY ON TEST:</b> 577 <b>HISTO:</b> 92-1195-363
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**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Heart	* Kidney	* Liver
* Lung	* Lymph Node, Mandibular	* Pancreas	* Pituitary Gland
* Spleen	* Testes	* Urinary Bladder	

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**MISSING**

\* Thymus

---

**OBSERVATIONS**

* Adrenal Cortex	Capsule	Hyperplasia Hypertrophy Carcinoma	Mild Minimal
Harderian Gland [ Carcinoma TGLS = 1-7 ]			
* Islets, Pancreatic		Hyperplasia	Marked
* Lymph Node, Mesenteric		Infiltration Cellular	Histiocyte, Mild
* Thyroid Gland	Follicle	Cyst	Mild

---

**PRIMARY CAUSE OF DEATH** - Harderian Gland Carcinoma

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 21:59:59  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 365	<b>TRT#:</b> 1 <b>DOSE:</b> 7M	<b>SEX:</b> Male <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 734 <b>HISTO:</b> 92-1195-365
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Medulla	* Lung	* Lymph Node, Mandibular	* Pancreas
* Pituitary Gland	* Spleen	* Testes	* Thymus
* Urinary Bladder			

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**OBSERVATIONS**

* Adrenal Cortex	Capsule	Hyperplasia	Mild
		Hypertrophy	Mild
* Heart	Valve	Inflammation	Acute, Mild
* Islets, Pancreatic		Hyperplasia	Marked
* Kidney		Nephropathy	Mild
* Liver		Hepatocellular Adenoma	
	[ Hepatocellular Adenoma TGLS = 1-4 ]		
* Lymph Node, Mesenteric		Infiltration Cellular	Histiocyte, Minimal
* Thyroid Gland	Follicle	Cyst	Mild

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 21:59:59  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 366	<b>TRT#:</b> 2 <b>DOSE:</b> 9M	<b>SEX:</b> Male <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 735 <b>HISTO:</b> 92-1195-366
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Medulla	* Heart	* Liver	* Lung
* Lymph Node, Mandibular	* Pancreas	* Pituitary Gland	* Spleen
* Testes	* Thyroid Gland	* Urinary Bladder	

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**MISSING**

\* Thymus

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**OBSERVATIONS**

* Adrenal Cortex	Capsule	Hyperplasia Hypertrophy	Moderate Mild
* Islets, Pancreatic		Hyperplasia	Moderate
* Kidney		Cyst Nephropathy	Focal, Mild Moderate
[ Nephropathy TGLS = 1-6 ]			
* Lymph Node, Mesenteric		Infiltration Cellular	Histiocyte, Minimal

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**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 21:59:59  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 367	<b>TRT#:</b> 2 <b>DOSE:</b> 9M	<b>SEX:</b> Male <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 735 <b>HISTO:</b> 92-1195-367
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Medulla	* Heart	* Liver	* Lymph Node, Mandibular
* Pancreas	* Pituitary Gland	* Spleen	* Testes
* Thyroid Gland	* Urinary Bladder		

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**MISSING**

\* Thymus

---

**OBSERVATIONS**

* Adrenal Cortex	Hypertrophy	Minimal
* Islets, Pancreatic	Hyperplasia	Moderate
* Kidney	Nephropathy	Mild
* Lung	Alveolar/Bronchiolar Adenoma	
* Lymph Node, Mesenteric	Infiltration Cellular	Histiocyte, Minimal
Seminal Vesicle	Hypertrophy	Marked

[ Hypertrophy TGLS = 1-7 ]

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**PRIMARY CAUSE OF DEATH** -

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 21:59:59  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 368	<b>TRT#:</b> 1 <b>DOSE:</b> 7M	<b>SEX:</b> Male <b>DISP:</b> Natural Death	<b>DAY ON TEST:</b> 526 <b>HISTO:</b> 92-1195-368
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**MISSING**

* Adrenal Cortex	* Adrenal Medulla	* Thymus
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**AUTO PRECLUDES DIAG.**

* Heart	* Kidney	* Lung	* Lymph Node, Mandibular
* Lymph Node, Mesenteric	* Pancreas	* Pituitary Gland	* Spleen
* Testes	* Thyroid Gland	* Urinary Bladder	

---

**OBSERVATIONS**

* Islets, Pancreatic	Hyperplasia	Moderate
* Liver	Hepatocellular Carcinoma	

[ Hepatocellular Carcinoma TGLS = 1-4 ]

---

**PRIMARY CAUSE OF DEATH** - Liver Hepatocellular Carcinoma

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\* PROTOCOL REQUIRED TISSUE



Experiment Number: 92003-02  
 Test Type: CHRONIC  
 Species/Strain: Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
 Test Compound: NTP 90 diet study  
 CAS Number: DIET90

Date Report Requested: 10/21/2014  
 Time Report Requested: 21:59:59  
 First Dose M/F: NA / NA  
 Lab: NIEHS

<b>ANIMAL ID:</b> 369	<b>TRT#:</b> 2 <b>DOSE:</b> 9M	<b>SEX:</b> Male <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 735 <b>HISTO:</b> 92-1195-369
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**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Lung	* Lymph Node, Mandibular	* Pancreas
* Spleen	* Testes	* Urinary Bladder	

**MISSING**

* Pituitary Gland	* Thymus		
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**OBSERVATIONS**

* Adrenal Cortex	Capsule	Hyperplasia Hypertrophy	Moderate Mild
* Heart	Coron Artery	Inflammation	Minimal
* Islets, Pancreatic		Hyperplasia	Moderate
* Kidney		Nephropathy	Minimal
* Liver		Clear Cell Focus Hepatocellular Adenoma	
[ Clear Cell Focus TGLS = 3-4 ]			
[ Hepatocellular Adenoma TGLS = 2-4 ]			
* Lymph Node, Mesenteric		Infiltration Cellular	Histiocyte, Mild
Skin	Subcut Tiss	Inflammation	Acute, Marked
[ Inflammation TGLS = 1-7 ]			
* Thyroid Gland	Follicle Follicular Cel	Cyst Hyperplasia	Mild Minimal

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 21:59:59  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

**ANIMAL ID:** 370

**TRT#:** 1  
**DOSE:** 7M

**SEX:** Male  
**DISP:** Natural Death

**DAY ON TEST:** 661  
**HISTO:** 92-1195-370

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

\* Pituitary Gland \* Testes

**MISSING**

\* Adrenal Cortex \* Adrenal Medulla \* Islets, Pancreatic \* Lymph Node, Mandibular  
\* Lymph Node, Mesenteric \* Pancreas \* Thymus \* Thyroid Gland  
\* Urinary Bladder

**AUTO PRECLUDES DIAG.**

\* Spleen

**OBSERVATIONS**

\* Heart Epicardium Mesothelioma Malignant  
\* Kidney Renal Tubule Dilatation Mild  
\* Liver Angiectasis Moderate  
\* Lung Hepatocellular Carcinoma  
Mesothelioma Malignant

**PRIMARY CAUSE OF DEATH**

- UNCERTAIN

**CONTRIBUTORY CAUSE OF DEATH**

- Heart Epicardium Mesothelioma Malignant;Lung Mesothelioma Malignant

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 92003-02  
Test Type: CHRONIC  
Species/Strain: Mouse/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA  
Test Compound: NTP 90 diet study  
CAS Number: DIET90

Date Report Requested: 10/21/2014  
Time Report Requested: 21:59:59  
First Dose M/F: NA / NA  
Lab: NIEHS

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ANIMAL ID: 372	TRT#: 1 DOSE: 7M	SEX: Male DISP: Terminal Sacrifice	DAY ON TEST: 734 HISTO: 92-1195-372
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ORGAN AND ACCOUNTABLE SITE STATUS

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NORMAL

* Adrenal Medulla	* Heart	* Lymph Node, Mandibular	* Pancreas
* Pituitary Gland	* Spleen	* Urinary Bladder	

---

MISSING

\* Thymus

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OBSERVATIONS

* Adrenal Cortex	Capsule	Hyperplasia	Mild
* Islets, Pancreatic		Hyperplasia	Marked
* Kidney		Nephropathy	Minimal
* Liver		Clear Cell Focus	Multiple
		Eosinophilic Focus	
* Lung		Alveolar/Bronchiolar Adenoma	
* Lymph Node, Mesenteric		Erythrophagocytosis	Mild
		Infiltration Cellular	Histiocyte, Mild
Seminal Vesicle		Hypertrophy	Marked
Note: TGL 1-NCL			
* Testes		Degeneration	Mild
* Thyroid Gland	Follicle	Cyst	Mild
	Follicular Cel	Hyperplasia	Minimal

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 21:59:59  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

<b>ANIMAL ID:</b> 375	<b>TRT#:</b> 2 <b>DOSE:</b> 9M	<b>SEX:</b> Male <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 735 <b>HISTO:</b> 92-1195-375
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**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Heart	* Kidney	* Lung
* Lymph Node, Mandibular	* Pancreas	* Pituitary Gland	* Urinary Bladder

**MISSING**

\* Thymus

**OBSERVATIONS**

* Adrenal Cortex	Capsule	Hyperplasia Hypertrophy	Marked Mild
* Islets, Pancreatic		Hyperplasia	Marked
* Liver		Hemangiosarcoma	
[ Hemangiosarcoma TGLS = 3-4 ]			
* Lymph Node, Mesenteric		Erythrophagocytosis Infiltration Cellular	Moderate Megakaryocyte, Mild
[ Erythrophagocytosis TGLS = 4-3 ]			
[ Infiltration Cellular TGLS = 4-3 ]			
Skin		Inflammation	Chronic Active, Marked
Note: SKIN INFLAMMATION (SLIDE 7) IS AN ABSCESS.			
[ Inflammation TGLS = 1-7 ]			
* Spleen		Hematopoietic Cell Proliferation	Moderate
[ Hematopoietic Cell Proliferation TGLS = 2-4 ]			
* Testes		Degeneration	Minimal
* Thyroid Gland	Follicle	Cyst	Mild

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 21:59:59  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 377	<b>TRT#:</b> 1 <b>DOSE:</b> 7M	<b>SEX:</b> Male <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 734 <b>HISTO:</b> 92-1195-377
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Medulla	* Heart	* Kidney	* Liver
* Lymph Node, Mandibular	* Pituitary Gland	* Spleen	* Testes
* Urinary Bladder			

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**MISSING**

\* Thymus

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**OBSERVATIONS**

* Adrenal Cortex	Capsule	Hyperplasia Hypertrophy	Mild Minimal
* Islets, Pancreatic		Hyperplasia	Marked
* Lung		Alveolar/Bronchiolar Adenoma	
* Lymph Node, Mesenteric		Infiltration Cellular	Histiocyte, Minimal
* Pancreas	Acinus	Vacuolization Cytoplasmic	Mild
Seminal Vesicle		Hypertrophy	Marked
[ Hypertrophy TGLS = 2-7 ]			
Skin	Dermis	Atrophy	Mild
[ Atrophy TGLS = 1-7 ]			
* Thyroid Gland	Follicle	Cyst	Mild

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 21:59:59  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

**ANIMAL ID:** 379

**TRT#:** 2  
**DOSE:** 9M

**SEX:** Male  
**DISP:** Natural Death

**DAY ON TEST:** 683  
**HISTO:** 92-1195-379

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Heart	* Kidney	* Liver	* Pituitary Gland
* Testes	* Urinary Bladder		

**MISSING**

* Adrenal Cortex	* Adrenal Medulla	* Islets, Pancreatic	* Lymph Node, Mandibular
* Lymph Node, Mesenteric	* Pancreas	* Thymus	* Thyroid Gland

**AUTO PRECLUDES DIAG.**

\* Spleen

**OBSERVATIONS**

* Lung	Alveolar/Bronchiolar Adenoma	
Seminal Vesicle	Hypertrophy	Marked

**PRIMARY CAUSE OF DEATH**

- UNCERTAIN

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 21:59:59  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

**ANIMAL ID:** 380

**TRT#:** 1  
**DOSE:** 7M

**SEX:** Male  
**DISP:** Natural Death

**DAY ON TEST:** 721  
**HISTO:** 92-1195-380

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Heart Zymbal's Gland	* Kidney	* Testes	* Urinary Bladder
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**MISSING**

* Lymph Node, Mandibular	* Thymus	* Thyroid Gland
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**AUTO PRECLUDES DIAG.**

* Adrenal Cortex	* Adrenal Medulla	* Pancreas	* Pituitary Gland
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**OBSERVATIONS**

* Islets, Pancreatic	Hyperplasia	Moderate
* Liver	Eosinophilic Focus	
* Lung	Sarcoma	Multiple
* Lymph Node, Mesenteric	Lymphoma Malignant	
* Spleen	Lymphoma Malignant	
[ Lymphoma Malignant TGLS = 1-4 ]		
* Thyroid Gland		
Note: TGL 2-NST		

**PRIMARY CAUSE OF DEATH**

- Lung Sarcoma

Animal Note: BODY CAVITY MASS, MALIGNANT LYMPHOMA

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 21:59:59  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 381	<b>TRT#:</b> 1 <b>DOSE:</b> 7M	<b>SEX:</b> Male <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 734 <b>HISTO:</b> 92-1195-381
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Medulla	* Heart	* Kidney	* Pancreas
* Pituitary Gland	* Spleen	* Testes	* Thyroid Gland
* Urinary Bladder			

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**MISSING**

\* Thymus

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**OBSERVATIONS**

* Adrenal Cortex	Capsule	Hyperplasia Hypertrophy	Marked Minimal
* Islets, Pancreatic		Hyperplasia	Marked
* Liver		Clear Cell Focus	
* Lung		Alveolar/Bronchiolar Carcinoma	
[ Alveolar/Bronchiolar Carcinoma TGLS = 2-5 ]			
* Lymph Node, Mandibular		Infiltration Cellular	Histiocyte, Minimal
* Lymph Node, Mesenteric		Infiltration Cellular	Histiocyte, Minimal
Seminal Vesicle		Hypertrophy	Marked
[ Hypertrophy TGLS = 1-7 ]			

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 21:59:59  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 382	<b>TRT#:</b> 2 <b>DOSE:</b> 9M	<b>SEX:</b> Male <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 735 <b>HISTO:</b> 92-1195-382
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Medulla	* Heart	* Lung	* Lymph Node, Mandibular
* Lymph Node, Mesenteric	* Pancreas	* Pituitary Gland	* Spleen
* Testes	* Urinary Bladder		

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**MISSING**

\* Thymus

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**OBSERVATIONS**

* Adrenal Cortex	Capsule	Hyperplasia Hypertrophy	Minimal Mild
* Islets, Pancreatic		Hyperplasia	Mild
* Kidney		Nephropathy	Minimal
* Liver		Eosinophilic Focus Hepatocellular Adenoma	
	[ Eosinophilic Focus TGLS = 2-4 ]		
	[ Hepatocellular Adenoma TGLS = 1-4 ]		
* Thyroid Gland	Follicle Follicular Cel	Cyst Hyperplasia	Minimal Mild

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 92003-02  
 Test Type: CHRONIC  
 Species/Strain: Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
 Test Compound: NTP 90 diet study  
 CAS Number: DIET90

Date Report Requested: 10/21/2014  
 Time Report Requested: 21:59:59  
 First Dose M/F: NA / NA  
 Lab: NIEHS

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ANIMAL ID: 384	TRT#: 1 DOSE: 7M	SEX: Male DISP: Natural Death	DAY ON TEST: 668 HISTO: 92-1195-384
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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<b>NORMAL</b>			
* Heart	* Lung	* Pituitary Gland	* Spleen
* Testes	* Thyroid Gland	* Urinary Bladder	

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<b>MISSING</b>			
* Adrenal Cortex	* Adrenal Medulla	* Lymph Node, Mandibular	* Thymus

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<b>OBSERVATIONS</b>			
* Islets, Pancreatic		Hyperplasia	Marked
* Kidney [ Dilatation TGLS = 2-6 ]	Renal Tubule	Dilatation	Moderate
* Liver		Hepatoblastoma	
		Hepatocellular Adenoma	
		Hepatocellular Carcinoma	
* Lymph Node, Mesenteric		Erythrophagocytosis	Mild
		Infiltration Cellular	Histiocyte, Mild
* Pancreas	Acinus	Vacuolization Cytoplasmic	Minimal
Seminal Vesicle [ Hypertrophy TGLS = 1-7 ]		Hypertrophy	Marked

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PRIMARY CAUSE OF DEATH	- Liver Hepatocellular Carcinoma
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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 21:59:59  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

<b>ANIMAL ID:</b> 386	<b>TRT#:</b> 2 <b>DOSE:</b> 9M	<b>SEX:</b> Male <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 735 <b>HISTO:</b> 92-1195-386
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**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Heart	* Lymph Node, Mandibular
* Pancreas	* Pituitary Gland	* Testes	* Urinary Bladder

**MISSING**

\* Thymus

**OBSERVATIONS**

* Islets, Pancreatic		Hyperplasia	Moderate
* Kidney	Renal Tubule	Dilatation	Minimal
	Pelvis	Inflammation	Moderate
* Liver		Clear Cell Focus	
		Hepatocellular Adenoma	
	[ Hepatocellular Adenoma TGLS = 4-8 ]		
* Lung		Alveolar/Bronchiolar Adenoma	
		Lymphoma Malignant	
* Lymph Node, Mesenteric		Lymphoma Malignant	
	[ Lymphoma Malignant TGLS = 3-3 ]		
Mesentery	Fat	Necrosis	Marked
	[ Necrosis TGLS = 5-3 ]		
Seminal Vesicle		Hypertrophy	Moderate
	[ Hypertrophy TGLS = 1-7 ]		
* Spleen		Lymphoma Malignant	
	[ Lymphoma Malignant TGLS = 2-4 ]		
* Thyroid Gland	Follicle	Cyst	Mild
	Follicular Cel	Hyperplasia	Mild

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 21:59:59  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 388	<b>TRT#:</b> 1 <b>DOSE:</b> 7M	<b>SEX:</b> Male <b>DISP:</b> Natural Death	<b>DAY ON TEST:</b> 623 <b>HISTO:</b> 92-1195-388
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Medulla	* Kidney	* Lung	* Pancreas
* Testes	* Thyroid Gland	* Urinary Bladder	

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**MISSING**

* Lymph Node, Mandibular	* Pituitary Gland	* Thymus	
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**OBSERVATIONS**

* Adrenal Cortex	Capsule	Hyperplasia	Mild
		Hypertrophy	Minimal
* Heart		Cardiomyopathy	Minimal
* Islets, Pancreatic		Hyperplasia	Mild
* Liver		Hepatocellular Carcinoma	
	[ Hepatocellular Carcinoma TGLS = 1-4 ]		
* Lymph Node, Mesenteric		Infiltration Cellular	Histiocyte, Mild
* Spleen		Hematopoietic Cell Proliferation	Moderate
	[ Hematopoietic Cell Proliferation TGLS = 2-4 ]		

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**PRIMARY CAUSE OF DEATH** - Liver Hepatocellular Carcinoma

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 21:59:59  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

**ANIMAL ID:** 390

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 734

**DOSE:** 7M

**DISP:** Terminal Sacrifice

**HISTO:** 92-1195-390

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

\* Adrenal Medulla  
\* Lymph Node, Mandibular  
\* Testes

\* Heart  
\* Pancreas  
\* Thymus

\* Islets, Pancreatic  
\* Pituitary Gland  
\* Thyroid Gland

\* Lung  
\* Spleen  
\* Urinary Bladder

**OBSERVATIONS**

\* Adrenal Cortex  
\* Kidney  
\* Liver

Capsule

Hyperplasia  
Nephropathy  
Hemangiosarcoma  
Hepatocellular Carcinoma

Moderate  
Mild

[ Hemangiosarcoma TGLS = 3-8 ]

[ Hepatocellular Carcinoma TGLS = 2-8 ]

\* Lymph Node, Mesenteric  
Seminal Vesicle

Infiltration Cellular  
Hypertrophy

Histiocyte, Minimal  
Marked

[ Hypertrophy TGLS = 1-7 ]

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 21:59:59  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 391	<b>TRT#:</b> 1 <b>DOSE:</b> 7M	<b>SEX:</b> Male <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 734 <b>HISTO:</b> 92-1195-391
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Medulla	* Heart	* Lung	* Lymph Node, Mandibular
* Pancreas	* Pituitary Gland	* Spleen	* Testes
* Thymus	* Urinary Bladder		

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**OBSERVATIONS**

* Adrenal Cortex		Adenoma	
	Capsule	Hyperplasia	Moderate
* Islets, Pancreatic		Hyperplasia	Marked
* Kidney	Renal Tubule	Dilatation	Mild
[ Dilatation TGLS = 1-6 ]			
* Liver		Clear Cell Focus	
[ Clear Cell Focus TGLS = 3-8 ]			
* Lymph Node, Mesenteric		Erythrophagocytosis	Mild
		Infiltration Cellular	Histiocyte, Mild
Seminal Vesicle		Hypertrophy	Marked
[ Hypertrophy TGLS = 2-7 ]			
* Thyroid Gland	Follicle	Cyst	Minimal

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 21:59:59  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 392	<b>TRT#:</b> 2 <b>DOSE:</b> 9M	<b>SEX:</b> Male <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 735 <b>HISTO:</b> 92-1195-392
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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<b>NORMAL</b>			
* Heart	* Kidney	* Lung	* Lymph Node, Mandibular
* Lymph Node, Mesenteric	* Pancreas	* Spleen	* Testes
* Urinary Bladder			

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<b>MISSING</b>			
* Adrenal Cortex	* Adrenal Medulla	* Pituitary Gland	* Thymus

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<b>OBSERVATIONS</b>			
* Islets, Pancreatic		Hyperplasia	Marked
* Liver		Clear Cell Focus	
[ Clear Cell Focus TGLS = 1-4 ]			
Seminal Vesicle		Hypertrophy	Marked
[ Hypertrophy TGLS = 2-7 ]			
* Thyroid Gland	Follicle	Cyst	Mild
	Follicular Cel	Hyperplasia	Mild

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<b>PRIMARY CAUSE OF DEATH</b>	-		
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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 21:59:59  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

<b>ANIMAL ID:</b> 393	<b>TRT#:</b> 1 <b>DOSE:</b> 7M	<b>SEX:</b> Male <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 734 <b>HISTO:</b> 92-1195-393
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**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Heart	* Kidney	* Lung
* Lymph Node, Mandibular	* Pituitary Gland	* Spleen	* Testes
* Thyroid Gland	* Urinary Bladder		

**MISSING**

\* Thymus

**OBSERVATIONS**

* Adrenal Cortex	Capsule	Hyperplasia Hypertrophy	Minimal Mild
* Islets, Pancreatic		Hyperplasia	Marked
* Liver	Hepatocyte	Mixed Cell Focus Necrosis	Marked
		[ Mixed Cell Focus TGLS = 3-4 ]	
		[ Necrosis TGLS = 2-8 ]	
* Lymph Node, Mesenteric		Infiltration Cellular	Histiocyte, Minimal
* Pancreas	Acinus	Vacuolization Cytoplasmic	Minimal
Seminal Vesicle		Hypertrophy	Marked
		[ Hypertrophy TGLS = 1-7 ]	

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 22:00:00  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 394	<b>TRT#:</b> 1 <b>DOSE:</b> 7M	<b>SEX:</b> Male <b>DISP:</b> Natural Death	<b>DAY ON TEST:</b> 672 <b>HISTO:</b> 92-1195-394
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Heart	* Kidney	* Lung	* Lymph Node, Mandibular
* Pituitary Gland	* Spleen	* Testes	* Thyroid Gland
* Urinary Bladder			

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**MISSING**

* Adrenal Medulla	* Thymus		
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**OBSERVATIONS**

* Adrenal Cortex	Capsule	Hyperplasia	Moderate
* Islets, Pancreatic		Hyperplasia	Marked
* Liver	Hepatocyte	Hepatocellular Carcinoma	
		Necrosis	Moderate
	[ Hepatocellular Carcinoma TGLS = 1-4 ]		
* Lymph Node, Mesenteric		Infiltration Cellular	Histiocyte, Mild
* Pancreas	Acinus	Vacuolization Cytoplasmic	Minimal
Seminal Vesicle		Hypertrophy	Marked
	[ Hypertrophy TGLS = 2-7 ]		

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**PRIMARY CAUSE OF DEATH** - Liver Hepatocellular Carcinoma

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 22:00:00  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 395	<b>TRT#:</b> 2 <b>DOSE:</b> 9M	<b>SEX:</b> Male <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 735 <b>HISTO:</b> 92-1195-395
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Heart	* Lung	* Lymph Node, Mandibular	* Pituitary Gland
* Spleen	* Testes	* Urinary Bladder	

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**MISSING**

* Adrenal Cortex	* Adrenal Medulla	* Thymus	
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**OBSERVATIONS**

* Islets, Pancreatic		Hyperplasia	Moderate
* Kidney		Nephropathy	Minimal
* Liver		Clear Cell Focus	
[ Clear Cell Focus TGLS = 1-4 ]			
* Lymph Node, Mesenteric		Erythrophagocytosis	Mild
		Infiltration Cellular	Histiocyte, Minimal
* Pancreas	Acinus	Vacuolization Cytoplasmic	Minimal
* Thyroid Gland	Follicle	Cyst	Mild
	Follicular Cel	Hyperplasia	Moderate

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 22:00:00  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 396	<b>TRT#:</b> 1 <b>DOSE:</b> 7M	<b>SEX:</b> Male <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 734 <b>HISTO:</b> 92-1195-396
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Medulla	* Islets, Pancreatic	* Lung	* Lymph Node, Mandibular
* Pancreas	* Pituitary Gland	* Testes	* Urinary Bladder

---

**MISSING**

\* Thymus

---

**OBSERVATIONS**

* Adrenal Cortex	Capsule	Hyperplasia Hypertrophy	Moderate Minimal
* Heart		Cardiomyopathy	Minimal
* Kidney		Nephropathy	Minimal
* Liver		Hepatocellular Carcinoma	
	[ Hepatocellular Carcinoma TGLS = 2-4 ]		
* Lymph Node, Mesenteric		Erythrophagocytosis Infiltration Cellular	Mild Histiocyte, Minimal
* Spleen		Hematopoietic Cell Proliferation	Moderate
	[ Hematopoietic Cell Proliferation TGLS = 1-4 ]		
* Thyroid Gland	Follicular Cel	Hyperplasia	Minimal

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 22:00:00  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 397	<b>TRT#:</b> 2 <b>DOSE:</b> 9M	<b>SEX:</b> Male <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 735 <b>HISTO:</b> 92-1195-397
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Medulla	* Heart	* Lung	* Lymph Node, Mandibular
* Pancreas	* Pituitary Gland	* Spleen	* Testes
* Thymus	* Urinary Bladder		

---

**OBSERVATIONS**

* Adrenal Cortex	Capsule	Hyperplasia	Mild
* Islets, Pancreatic		Hyperplasia	Marked
* Kidney	Renal Tubule	Dilatation	Mild
* Liver		Clear Cell Focus	Multiple
[ Clear Cell Focus TGLS = 1,2-4; 3,4-7 ]			
* Lymph Node, Mesenteric		Infiltration Cellular	Histiocyte, Minimal
Seminal Vesicle		Hypertrophy	Marked
[ Hypertrophy TGLS = 5-7 ]			
* Thyroid Gland	Follicle	Cyst	Mild
	Follicular Cel	Hyperplasia	Minimal

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PRIMARY CAUSE OF DEATH

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 22:00:00  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 399	<b>TRT#:</b> 1 <b>DOSE:</b> 7M	<b>SEX:</b> Male <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 734 <b>HISTO:</b> 92-1195-399
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Medulla	* Lymph Node, Mandibular	* Pancreas	* Pituitary Gland
* Spleen	* Testes	* Urinary Bladder	

---

**MISSING**

\* Thymus

---

**OBSERVATIONS**

* Adrenal Cortex	Capsule	Hyperplasia	Minimal
* Heart		Cardiomyopathy	Mild
* Islets, Pancreatic		Hyperplasia	Marked
* Kidney		Nephropathy	Minimal
* Liver		Mixed Cell Focus	
* Lung	Alveolus	Alveolar/Bronchiolar Carcinoma	
	[ Alveolar/Bronchiolar Carcinoma TGLS = 2-7 ]	Infiltration Cellular	Histiocyte, Moderate
* Lymph Node, Mesenteric		Infiltration Cellular	Histiocyte, Minimal
Seminal Vesicle		Hypertrophy	Marked
	[ Hypertrophy TGLS = 1-7 ]		
* Thyroid Gland	Follicular Cel	Hyperplasia	Minimal

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 22:00:00  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 400	<b>TRT#:</b> 2 <b>DOSE:</b> 9M	<b>SEX:</b> Male <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 735 <b>HISTO:</b> 92-1195-400
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**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Kidney	* Lymph Node, Mandibular	* Pancreas
* Pituitary Gland	* Spleen	* Testes	* Urinary Bladder

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**MISSING**

\* Thymus

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**OBSERVATIONS**

* Adrenal Cortex	Capsule	Hyperplasia	Moderate
* Heart		Cardiomyopathy	Minimal
* Islets, Pancreatic		Hyperplasia	Minimal
* Liver		Clear Cell Focus	
		Mixed Cell Focus	
		[ Clear Cell Focus TGLS = 2-4 ]	
		[ Mixed Cell Focus TGLS = 3-7 ]	
* Lung	Alveolus	Alveolar/Bronchiolar Carcinoma	Histiocyte, Moderate
		Infiltration Cellular	
		[ Alveolar/Bronchiolar Carcinoma TGLS = 1-7 ]	
* Lymph Node, Mesenteric		Infiltration Cellular	Histiocyte, Minimal
* Thyroid Gland	Follicle	Cyst	Minimal

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 22:00:00  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 402	<b>TRT#:</b> 1 <b>DOSE:</b> 7M	<b>SEX:</b> Male <b>DISP:</b> Natural Death	<b>DAY ON TEST:</b> 670 <b>HISTO:</b> 92-1195-402
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Heart	* Lung	* Testes	* Thyroid Gland
* Urinary Bladder			

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**MISSING**

* Adrenal Cortex	* Adrenal Medulla	* Islets, Pancreatic	* Lymph Node, Mandibular
* Lymph Node, Mesenteric	* Pancreas	* Pituitary Gland	* Thymus

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**AUTO PRECLUDES DIAG.**

\* Spleen

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**OBSERVATIONS**

* Kidney Note: BACTERIA PRESENT IN KIDNEY LESION.	Inflammation	Acute, Moderate
* Liver Note: LIVER NODULE (L-1) SEEN AT TRIM. [ Hepatocellular Carcinoma TGLS = 1-4 ]	Hepatocellular Carcinoma	

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**PRIMARY CAUSE OF DEATH** - Liver Hepatocellular Carcinoma

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 22:00:00  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

**ANIMAL ID:** 403

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 734

**DOSE:** 7M

**DISP:** Terminal Sacrifice

**HISTO:** 92-1195-403

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

\* Adrenal Medulla  
\* Pancreas  
\* Urinary Bladder

\* Heart  
\* Pituitary Gland

\* Lung  
\* Spleen

\* Lymph Node, Mandibular  
\* Testes

**MISSING**

\* Thymus

**OBSERVATIONS**

\* Adrenal Cortex  
\* Islets, Pancreatic  
\* Kidney  
\* Liver

Capsule  
Renal Tubule

Hyperplasia  
Hyperplasia  
Dilatation  
Clear Cell Focus

Moderate  
Marked  
Mild  
Multiple

[ Clear Cell Focus TGLS = 2,3-4 ]

\* Lymph Node, Mesenteric

Erythrophagocytosis  
Infiltration Cellular  
Hypertrophy

Minimal  
Histiocyte, Minimal  
Marked

Seminal Vesicle

[ Hypertrophy TGLS = 1-1 ]

\* Thyroid Gland

Follicle  
Follicular Cel

Cyst  
Hyperplasia

Mild  
Minimal

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 22:00:00  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

<b>ANIMAL ID:</b> 404	<b>TRT#:</b> 1 <b>DOSE:</b> 7M	<b>SEX:</b> Male <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 734 <b>HISTO:</b> 92-1195-404
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**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Heart	* Kidney	* Lung
* Pancreas	* Pituitary Gland	* Testes	* Urinary Bladder

**MISSING**

\* Thymus

**OBSERVATIONS**

* Adrenal Cortex	Capsule	Hyperplasia	Marked
* Islets, Pancreatic		Hyperplasia	Marked
* Liver		Eosinophilic Focus	Multiple
		Mixed Cell Focus	Multiple
[ Eosinophilic Focus TGLS = 2-4 ]			
[ Mixed Cell Focus TGLS = 2-4 ]			
* Lymph Node, Mandibular		Infiltration Cellular	Histiocyte, Moderate
* Lymph Node, Mesenteric		Infiltration Cellular	Histiocyte, Mild
Seminal Vesicle		Hypertrophy	Marked
[ Hypertrophy TGLS = 3-7 ]			
* Spleen		Hyperplasia	Lymphoid, Mild
[ Hyperplasia TGLS = 1-4 ]			
* Thyroid Gland	Follicle	Cyst	Mild
	Follicular Cel	Hyperplasia	Mild

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 22:00:00  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 405	<b>TRT#:</b> 1 <b>DOSE:</b> 7M	<b>SEX:</b> Male <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 734 <b>HISTO:</b> 92-1195-405
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Medulla	* Heart	* Lung	* Spleen
* Testes	* Thyroid Gland	* Urinary Bladder	

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**MISSING**

* Lymph Node, Mandibular	* Pituitary Gland	* Thymus	
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**OBSERVATIONS**

* Adrenal Cortex	Capsule	Hyperplasia Infiltration Cellular	Moderate Histiocyte, Mild
* Islets, Pancreatic		Hyperplasia	Marked
* Kidney	Renal Tubule	Degeneration	Mild
* Liver		Hepatocellular Carcinoma	
[ Hepatocellular Carcinoma TGLS = 1-4 ]			
* Lymph Node, Mesenteric		Infiltration Cellular	Histiocyte, Moderate
* Pancreas	Acinus	Cytoplasmic Alteration	Moderate

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**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02

**Test Type:** CHRONIC

**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** NTP 90 diet study

**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014

**Time Report Requested:** 22:00:00

**First Dose M/F:** NA / NA

**Lab:** NIEHS

**ANIMAL ID:** 406

**TRT#:** 2

**SEX:** Male

**DAY ON TEST:** 588

**DOSE:** 9M

**DISP:** Natural Death

**HISTO:** 92-1195-406

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

\* Heart

**MISSING**

\* Lymph Node, Mesenteric

\* Pituitary Gland

\* Thyroid Gland

**AUTO PRECLUDES DIAG.**

\* Adrenal Cortex

\* Adrenal Medulla

\* Kidney

\* Liver

\* Lung

\* Lymph Node, Mandibular

\* Pancreas

\* Spleen

\* Testes

\* Thymus

\* Urinary Bladder

**OBSERVATIONS**

\* Islets, Pancreatic

Hyperplasia

Marked

\* Liver

Note: TGL 2-LIVER MASS COLLECTED, TISSUE AUTOLYSIS PRECLUDES DIAGNOSIS.

Seminal Vesicle

Hypertrophy

Marked

Note: NOTED TO BE ENLARGED AT TRIM (L-1).

[ Hypertrophy TGLS = 1-7 ]

**PRIMARY CAUSE OF DEATH**

- UNCERTAIN

Animal Note: TISSUE AUTOLYZED.

Animal Note: LIVER MASS AT NECROPSY (L-2).

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 22:00:00  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

**ANIMAL ID:** 407

**TRT#:** 1  
**DOSE:** 7M

**SEX:** Male  
**DISP:** Terminal Sacrifice

**DAY ON TEST:** 734  
**HISTO:** 92-1195-407

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Heart	* Kidney	* Liver	* Lung
* Pancreas	* Pituitary Gland	* Spleen	* Testes
* Thyroid Gland	* Urinary Bladder		

**MISSING**

* Adrenal Cortex	* Adrenal Medulla	* Thymus	
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**OBSERVATIONS**

* Islets, Pancreatic	Hyperplasia	Marked
* Lymph Node, Mandibular	Infiltration Cellular	Polymorphnuclr, Moderate
* Lymph Node, Mesenteric	Infiltration Cellular	Histiocyte, Mild
Seminal Vesicle	Hypertrophy	Moderate
[ Hypertrophy TGLS = 1-7 ]		

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 22:00:00  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 408	<b>TRT#:</b> 1 <b>DOSE:</b> 7M	<b>SEX:</b> Male <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 734 <b>HISTO:</b> 92-1195-408
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**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

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* Adrenal Medulla	* Heart	* Lung	* Lymph Node, Mandibular
* Pituitary Gland	* Spleen	* Testes	* Thyroid Gland
* Urinary Bladder			

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**MISSING**

\* Thymus

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**OBSERVATIONS**

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* Adrenal Cortex	Capsule	Hyperplasia Hypertrophy	Moderate Mild
* Islets, Pancreatic		Hyperplasia	Marked
* Kidney	Renal Tubule	Dilatation	Minimal
* Liver		Hepatocellular Adenoma	
[ Hepatocellular Adenoma TGLS = 2-7 ]			
* Lymph Node, Mesenteric		Infiltration Cellular	Histiocyte, Minimal
* Pancreas	Acinus	Degeneration	Minimal
Seminal Vesicle		Hypertrophy	Marked
[ Hypertrophy TGLS = 1-7 ]			

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 22:00:00  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 409	<b>TRT#:</b> 1 <b>DOSE:</b> 7M	<b>SEX:</b> Male <b>DISP:</b> Natural Death	<b>DAY ON TEST:</b> 685 <b>HISTO:</b> 92-1195-409
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Heart	* Lung	* Lymph Node, Mandibular	* Pancreas
* Pituitary Gland	* Spleen	* Testes	* Urinary Bladder

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**MISSING**

* Adrenal Medulla	* Lymph Node, Mesenteric	* Thymus
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**OBSERVATIONS**

* Adrenal Cortex	Capsule	Hyperplasia	Mild
* Islets, Pancreatic		Hyperplasia	Marked
* Kidney	Renal Tubule Cortex	Dilatation Mineralization	Minimal Minimal
* Liver		Hepatocellular Adenoma	
Seminal Vesicle		Hypertrophy	Marked
Note: NOTED TO BE ENLARGED AT NECROPSY (L-1). [ Hypertrophy TGLS = 1-7 ]			
* Thyroid Gland	Follicle	Cyst	Mild

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**PRIMARY CAUSE OF DEATH** - UNCERTAIN

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 92003-02

Test Type: CHRONIC

Species/Strain: Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

Test Compound: NTP 90 diet study

CAS Number: DIET90

Date Report Requested: 10/21/2014

Time Report Requested: 22:00:00

First Dose M/F: NA / NA

Lab: NIEHS

ANIMAL ID: 410

TRT#: 1

SEX: Male

DAY ON TEST: 734

DOSE: 7M

DISP: Terminal Sacrifice

HISTO: 92-1195-410

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Heart	* Lymph Node, Mandibular	* Pituitary Gland	Stomach, Forestomach
Stomach, Glandular	* Testes	* Urinary Bladder	

**MISSING**

* Adrenal Cortex	* Adrenal Medulla	* Thymus	
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**OBSERVATIONS**

* Islets, Pancreatic		Hyperplasia	Moderate
* Kidney	Renal Tubule	Cyst	Moderate
		Nephropathy	Moderate
* Liver		Clear Cell Focus	
		Hepatocellular Carcinoma	
	[ Clear Cell Focus TGLS = 2-4 ]		
	[ Hepatocellular Carcinoma TGLS = 4-7 ]		
* Lung		Carcinoma	Metastatic (Liver)
* Lymph Node, Mesenteric		Infiltration Cellular	Histiocyte, Mild
* Pancreas	Acinus	Hypertrophy	Minimal
* Spleen		Hematopoietic Cell Proliferation	Moderate
	[ Hematopoietic Cell Proliferation TGLS = 3-4 ]		
* Thyroid Gland	Follicle	Cyst	Minimal

PRIMARY CAUSE OF DEATH

-

Animal Note: STOMACH TGL 1-NCL

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 22:00:00  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 411	<b>TRT#:</b> 1 <b>DOSE:</b> 7M	<b>SEX:</b> Male <b>DISP:</b> Natural Death	<b>DAY ON TEST:</b> 721 <b>HISTO:</b> 92-1195-411
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Medulla	* Heart	* Kidney	* Lung
* Lymph Node, Mandibular	* Pancreas	* Pituitary Gland	* Testes
* Thyroid Gland	* Urinary Bladder		

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**MISSING**

\* Thymus

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**OBSERVATIONS**

* Adrenal Cortex	Capsule	Hyperplasia	Marked
* Islets, Pancreatic		Hyperplasia	Moderate
* Liver		Eosinophilic Focus	
[ Eosinophilic Focus TGLS = 1-4 ]			
* Lymph Node, Mesenteric		Infiltration Cellular	Histiocyte, Minimal
Seminal Vesicle		Hypertrophy	Marked
[ Hypertrophy TGLS = 2-7 ]			
* Spleen		Hyperplasia	Lymphoid, Mild

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 22:00:00  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 412	<b>TRT#:</b> 2 <b>DOSE:</b> 9M	<b>SEX:</b> Male <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 735 <b>HISTO:</b> 92-1195-412
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Medulla	* Heart	* Kidney	* Liver
* Lung	* Lymph Node, Mandibular	* Lymph Node, Mesenteric	* Pancreas
* Pituitary Gland	* Spleen	* Testes	* Urinary Bladder

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**MISSING**

\* Thymus

---

**OBSERVATIONS**

* Adrenal Cortex	Capsule	Hyperplasia Hypertrophy	Minimal Mild
* Islets, Pancreatic		Hyperplasia	Mild
* Thyroid Gland	Follicle	Cyst	Mild

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**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 22:00:00  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

**ANIMAL ID:** 413

**TRT#:** 2  
**DOSE:** 9M

**SEX:** Male  
**DISP:** Terminal Sacrifice

**DAY ON TEST:** 735  
**HISTO:** 92-1195-413

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

\* Adrenal Medulla  
\* Lymph Node, Mandibular  
\* Testes

\* Heart  
\* Pancreas  
\* Thyroid Gland

\* Liver  
\* Pituitary Gland  
\* Urinary Bladder

\* Lung  
\* Spleen

**MISSING**

\* Thymus

**OBSERVATIONS**

\* Adrenal Cortex

Capsule

Hyperplasia

Mild

Hypertrophy

Minimal

\* Islets, Pancreatic

Hyperplasia

Mild

\* Kidney

Renal Tubule

Dilatation

Minimal

\* Lymph Node, Mesenteric

Infiltration Cellular

Histiocyte, Mild

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 92003-02  
Test Type: CHRONIC  
Species/Strain: Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
Test Compound: NTP 90 diet study  
CAS Number: DIET90

Date Report Requested: 10/21/2014  
Time Report Requested: 22:00:00  
First Dose M/F: NA / NA  
Lab: NIEHS

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<b>ANIMAL ID:</b> 414	<b>TRT#:</b> 1 <b>DOSE:</b> 7M	<b>SEX:</b> Male <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 734 <b>HISTO:</b> 92-1195-414
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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<b>NORMAL</b>			
* Heart	* Lung	* Lymph Node, Mandibular	* Pancreas
* Pituitary Gland	* Spleen	* Testes	* Thymus
* Urinary Bladder			

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<b>MISSING</b>			
* Adrenal Cortex	* Adrenal Medulla		

---

<b>OBSERVATIONS</b>			
* Islets, Pancreatic		Hyperplasia	Moderate
* Kidney	Renal Tubule	Dilatation	Mild
* Liver		Clear Cell Focus	
		Hepatocellular Adenoma	
[ Hepatocellular Adenoma TGLS = 2-4 ]			
* Lymph Node, Mesenteric		Infiltration Cellular	Histiocyte, Minimal
Seminal Vesicle		Hypertrophy	Marked
[ Hypertrophy TGLS = 1-7 ]			
* Thyroid Gland	Follicular Cel	Hyperplasia	Minimal

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<b>PRIMARY CAUSE OF DEATH</b>	-		
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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 22:00:00  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 415	<b>TRT#:</b> 1 <b>DOSE:</b> 7M	<b>SEX:</b> Male <b>DISP:</b> Natural Death	<b>DAY ON TEST:</b> 508 <b>HISTO:</b> 92-1195-415
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Kidney	* Lung
* Lymph Node, Mandibular	* Lymph Node, Mesenteric	* Pancreas	* Pituitary Gland
* Testes	* Urinary Bladder		

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**MISSING**

* Heart	* Spleen	* Thymus	
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**AUTO PRECLUDES DIAG.**

\* Thyroid Gland

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**OBSERVATIONS**

* Islets, Pancreatic	Hyperplasia	Minimal
* Liver	Hepatocellular Carcinoma	

[ Hepatocellular Carcinoma TGLS = 1-4 ]

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**PRIMARY CAUSE OF DEATH** - Liver Hepatocellular Carcinoma

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 22:00:00  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 416	<b>TRT#:</b> 2 <b>DOSE:</b> 9M	<b>SEX:</b> Male <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 735 <b>HISTO:</b> 92-1195-416
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Medulla	* Heart	* Lung	* Lymph Node, Mandibular
* Pancreas	* Pituitary Gland	* Testes	* Thymus
* Urinary Bladder			

---

**MISSING**

\* Spleen

---

**OBSERVATIONS**

* Adrenal Cortex	Capsule	Hyperplasia Hypertrophy	Mild Moderate
* Islets, Pancreatic		Hyperplasia	Marked
* Kidney	Renal Tubule	Dilatation	Mild
* Liver		Hepatocellular Adenoma	Multiple
[ Hepatocellular Adenoma TGLS = 1,2,3-4 ]			
* Lymph Node, Mesenteric		Infiltration Cellular	Histiocyte, Minimal
Seminal Vesicle		Hypertrophy	Marked
[ Hypertrophy TGLS = 4-7 ]			
* Thyroid Gland	Follicle	Cyst	Moderate

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 22:00:00  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 417	<b>TRT#:</b> 1 <b>DOSE:</b> 7M	<b>SEX:</b> Male <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 734 <b>HISTO:</b> 92-1195-417
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Medulla	* Heart	* Kidney	* Lung
* Lymph Node, Mandibular	* Pancreas	* Pituitary Gland	* Spleen
* Testes	* Thymus	* Thyroid Gland	* Urinary Bladder

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**OBSERVATIONS**

* Adrenal Cortex	Capsule	Hyperplasia	Mild
		Hypertrophy	Mild
* Islets, Pancreatic		Hyperplasia	Moderate
* Liver		Clear Cell Focus	Multiple
[ Clear Cell Focus TGLS = 2-4 ]			
* Lymph Node, Mesenteric		Infiltration Cellular	Histiocyte, Minimal
Seminal Vesicle		Hypertrophy	Marked
[ Hypertrophy TGLS = 1-7 ]			

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 22:00:00  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 418	<b>TRT#:</b> 2 <b>DOSE:</b> 9M	<b>SEX:</b> Male <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 735 <b>HISTO:</b> 92-1195-418
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Medulla	* Heart	* Liver	* Lung
* Lymph Node, Mandibular	* Pancreas	* Pituitary Gland	* Spleen
* Testes	* Thyroid Gland	* Urinary Bladder	

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**MISSING**

\* Thymus

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**OBSERVATIONS**

* Adrenal Cortex	Capsule	Hyperplasia	Moderate
* Islets, Pancreatic		Hyperplasia	Minimal
* Kidney		Nephropathy	Minimal
* Lymph Node, Mesenteric		Infiltration Cellular	Histiocyte, Moderate

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 22:00:00  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 419	<b>TRT#:</b> 1 <b>DOSE:</b> 7M	<b>SEX:</b> Male <b>DISP:</b> Natural Death	<b>DAY ON TEST:</b> 729 <b>HISTO:</b> 92-1195-419
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Heart	* Lung	* Testes
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**MISSING**

\* Thymus

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**AUTO PRECLUDES DIAG.**

* Adrenal Cortex	* Adrenal Medulla	* Islets, Pancreatic	* Liver
* Lymph Node, Mandibular	* Lymph Node, Mesenteric	* Pancreas	* Pituitary Gland
* Spleen	* Thyroid Gland	* Urinary Bladder	

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**OBSERVATIONS**

* Kidney Tissue NOS [ Carcinoma TGLS = 1-7 ]	Pelvis	Hydronephrosis Carcinoma	Moderate
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**PRIMARY CAUSE OF DEATH** - Tissue NOS Carcinoma

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\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 22:00:00  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 420	<b>TRT#:</b> 1 <b>DOSE:</b> 7M	<b>SEX:</b> Male <b>DISP:</b> Natural Death	<b>DAY ON TEST:</b> 729 <b>HISTO:</b> 92-1195-420
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**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Heart	* Lung	* Pituitary Gland	* Thyroid Gland
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**MISSING**

* Lymph Node, Mandibular	* Thymus
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**AUTO PRECLUDES DIAG.**

* Adrenal Medulla	* Kidney	* Liver	* Lymph Node, Mesenteric
* Pancreas	* Spleen	* Testes	* Urinary Bladder

**OBSERVATIONS**

* Adrenal Cortex	Capsule	Hyperplasia	Mild
* Islets, Pancreatic		Hyperplasia	Moderate

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<b>PRIMARY CAUSE OF DEATH</b>	- UNCERTAIN
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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 22:00:00  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 421	<b>TRT#:</b> 1 <b>DOSE:</b> 7M	<b>SEX:</b> Male <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 734 <b>HISTO:</b> 92-1195-421
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Heart	* Lymph Node, Mandibular	* Pancreas	* Spleen
* Testes	* Urinary Bladder		

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**MISSING**

* Adrenal Cortex	* Adrenal Medulla	* Lymph Node, Mesenteric	* Pituitary Gland
* Thymus	* Thyroid Gland		

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**OBSERVATIONS**

* Islets, Pancreatic		Hyperplasia	Moderate
* Kidney	Renal Tubule	Dilatation	Minimal
		Nephropathy	Minimal
* Liver		Clear Cell Focus	Multiple
		Eosinophilic Focus	
	[ Clear Cell Focus TGLS = 2-4 ]		
	[ Eosinophilic Focus TGLS = 1-7 ]		
* Lung		Alveolar/Bronchiolar Adenoma	
Seminal Vesicle		Hypertrophy	Marked
	[ Hypertrophy TGLS = 3-8 ]		

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**PRIMARY CAUSE OF DEATH** -

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 22:00:00  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 422	<b>TRT#:</b> 2 <b>DOSE:</b> 9M	<b>SEX:</b> Male <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 735 <b>HISTO:</b> 92-1195-422
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Heart	* Pancreas	* Spleen	* Testes
* Urinary Bladder			

---

**MISSING**

* Adrenal Cortex	* Adrenal Medulla	* Lymph Node, Mandibular	* Lymph Node, Mesenteric
* Pituitary Gland	* Thymus		

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**OBSERVATIONS**

* Islets, Pancreatic		Hyperplasia	Marked
* Kidney		Nephropathy	Mild
* Liver		Hepatocellular Adenoma	Multiple
[ Hepatocellular Adenoma TGLS = 1-4 ]			
* Lung		Alveolar/Bronchiolar Adenoma	Multiple
[ Alveolar/Bronchiolar Adenoma TGLS = 2-7 ]			
Seminal Vesicle		Hypertrophy	Marked
[ Hypertrophy TGLS = 3-8 ]			
* Thyroid Gland	Follicular Cel	Hyperplasia	Mild

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 22:00:00  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 423	<b>TRT#:</b> 2 <b>DOSE:</b> 9M	<b>SEX:</b> Male <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 735 <b>HISTO:</b> 92-1195-423
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Heart	* Islets, Pancreatic
* Lung	* Lymph Node, Mandibular	* Pancreas	* Pituitary Gland
* Testes	* Urinary Bladder		

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**MISSING**

\* Thymus

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**OBSERVATIONS**

* Kidney		Nephropathy	Mild
* Liver		Hepatocellular Carcinoma	
[ Hepatocellular Carcinoma TGLS = 2-4 ]			
* Lymph Node, Mesenteric		Erythrophagocytosis	Mild
		Infiltration Cellular	Histiocyte, Mild
Seminal Vesicle		Hypertrophy	Marked
[ Hypertrophy TGLS = 1-7 ]			
* Spleen		Hematopoietic Cell Proliferation	Mild
* Thyroid Gland	Follicle	Cyst	Mild
	Follicular Cel	Hyperplasia	Mild

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 22:00:00  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 424	<b>TRT#:</b> 1 <b>DOSE:</b> 7M	<b>SEX:</b> Male <b>DISP:</b> Natural Death	<b>DAY ON TEST:</b> 650 <b>HISTO:</b> 92-1195-424
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Medulla	* Heart	* Lung	* Lymph Node, Mandibular
* Pancreas	* Testes	* Thyroid Gland	* Urinary Bladder

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**MISSING**

* Pituitary Gland	* Thymus
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**OBSERVATIONS**

* Adrenal Cortex	Capsule	Hyperplasia	Minimal
* Islets, Pancreatic		Hyperplasia	Marked
* Kidney	Renal Tubule	Dilatation	Moderate
[ Dilatation TGLS = 2-6 ]			
* Liver		Hepatocellular Carcinoma	
[ Hepatocellular Carcinoma TGLS = 1-4 ]			
* Lymph Node, Mesenteric		Erythrophagocytosis	Moderate
* Spleen		Hematopoietic Cell Proliferation	Moderate

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**PRIMARY CAUSE OF DEATH** - Liver Hepatocellular Carcinoma

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 22:00:00  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

**ANIMAL ID:** 426

**TRT#:** 1  
**DOSE:** 7M

**SEX:** Male  
**DISP:** Natural Death

**DAY ON TEST:** 650  
**HISTO:** 92-1195-426

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

\* Adrenal Medulla  
\* Lung  
\* Testes

\* Heart  
\* Pancreas  
\* Thyroid Gland

\* Kidney  
\* Pituitary Gland  
\* Urinary Bladder

\* Liver  
\* Spleen

**MISSING**

\* Lymph Node, Mandibular

\* Thymus

**OBSERVATIONS**

\* Adrenal Cortex  
\* Islets, Pancreatic  
\* Lymph Node, Mesenteric

Capsule

Hyperplasia  
Hyperplasia  
Erythrophagocytosis  
Infiltration Cellular

Minimal  
Marked  
Mild  
Histiocyte, Mild

**PRIMARY CAUSE OF DEATH**

- UNCERTAIN

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 22:00:00  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 427	<b>TRT#:</b> 2 <b>DOSE:</b> 9M	<b>SEX:</b> Male <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 735 <b>HISTO:</b> 92-1195-427
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Heart	* Islets, Pancreatic	* Kidney	* Liver
* Lung	* Lymph Node, Mandibular	* Pancreas	* Pituitary Gland
* Spleen	* Testes	* Urinary Bladder	

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**MISSING**

* Adrenal Cortex	* Adrenal Medulla	* Lymph Node, Mesenteric	* Thymus
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**OBSERVATIONS**

* Thyroid Gland	Follicle	Cyst	Mild
	Follicular Cel	Hyperplasia	Minimal

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 22:00:00  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

**ANIMAL ID:** 428

**TRT#:** 2  
**DOSE:** 9M

**SEX:** Male  
**DISP:** Terminal Sacrifice

**DAY ON TEST:** 735  
**HISTO:** 92-1195-428

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Kidney	* Lung	* Lymph Node, Mandibular
* Pancreas	* Pituitary Gland	* Spleen	* Testes
* Thyroid Gland	* Urinary Bladder		

**MISSING**

\* Thymus

**OBSERVATIONS**

* Adrenal Cortex	Capsule	Hyperplasia	Minimal
* Heart	Coron Artery	Inflammation	Marked
	Coron Artery	Necrosis	Marked
* Islets, Pancreatic		Hyperplasia	Minimal
* Liver		Hepatocellular Adenoma	
	[ Hepatocellular Adenoma TGLS = 1-4 ]		
* Lymph Node, Mesenteric		Erythrophagocytosis	Moderate
		Infiltration Cellular	Histiocyte, Mild

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 22:00:00  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 430	<b>TRT#:</b> 1 <b>DOSE:</b> 7M	<b>SEX:</b> Male <b>DISP:</b> Natural Death	<b>DAY ON TEST:</b> 704 <b>HISTO:</b> 92-1195-430
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Heart	* Lung	* Testes
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**MISSING**

* Adrenal Cortex	* Adrenal Medulla	* Islets, Pancreatic	* Lymph Node, Mandibular
* Lymph Node, Mesenteric	* Pancreas	* Thymus	* Urinary Bladder

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**AUTO PRECLUDES DIAG.**

* Kidney	* Pituitary Gland	* Spleen
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**OBSERVATIONS**

* Liver	Hepatocyte	Hepatocellular Carcinoma Necrosis	Moderate
[ Hepatocellular Carcinoma TGLS = 1-4 ]			
* Thyroid Gland	Follicular Cel	Hyperplasia	Minimal

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**PRIMARY CAUSE OF DEATH** - Liver Hepatocellular Carcinoma

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 22:00:00  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

**ANIMAL ID:** 432

**TRT#:** 2  
**DOSE:** 9M

**SEX:** Male  
**DISP:** Natural Death

**DAY ON TEST:** 623  
**HISTO:** 92-1195-432

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Lymph Node, Mandibular	* Pituitary Gland
* Testes	* Thyroid Gland	* Urinary Bladder	

**MISSING**

\* Thymus

**AUTO PRECLUDES DIAG.**

* Kidney	* Lymph Node, Mesenteric	* Spleen
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**OBSERVATIONS**

* Heart [ Carcinoma TGLS = 1-3 ]		Carcinoma	Metastatic (Pancreas)
* Islets, Pancreatic		Hyperplasia	Moderate
* Liver		Hepatocellular Carcinoma	Multiple
* Lung [ Alveolar/Bronchiolar Carcinoma TGLS = 2-5 ]		Alveolar/Bronchiolar Carcinoma	
* Pancreas	Acinus	Carcinoma	

**PRIMARY CAUSE OF DEATH**

- Pancreas Acinus Carcinoma

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 22:00:00  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

**ANIMAL ID:** 434

**TRT#:** 2  
**DOSE:** 9M

**SEX:** Male  
**DISP:** Natural Death

**DAY ON TEST:** 735  
**HISTO:** 92-1195-434

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Heart	* Kidney	* Lung	* Lymph Node, Mandibular
Mammary Gland	* Pancreas	* Pituitary Gland	* Spleen
* Testes	* Thyroid Gland	* Urinary Bladder	

**MISSING**

* Adrenal Cortex	* Adrenal Medulla	* Thymus	
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**OBSERVATIONS**

* Islets, Pancreatic	Hyperplasia	Mild
* Liver	Clear Cell Focus	
* Lymph Node, Mesenteric	Erythrophagocytosis	Mild
	Infiltration Cellular	Histiocyte, Minimal

**PRIMARY CAUSE OF DEATH**

- UNCERTAIN

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 22:00:00  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 435	<b>TRT#:</b> 1 <b>DOSE:</b> 7M	<b>SEX:</b> Male <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 734 <b>HISTO:</b> 92-1195-435
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Medulla	* Heart	* Liver	* Lung
* Pancreas	* Pituitary Gland	* Spleen	* Testes
* Urinary Bladder			

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**MISSING**

\* Thymus

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**OBSERVATIONS**

* Adrenal Cortex	Capsule	Hyperplasia Hypertrophy	Mild Moderate
* Islets, Pancreatic		Hyperplasia	Moderate
* Kidney		Nephropathy	Mild
* Lymph Node, Mandibular		Pigmentation	Mild
* Lymph Node, Mesenteric		Erythrophagocytosis	Mild
Seminal Vesicle		Infiltration Cellular Hypertrophy	Histiocyte, Minimal Marked
[ Hypertrophy TGLS = 1-7 ]			
* Thyroid Gland	Follicular Cel	Hyperplasia	Minimal

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 22:00:00  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 436	<b>TRT#:</b> 2 <b>DOSE:</b> 9M	<b>SEX:</b> Male <b>DISP:</b> Moribund Sacrifice	<b>DAY ON TEST:</b> 701 <b>HISTO:</b> 92-1195-436
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Medulla	* Heart	* Liver	* Lung
* Lymph Node, Mandibular	* Lymph Node, Mesenteric	* Pancreas	* Pituitary Gland
* Spleen	* Testes	* Thymus	* Urinary Bladder

---

**OBSERVATIONS**

* Adrenal Cortex	Capsule	Hyperplasia Hypertrophy Adenoma	Mild Marked
Harderian Gland [ Adenoma TGLS = 1-7 ]			
* Islets, Pancreatic		Hyperplasia	Marked
* Kidney		Nephropathy	Mild
* Thyroid Gland	Follicle Follicular Cel	Cyst Hyperplasia	Minimal Mild

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**PRIMARY CAUSE OF DEATH** - Harderian Gland Adenoma

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 92003-02  
Test Type: CHRONIC  
Species/Strain: Mouse/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA  
Test Compound: NTP 90 diet study  
CAS Number: DIET90

Date Report Requested: 10/21/2014  
Time Report Requested: 22:00:00  
First Dose M/F: NA / NA  
Lab: NIEHS

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ANIMAL ID: 437	TRT#: 2 DOSE: 9M	SEX: Male DISP: Natural Death	DAY ON TEST: 489 HISTO: 92-1195-437
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Heart	* Kidney	* Lung	* Lymph Node, Mandibular
* Lymph Node, Mesenteric	* Pancreas	* Pituitary Gland	* Testes
* Urinary Bladder			

---

**MISSING**

* Adrenal Medulla	* Thymus
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**OBSERVATIONS**

* Adrenal Cortex	Capsule	Hyperplasia	Mild
* Islets, Pancreatic		Hyperplasia	Moderate
* Liver		Hepatocellular Adenoma	
[ Hepatocellular Adenoma TGLS = 1-4 ]			
* Spleen		Hematopoietic Cell Proliferation	Mild
* Thyroid Gland	Follicle	Cyst	Minimal

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PRIMARY CAUSE OF DEATH	- UNCERTAIN
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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 22:00:00  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 442	<b>TRT#:</b> 2 <b>DOSE:</b> 9M	<b>SEX:</b> Male <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 735 <b>HISTO:</b> 92-1195-442
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Medulla	* Heart	* Lung	* Lymph Node, Mandibular
* Lymph Node, Mesenteric	* Pancreas	* Pituitary Gland	* Spleen
* Testes	* Thymus	* Urinary Bladder	

---

**OBSERVATIONS**

* Adrenal Cortex	Capsule	Hyperplasia Hypertrophy	Moderate Mild
* Islets, Pancreatic		Hyperplasia	Mild
* Kidney		Nephropathy	Minimal
* Liver		Clear Cell Focus Mixed Cell Focus	Multiple
[ Clear Cell Focus TGLS = 1-4 ]			
[ Mixed Cell Focus TGLS = 2-4 ]			
* Thyroid Gland	Follicle Follicular Cel	Cyst Hyperplasia	Mild Mild

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 92003-02  
Test Type: CHRONIC  
Species/Strain: Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
Test Compound: NTP 90 diet study  
CAS Number: DIET90

Date Report Requested: 10/21/2014  
Time Report Requested: 22:00:00  
First Dose M/F: NA / NA  
Lab: NIEHS

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<b>ANIMAL ID:</b> 443	<b>TRT#:</b> 2 <b>DOSE:</b> 9M	<b>SEX:</b> Male <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 735 <b>HISTO:</b> 92-1195-443
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**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Heart	* Lymph Node, Mandibular	* Pancreas
* Pituitary Gland	* Spleen	* Testes	* Urinary Bladder

---

**MISSING**

\* Thymus

---

**OBSERVATIONS**

* Adrenal Cortex	Capsule	Hyperplasia Hypertrophy	Moderate Mild
* Islets, Pancreatic		Hyperplasia	Moderate
* Kidney	Renal Tubule	Dilatation	Mild
* Liver		Clear Cell Focus	
* Lung		Alveolar/Bronchiolar Adenoma	
* Lymph Node, Mesenteric		Infiltration Cellular	Histiocyte, Minimal
Seminal Vesicle		Hypertrophy	Marked
[ Hypertrophy TGLS = 1-7 ]			
* Thyroid Gland	Follicle	Cyst	Minimal

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 22:00:00  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

**ANIMAL ID:** 444

**TRT#:** 2  
**DOSE:** 9M

**SEX:** Male  
**DISP:** Natural Death

**DAY ON TEST:** 704  
**HISTO:** 92-1195-444

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Heart	* Liver	* Lung	* Testes
* Thyroid Gland	* Urinary Bladder		

**MISSING**

* Adrenal Cortex	* Adrenal Medulla	* Islets, Pancreatic	* Lymph Node, Mandibular
* Lymph Node, Mesenteric	* Pancreas	* Thymus	

**OBSERVATIONS**

* Kidney	Nephropathy	Minimal
* Pituitary Gland	Cyst	Minimal
* Spleen	Hemangiosarcoma	

[ Hemangiosarcoma TGLS = 1-4 ]

**PRIMARY CAUSE OF DEATH**

- Spleen Hemangiosarcoma

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 92003-02  
Test Type: CHRONIC  
Species/Strain: Mouse/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA  
Test Compound: NTP 90 diet study  
CAS Number: DIET90

Date Report Requested: 10/21/2014  
Time Report Requested: 22:00:00  
First Dose M/F: NA / NA  
Lab: NIEHS

ANIMAL ID: 445	TRT#: 2 DOSE: 9M	SEX: Male DISP: Terminal Sacrifice	DAY ON TEST: 735 HISTO: 92-1195-445
<b>ORGAN AND ACCOUNTABLE SITE STATUS</b>			
<b>NORMAL</b>			
* Heart	* Liver	* Lymph Node, Mandibular	* Pancreas
* Pituitary Gland	* Spleen	* Testes	* Thyroid Gland
* Urinary Bladder			
<b>MISSING</b>			
* Adrenal Cortex	* Adrenal Medulla	* Thymus	
<b>OBSERVATIONS</b>			
* Islets, Pancreatic		Hyperplasia	Minimal
* Kidney	Renal Tubule	Dilatation	Minimal
		Nephropathy	Mild
* Lung		Alveolar/Bronchiolar Carcinoma	
	[ Alveolar/Bronchiolar Carcinoma TGLS = 1-5 ]		
* Lymph Node, Mesenteric		Infiltration Cellular	Histiocyte, Minimal
PRIMARY CAUSE OF DEATH	-		

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 22:00:00  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 446	<b>TRT#:</b> 2 <b>DOSE:</b> 9M	<b>SEX:</b> Male <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 735 <b>HISTO:</b> 92-1195-446
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Medulla	* Heart	* Lymph Node, Mandibular	* Lymph Node, Mesenteric
* Pancreas	* Pituitary Gland	* Spleen	* Testes
* Thymus	* Thyroid Gland	* Urinary Bladder	

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**OBSERVATIONS**

* Adrenal Cortex	Capsule	Hyperplasia Hypertrophy	Moderate Moderate
* Islets, Pancreatic		Hyperplasia	Mild
* Kidney [ Carcinoma TGLS = 1-6 ]	Cortex, Renal Tubule	Carcinoma	
* Liver		Clear Cell Focus	Multiple
* Lung Seminal Vesicle [ Hypertrophy TGLS = 2-7 ]		Alveolar/Bronchiolar Adenoma Hypertrophy	Moderate

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 22:00:00  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 447	<b>TRT#:</b> 2 <b>DOSE:</b> 9M	<b>SEX:</b> Male <b>DISP:</b> Accidentally Killed	<b>DAY ON TEST:</b> 667 <b>HISTO:</b> 92-1195-447
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Heart	* Lymph Node, Mandibular	* Pancreas	* Pituitary Gland
* Spleen	* Testes	* Thyroid Gland	* Urinary Bladder

---

**MISSING**

\* Thymus

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**OBSERVATIONS**

* Adrenal Cortex	Capsule	Hyperplasia	Moderate
* Adrenal Medulla		Hypertrophy	Mild
* Islets, Pancreatic		Hyperplasia	Moderate
* Kidney		Nephropathy	Mild
* Liver		Clear Cell Focus	
* Lung		Alveolar/Bronchiolar Adenoma	
* Lymph Node, Mesenteric		Hemorrhage	Moderate
		Infiltration Cellular	Histiocyte, Minimal

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**PRIMARY CAUSE OF DEATH** - UNCERTAIN

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Animal Note: ACCIDENTAL DEATH.

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 22:00:00  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 448	<b>TRT#:</b> 2 <b>DOSE:</b> 9M	<b>SEX:</b> Male <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 735 <b>HISTO:</b> 92-1195-448
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**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Islets, Pancreatic	* Lymph Node, Mandibular
* Pancreas	* Spleen	* Testes	* Urinary Bladder

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**MISSING**

* Pituitary Gland	* Thymus
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**OBSERVATIONS**

* Heart	Cardiomyopathy	Mild
* Kidney	Nephropathy	Moderate
* Liver	Hepatocellular Carcinoma	
[ Hepatocellular Carcinoma TGLS = 1-4 ]		
* Lung	Alveolar/Bronchiolar Carcinoma	
[ Alveolar/Bronchiolar Carcinoma TGLS = 3-7 ]	Hepatocellular Carcinoma	Metastatic (Liver)
* Lymph Node, Mesenteric	Erythrophagocytosis	Mild
[ Infiltration Cellular TGLS = 2-8 ]	Infiltration Cellular	Histiocyte, Mild
* Thyroid Gland	Follicular Cel	Hyperplasia
		Mild

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**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 22:00:00  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 449	<b>TRT#:</b> 1 <b>DOSE:</b> 7M	<b>SEX:</b> Male <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 734 <b>HISTO:</b> 92-1195-449
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Heart	* Kidney
* Pancreas	* Testes	* Urinary Bladder	

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**MISSING**

* Lymph Node, Mesenteric	* Pituitary Gland	* Thymus	
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**OBSERVATIONS**

* Islets, Pancreatic	Hyperplasia	Moderate
* Kidney Note: TGL 2-NCL		
* Liver [ Eosinophilic Focus TGLS = 3,4-8 ]	Eosinophilic Focus	Multiple
* Lung	Alveolar/Bronchiolar Adenoma	
* Lymph Node, Mandibular	Mast Cell Tumor Malignant	Metastatic (Uncertain Primary Site)
Seminal Vesicle [ Hypertrophy TGLS = 1-7 ]	Hypertrophy	Marked
* Spleen	Infiltration Cellular	Histiocyte, Mild
* Thyroid Gland	Inflammation	Acute, Minimal

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**PRIMARY CAUSE OF DEATH** -

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 22:00:00  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 450	<b>TRT#:</b> 1 <b>DOSE:</b> 7M	<b>SEX:</b> Male <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 734 <b>HISTO:</b> 92-1195-450
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Medulla	* Heart	* Kidney	* Lung
* Lymph Node, Mandibular	* Pituitary Gland	* Spleen	* Testes
* Urinary Bladder			

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**MISSING**

\* Thymus

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**OBSERVATIONS**

* Adrenal Cortex	Capsule	Hyperplasia Hypertrophy	Moderate Mild
* Islets, Pancreatic		Hyperplasia	Marked
* Liver		Eosinophilic Focus	Multiple
[ Eosinophilic Focus TGLS = 1-4 ]			
* Lymph Node, Mesenteric		Erythrophagocytosis Infiltration Cellular	Mild Histiocyte, Mild
* Pancreas	Acinus	Vacuolization Cytoplasmic	Mild
Seminal Vesicle		Hypertrophy	Marked
[ Hypertrophy TGLS = 2-7 ]			
* Thyroid Gland	Follicular Cel	Hyperplasia	Minimal

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**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 22:00:00  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 452	<b>TRT#:</b> 1 <b>DOSE:</b> 7M	<b>SEX:</b> Male <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 734 <b>HISTO:</b> 92-1195-452
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Medulla	* Heart	* Lung	* Lymph Node, Mandibular
* Pancreas	* Spleen	* Testes	* Urinary Bladder

---

**MISSING**

* Pituitary Gland	* Thymus
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**OBSERVATIONS**

* Adrenal Cortex	Capsule	Hyperplasia Hypertrophy	Mild Minimal
* Islets, Pancreatic		Hyperplasia	Moderate
* Kidney	Renal Tubule	Cyst Nephropathy	Moderate Mild
* Liver		Eosinophilic Focus	
[ Eosinophilic Focus TGLS = 1-4 ]			
* Lymph Node, Mesenteric		Erythrophagocytosis Infiltration Cellular	Moderate Histiocyte, Mild
Seminal Vesicle		Hypertrophy	Marked
[ Hypertrophy TGLS = 2-7 ]			
* Thyroid Gland	Follicle	Cyst	Mild

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 22:00:00  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

**ANIMAL ID:** 453

**TRT#:** 2  
**DOSE:** 9M

**SEX:** Male  
**DISP:** Terminal Sacrifice

**DAY ON TEST:** 735  
**HISTO:** 92-1195-453

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Heart	* Kidney	* Lung
* Lymph Node, Mandibular	* Pancreas	* Spleen	* Testes
* Thymus	* Urinary Bladder		

**MISSING**

\* Pituitary Gland

**OBSERVATIONS**

* Adrenal Cortex	Capsule	Hyperplasia Hypertrophy	Mild Minimal
* Islets, Pancreatic		Hyperplasia	Moderate
* Liver		Clear Cell Focus	
* Lymph Node, Mesenteric		Infiltration Cellular	Histiocyte, Mild
Mesentery	Fat	Necrosis	Moderate
[ Necrosis TGLS = 1-3 ]			
Seminal Vesicle		Hypertrophy	Moderate
[ Hypertrophy TGLS = 2-7 ]			
* Thyroid Gland	Follicle Follicular Cel	Cyst Hyperplasia	Minimal Mild

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 92003-02

Test Type: CHRONIC

Species/Strain: Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

Test Compound: NTP 90 diet study

CAS Number: DIET90

Date Report Requested: 10/21/2014

Time Report Requested: 22:00:00

First Dose M/F: NA / NA

Lab: NIEHS

ANIMAL ID: 454

TRT#: 2

SEX: Male

DAY ON TEST: 637

DOSE: 9M

DISP: Terminal Sacrifice

HISTO: 92-1195-454

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

\* Heart

\* Testes

**MISSING**

\* Lymph Node, Mesenteric

\* Thymus

**AUTO PRECLUDES DIAG.**

\* Adrenal Medulla

\* Islets, Pancreatic

\* Lymph Node, Mandibular

\* Pancreas

\* Pituitary Gland

\* Spleen

\* Thyroid Gland

\* Urinary Bladder

**OBSERVATIONS**

\* Adrenal Cortex

Capsule

Hyperplasia

Mild

\* Kidney

Nephropathy

Minimal

\* Liver

Hemangiosarcoma

[ Hemangiosarcoma TGLS = 1-4 ]

\* Lung

Alveolar/Bronchiolar Adenoma

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 22:00:00  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 455	<b>TRT#:</b> 1 <b>DOSE:</b> 7M	<b>SEX:</b> Male <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 734 <b>HISTO:</b> 92-1195-455
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Medulla	* Heart	* Lymph Node, Mandibular	* Pancreas
* Pituitary Gland	* Spleen	* Testes	* Urinary Bladder

---

**MISSING**

\* Thymus

---

**OBSERVATIONS**

* Adrenal Cortex	Capsule	Hyperplasia Hypertrophy	Minimal Moderate
* Islets, Pancreatic		Hyperplasia	Marked
* Kidney		Nephropathy	Minimal
* Liver		Hepatocellular Carcinoma	
	[ Hepatocellular Carcinoma TGLS = 1-4 ]		
* Lung		Alveolar/Bronchiolar Adenoma	
	[ Alveolar/Bronchiolar Adenoma TGLS = 3-5 ]		
* Lymph Node, Mesenteric		Erythrophagocytosis Infiltration Cellular	Moderate Histiocyte, Minimal
Seminal Vesicle		Hypertrophy	Moderate
	[ Hypertrophy TGLS = 2-7 ]		
* Thyroid Gland	Follicle	Cyst	Minimal

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**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 92003-02

Test Type: CHRONIC

Species/Strain: Mouse/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: NTP 90 diet study

CAS Number: DIET90

Date Report Requested: 10/21/2014

Time Report Requested: 22:00:00

First Dose M/F: NA / NA

Lab: NIEHS

ANIMAL ID: 456

TRT#: 2

SEX: Male

DAY ON TEST: 735

DOSE: 9M

DISP: Terminal Sacrifice

HISTO: 92-1195-456

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

\* Adrenal Medulla  
\* Thymus

\* Heart  
\* Thyroid Gland

\* Lymph Node, Mandibular  
\* Urinary Bladder

\* Pituitary Gland

OBSERVATIONS

\* Adrenal Cortex

Capsule

Hyperplasia

Mild

Hypertrophy

Mild

\* Islets, Pancreatic

Hyperplasia

Moderate

\* Kidney

Renal Tubule

Dilatation

Mild

\* Liver

Clear Cell Focus

Eosinophilic Focus

Hepatocellular Adenoma

[ Hepatocellular Adenoma TGLS = 1-4 ]

\* Lung

Alveolar/Bronchiolar Carcinoma

Alveolus

Infiltration Cellular

Histiocyte, Moderate

[ Alveolar/Bronchiolar Carcinoma TGLS = 2-5 ]

\* Lymph Node, Mesenteric

Erythrophagocytosis

Mild

\* Pancreas

Acinus

Vacuolization Cytoplasmic

Minimal

\* Spleen

Angiectasis

Mild

\* Testes

Degeneration

Moderate

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 22:00:00  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 457	<b>TRT#:</b> 2 <b>DOSE:</b> 9M	<b>SEX:</b> Male <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 735 <b>HISTO:</b> 92-1195-457
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Medulla	* Heart	* Islets, Pancreatic	* Liver
* Lymph Node, Mandibular	* Lymph Node, Mesenteric	* Pancreas	* Pituitary Gland
* Spleen	* Testes	* Urinary Bladder	

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**MISSING**

\* Thymus

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**OBSERVATIONS**

* Adrenal Cortex	Capsule	Adenoma Hypertrophy	Moderate
* Kidney	Renal Tubule	Cyst	Moderate
* Lung	[ Alveolar/Bronchiolar Adenoma TGLS = 1-5 ]	Alveolar/Bronchiolar Adenoma	
* Thyroid Gland	Follicle Follicular Cel	Cyst Hyperplasia	Mild Minimal

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 22:00:00  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

<b>ANIMAL ID:</b> 459	<b>TRT#:</b> 2 <b>DOSE:</b> 9M	<b>SEX:</b> Male <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 735 <b>HISTO:</b> 92-1195-459
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**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Heart	* Lymph Node, Mandibular	* Pituitary Gland
* Spleen	* Testes	* Urinary Bladder	

**MISSING**

\* Thymus

**OBSERVATIONS**

* Adrenal Cortex	Capsule	Hyperplasia	Mild
* Islets, Pancreatic		Hyperplasia	Marked
* Kidney	Renal Tubule	Cyst	Mild
* Liver		Clear Cell Focus	Multiple
		Hepatocellular Adenoma	
[ Hepatocellular Adenoma TGLS = 2-4 ]			
* Lung		Alveolar/Bronchiolar Adenoma	
* Lymph Node, Mesenteric		Infiltration Cellular	Histiocyte, Minimal
* Pancreas	Acinus	Vacuolization Cytoplasmic	Mild
Seminal Vesicle		Hypertrophy	Moderate
[ Hypertrophy TGLS = 1-7 ]			
* Thyroid Gland	Follicle	Cyst	Mild

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 22:00:00  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

**ANIMAL ID:** 460

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 734

**DOSE:** 7M

**DISP:** Terminal Sacrifice

**HISTO:** 92-1195-460

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

\* Adrenal Medulla  
\* Lymph Node, Mesenteric  
\* Testes

\* Heart  
\* Pancreas  
\* Thymus

\* Liver  
\* Pituitary Gland  
\* Thyroid Gland

\* Lymph Node, Mandibular  
\* Spleen  
\* Urinary Bladder

**OBSERVATIONS**

\* Adrenal Cortex  
\* Islets, Pancreatic  
\* Kidney  
\* Lung  
Seminal Vesicle  
[ Hypertrophy TGLS = 1-7 ]

Capsule

Hyperplasia  
Hyperplasia  
Nephropathy  
Inflammation  
Hypertrophy

Moderate  
Mild  
Minimal  
Granulomatous, Minimal  
Marked

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 92003-02  
Test Type: CHRONIC  
Species/Strain: Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
Test Compound: NTP 90 diet study  
CAS Number: DIET90

Date Report Requested: 10/21/2014  
Time Report Requested: 22:00:00  
First Dose M/F: NA / NA  
Lab: NIEHS

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<b>ANIMAL ID:</b> 461	<b>TRT#:</b> 2 <b>DOSE:</b> 9M	<b>SEX:</b> Male <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 735 <b>HISTO:</b> 92-1195-461
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**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Heart	* Kidney	* Liver
* Lymph Node, Mandibular	* Lymph Node, Mesenteric	* Pancreas	* Pituitary Gland
* Spleen	* Testes	* Urinary Bladder	

---

**MISSING**

\* Thymus

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**OBSERVATIONS**

* Adrenal Cortex	Capsule	Hyperplasia Hypertrophy	Moderate Mild
* Islets, Pancreatic		Hyperplasia	Minimal
* Lung		Alveolar/Bronchiolar Adenoma	Multiple
[ Alveolar/Bronchiolar Adenoma TGLS = 2-5 ]			
Mesentery	Fat	Necrosis	Marked
[ Necrosis TGLS = 1-7 ]			
* Thyroid Gland	Follicle Follicular Cel	Cyst Hyperplasia	Mild Mild

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**PRIMARY CAUSE OF DEATH**

-

Animal Note: LESION 1, IDENTIFIED AS AN ENLARGED MESENTERIC LYMPH NODE, IS ACTUALLY FAT NECROSIS WITH GRANULOMATOUS INFLAMMATION.

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\* PROTOCOL REQUIRED TISSUE



Experiment Number: 92003-02  
 Test Type: CHRONIC  
 Species/Strain: Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
 Test Compound: NTP 90 diet study  
 CAS Number: DIET90

Date Report Requested: 10/21/2014  
 Time Report Requested: 22:00:00  
 First Dose M/F: NA / NA  
 Lab: NIEHS

<b>ANIMAL ID:</b> 462	<b>TRT#:</b> 1 <b>DOSE:</b> 7M	<b>SEX:</b> Male <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 734 <b>HISTO:</b> 92-1195-462
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**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Heart	* Liver	* Lung
* Lymph Node, Mandibular	* Pituitary Gland	* Spleen	* Testes
* Thymus	* Urinary Bladder		

**OBSERVATIONS**

* Adrenal Cortex	Capsule	Hyperplasia Hypertrophy	Mild Minimal
* Islets, Pancreatic		Hyperplasia	Marked
* Kidney		Nephropathy	Minimal
* Lymph Node, Mesenteric		Erythrophagocytosis	Minimal
		Infiltration Cellular	Histiocyte, Minimal
* Pancreas	Acinus	Vacuolization Cytoplasmic	Minimal
Seminal Vesicle		Hypertrophy	Marked
[ Hypertrophy TGLS = 2-8 ]			
Skin		Atrophy	Moderate
[ Atrophy TGLS = 1-7 ]			
* Thyroid Gland	Follicle	Cyst	Mild
	Follicular Cel	Hyperplasia	Minimal

<b>PRIMARY CAUSE OF DEATH</b>	-
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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 22:00:00  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 463	<b>TRT#:</b> 2 <b>DOSE:</b> 9M	<b>SEX:</b> Male <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 735 <b>HISTO:</b> 92-1195-463
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Heart	* Kidney	* Lymph Node, Mandibular	* Pituitary Gland
* Spleen	* Testes	* Thyroid Gland	* Urinary Bladder

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**MISSING**

* Adrenal Cortex	* Adrenal Medulla	* Thymus
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**OBSERVATIONS**

* Islets, Pancreatic		Hyperplasia	Marked
* Liver		Clear Cell Focus	
		Hepatocellular Adenoma	Multiple
	[ Hepatocellular Adenoma TGLS = 1-4; 4-7 ]		
* Lung		Alveolar/Bronchiolar Adenoma	Multiple
		Alveolar/Bronchiolar Carcinoma	
	[ Alveolar/Bronchiolar Adenoma TGLS = 3-5 ]		
	[ Alveolar/Bronchiolar Carcinoma TGLS = 2-7 ]		
* Lymph Node, Mesenteric		Erythrophagocytosis	Mild
		Infiltration Cellular	Histiocyte, Minimal
* Pancreas	Acinus	Atrophy	Minimal

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 22:00:00  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 464	<b>TRT#:</b> 1 <b>DOSE:</b> 7M	<b>SEX:</b> Male <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 734 <b>HISTO:</b> 92-1195-464
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Medulla	* Heart	* Kidney	* Lung
* Lymph Node, Mandibular	* Pancreas	* Spleen	* Testes
* Thyroid Gland	* Urinary Bladder		

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**MISSING**

* Pituitary Gland	* Thymus		
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**OBSERVATIONS**

* Adrenal Cortex	Capsule	Hyperplasia Hypertrophy	Moderate Minimal
* Islets, Pancreatic		Hyperplasia	Marked
* Liver		Eosinophilic Focus	
[ Eosinophilic Focus TGLS = 1-4 ]			
* Lymph Node, Mesenteric		Infiltration Cellular	Histiocyte, Minimal
Seminal Vesicle		Hypertrophy	Marked
[ Hypertrophy TGLS = 2-7 ]			

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 22:00:00  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 466	<b>TRT#:</b> 1 <b>DOSE:</b> 7M	<b>SEX:</b> Male <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 734 <b>HISTO:</b> 92-1195-466
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Medulla	* Heart	* Liver	* Lymph Node, Mandibular
* Pituitary Gland	* Spleen	* Testes	* Thyroid Gland
* Urinary Bladder			

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**MISSING**

\* Thymus

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**OBSERVATIONS**

* Adrenal Cortex	Capsule	Hyperplasia	Marked
* Islets, Pancreatic		Hyperplasia	Marked
* Kidney	Renal Tubule	Dilatation	Mild
* Lung		Alveolar/Bronchiolar Adenoma	
* Lymph Node, Mesenteric		Erythrophagocytosis	Mild
		Infiltration Cellular	Histiocyte, Mild
* Pancreas	Acinus	Vacuolization Cytoplasmic	Mild
Seminal Vesicle		Hypertrophy	Marked

[ Hypertrophy TGLS = 1-7 ]

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 22:00:00  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 467	<b>TRT#:</b> 1 <b>DOSE:</b> 7M	<b>SEX:</b> Male <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 734 <b>HISTO:</b> 92-1195-467
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Liver	* Lymph Node, Mandibular	* Spleen	* Thyroid Gland
* Urinary Bladder			

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**MISSING**

* Adrenal Cortex	* Adrenal Medulla	* Lymph Node, Mesenteric	* Thymus
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**INSUFFICIENT TISSUE**

\* Pituitary Gland

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**OBSERVATIONS**

* Heart		Inflammation	Minimal
* Islets, Pancreatic		Hyperplasia	Moderate
* Kidney	Renal Tubule	Cyst	Mild
* Lung		Alveolar/Bronchiolar Adenoma	
* Pancreas	Acinus	Vacuolization Cytoplasmic	Minimal
* Testes		Degeneration	Mild

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 92003-02  
Test Type: CHRONIC  
Species/Strain: Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
Test Compound: NTP 90 diet study  
CAS Number: DIET90

Date Report Requested: 10/21/2014  
Time Report Requested: 22:00:00  
First Dose M/F: NA / NA  
Lab: NIEHS

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<b>ANIMAL ID:</b> 701	<b>TRT#:</b> 2 <b>DOSE:</b> 9M	<b>SEX:</b> Male <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 735 <b>HISTO:</b> 92-1195-701
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Heart	* Lung	* Lymph Node, Mandibular	* Pancreas
* Spleen	* Testes	* Urinary Bladder	

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**MISSING**

* Adrenal Cortex	* Adrenal Medulla	* Pituitary Gland	* Thymus
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**OBSERVATIONS**

* Islets, Pancreatic		Hyperplasia	Marked
* Kidney		Nephropathy	Minimal
* Liver		Eosinophilic Focus	Multiple
[ Eosinophilic Focus TGLS = 2-4 ]			
* Lymph Node, Mesenteric		Infiltration Cellular	Histiocyte, Minimal
Seminal Vesicle		Hypertrophy	Marked
[ Hypertrophy TGLS = 1-7 ]			
* Thyroid Gland	Follicular Cel	Hyperplasia	Minimal

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 92003-02  
 Test Type: CHRONIC  
 Species/Strain: Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
 Test Compound: NTP 90 diet study  
 CAS Number: DIET90

Date Report Requested: 10/21/2014  
 Time Report Requested: 22:00:00  
 First Dose M/F: NA / NA  
 Lab: NIEHS

<b>ANIMAL ID:</b> 468	<b>TRT#:</b> 3 <b>DOSE:</b> 7F	<b>SEX:</b> Female <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 736 <b>HISTO:</b> 92-1195-468
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**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Heart	* Kidney	* Lung
* Lymph Node, Mandibular	* Ovary	* Pancreas	* Spleen
* Urinary Bladder			

**MISSING**

\* Thymus

**OBSERVATIONS**

* Adrenal Cortex	Capsule	Hyperplasia	Moderate
* Islets, Pancreatic		Hyperplasia	Minimal
* Liver		Hepatocellular Carcinoma	
[ Hepatocellular Carcinoma TGLS = 3-4 ]			
* Lymph Node, Mesenteric		Infiltration Cellular	Histiocyte, Mild
Mesentery	Fat	Necrosis	Moderate
[ Necrosis TGLS = 1-7 ]			
* Pituitary Gland	Pars Distalis	Adenoma	
* Thyroid Gland	Follicle	Cyst	Mild
	Follicular Cel	Hyperplasia	Minimal
* Uterus	Bilateral	Cyst	Moderate
[ Cyst TGLS = 2-6 ]			

PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 22:00:00  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 469	<b>TRT#:</b> 4	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 738
	<b>DOSE:</b> 9F	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 92-1195-469

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Medulla	* Heart	* Islets, Pancreatic	* Liver
* Lymph Node, Mandibular	* Lymph Node, Mesenteric	* Pituitary Gland	* Urinary Bladder

---

**MISSING**

\* Thymus

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**OBSERVATIONS**

* Adrenal Cortex	Capsule	Hyperplasia	Moderate
* Kidney		Nephropathy	Minimal
* Lung		Sarcoma	Metastatic (Skin)
* Ovary		Cyst	Marked
[ Cyst TGLS = 4-6 ]			
* Pancreas	Acinus	Vacuolization Cytoplasmic	Mild
Skin		Sarcoma	Multiple
[ Sarcoma TGLS = 1-9; 2-8 ]			
* Spleen		Hematopoietic Cell Proliferation	Moderate
[ Hematopoietic Cell Proliferation TGLS = 5-4 ]			
* Thyroid Gland	Follicle	Cyst	Mild
	Follicular Cel	Hyperplasia	Moderate
Tissue NOS	Thoracic	Sarcoma	
[ Sarcoma TGLS = 3-7 ]			
* Uterus		Inflammation	Acute, Mild

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 22:00:00  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 471	<b>TRT#:</b> 3 <b>DOSE:</b> 7F	<b>SEX:</b> Female <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 736 <b>HISTO:</b> 92-1195-471
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Medulla	* Heart	* Islets, Pancreatic	* Kidney
* Lung	* Lymph Node, Mandibular	* Ovary	* Pancreas
* Pituitary Gland	* Thymus	* Urinary Bladder	

---

**OBSERVATIONS**

* Adrenal Cortex	Capsule	Hyperplasia	Moderate
* Liver		Eosinophilic Focus	Multiple
[ Eosinophilic Focus TGLS = 2-4; 3-7 ]			
* Lymph Node, Mesenteric		Infiltration Cellular	Histiocyte, Minimal
* Spleen		Hematopoietic Cell Proliferation	Mild
		Hyperplasia	Lymphoid, Moderate
[ Hyperplasia TGLS = 1-4 ]			
* Thyroid Gland	Follicle	Cyst	Minimal
* Uterus		Cyst	Moderate
[ Cyst TGLS = 4-6 ]			

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**PRIMARY CAUSE OF DEATH** -

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 92003-02  
Test Type: CHRONIC  
Species/Strain: Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
Test Compound: NTP 90 diet study  
CAS Number: DIET90

Date Report Requested: 10/21/2014  
Time Report Requested: 22:00:00  
First Dose M/F: NA / NA  
Lab: NIEHS

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<b>ANIMAL ID:</b> 472	<b>TRT#:</b> 3	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 736
	<b>DOSE:</b> 7F	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 92-1195-472

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Medulla	* Heart	* Kidney	* Lung
* Lymph Node, Mandibular	* Ovary	* Pancreas	* Pituitary Gland
* Urinary Bladder			

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**MISSING**

\* Thymus

---

**OBSERVATIONS**

* Adrenal Cortex	Capsule	Hyperplasia	Moderate
* Islets, Pancreatic		Hyperplasia	Minimal
* Liver		Eosinophilic Focus	
		Hepatocellular Adenoma	Multiple
		Hepatocellular Carcinoma	
		[ Eosinophilic Focus TGLS = 3-4 ]	
		[ Hepatocellular Adenoma TGLS = 2-8; 5-7 ]	
		[ Hepatocellular Carcinoma TGLS = 4-4 ]	
* Lymph Node, Mesenteric		Infiltration Cellular	Histiocyte, Minimal
* Spleen		Hematopoietic Cell Proliferation	Moderate
* Thyroid Gland	Follicle	Adenoma	
* Uterus		Cyst	Moderate
		[ Cyst TGLS = 1-6 ]	

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 22:00:00  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 474	<b>TRT#:</b> 4 <b>DOSE:</b> 9F	<b>SEX:</b> Female <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 737 <b>HISTO:</b> 92-1195-474
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Medulla	* Heart	* Kidney	* Liver
* Lymph Node, Mandibular	* Pancreas	* Pituitary Gland	* Spleen
* Urinary Bladder			

---

**OBSERVATIONS**

* Adrenal Cortex	Capsule	Hyperplasia	Moderate
Note: A MODERATELY LARGE CYST WAS PRESENT IN THE CORTEX OF ONE ADRENAL.			
* Islets, Pancreatic		Hyperplasia	Moderate
* Lung		Lymphoma Malignant	
* Lymph Node, Mesenteric		Plasma Cell Tumor Malignant	
* Ovary		Cyst	Moderate
* Thymus		Angiectasis	Mild
* Thyroid Gland	Follicular Cel	Hyperplasia	Minimal
* Uterus	Bilateral	Cyst	Moderate
[ Cyst TGLS = 1-6 ]			

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 22:00:00  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 475	<b>TRT#:</b> 3 <b>DOSE:</b> 7F	<b>SEX:</b> Female <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 736 <b>HISTO:</b> 92-1195-475
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Heart	* Lung	* Lymph Node, Mandibular	* Ovary
* Pituitary Gland	* Spleen	* Thyroid Gland	* Urinary Bladder

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**MISSING**

* Adrenal Cortex	* Adrenal Medulla	* Lymph Node, Mesenteric
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**OBSERVATIONS**

* Islets, Pancreatic		Hyperplasia	Minimal
* Kidney		Nephropathy	Mild
* Liver		Hepatocellular Adenoma	
[ Hepatocellular Adenoma TGLS = 2-4 ]			
* Pancreas	Acinus	Inflammation	Mild
* Thymus	Epithel Cell	Hyperplasia	Mild
* Uterus	Bilateral	Cyst	Marked
[ Cyst TGLS = 1-6 ]			

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 92003-02  
Test Type: CHRONIC  
Species/Strain: Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
Test Compound: NTP 90 diet study  
CAS Number: DIET90

Date Report Requested: 10/21/2014  
Time Report Requested: 22:00:00  
First Dose M/F: NA / NA  
Lab: NIEHS

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<b>ANIMAL ID:</b> 476	<b>TRT#:</b> 3 <b>DOSE:</b> 7F	<b>SEX:</b> Female <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 736 <b>HISTO:</b> 92-1195-476
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Medulla	* Heart	* Kidney	* Lung
* Ovary	* Pituitary Gland	* Spleen	* Thymus
* Urinary Bladder			

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**OBSERVATIONS**

* Adrenal Cortex	Capsule	Hyperplasia	Mild
* Islets, Pancreatic		Hyperplasia	Mild
* Liver		Eosinophilic Focus	
[ Eosinophilic Focus TGLS = 3-4 ]			
* Lymph Node, Mandibular		Hemorrhage	Mild
[ Hemorrhage TGLS = 1-1 ]			
* Lymph Node, Mesenteric		Infiltration Cellular	Histiocyte, Minimal
* Pancreas	Acinus	Degeneration	Mild
* Thyroid Gland	Follicle	Cyst	Minimal
	Follicular Cel	Hyperplasia	Minimal
* Uterus	Bilateral	Cyst	Moderate
[ Cyst TGLS = 2-6 ]			

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PRIMARY CAUSE OF DEATH

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 22:00:00  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 478	<b>TRT#:</b> 4 <b>DOSE:</b> 9F	<b>SEX:</b> Female <b>DISP:</b> Natural Death	<b>DAY ON TEST:</b> 70 <b>HISTO:</b> 92-1195-478
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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<b>NORMAL</b>			
* Adrenal Cortex	* Heart	* Islets, Pancreatic	* Kidney
* Liver	* Lymph Node, Mandibular	* Lymph Node, Mesenteric	* Pancreas
* Pituitary Gland	* Spleen	* Thymus	* Thyroid Gland

---

<b>MISSING</b>			
* Adrenal Medulla	* Ovary	* Urinary Bladder	* Uterus

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<b>OBSERVATIONS</b>			
* Lung	Mediastinum	Hemorrhage	Marked

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<b>PRIMARY CAUSE OF DEATH</b>	- UNCERTAIN		
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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 22:00:00  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 479	<b>TRT#:</b> 3	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 737
	<b>DOSE:</b> 7F	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 92-1195-479

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Medulla	* Heart	* Islets, Pancreatic	* Lung
* Lymph Node, Mandibular	* Pancreas	* Urinary Bladder	

---

**MISSING**

* Lymph Node, Mesenteric	* Pituitary Gland	* Thymus	
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**OBSERVATIONS**

* Adrenal Cortex	Capsule	Hyperplasia	Moderate
* Kidney		Nephropathy	Minimal
* Liver		Eosinophilic Focus	Multiple
* Ovary		Cyst	Mild
* Spleen		Hematopoietic Cell Proliferation	Moderate
[ Hematopoietic Cell Proliferation TGLS = 1-4 ]			
* Thyroid Gland	Follicle	Cyst	Minimal
* Uterus	Bilateral	Cyst	Marked
[ Cyst TGLS = 2-6 ]			

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 22:00:00  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 480	<b>TRT#:</b> 3 <b>DOSE:</b> 7F	<b>SEX:</b> Female <b>DISP:</b> Natural Death	<b>DAY ON TEST:</b> 717 <b>HISTO:</b> 92-1195-480
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Medulla	* Heart	* Kidney	* Lung
* Pituitary Gland			

---

**MISSING**

\* Thymus

---

**AUTO PRECLUDES DIAG.**

* Islets, Pancreatic	* Lymph Node, Mandibular	* Lymph Node, Mesenteric	* Pancreas
* Spleen	* Urinary Bladder		

---

**OBSERVATIONS**

* Adrenal Cortex	Capsule	Hyperplasia	Mild
* Liver		Eosinophilic Focus	
		Hepatocellular Adenoma	
[ Eosinophilic Focus TGLS = 2-4 ]			
[ Hepatocellular Adenoma TGLS = 2-4 ]			
Mesentery	Fat	Necrosis	Marked
[ Necrosis TGLS = 4-8 ]			
* Ovary		Cyst	Marked
[ Cyst TGLS = 3-7 ]			
* Thyroid Gland	Follicular Cel	Hyperplasia	Minimal
* Uterus	Bilateral	Cyst	Moderate
[ Cyst TGLS = 1-6 ]			

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**PRIMARY CAUSE OF DEATH** - UNCERTAIN

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 22:00:00  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 481	<b>TRT#:</b> 3	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 560
	<b>DOSE:</b> 7F	<b>DISP:</b> Natural Death	<b>HISTO:</b> 92-1195-481

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

\* Heart

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**MISSING**

\* Ovary

\* Spleen

\* Thymus

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**AUTO PRECLUDES DIAG.**

\* Adrenal Cortex

\* Adrenal Medulla

\* Islets, Pancreatic

\* Kidney

\* Lymph Node, Mandibular

\* Lymph Node, Mesenteric

\* Pancreas

\* Pituitary Gland

---

\* Urinary Bladder

---

**OBSERVATIONS**

\* Liver

Hepatocellular Carcinoma

[ Hepatocellular Carcinoma TGLS = 1-4 ]

\* Lung

Hepatocellular Carcinoma

Metastatic (Liver)

Mesentery

Fat

Necrosis

Moderate

\* Thyroid Gland

Follicle

Cyst

Minimal

\* Uterus

Bilateral

Cyst

Marked

---

**PRIMARY CAUSE OF DEATH** - Liver Hepatocellular Carcinoma

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 22:00:00  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 482	<b>TRT#:</b> 4 <b>DOSE:</b> 9F	<b>SEX:</b> Female <b>DISP:</b> Natural Death	<b>DAY ON TEST:</b> 121 <b>HISTO:</b> 92-1195-482
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**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Heart	* Lung	* Lymph Node, Mandibular	* Ovary
* Pancreas	* Pituitary Gland	* Thyroid Gland	* Urinary Bladder

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**MISSING**

* Adrenal Medulla	* Thymus
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**OBSERVATIONS**

* Adrenal Cortex	Capsule	Hyperplasia	Mild
* Islets, Pancreatic		Hyperplasia	Mild
* Kidney		Nephropathy	Mild
* Liver		Hemangiosarcoma	Metastatic (Spleen)
		Lymphoma Malignant	
* Lymph Node, Mesenteric		Infiltration Cellular	Histiocyte, Minimal
* Spleen		Hemangiosarcoma	
[ Hemangiosarcoma TGLS = 2-4 ]			
* Uterus		Cyst	Marked
[ Cyst TGLS = 1-6 ]			

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<b>PRIMARY CAUSE OF DEATH</b>	- UNCERTAIN
<b>CONTRIBUTORY CAUSE OF DEATH</b>	- Liver Lymphoma Malignant;Spleen Hemangiosarcoma

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 22:00:00  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 483	<b>TRT#:</b> 4	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 738
	<b>DOSE:</b> 9F	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 92-1195-483

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Medulla	* Heart	* Islets, Pancreatic	* Kidney
* Lung	* Lymph Node, Mandibular	* Ovary	* Pancreas
* Pituitary Gland	* Urinary Bladder		

---

**MISSING**

\* Thymus

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**OBSERVATIONS**

* Adrenal Cortex	Capsule	Hyperplasia	Moderate
* Liver		Eosinophilic Focus	
[ Eosinophilic Focus TGLS = 1-4 ]			
* Lymph Node, Mesenteric		Infiltration Cellular	Histiocyte, Minimal
* Spleen		Hematopoietic Cell Proliferation	Mild
* Thyroid Gland	Follicular Cel	Hyperplasia	Moderate
* Uterus		Cyst	Marked
[ Cyst TGLS = 2-6 ]			

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**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE



Experiment Number: 92003-02

Test Type: CHRONIC

Species/Strain: Mouse/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: NTP 90 diet study

CAS Number: DIET90

Date Report Requested: 10/21/2014

Time Report Requested: 22:00:00

First Dose M/F: NA / NA

Lab: NIEHS

<b>ANIMAL ID:</b> 488	<b>TRT#:</b> 3 <b>DOSE:</b> 7F	<b>SEX:</b> Female <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 736 <b>HISTO:</b> 92-1195=488
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ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	Eye	* Heart	* Kidney
* Lung	* Lymph Node, Mandibular	* Pancreas	* Urinary Bladder
* Uterus			

OBSERVATIONS

* Adrenal Cortex	Capsule	Hyperplasia	Marked
Eye			
Note: HARDERIAN GLAND ADENOMA BEHIND EYE. TGL 5-NCL			
Harderian Gland		Adenoma	
[ Adenoma TGLS = 4-8 ]			
Intestine Small, Jejunum		Lymphoma Malignant	
[ Lymphoma Malignant TGLS = 3-7 ]			
* Islets, Pancreatic		Hyperplasia	Minimal
* Liver		Clear Cell Focus	
		Inflammation	Focal, Mild
		Mixed Cell Focus	Multiple
[ Clear Cell Focus TGLS = 2-4 ]			
[ Mixed Cell Focus TGLS = 2-4,7 ]			
* Lymph Node, Mesenteric		Lymphoma Malignant	
* Ovary		Cyst	Moderate
[ Cyst TGLS = 1-6 ]			
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 6-2 ]			
* Spleen		Hematopoietic Cell Proliferation	Mild
* Thymus	Epithel Cell	Hyperplasia	Mild
* Thyroid Gland	Follicular Cel	Hyperplasia	Moderate

PRIMARY CAUSE OF DEATH -

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 92003-02  
Test Type: CHRONIC  
Species/Strain: Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
Test Compound: NTP 90 diet study  
CAS Number: DIET90

Date Report Requested: 10/21/2014  
Time Report Requested: 22:00:00  
First Dose M/F: NA / NA  
Lab: NIEHS

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<b>ANIMAL ID:</b> 489	<b>TRT#:</b> 4 <b>DOSE:</b> 9F	<b>SEX:</b> Female <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 737 <b>HISTO:</b> 92-1195-489
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**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Heart	* Islets, Pancreatic	* Kidney
* Lung	* Lymph Node, Mandibular	* Lymph Node, Mesenteric	* Ovary
* Pancreas	* Pituitary Gland		

---

**MISSING**

\* Urinary Bladder

---

**OBSERVATIONS**

* Adrenal Cortex	Capsule	Hyperplasia	Moderate
* Liver		Eosinophilic Focus	Multiple
		Hepatocellular Adenoma	
	[ Eosinophilic Focus TGLS = 3-7; 4-4 ]		
	[ Hepatocellular Adenoma TGLS = 2-4 ]		
* Spleen		Hematopoietic Cell Proliferation	Mild
* Thymus	Epithel Cell	Hyperplasia	Mild
* Thyroid Gland	Follicular Cel	Adenoma	
	Follicle	Cyst	Minimal
	Follicular Cel	Hyperplasia	Mild
* Uterus	Bilateral	Cyst	Marked
	[ Cyst TGLS = 1-6 ]		

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PRIMARY CAUSE OF DEATH

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 22:00:00  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

<b>ANIMAL ID:</b> 490	<b>TRT#:</b> 3 <b>DOSE:</b> 7F	<b>SEX:</b> Female <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 736 <b>HISTO:</b> 92-1195-490
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**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Heart	* Kidney	* Lung
* Lymph Node, Mandibular	* Pancreas	* Pituitary Gland	* Spleen
* Urinary Bladder			

**MISSING**

\* Thymus

**OBSERVATIONS**

* Adrenal Cortex	Capsule	Hyperplasia	Moderate
* Islets, Pancreatic		Hyperplasia	Mild
* Liver		Eosinophilic Focus	Multiple
		Hepatocellular Adenoma	Multiple
[ Eosinophilic Focus TGLS = 6-4 ]			
[ Hepatocellular Adenoma TGLS = 4-8; 5-4; 7-9; 8-10 ]			
* Lymph Node, Mesenteric		Infiltration Cellular	Histiocyte, Mild
Mesentery	Fat	Necrosis	Moderate
[ Necrosis TGLS = 3-7 ]			
* Ovary		Cystadenoma	
* Thyroid Gland	Follicle	Cyst	Minimal
* Uterus	Bilateral	Cyst	Mild
[ Cyst TGLS = 1,2-6 ]			

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 22:00:00  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 492	<b>TRT#:</b> 3 <b>DOSE:</b> 7F	<b>SEX:</b> Female <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 737 <b>HISTO:</b> 92-1195-492
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Medulla	* Heart	* Lung	* Lymph Node, Mandibular
* Pituitary Gland	* Spleen	* Urinary Bladder	

---

**MISSING**

\* Thymus

---

**OBSERVATIONS**

* Adrenal Cortex	Capsule	Hyperplasia	Moderate
* Islets, Pancreatic		Hyperplasia	Minimal
* Kidney		Nephropathy	Minimal
* Liver		Basophilic Focus	
		Eosinophilic Focus	
[ Eosinophilic Focus TGLS = 1-4 ]			
* Lymph Node, Mesenteric		Infiltration Cellular	Histiocyte, Mild
* Ovary		Cyst	Moderate
* Pancreas	Acinus	Degeneration	Mild
* Thyroid Gland	Follicle	Cyst	Mild
* Uterus	Bilateral	Cyst	Moderate

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[ Cyst TGLS = 2-6 ]

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**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 92003-02

Test Type: CHRONIC

Species/Strain: Mouse/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: NTP 90 diet study

CAS Number: DIET90

Date Report Requested: 10/21/2014

Time Report Requested: 22:00:00

First Dose M/F: NA / NA

Lab: NIEHS

ANIMAL ID: 493

TRT#: 4

SEX: Female

DAY ON TEST: 737

DOSE: 9F

DISP: Terminal Sacrifice

HISTO: 92-1195-493

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

\* Adrenal Medulla

\* Heart

\* Islets, Pancreatic

\* Kidney

\* Lung

\* Pancreas

\* Urinary Bladder

MISSING

\* Pituitary Gland

OBSERVATIONS

\* Adrenal Cortex

Capsule

Hyperplasia

Moderate

Harderian Gland

Adenoma

[ Adenoma TGLS = 4-8 ]

\* Liver

Clear Cell Focus

Multiple

Eosinophilic Focus

Multiple

Hepatocellular Adenoma

[ Clear Cell Focus TGLS = 2-4 ]

[ Eosinophilic Focus TGLS = 1-4 ]

[ Hepatocellular Adenoma TGLS = 1-4 ]

\* Lymph Node, Mandibular

Erythrophagocytosis

Mild

\* Lymph Node, Mesenteric

Infiltration Cellular

Histiocyte, Minimal

Mesentery

Fat

Necrosis

Marked

[ Necrosis TGLS = 3-7 ]

\* Ovary

Cyst

Mild

\* Spleen

Hematopoietic Cell Proliferation

Moderate

\* Thymus

Epithel Cell

Hyperplasia

Mild

\* Thyroid Gland

Follicle

Cyst

Mild

Follicular Cel

Hyperplasia

Minimal

\* Uterus

Cyst

Marked

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 22:00:00  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 494	<b>TRT#:</b> 4 <b>DOSE:</b> 9F	<b>SEX:</b> Female <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 737 <b>HISTO:</b> 92-1195-494
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**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Heart	* Liver	* Lung
* Lymph Node, Mandibular	* Lymph Node, Mesenteric	* Pancreas	* Pituitary Gland
* Spleen	* Urinary Bladder		

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**MISSING**

\* Thymus

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**OBSERVATIONS**

* Adrenal Cortex	Capsule	Hyperplasia	Marked
* Islets, Pancreatic		Hyperplasia	Minimal
* Kidney		Nephropathy	Minimal
Mesentery	Fat	Necrosis	Moderate
[ Necrosis TGLS = 1-7 ]			
* Ovary		Cyst	Moderate
		Cystadenoma	
* Thyroid Gland	Follicle	Cyst	Minimal
	Follicular Cel	Hyperplasia	Minimal
* Uterus	Bilateral	Cyst	Mild

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**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 22:00:00  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 496	<b>TRT#:</b> 3 <b>DOSE:</b> 7F	<b>SEX:</b> Female <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 736 <b>HISTO:</b> 92-1195-496
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**ORGAN AND ACCOUNTABLE SITE STATUS**

---

<b>NORMAL</b>			
* Adrenal Medulla	* Heart	* Kidney	* Lung
* Lymph Node, Mandibular	* Pancreas	* Pituitary Gland	* Spleen
* Urinary Bladder			

---

<b>MISSING</b>			
* Ovary	* Thymus		

---

<b>OBSERVATIONS</b>			
* Adrenal Cortex	Capsule	Hyperplasia	Moderate
* Islets, Pancreatic		Hyperplasia	Minimal
* Liver		Eosinophilic Focus	
		Hepatocellular Adenoma	
[ Hepatocellular Adenoma TGLS = 2,3-4 ]			
* Lymph Node, Mesenteric		Infiltration Cellular	Histiocyte, Minimal
* Thyroid Gland	Follicle	Cyst	Minimal
	Follicular Cel	Hyperplasia	Mild
* Uterus	Bilateral	Cyst	Marked
[ Cyst TGLS = 1-6 ]			

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<b>PRIMARY CAUSE OF DEATH</b>	-		
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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 22:00:00  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 497	<b>TRT#:</b> 4	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 697
	<b>DOSE:</b> 9F	<b>DISP:</b> Natural Death	<b>HISTO:</b> 92-1195-497

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

\* Heart

---

**MISSING**

\* Adrenal Cortex

\* Adrenal Medulla

\* Islets, Pancreatic

\* Lymph Node, Mandibular

\* Lymph Node, Mesenteric

\* Ovary

\* Pancreas

\* Pituitary Gland

\* Thymus

\* Thyroid Gland

\* Urinary Bladder

---

**AUTO PRECLUDES DIAG.**

\* Kidney

\* Liver

\* Lung

\* Spleen

---

**OBSERVATIONS**

\* Uterus

Bilateral

Cyst

Marked

---

**PRIMARY CAUSE OF DEATH**

- UNCERTAIN

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 22:00:00  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 498	<b>TRT#:</b> 4	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 675
	<b>DOSE:</b> 9F	<b>DISP:</b> Natural Death	<b>HISTO:</b> 92-1195-498

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Medulla	* Heart	* Lung	* Lymph Node, Mandibular
* Lymph Node, Mesenteric	* Thyroid Gland	* Urinary Bladder	

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**MISSING**

* Pancreas	* Pituitary Gland	* Thymus	
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**OBSERVATIONS**

* Adrenal Cortex	Capsule	Hyperplasia	Marked
* Islets, Pancreatic		Carcinoma	
[ Carcinoma TGLS = 1-7 ]			
* Kidney		Nephropathy	Minimal
* Liver		Carcinoma	Metastatic (Islets, Pancreatic)
* Ovary		Cyst	Moderate
* Spleen		Hematopoietic Cell Proliferation	Moderate
* Uterus		Cyst	Marked

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<b>PRIMARY CAUSE OF DEATH</b>	- UNCERTAIN
<b>CONTRIBUTORY CAUSE OF DEATH</b>	- Islets;Pancreatic Carcinoma

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 92003-02  
 Test Type: CHRONIC  
 Species/Strain: Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
 Test Compound: NTP 90 diet study  
 CAS Number: DIET90

Date Report Requested: 10/21/2014  
 Time Report Requested: 22:00:00  
 First Dose M/F: NA / NA  
 Lab: NIEHS

<b>ANIMAL ID:</b> 499	<b>TRT#:</b> 4 <b>DOSE:</b> 9F	<b>SEX:</b> Female <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 738 <b>HISTO:</b> 92-1195-499
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**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Heart	* Pancreas	* Pituitary Gland
* Urinary Bladder			

**MISSING**

\* Thymus

**OBSERVATIONS**

* Adrenal Cortex	Capsule	Hyperplasia	Moderate
* Islets, Pancreatic		Hyperplasia	Minimal
* Kidney		Lymphoma Malignant	
* Liver		Lymphoma Malignant	
	Hepatocyte	Necrosis	Moderate
	Hepatocyte	Vacuolization Cytoplasmic	Mild
Note: VACUOLES IN HEPATOCYTES APPEAR TO BE THE RESULT OF LIPID ACCUMULATION. [ Lymphoma Malignant TGLS = 2-4 ]			
* Lung		Lymphoma Malignant	
* Lymph Node, Mandibular		Lymphoma Malignant	
* Lymph Node, Mesenteric		Atrophy	Moderate
* Ovary		Hemorrhage	Moderate
* Spleen		Lymphoma Malignant	
[ Lymphoma Malignant TGLS = 1-4 ]			
* Thyroid Gland	Follicle	Cyst	Mild
* Uterus	Bilateral	Cyst	Mild

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 22:00:00  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

<b>ANIMAL ID:</b> 500	<b>TRT#:</b> 4 <b>DOSE:</b> 9F	<b>SEX:</b> Female <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 738 <b>HISTO:</b> 92-1195-500
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**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Heart	* Lung	* Lymph Node, Mandibular
* Pancreas	* Pituitary Gland	* Spleen	* Urinary Bladder

**MISSING**

\* Thymus

**OBSERVATIONS**

* Adrenal Cortex	Capsule	Hyperplasia	Moderate
* Islets, Pancreatic		Hyperplasia	Mild
* Kidney		Nephropathy	Minimal
* Liver		Eosinophilic Focus	Multiple
		Hepatocellular Adenoma	Multiple
Note: TGL 7-NCL			
[ Eosinophilic Focus TGLS = 4-7; 5-10; 6-9 ]			
[ Hepatocellular Adenoma TGLS = 2-11; 3-8 ]			
* Lymph Node, Mesenteric		Infiltration Cellular	Histiocyte, Minimal
Mesentery	Fat	Necrosis	Marked
[ Necrosis TGLS = 1-13 ]			
* Ovary		Cyst	Mild
* Thyroid Gland	Follicular Cel	Hyperplasia	Mild
* Uterus	Bilateral	Cyst	Marked
[ Cyst TGLS = 8-12 ]			

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 22:00:00  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 501	<b>TRT#:</b> 3 <b>DOSE:</b> 7F	<b>SEX:</b> Female <b>DISP:</b> Natural Death	<b>DAY ON TEST:</b> 623 <b>HISTO:</b> 92-1195-501
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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<b>NORMAL</b>			
* Adrenal Medulla	* Heart	* Kidney	* Lung
* Lymph Node, Mandibular	* Ovary	* Pancreas	* Pituitary Gland
* Spleen	* Urinary Bladder		

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<b>MISSING</b>			
* Thymus	* Thyroid Gland		

---

<b>OBSERVATIONS</b>			
* Adrenal Cortex	Capsule	Hyperplasia	Mild
* Islets, Pancreatic		Hyperplasia	Mild
* Liver		Hepatocellular Adenoma	
[ Hepatocellular Adenoma TGLS = 1-4 ]			
* Lymph Node, Mesenteric		Infiltration Cellular	Histiocyte, Mild
Mesentery	Fat	Necrosis	Moderate
* Uterus	Bilateral	Cyst	Moderate
[ Cyst TGLS = 2-6 ]			

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<b>PRIMARY CAUSE OF DEATH</b>	- UNCERTAIN		
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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 22:00:00  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 503	<b>TRT#:</b> 3 <b>DOSE:</b> 7F	<b>SEX:</b> Female <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 736 <b>HISTO:</b> 92-1195-503
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**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Heart	* Kidney	* Lung
* Lymph Node, Mandibular	* Ovary	* Pancreas	* Spleen
* Thyroid Gland	* Urinary Bladder		

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**MISSING**

\* Pituitary Gland

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**OBSERVATIONS**

* Adrenal Cortex	Capsule	Hyperplasia	Mild
* Islets, Pancreatic		Hyperplasia	Mild
* Liver		Eosinophilic Focus	
		Hepatocellular Adenoma	
[ Hepatocellular Adenoma TGLS = 1-4 ]			
* Lymph Node, Mesenteric		Infiltration Cellular	Histiocyte, Minimal
* Thymus	Epithel Cell	Hyperplasia	Mild
* Uterus		Cyst	Moderate

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**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 22:00:00  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 504	<b>TRT#:</b> 4	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 561
	<b>DOSE:</b> 9F	<b>DISP:</b> Natural Death	<b>HISTO:</b> 92-2295-504

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**MISSING**

\* Lymph Node, Mandibular                      \* Thymus

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**AUTO PRECLUDES DIAG.**

* Adrenal Cortex	* Adrenal Medulla	* Heart	* Islets, Pancreatic
* Kidney	* Liver	* Lymph Node, Mesenteric	* Ovary
* Pancreas	* Pituitary Gland	* Spleen	* Thyroid Gland
* Urinary Bladder	* Uterus		

---

**OBSERVATIONS**

* Lung		Alveolar/Bronchiolar Adenoma	
	Alveolus	Infiltration Cellular	Histiocyte, Moderate

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**PRIMARY CAUSE OF DEATH**                      - UNCERTAIN

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 22:00:00  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 505	<b>TRT#:</b> 4	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 738
	<b>DOSE:</b> 9F	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 92-1195-505

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Heart	* Islets, Pancreatic	* Liver	* Lung
* Lymph Node, Mandibular	* Ovary	* Pancreas	* Pituitary Gland
* Spleen	* Urinary Bladder		

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**MISSING**

* Adrenal Cortex	* Adrenal Medulla	* Thymus	
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**OBSERVATIONS**

* Kidney		Nephropathy	Mild
* Lymph Node, Mesenteric		Erythrophagocytosis	Mild
* Thyroid Gland	Follicular Cel	Hyperplasia	Mild
* Uterus	Bilateral	Cyst	Moderate

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[ Cyst TGLS = 1-6 ]

PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 92003-02  
 Test Type: CHRONIC  
 Species/Strain: Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
 Test Compound: NTP 90 diet study  
 CAS Number: DIET90

Date Report Requested: 10/21/2014  
 Time Report Requested: 22:00:00  
 First Dose M/F: NA / NA  
 Lab: NIEHS

<b>ANIMAL ID:</b> 506	<b>TRT#:</b> 4 <b>DOSE:</b> 9F	<b>SEX:</b> Female <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 737 <b>HISTO:</b> 92-1195-506
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**ORGAN AND ACCOUNTABLE SITE STATUS**

<b>NORMAL</b>			
* Adrenal Medulla	* Heart	* Islets, Pancreatic	* Pancreas
* Pituitary Gland			

<b>MISSING</b>			
* Thymus			

<b>OBSERVATIONS</b>			
* Adrenal Cortex	Capsule	Hyperplasia	Moderate
* Kidney		Lymphoma Malignant	
* Liver		Hepatocellular Carcinoma	
[ Hepatocellular Carcinoma TGLS = 3-4 ]			
* Lung		Lymphoma Malignant	
* Lymph Node, Mandibular		Lymphoma Malignant	
* Lymph Node, Mesenteric		Lymphoma Malignant	
* Ovary	Bilateral	Lymphoma Malignant	
* Spleen		Lymphoma Malignant	
[ Lymphoma Malignant TGLS = 2-4 ]			
* Thyroid Gland	Follicle	Cyst	Mild
	Follicular Cel	Hyperplasia	Minimal
* Urinary Bladder		Lymphoma Malignant	
* Uterus	Bilateral	Cyst	Marked
	Bilateral	Lymphoma Malignant	
[ Cyst TGLS = 1-6 ]			

<b>PRIMARY CAUSE OF DEATH</b>	-
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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 22:00:00  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 507	<b>TRT#:</b> 3 <b>DOSE:</b> 7F	<b>SEX:</b> Female <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 736 <b>HISTO:</b> 92-1195-507
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Medulla	* Heart	* Kidney	* Lung
* Lymph Node, Mandibular	* Lymph Node, Mesenteric	* Ovary	* Pituitary Gland
* Thyroid Gland	* Urinary Bladder		

---

**MISSING**

\* Thymus

---

**OBSERVATIONS**

* Adrenal Cortex	Capsule	Hyperplasia	Moderate
* Islets, Pancreatic		Hyperplasia	Minimal
* Liver	Periportal	Hepatocellular Adenoma	
		Infiltration Cellular	Lymphocyte, Mild
Note: TGL 2-NCL; TGL 3-NCL [ Hepatocellular Adenoma TGLS = 1-7 ]			
* Pancreas	Acinus	Inflammation	Mild
* Spleen		Hematopoietic Cell Proliferation	Mild
* Uterus	Bilateral	Cyst	Marked
[ Cyst TGLS = 4-6 ]			

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 22:00:00  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 508	<b>TRT#:</b> 4	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 661
	<b>DOSE:</b> 9F	<b>DISP:</b> Natural Death	<b>HISTO:</b> 92-1195-508

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Pituitary Gland	* Thyroid Gland
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**MISSING**

* Adrenal Medulla	* Islets, Pancreatic	* Lymph Node, Mandibular	* Lymph Node, Mesenteric
* Pancreas	* Thymus		

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**AUTO PRECLUDES DIAG.**

* Kidney	* Liver	* Ovary	* Urinary Bladder
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**OBSERVATIONS**

* Adrenal Cortex	Capsule	Hyperplasia	Mild
* Heart	Ventricle	Carcinoma	Metastatic (Skin)
* Lung		Carcinoma	Metastatic (Skin)
Skin	Pinna	Carcinoma	
[ Carcinoma TGLS = 1-7 ]			
* Spleen		Hematopoietic Cell Proliferation	Moderate
* Uterus		Cyst	Moderate

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**PRIMARY CAUSE OF DEATH** - Heart Ventricle Carcinoma Skin

**CONTRIBUTORY CAUSE OF DEATH** - Lung Carcinoma Skin

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Animal Note: CARCINOMA AROSE IN THE EXTERNAL EAR AND PENETRATED FOR THE MIDDLE AND INNER EAR TO THE BRAIN.

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 22:00:00  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 509	<b>TRT#:</b> 3 <b>DOSE:</b> 7F	<b>SEX:</b> Female <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 736 <b>HISTO:</b> 92-1195-509
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Medulla	* Heart	* Islets, Pancreatic	* Kidney
* Lymph Node, Mandibular	* Pancreas	* Pituitary Gland	* Spleen
* Thymus	* Urinary Bladder		

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**MISSING**

\* Lymph Node, Mesenteric

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**OBSERVATIONS**

* Adrenal Cortex	Capsule	Hyperplasia	Moderate
* Liver		Hepatocellular Adenoma	
[ Hepatocellular Adenoma TGLS = 1-7 ]			
* Lung	Alveolar Epith	Hyperplasia	Moderate
* Ovary		Cyst	Mild
* Thyroid Gland	Follicle	Adenoma	
* Uterus	Bilateral	Cyst	Minimal
[ Cyst TGLS = 2-6 ]			

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 22:00:00  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

<b>ANIMAL ID:</b> 510	<b>TRT#:</b> 4 <b>DOSE:</b> 9F	<b>SEX:</b> Female <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 737 <b>HISTO:</b> 92-1195-510
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**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Heart	* Lung	* Lymph Node, Mandibular
* Ovary	* Pancreas	* Pituitary Gland	* Urinary Bladder

**MISSING**

\* Lymph Node, Mesenteric

**OBSERVATIONS**

* Adrenal Cortex	Capsule	Hyperplasia	Moderate
* Islets, Pancreatic		Hyperplasia	Mild
* Kidney		Lymphoma Malignant	
* Liver		Lymphoma Malignant	
		Mixed Cell Focus	Multiple
[ Lymphoma Malignant TGLS = 4-4; 5-7; 7-8 ]			
[ Mixed Cell Focus TGLS = 3-4 ]			
* Spleen		Hematopoietic Cell Proliferation	Mild
		Lymphoma Malignant	
[ Lymphoma Malignant TGLS = 1-4 ]			
* Thymus	Epithel Cell	Hyperplasia	Moderate
* Thyroid Gland	Follicle	Cyst	Minimal
	Follicular Cel	Hyperplasia	Minimal
* Uterus	Bilateral	Cyst	Marked
[ Cyst TGLS = 2-6 ]			

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 92003-02  
Test Type: CHRONIC  
Species/Strain: Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
Test Compound: NTP 90 diet study  
CAS Number: DIET90

Date Report Requested: 10/21/2014  
Time Report Requested: 22:00:00  
First Dose M/F: NA / NA  
Lab: NIEHS

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<b>ANIMAL ID:</b> 511	<b>TRT#:</b> 4 <b>DOSE:</b> 9F	<b>SEX:</b> Female <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 738 <b>HISTO:</b> 92-1195-511
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Medulla	* Heart	* Kidney	* Lung
* Lymph Node, Mandibular	* Lymph Node, Mesenteric	* Pancreas	* Pituitary Gland
* Spleen	* Thymus	* Urinary Bladder	

---

**OBSERVATIONS**

* Adrenal Cortex	Capsule	Hyperplasia	Moderate
	Zona Reticul	Vacuolization Cytoplasmic	Marked
* Islets, Pancreatic		Hyperplasia	Minimal
* Liver		Eosinophilic Focus	
Mesentery	Fat	Necrosis	Moderate
[ Necrosis TGLS = 1-7 ]			
* Ovary		Cyst	Mild
* Thyroid Gland	Follicle	Cyst	Minimal
	Follicular Cel	Hyperplasia	Moderate
* Uterus	Bilateral	Cyst	Moderate
[ Cyst TGLS = 2-6 ]			

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 22:00:00  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 512	<b>TRT#:</b> 4	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 737
	<b>DOSE:</b> 9F	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 92-1195-512

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Medulla	* Heart	* Lung	* Lymph Node, Mandibular
* Pancreas	* Pituitary Gland	* Spleen	* Thymus

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**MISSING**

\* Urinary Bladder

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**OBSERVATIONS**

* Adrenal Cortex	Capsule	Hyperplasia	Mild
* Islets, Pancreatic		Hyperplasia	Mild
* Kidney		Nephropathy	Mild
* Liver		Eosinophilic Focus	Multiple
Note: TGL 3-NCL [ Eosinophilic Focus TGLS = 1,2-4 ]			
* Lymph Node, Mesenteric		Infiltration Cellular	Histiocyte, Mild
* Ovary		Cystadenoma	
* Thyroid Gland	Follicle	Cyst	Mild
	Follicular Cel	Hyperplasia	Mild
* Uterus	Bilateral	Cyst	Moderate

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 22:00:00  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 515	<b>TRT#:</b> 3 <b>DOSE:</b> 7F	<b>SEX:</b> Female <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 736 <b>HISTO:</b> 92-1195-515
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Heart	* Liver	* Lung	* Lymph Node, Mandibular
* Pancreas	* Spleen	* Urinary Bladder	

---

**MISSING**

* Adrenal Cortex	* Adrenal Medulla	* Lymph Node, Mesenteric	* Pituitary Gland
* Thymus			

---

**OBSERVATIONS**

* Islets, Pancreatic		Hyperplasia	Minimal
* Kidney		Nephropathy	Minimal
* Ovary		Cystadenoma	
* Thyroid Gland	Follicle	Cyst	Minimal
* Uterus	Bilateral	Cyst	Marked

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[ Cyst TGLS = 1-6 ]

**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 22:00:00  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 516	<b>TRT#:</b> 4 <b>DOSE:</b> 9F	<b>SEX:</b> Female <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 738 <b>HISTO:</b> 92-1195-516
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Medulla	* Heart	* Kidney	* Lung
* Lymph Node, Mandibular	* Lymph Node, Mesenteric	* Ovary	* Pancreas
* Spleen	* Urinary Bladder		

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**MISSING**

* Pituitary Gland	* Thymus		
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**OBSERVATIONS**

* Adrenal Cortex	Capsule	Hyperplasia	Mild
* Islets, Pancreatic		Hyperplasia	Minimal
* Liver		Eosinophilic Focus	Multiple
		Hepatocellular Adenoma	Multiple
		[ Eosinophilic Focus TGLS = 4-4,8 ]	
		[ Hepatocellular Adenoma TGLS = 1,2-4; 3-7 ]	
* Thyroid Gland	Follicle	Cyst	Minimal
	Follicular Cel	Hyperplasia	Mild
* Uterus		Cyst	Marked

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**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 22:00:00  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

<b>ANIMAL ID:</b> 517	<b>TRT#:</b> 4 <b>DOSE:</b> 9F	<b>SEX:</b> Female <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 737 <b>HISTO:</b> 92-1195-517
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**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Heart	* Kidney	* Lymph Node, Mandibular
* Ovary	* Pituitary Gland	* Urinary Bladder	

**MISSING**

\* Thymus

**OBSERVATIONS**

* Adrenal Cortex	Capsule	Hyperplasia	Moderate
* Islets, Pancreatic		Hyperplasia	Moderate
* Liver		Clear Cell Focus	
		Eosinophilic Focus	Multiple
		Hemangiosarcoma	
		Hepatocellular Adenoma	Multiple
		[ Eosinophilic Focus TGLS = 3-4 ]	
		[ Hepatocellular Adenoma TGLS = 4-8; 5-7 ]	
* Lung		Hemorrhage	Mild
* Lymph Node, Mesenteric		Infiltration Cellular	Histiocyte, Mild
Mesentery	Fat	Necrosis	Moderate
		[ Necrosis TGLS = 2-7 ]	
* Pancreas	Acinus	Degeneration	Minimal
* Spleen		Hyperplasia	Lymphoid, Moderate
		[ Hyperplasia TGLS = 1-4 ]	
* Thyroid Gland	Follicle	Cyst	Minimal
	Follicular Cel	Hyperplasia	Minimal
* Uterus	Bilateral	Cyst	Marked

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 92003-02  
Test Type: CHRONIC  
Species/Strain: Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
Test Compound: NTP 90 diet study  
CAS Number: DIET90

Date Report Requested: 10/21/2014  
Time Report Requested: 22:00:00  
First Dose M/F: NA / NA  
Lab: NIEHS

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<b>ANIMAL ID:</b> 518	<b>TRT#:</b> 4 <b>DOSE:</b> 9F	<b>SEX:</b> Female <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 737 <b>HISTO:</b> 92-1195-518
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Medulla	* Heart	* Islets, Pancreatic	* Kidney
* Liver	* Lung	* Lymph Node, Mandibular	* Lymph Node, Mesenteric
* Pituitary Gland	* Spleen	* Urinary Bladder	

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**MISSING**

\* Thymus

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**OBSERVATIONS**

* Adrenal Cortex	Capsule	Hyperplasia	Moderate
* Ovary [ Cyst TGLS = 1-6 ]	Bilateral	Cyst	Moderate
* Pancreas	Acinus	Degeneration	Minimal
* Thyroid Gland	Follicle	Cyst	Minimal
	Follicular Cel	Hyperplasia	Minimal
* Uterus	Bilateral	Cyst	Moderate

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 22:00:00  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 519	<b>TRT#:</b> 4	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 737
	<b>DOSE:</b> 9F	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 92-1195-519

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**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Heart	* Lung	* Lymph Node, Mandibular
* Pancreas	* Spleen	* Thymus	* Urinary Bladder

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**MISSING**

* Lymph Node, Mesenteric	* Pituitary Gland
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**OBSERVATIONS**

* Adrenal Cortex	Capsule	Hyperplasia	Moderate
* Islets, Pancreatic		Hyperplasia	Minimal
* Kidney		Nephropathy	Minimal
* Liver		Eosinophilic Focus	
[ Eosinophilic Focus TGLS = 1-4 ]			
* Ovary		Cyst	Minimal
* Thyroid Gland	Follicle	Cyst	Minimal
* Uterus	Bilateral	Cyst	Marked
[ Cyst TGLS = 2-6 ]			

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 22:00:00  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 521	<b>TRT#:</b> 4 <b>DOSE:</b> 9F	<b>SEX:</b> Female <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 737 <b>HISTO:</b> 92-1195-521
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Heart	* Islets, Pancreatic	* Liver	* Lung
* Lymph Node, Mandibular	* Ovary	* Pancreas	* Spleen
* Urinary Bladder	* Uterus		

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**MISSING**

* Adrenal Cortex	* Adrenal Medulla	* Lymph Node, Mesenteric	* Thymus
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**OBSERVATIONS**

* Kidney		Nephropathy	Moderate
* Pituitary Gland	Pars Distalis	Hyperplasia	Mild
* Thyroid Gland	Follicle	Cyst	Minimal
	Follicular Cel	Hyperplasia	Mild

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 22:00:00  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

<b>ANIMAL ID:</b> 522	<b>TRT#:</b> 3 <b>DOSE:</b> 7F	<b>SEX:</b> Female <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 736 <b>HISTO:</b> 92-1195-522
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**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Heart	* Kidney	* Lymph Node, Mandibular
* Pancreas	* Pituitary Gland	* Thymus	* Urinary Bladder

**OBSERVATIONS**

* Adrenal Cortex	Capsule	Hyperplasia	Minimal
* Islets, Pancreatic		Adenoma	
		Hyperplasia	Marked
* Liver		Hepatocellular Adenoma	Multiple
		Mixed Cell Focus	Multiple
		[ Hepatocellular Adenoma TGLS = 2-9; 3-7; 5-4; 6-8 ]	
		[ Mixed Cell Focus TGLS = 4-4 ]	
* Lung		Hemorrhage	Minimal
* Lymph Node, Mesenteric		Erythrophagocytosis	Mild
Mesentery	Fat	Necrosis	Moderate
		[ Necrosis TGLS = 1-7 ]	
* Ovary		Cyst	Minimal
* Spleen		Hematopoietic Cell Proliferation	Mild
* Thyroid Gland	Follicle	Cyst	Mild
	Follicular Cel	Hyperplasia	Minimal
* Uterus	Bilateral	Cyst	Marked
		[ Cyst TGLS = 7-6 ]	

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 22:00:00  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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**ANIMAL ID:** 523

**TRT#:** 3  
**DOSE:** 7F

**SEX:** Female  
**DISP:** Natural Death

**DAY ON TEST:** 645  
**HISTO:** 92-1195-523

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

\* Heart \* Pancreas

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**MISSING**

\* Islets, Pancreatic \* Lymph Node, Mesenteric \* Spleen \* Thymus

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**AUTO PRECLUDES DIAG.**

\* Adrenal Cortex \* Adrenal Medulla \* Kidney \* Liver  
\* Lung \* Lymph Node, Mandibular \* Ovary \* Pituitary Gland  
\* Thyroid Gland \* Urinary Bladder \* Uterus

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**OBSERVATIONS**

\* Liver  
Note: TGL 1-NST

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**PRIMARY CAUSE OF DEATH**

- UNCERTAIN

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 92003-02  
Test Type: CHRONIC  
Species/Strain: Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
Test Compound: NTP 90 diet study  
CAS Number: DIET90

Date Report Requested: 10/21/2014  
Time Report Requested: 22:00:00  
First Dose M/F: NA / NA  
Lab: NIEHS

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<b>ANIMAL ID:</b> 524	<b>TRT#:</b> 4	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 737
	<b>DOSE:</b> 9F	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 92-1195-524

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Medulla	* Heart	* Lung	* Lymph Node, Mandibular
* Lymph Node, Mesenteric	* Pancreas	* Urinary Bladder	

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**MISSING**

* Pituitary Gland	* Thymus
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**OBSERVATIONS**

* Adrenal Cortex	Capsule	Hyperplasia	Moderate
* Islets, Pancreatic		Hyperplasia	Mild
* Kidney		Nephropathy	Mild
* Liver		Hepatocellular Adenoma	
		Infiltration Cellular	Lymphocyte, Mild
[ Hepatocellular Adenoma TGLS = 3-4 ]			
* Ovary		Cystadenoma	
[ Cystadenoma TGLS = 2-6 ]			
* Spleen		Hyperplasia	Lymphoid, Mild
[ Hyperplasia TGLS = 1-4 ]			
* Thyroid Gland	Follicle	Cyst	Minimal
	Follicular Cel	Hyperplasia	Mild
* Uterus	Bilateral	Cyst	Mild

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 92003-02

Test Type: CHRONIC

Species/Strain: Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

Test Compound: NTP 90 diet study

CAS Number: DIET90

Date Report Requested: 10/21/2014

Time Report Requested: 22:00:00

First Dose M/F: NA / NA

Lab: NIEHS

ANIMAL ID: 525

TRT#: 4

SEX: Female

DAY ON TEST: 737

DOSE: 9F

DISP: Terminal Sacrifice

HISTO: 92-1195-525

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Heart	* Islets, Pancreatic	* Liver	* Lung
* Lymph Node, Mandibular	* Lymph Node, Mesenteric	* Pancreas	* Thymus

**MISSING**

* Adrenal Cortex	* Adrenal Medulla	* Pituitary Gland	* Urinary Bladder
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**OBSERVATIONS**

* Kidney		Nephropathy	Minimal
* Ovary		Cyst	Minimal
Skin		Sarcoma	
Note: TGL 1 INVOLVED TAIL, HOWEVER TERM NOT AVAILABLE. [ Sarcoma TGLS = 1-8; 2-7 ]			
* Spleen		Hematopoietic Cell Proliferation	Moderate
[ Hematopoietic Cell Proliferation TGLS = 3-4 ]			
* Thyroid Gland	Follicle	Cyst	Mild
	Follicular Cel	Hyperplasia	Minimal
* Uterus	Bilateral	Cyst	Marked
[ Cyst TGLS = 4-6 ]			

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 22:00:00  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 527	<b>TRT#:</b> 4	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 738
	<b>DOSE:</b> 9F	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 92-1195-527

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Medulla	* Heart	* Kidney	* Lung
* Lymph Node, Mandibular	* Pancreas	* Pituitary Gland	* Spleen
* Urinary Bladder			

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**MISSING**

\* Thymus

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**OBSERVATIONS**

* Adrenal Cortex	Capsule	Hyperplasia	Mild
* Islets, Pancreatic		Adenoma	
* Liver		Mixed Cell Focus	
[ Mixed Cell Focus TGLS = 1-7 ]			
* Lymph Node, Mesenteric		Infiltration Cellular	Histiocyte, Minimal
* Ovary		Cyst	Minimal
* Thyroid Gland	Follicle	Cyst	Minimal
	Follicular Cel	Hyperplasia	Mild
* Uterus	Bilateral	Cyst	Minimal

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 22:00:00  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 528	<b>TRT#:</b> 4	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 737
	<b>DOSE:</b> 9F	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 92-1195-528

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Medulla	* Heart	* Islets, Pancreatic	* Lung
* Lymph Node, Mandibular	* Ovary	* Pancreas	* Urinary Bladder

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**MISSING**

* Lymph Node, Mesenteric	* Pituitary Gland	* Spleen	* Thymus
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**OBSERVATIONS**

* Adrenal Cortex	Capsule	Hyperplasia	Mild
* Kidney		Nephropathy	Mild
* Liver		Basophilic Focus	
* Thyroid Gland	Follicle	Cyst	Minimal
* Uterus	Bilateral	Cyst	Marked

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[ Cyst TGLS = 1-6 ]

PRIMARY CAUSE OF DEATH

-

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 92003-02

Test Type: CHRONIC

Species/Strain: Mouse/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: NTP 90 diet study

CAS Number: DIET90

Date Report Requested: 10/21/2014

Time Report Requested: 22:00:00

First Dose M/F: NA / NA

Lab: NIEHS

ANIMAL ID: 531

TRT#: 3

SEX: Female

DAY ON TEST: 668

DOSE: 7F

DISP: Moribund Sacrifice

HISTO: 92-1195-531

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

\* Adrenal Medulla  
\* Urinary Bladder

\* Heart

\* Pancreas

\* Spleen

MISSING

\* Lymph Node, Mandibular

\* Thymus

INSUFFICIENT TISSUE

\* Ovary

OBSERVATIONS

\* Adrenal Cortex  
\* Islets, Pancreatic  
\* Kidney  
\* Liver

Capsule

Hyperplasia  
Hyperplasia  
Nephropathy  
Eosinophilic Focus  
Hepatocellular Carcinoma

Mild  
Mild  
Minimal

[ Hepatocellular Carcinoma TGLS = 2-7 ]

\* Lung  
\* Lymph Node, Mesenteric  
\* Pituitary Gland  
Skin

Pars Distalis

Hepatocellular Carcinoma  
Infiltration Cellular  
Adenoma  
Sarcoma

Metastatic (Liver)  
Histiocyte, Mild

[ Sarcoma TGLS = 1-8 ]

\* Thyroid Gland  
\* Uterus

Follicle  
Bilateral

Cyst  
Cyst

Minimal  
Moderate

PRIMARY CAUSE OF DEATH

- Skin Sarcoma

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 22:00:00  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 532	<b>TRT#:</b> 3 <b>DOSE:</b> 7F	<b>SEX:</b> Female <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 736 <b>HISTO:</b> 92-1195-532
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Heart	* Islets, Pancreatic	* Kidney	* Liver
* Lung	* Lymph Node, Mandibular	* Ovary	* Pituitary Gland
* Spleen	* Urinary Bladder		

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**MISSING**

* Adrenal Medulla	* Thymus		
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**OBSERVATIONS**

* Adrenal Cortex	Capsule	Hyperplasia	Moderate
* Lymph Node, Mesenteric		Infiltration Cellular	Histiocyte, Minimal
* Pancreas	Acinus	Inflammation	Mild
	Acinus	Vacuolization Cytoplasmic	Mild
Skin		Schwannoma Malignant	
[ Schwannoma Malignant TGLS = 1-7 ]			
* Thyroid Gland	Follicle	Cyst	Minimal
* Uterus	Bilateral	Cyst	Marked
[ Cyst TGLS = 2-6 ]			

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**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 92003-02  
Test Type: CHRONIC  
Species/Strain: Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
Test Compound: NTP 90 diet study  
CAS Number: DIET90

Date Report Requested: 10/21/2014  
Time Report Requested: 22:00:00  
First Dose M/F: NA / NA  
Lab: NIEHS

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<b>ANIMAL ID:</b> 534	<b>TRT#:</b> 4	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 574
	<b>DOSE:</b> 9F	<b>DISP:</b> Natural Death	<b>HISTO:</b> 92-1195-534

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Medulla	* Heart	* Kidney	* Liver
* Lung	* Lymph Node, Mandibular	* Lymph Node, Mesenteric	* Ovary
* Thyroid Gland	* Urinary Bladder	* Uterus	

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**MISSING**

* Pituitary Gland	* Thymus
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**AUTO PRECLUDES DIAG.**

* Islets, Pancreatic	* Pancreas
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**OBSERVATIONS**

* Adrenal Cortex	Capsule	Hyperplasia	Mild
Skin		Sarcoma	
Note: CYSTIC BLOODY POUCH, TERM NOT AVAILABLE. [ Sarcoma TGLS = 1-7 ]			
* Spleen		Hematopoietic Cell Proliferation	Marked

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PRIMARY CAUSE OF DEATH	- UNCERTAIN
CONTRIBUTORY CAUSE OF DEATH	- Skin Sarcoma

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 22:00:00  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 535	<b>TRT#:</b> 4	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 737
	<b>DOSE:</b> 9F	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 92-1195-535

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Medulla	* Heart	* Islets, Pancreatic	* Kidney
* Lung	* Lymph Node, Mandibular	* Lymph Node, Mesenteric	* Ovary
* Pancreas	* Pituitary Gland	* Spleen	* Urinary Bladder

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**MISSING**

\* Thymus

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**OBSERVATIONS**

* Adrenal Cortex	Capsule	Hyperplasia	Mild
Harderian Gland		Adenoma	
[ Adenoma TGLS = 3-8 ]			
* Liver		Hepatocellular Adenoma	
[ Hepatocellular Adenoma TGLS = 2-4 ]			
Mesentery	Fat	Necrosis	Moderate
[ Necrosis TGLS = 1-7 ]			
* Thyroid Gland	Follicle	Cyst	Minimal
	Follicular Cel	Hyperplasia	Minimal
* Uterus	Bilateral	Cyst	Moderate

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 22:00:00  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

**ANIMAL ID:** 536

**TRT#:** 4  
**DOSE:** 9F

**SEX:** Female  
**DISP:** Terminal Sacrifice

**DAY ON TEST:** 737  
**HISTO:** 92-1195-536

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Heart	* Islets, Pancreatic	* Kidney
* Lung	* Lymph Node, Mandibular	* Lymph Node, Mesenteric	* Pancreas
* Pituitary Gland	* Thyroid Gland	* Urinary Bladder	

**MISSING**

\* Thymus

**OBSERVATIONS**

* Adrenal Cortex	Capsule	Hyperplasia	Mild
* Liver		Eosinophilic Focus	
		Hepatocellular Carcinoma	
	[ Hepatocellular Carcinoma TGLS = 1-4 ]		
* Ovary		Infiltration Cellular	Lymphocyte, Moderate
	[ Infiltration Cellular TGLS = 2-6 ]		
* Spleen		Hematopoietic Cell Proliferation	Mild
* Uterus	Bilateral	Cyst	Marked
	[ Cyst TGLS = 3-6 ]		

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 22:00:00  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 537	<b>TRT#:</b> 4 <b>DOSE:</b> 9F	<b>SEX:</b> Female <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 737 <b>HISTO:</b> 92-1195-537
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Medulla	* Heart	* Islets, Pancreatic	* Kidney
* Lung	* Lymph Node, Mandibular	* Pancreas	* Pituitary Gland
* Spleen	* Thymus	* Urinary Bladder	* Uterus

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**OBSERVATIONS**

* Adrenal Cortex	Capsule	Hyperplasia	Moderate
* Liver	[ Hepatocellular Adenoma TGLS = 1,2-4; 3-7 ]	Hepatocellular Adenoma	Multiple
* Lymph Node, Mesenteric		Infiltration Cellular	Histiocyte, Minimal
* Ovary		Cyst	Mild
* Thyroid Gland	Follicle	Cyst	Mild
	Follicular Cel	Hyperplasia	Mild

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 22:00:00  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 538	<b>TRT#:</b> 4	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 737
	<b>DOSE:</b> 9F	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 92-1195-538

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Heart	* Islets, Pancreatic	* Kidney	* Liver
* Lymph Node, Mandibular	* Pancreas	* Spleen	* Thymus
* Urinary Bladder			

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**MISSING**

* Adrenal Medulla	* Lymph Node, Mesenteric	* Pituitary Gland	
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**OBSERVATIONS**

* Adrenal Cortex	Capsule	Hyperplasia	Minimal
* Lung		Alveolar/Bronchiolar Adenoma	
	[ Alveolar/Bronchiolar Adenoma TGLS = 2-5 ]		
* Ovary		Cyst	Mild
* Thyroid Gland	Follicle	Cyst	Minimal
	Follicular Cel	Hyperplasia	Mild
* Uterus	Bilateral	Cyst	Marked
	[ Cyst TGLS = 1-6 ]		

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**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 22:00:00  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 541	<b>TRT#:</b> 3 <b>DOSE:</b> 7F	<b>SEX:</b> Female <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 736 <b>HISTO:</b> 92-1195-541
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Heart	* Islets, Pancreatic	* Kidney	* Liver
* Lymph Node, Mandibular	* Ovary	* Pancreas	* Spleen
* Thymus	* Urinary Bladder		

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**MISSING**

* Adrenal Cortex	* Adrenal Medulla	* Lymph Node, Mesenteric	* Pituitary Gland
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**OBSERVATIONS**

* Lung	Alveolar Epith	Hyperplasia	Minimal
* Thyroid Gland	Follicle	Cyst	Minimal
	Follicular Cel	Hyperplasia	Minimal
* Uterus	Bilateral	Cyst	Marked

---

[ Cyst TGLS = 1-6 ]

PRIMARY CAUSE OF DEATH

-

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 92003-02

Test Type: CHRONIC

Species/Strain: Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

Test Compound: NTP 90 diet study

CAS Number: DIET90

Date Report Requested: 10/21/2014

Time Report Requested: 22:00:00

First Dose M/F: NA / NA

Lab: NIEHS

ANIMAL ID: 545

TRT#: 3

SEX: Female

DAY ON TEST: 736

DOSE: 7F

DISP: Terminal Sacrifice

HISTO: 92-1195-545

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

\* Adrenal Medulla

\* Heart

\* Liver

\* Lung

\* Lymph Node, Mandibular

\* Ovary

\* Pancreas

\* Pituitary Gland

\* Urinary Bladder

**MISSING**

\* Lymph Node, Mesenteric

**OBSERVATIONS**

\* Adrenal Cortex

Capsule

Hyperplasia

Moderate

\* Islets, Pancreatic

Hyperplasia

Minimal

\* Kidney

Nephropathy

Minimal

Skin

Sarcoma

[ Sarcoma TGLS = 1-7 ]

\* Spleen

Hematopoietic Cell Proliferation

Mild

[ Hematopoietic Cell Proliferation TGLS = 2-4 ]

\* Thymus

Epithel Cell

Hyperplasia

Minimal

\* Thyroid Gland

Follicle

Cyst

Minimal

Follicular Cel

Hyperplasia

Minimal

\* Uterus

Bilateral

Cyst

Mild

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 22:00:00  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 546	<b>TRT#:</b> 4 <b>DOSE:</b> 9F	<b>SEX:</b> Female <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 737 <b>HISTO:</b> 92-1195-546
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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<b>NORMAL</b>			
* Heart	* Islets, Pancreatic	* Kidney	* Lymph Node, Mandibular
* Ovary	* Pancreas	* Spleen	* Thyroid Gland
* Urinary Bladder			

---

<b>MISSING</b>			
* Adrenal Cortex	* Adrenal Medulla	* Thymus	

---

<b>OBSERVATIONS</b>			
* Liver		Eosinophilic Focus Hemangiosarcoma	
[ Eosinophilic Focus TGLS = 2-7 ]			
[ Hemangiosarcoma TGLS = 1-4 ]			
* Lung		Alveolar/Bronchiolar Carcinoma	
* Lymph Node, Mesenteric		Infiltration Cellular	Histiocyte, Mild
* Pituitary Gland	Pars Distalis	Adenoma	
* Uterus		Cyst	Mild

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<b>PRIMARY CAUSE OF DEATH</b>	-		
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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 22:00:00  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 547	<b>TRT#:</b> 3 <b>DOSE:</b> 7F	<b>SEX:</b> Female <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 736 <b>HISTO:</b> 92-1195-547
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Medulla	* Heart	* Islets, Pancreatic	* Liver
* Lung	* Pancreas	* Pituitary Gland	* Spleen
* Thyroid Gland	* Urinary Bladder		

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**MISSING**

* Lymph Node, Mandibular	* Lymph Node, Mesenteric	* Thymus
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**OBSERVATIONS**

* Adrenal Cortex	Capsule	Hyperplasia	Mild
* Kidney		Nephropathy	Mild
* Ovary		Cyst	Minimal
* Uterus	Bilateral	Cyst	Mild
		Leiomyoma	

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[ Leiomyoma TGLS = 1-6 ]

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 92003-02  
Test Type: CHRONIC  
Species/Strain: Mouse/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA  
Test Compound: NTP 90 diet study  
CAS Number: DIET90

Date Report Requested: 10/21/2014  
Time Report Requested: 22:00:00  
First Dose M/F: NA / NA  
Lab: NIEHS

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<b>ANIMAL ID:</b> 548	<b>TRT#:</b> 4	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 737
	<b>DOSE:</b> 9F	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 92-1195-548

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Heart	* Kidney	* Liver	* Lymph Node, Mandibular
* Ovary	* Pituitary Gland	* Spleen	* Urinary Bladder

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**MISSING**

* Adrenal Cortex	* Adrenal Medulla	* Thymus
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**OBSERVATIONS**

Harderian Gland		Adenoma	
[ Adenoma TGLS = 1-7 ]			
* Islets, Pancreatic		Hyperplasia	Mild
* Lung		Pigmentation	Moderate
* Lymph Node, Mesenteric		Infiltration Cellular	Histiocyte, Minimal
* Pancreas	Acinus	Vacuolization Cytoplasmic	Minimal
* Thyroid Gland	Follicle	Cyst	Minimal
	Follicular Cel	Hyperplasia	Minimal
* Uterus	Bilateral	Cyst	Mild

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 92003-02  
Test Type: CHRONIC  
Species/Strain: Mouse/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA  
Test Compound: NTP 90 diet study  
CAS Number: DIET90

Date Report Requested: 10/21/2014  
Time Report Requested: 22:00:00  
First Dose M/F: NA / NA  
Lab: NIEHS

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ANIMAL ID: 549	TRT#: 4 DOSE: 9F	SEX: Female DISP: Terminal Sacrifice	DAY ON TEST: 737 HISTO: 92-1195-549
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Medulla	* Heart	* Islets, Pancreatic	* Kidney
* Liver	* Lung	* Lymph Node, Mandibular	* Pancreas
* Pituitary Gland	* Spleen	* Urinary Bladder	

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**MISSING**

\* Thymus

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**OBSERVATIONS**

* Adrenal Cortex	Capsule	Hyperplasia	Mild
* Lymph Node, Mesenteric		Infiltration Cellular	Histiocyte, Minimal
* Ovary		Cystadenoma	
* Thyroid Gland	Follicle	Cyst	Minimal
	Follicular Cel	Hyperplasia	Mild
* Uterus	Bilateral	Cyst	Marked

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[ Cyst TGLS = 1-6 ]

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 22:00:00  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 550	<b>TRT#:</b> 3 <b>DOSE:</b> 7F	<b>SEX:</b> Female <b>DISP:</b> Natural Death	<b>DAY ON TEST:</b> 738 <b>HISTO:</b> 92-1195-550
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Heart	* Lung	Tissue NOS
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**MISSING**

* Pituitary Gland	* Thymus
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**AUTO PRECLUDES DIAG.**

* Adrenal Cortex	* Adrenal Medulla	* Islets, Pancreatic	* Kidney
* Lymph Node, Mandibular	* Lymph Node, Mesenteric	* Ovary	* Pancreas
* Spleen	* Thyroid Gland	* Urinary Bladder	

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**OBSERVATIONS**

* Liver	Hemangiosarcoma	
Skin	Schwannoma Malignant	
[ Schwannoma Malignant TGLS = 1-7 ]		
* Uterus	Cyst	Mild

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<b>PRIMARY CAUSE OF DEATH</b>	- UNCERTAIN
<b>CONTRIBUTORY CAUSE OF DEATH</b>	- Liver Hemangiosarcoma;Skin Schwannoma Malignant

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 22:00:00  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

<b>ANIMAL ID:</b> 552	<b>TRT#:</b> 4 <b>DOSE:</b> 9F	<b>SEX:</b> Female <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 738 <b>HISTO:</b> 92-1195-552
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**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Heart	* Kidney	* Lung
* Lymph Node, Mandibular	* Ovary	* Pancreas	* Urinary Bladder

**OBSERVATIONS**

* Adrenal Cortex	Capsule	Hyperplasia	Moderate
* Islets, Pancreatic		Hyperplasia	Mild
* Liver		Angiectasis	Mild
		Clear Cell Focus	
		Eosinophilic Focus	
		Hepatocellular Adenoma	Multiple
Note: TGL 6-NCL [ Angiectasis TGLS = 4-9 ] [ Clear Cell Focus TGLS = 7-4 ] [ Eosinophilic Focus TGLS = 5-10 ] [ Hepatocellular Adenoma TGLS = 1-8; 2-7; 3-4 ]			
* Lymph Node, Mesenteric		Infiltration Cellular	Histiocyte, Mild
* Pituitary Gland	Pars Distalis	Hyperplasia	Mild
* Spleen		Hematopoietic Cell Proliferation	Mild
* Thymus		Thymoma Benign	
		[ Thymoma Benign TGLS = 8-2 ]	
* Thyroid Gland	Follicle	Cyst	Mild
	Follicular Cel	Hyperplasia	Minimal
* Uterus		Cyst	Mild

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 22:00:00  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 554	<b>TRT#:</b> 3 <b>DOSE:</b> 7F	<b>SEX:</b> Female <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 737 <b>HISTO:</b> 92-1195-554
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**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

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* Adrenal Medulla	* Heart	* Islets, Pancreatic	* Kidney
* Liver	* Lung	* Lymph Node, Mandibular	* Pancreas
* Pituitary Gland	* Spleen	* Thyroid Gland	* Urinary Bladder

---

**MISSING**

\* Thymus

**OBSERVATIONS**

---

* Adrenal Cortex	Capsule	Hyperplasia	Mild
* Lymph Node, Mesenteric		Infiltration Cellular	Histiocyte, Minimal
* Ovary	Bilateral	Infiltration Cellular	Histiocyte, Moderate
* Uterus	Bilateral	Cyst	Marked

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[ Cyst TGLS = 1-6 ]

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 22:00:00  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 555	<b>TRT#:</b> 4 <b>DOSE:</b> 9F	<b>SEX:</b> Female <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 738 <b>HISTO:</b> 92-1195-555
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Medulla	* Heart	* Islets, Pancreatic	* Kidney
* Lung	* Lymph Node, Mandibular	* Ovary	* Pancreas
* Pituitary Gland	* Spleen	* Thymus	* Urinary Bladder

---

**OBSERVATIONS**

* Adrenal Cortex	Capsule	Hyperplasia	Moderate
* Liver		Hepatocellular Adenoma	
[ Hepatocellular Adenoma TGLS = 2-4 ]			
* Lymph Node, Mesenteric		Infiltration Cellular	Histiocyte, Minimal
* Thyroid Gland	Follicle	Cyst	Minimal
	Follicular Cel	Hyperplasia	Mild
* Uterus	Bilateral	Cyst	Marked
[ Cyst TGLS = 1-6 ]			

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PRIMARY CAUSE OF DEATH

-

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\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 22:00:00  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 556	<b>TRT#:</b> 3 <b>DOSE:</b> 7F	<b>SEX:</b> Female <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 736 <b>HISTO:</b> 92-1195-556
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Heart	* Islets, Pancreatic	* Kidney	* Liver
* Lymph Node, Mandibular	* Lymph Node, Mesenteric	* Ovary	* Pituitary Gland
* Spleen	* Urinary Bladder		

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**MISSING**

\* Adrenal Medulla

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**OBSERVATIONS**

* Adrenal Cortex	Capsule	Hyperplasia	Mild
* Lung		Alveolar/Bronchiolar Adenoma	
	[ Alveolar/Bronchiolar Adenoma TGLS = 1-5 ]		
* Pancreas	Acinus	Inflammation	Mild
* Thymus	Epithel Cell	Hyperplasia	Moderate
* Thyroid Gland	Follicle	Cyst	Mild
* Uterus		Cyst	Minimal

---

PRIMARY CAUSE OF DEATH

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 22:00:00  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 557	<b>TRT#:</b> 4 <b>DOSE:</b> 9F	<b>SEX:</b> Female <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 737 <b>HISTO:</b> 92-1195-557
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Medulla	* Heart	* Islets, Pancreatic	* Kidney
* Liver	* Lymph Node, Mandibular	* Ovary	* Pancreas
* Pituitary Gland	* Spleen	* Thymus	* Urinary Bladder

---

**OBSERVATIONS**

* Adrenal Cortex	Capsule	Hyperplasia	Moderate
* Lung		Alveolar/Bronchiolar Carcinoma	
* Lymph Node, Mesenteric		Infiltration Cellular	Histiocyte, Minimal
* Thyroid Gland	Follicle	Cyst	Minimal
* Uterus	Bilateral	Cyst	Moderate

[ Cyst TGLS = 1-6 ]

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PRIMARY CAUSE OF DEATH

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-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 22:00:00  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 558	<b>TRT#:</b> 3 <b>DOSE:</b> 7F	<b>SEX:</b> Female <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 736 <b>HISTO:</b> 92-1195-558
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Medulla	* Heart	* Islets, Pancreatic	* Lung
* Lymph Node, Mandibular	* Lymph Node, Mesenteric	* Ovary	* Pancreas
* Pituitary Gland	* Thymus	* Thyroid Gland	

---

**MISSING**

\* Urinary Bladder

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**OBSERVATIONS**

* Adrenal Cortex	Capsule	Hyperplasia	Moderate
* Kidney		Nephropathy	Minimal
* Liver		Eosinophilic Focus	
		Hepatocellular Adenoma	Multiple
		[ Eosinophilic Focus TGLS = 2-4 ]	
		[ Hepatocellular Adenoma TGLS = 3-7; 4-4 ]	
* Spleen		Hematopoietic Cell Proliferation	Mild
* Uterus	Bilateral	Cyst	Mild
		[ Cyst TGLS = 1-6 ]	

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**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 22:00:00  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 559	<b>TRT#:</b> 4	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 737
	<b>DOSE:</b> 9F	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 92-1195-559

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Heart	* Islets, Pancreatic	* Kidney	* Liver
* Lung	* Lymph Node, Mandibular	* Lymph Node, Mesenteric	* Pancreas
* Spleen	* Urinary Bladder		

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**MISSING**

\* Adrenal Medulla

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**OBSERVATIONS**

* Adrenal Cortex	Capsule	Hyperplasia	Mild
* Ovary		Cystadenoma	
[ Cystadenoma TGLS = 2-6 ]			
* Pituitary Gland	Pars Distalis	Hyperplasia	Mild
* Thymus	Epithel Cell	Hyperplasia	Moderate
* Thyroid Gland	Follicle	Cyst	Mild
	Follicular Cel	Hyperplasia	Mild
* Uterus	Bilateral	Cyst	Mild
[ Cyst TGLS = 1-6 ]			

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**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 92003-02

Test Type: CHRONIC

Species/Strain: Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

Test Compound: NTP 90 diet study

CAS Number: DIET90

Date Report Requested: 10/21/2014

Time Report Requested: 22:00:00

First Dose M/F: NA / NA

Lab: NIEHS

ANIMAL ID: 560

TRT#: 3

SEX: Female

DAY ON TEST: 714

DOSE: 7F

DISP: Moribund Sacrifice

HISTO: 92-1195-560

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

\* Adrenal Medulla

\* Heart

\* Islets, Pancreatic

\* Kidney

\* Lung

\* Lymph Node, Mesenteric

\* Pancreas

**MISSING**

\* Lymph Node, Mandibular

\* Ovary

\* Pituitary Gland

\* Thymus

**OBSERVATIONS**

\* Adrenal Cortex

Capsule

Hyperplasia

Mild

\* Kidney

Note: TGL 2-NCL

\* Liver

Eosinophilic Focus

Hepatocyte

Necrosis

Mild

Mesentery

Fat

Necrosis

Marked

Note: MESENTERY FAT MASS (L-4) FOUND AT TRIM.

[ Necrosis TGLS = 4-7 ]

\* Pituitary Gland

Note: TGL 3-NST

\* Spleen

Hematopoietic Cell Proliferation

Moderate

[ Hematopoietic Cell Proliferation TGLS = 1-4 ]

\* Thyroid Gland

Follicle

Cyst

Minimal

\* Urinary Bladder

Inflammation

Acute, Marked

\* Uterus

Cyst

Mild

PRIMARY CAUSE OF DEATH

- UNCERTAIN

CONTRIBUTORY CAUSE OF DEATH

- Urinary Bladder Inflammation

Animal Note: MARKED INFLAMMATION OF BLADDER IS CONTRIBUTORY FACTOR AS WELL AS MARKED SUPPURATIVE ESOPHAGITIS.

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 22:00:00  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 561	<b>TRT#:</b> 4	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 738
	<b>DOSE:</b> 9F	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 92-1195-561

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Medulla	* Heart	* Islets, Pancreatic	* Lung
* Lymph Node, Mandibular	* Pancreas	* Pituitary Gland	* Thymus
* Urinary Bladder			

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**OBSERVATIONS**

* Adrenal Cortex	Capsule	Hyperplasia	Mild
* Kidney		Nephropathy	Moderate
* Liver		Hepatocellular Adenoma	
[ Hepatocellular Adenoma TGLS = 2-4 ]			
* Lymph Node, Mesenteric		Infiltration Cellular	Histiocyte, Minimal
* Ovary		Cyst	Marked
[ Cyst TGLS = 1-6 ]			
* Spleen		Hematopoietic Cell Proliferation	Moderate
* Thyroid Gland	Follicle	Cyst	Mild
	Follicular Cel	Hyperplasia	Minimal
* Uterus		Carcinoma	
[ Carcinoma TGLS = 3-6 ]			

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**PRIMARY CAUSE OF DEATH** -

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 92003-02  
 Test Type: CHRONIC  
 Species/Strain: Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
 Test Compound: NTP 90 diet study  
 CAS Number: DIET90

Date Report Requested: 10/21/2014  
 Time Report Requested: 22:00:00  
 First Dose M/F: NA / NA  
 Lab: NIEHS

<b>ANIMAL ID:</b> 562	<b>TRT#:</b> 3 <b>DOSE:</b> 7F	<b>SEX:</b> Female <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 736 <b>HISTO:</b> 92-1195-562
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**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Heart	* Islets, Pancreatic	* Kidney
* Lung	* Lymph Node, Mandibular	* Ovary	* Pituitary Gland
* Urinary Bladder			

**MISSING**

\* Thymus

**OBSERVATIONS**

* Adrenal Cortex	Capsule	Hyperplasia	Moderate
* Liver	Hepatocyte	Hepatocellular Carcinoma Necrosis	Mild
	[ Hepatocellular Carcinoma TGLS = 3-4 ]		
	[ Necrosis TGLS = 2-4 ]		
* Lymph Node, Mesenteric		Infiltration Cellular	Histiocyte, Mild
Mesentery	Fat	Necrosis	Marked
	[ Necrosis TGLS = 2-7 ]		
* Pancreas	Acinus	Degeneration	Minimal
* Spleen		Hematopoietic Cell Proliferation	Moderate
* Thyroid Gland	Follicle	Cyst	Minimal
	Follicular Cel	Hyperplasia	Minimal
* Uterus	Bilateral	Cyst	Marked
	[ Cyst TGLS = 1-6 ]		

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 92003-02  
Test Type: CHRONIC  
Species/Strain: Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
Test Compound: NTP 90 diet study  
CAS Number: DIET90

Date Report Requested: 10/21/2014  
Time Report Requested: 22:00:00  
First Dose M/F: NA / NA  
Lab: NIEHS

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<b>ANIMAL ID:</b> 563	<b>TRT#:</b> 4	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 737
	<b>DOSE:</b> 9F	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 92-1195-563

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Cortex	* Heart	* Islets, Pancreatic	* Liver
* Lymph Node, Mandibular	* Ovary	* Pancreas	* Spleen
* Urinary Bladder	* Uterus		

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**MISSING**

* Adrenal Medulla	* Thymus
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**OBSERVATIONS**

* Kidney		Nephropathy	Minimal
* Lung	Mediastinum	Inflammation	Granulomatous, Mild
* Lymph Node, Mesenteric		Lymphoma Malignant	
* Pituitary Gland		Adenoma	
* Thyroid Gland	Follicle	Cyst	Minimal
Tissue NOS	Abdominal	Lymphoma Malignant	

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[ Lymphoma Malignant TGLS = 1-7 ]

**PRIMARY CAUSE OF DEATH**

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Animal Note: GROSS LESION CALLED THORACIC CAVITY MASS BUT SECTION 7 HAS NEOPLASM W/FRAGMENTS OF PANCREAS ATTACHED. I BELIEVE MASS WAS IN ABDOMINAL CAVITY, PROBABLY MES LN.

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\* PROTOCOL REQUIRED TISSUE



Experiment Number: 92003-02  
Test Type: CHRONIC  
Species/Strain: Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
Test Compound: NTP 90 diet study  
CAS Number: DIET90

Date Report Requested: 10/21/2014  
Time Report Requested: 22:00:00  
First Dose M/F: NA / NA  
Lab: NIEHS

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<b>ANIMAL ID:</b> 564	<b>TRT#:</b> 3 <b>DOSE:</b> 7F	<b>SEX:</b> Female <b>DISP:</b> Natural Death	<b>DAY ON TEST:</b> 623 <b>HISTO:</b> 92-1195-564
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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<b>NORMAL</b> * Heart	* Ovary	Tissue NOS	Vagina
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<b>MISSING</b> * Pituitary Gland	* Thymus		
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<b>AUTO PRECLUDES DIAG.</b> * Adrenal Medulla * Lymph Node, Mesenteric * Urinary Bladder	* Islets, Pancreatic * Pancreas * Uterus	* Kidney * Spleen	* Lymph Node, Mandibular * Thyroid Gland
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<b>OBSERVATIONS</b> * Adrenal Cortex * Liver * Lung	Capsule	Hyperplasia Hepatocellular Carcinoma Hepatocellular Carcinoma	Minimal Metastatic (Liver)
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<b>PRIMARY CAUSE OF DEATH</b>	- Liver Hepatocellular Carcinoma		
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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 92003-02  
Test Type: CHRONIC  
Species/Strain: Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
Test Compound: NTP 90 diet study  
CAS Number: DIET90

Date Report Requested: 10/21/2014  
Time Report Requested: 22:00:00  
First Dose M/F: NA / NA  
Lab: NIEHS

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<b>ANIMAL ID:</b> 565	<b>TRT#:</b> 3 <b>DOSE:</b> 7F	<b>SEX:</b> Female <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 737 <b>HISTO:</b> 92-1195-565
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**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Heart	* Islets, Pancreatic	* Kidney	* Lung
* Lymph Node, Mandibular	* Lymph Node, Mesenteric	* Ovary	* Pancreas
* Pituitary Gland	* Spleen	* Thymus	* Urinary Bladder

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**MISSING**

\* Adrenal Medulla

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**OBSERVATIONS**

* Adrenal Cortex	Capsule	Hyperplasia	Moderate
* Liver		Eosinophilic Focus	
		Hepatocellular Adenoma	
	[ Eosinophilic Focus TGLS = 1-4 ]		
	[ Hepatocellular Adenoma TGLS = 2-4 ]		
* Thyroid Gland	Follicle	Cyst	Moderate
* Uterus	Bilateral	Cyst	Marked
	[ Cyst TGLS = 3-6 ]		

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 22:00:00  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 566	<b>TRT#:</b> 3 <b>DOSE:</b> 7F	<b>SEX:</b> Female <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 736 <b>HISTO:</b> 92-1195-566
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Medulla	* Heart	* Islets, Pancreatic	* Liver
* Lung	* Lymph Node, Mandibular	* Lymph Node, Mesenteric	* Ovary
* Pancreas	* Pituitary Gland	* Spleen	* Thymus
* Urinary Bladder			

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**OBSERVATIONS**

* Adrenal Cortex	Capsule	Hyperplasia	Moderate
* Kidney		Metaplasia	Osseous, Minimal
		Nephropathy	Mild
* Thyroid Gland	Follicle	Cyst	Minimal
	Follicular Cel	Hyperplasia	Minimal
* Uterus		Carcinoma	
	Bilateral	Cyst	Moderate

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 22:00:00  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

**ANIMAL ID:** 567

**TRT#:** 4  
**DOSE:** 9F

**SEX:** Female  
**DISP:** Terminal Sacrifice

**DAY ON TEST:** 737  
**HISTO:** 92-1195-567

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Heart	* Liver	* Lung
* Lymph Node, Mandibular	* Pancreas	* Pituitary Gland	* Spleen
* Thymus	* Urinary Bladder		

**OBSERVATIONS**

* Adrenal Cortex	Capsule	Hyperplasia	Moderate
Harderian Gland		Adenoma	
[ Adenoma TGLS = 2-7 ]			
* Islets, Pancreatic		Hyperplasia	Mild
* Kidney		Nephropathy	Mild
* Lymph Node, Mesenteric		Infiltration Cellular	Histiocyte, Minimal
* Ovary		Cyst	Moderate
		Cystadenoma	
* Thyroid Gland	Follicle	Cyst	Minimal
	Follicular Cel	Hyperplasia	Mild
* Uterus	Bilateral	Cyst	Marked
[ Cyst TGLS = 1-6 ]			

**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 92003-02  
Test Type: CHRONIC  
Species/Strain: Mouse/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA  
Test Compound: NTP 90 diet study  
CAS Number: DIET90

Date Report Requested: 10/21/2014  
Time Report Requested: 22:00:00  
First Dose M/F: NA / NA  
Lab: NIEHS

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ANIMAL ID: 570	TRT#: 3 DOSE: 7F	SEX: Female DISP: Terminal Sacrifice	DAY ON TEST: 736 HISTO: 92-1195-570
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ORGAN AND ACCOUNTABLE SITE STATUS

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NORMAL

* Adrenal Medulla	* Heart	* Islets, Pancreatic	* Lung
* Lymph Node, Mandibular	* Lymph Node, Mesenteric	* Ovary	* Pancreas
* Spleen	* Thymus	* Urinary Bladder	

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MISSING

\* Pituitary Gland

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OBSERVATIONS

* Adrenal Cortex	Capsule	Hyperplasia	Moderate
* Kidney		Nephropathy	Minimal
* Liver		Hepatocellular Adenoma	
[ Hepatocellular Adenoma TGLS = 1-7 ]			
* Thyroid Gland	Follicle	Cyst	Minimal
	Follicular Cel	Hyperplasia	Minimal
* Uterus	Bilateral	Cyst	Minimal

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 92003-02  
Test Type: CHRONIC  
Species/Strain: Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
Test Compound: NTP 90 diet study  
CAS Number: DIET90

Date Report Requested: 10/21/2014  
Time Report Requested: 22:00:00  
First Dose M/F: NA / NA  
Lab: NIEHS

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<b>ANIMAL ID:</b> 572	<b>TRT#:</b> 4	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 738
	<b>DOSE:</b> 9F	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 92-1195-572

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Medulla	* Heart	* Islets, Pancreatic	* Kidney
* Liver	* Lung	* Lymph Node, Mandibular	* Ovary
* Pancreas	* Pituitary Gland	* Spleen	* Thymus
* Urinary Bladder			

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**OBSERVATIONS**

* Adrenal Cortex	Capsule	Hyperplasia	Moderate
* Lymph Node, Mesenteric		Infiltration Cellular	Histiocyte, Minimal
Mesentery	Fat	Necrosis	Marked
[ Necrosis TGLS = 2-7 ]			
Skin	Hair Follicle	Atrophy	Mild
[ Atrophy TGLS = 1-7 ]			
* Thyroid Gland	Follicle	Cyst	Minimal
	Follicular Cel	Hyperplasia	Mild
* Uterus	Bilateral	Cyst	Moderate

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 92003-02

Test Type: CHRONIC

Species/Strain: Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

Test Compound: NTP 90 diet study

CAS Number: DIET90

Date Report Requested: 10/21/2014

Time Report Requested: 22:00:00

First Dose M/F: NA / NA

Lab: NIEHS

ANIMAL ID: 577

TRT#: 3

SEX: Female

DAY ON TEST: 676

DOSE: 7F

DISP: Natural Death

HISTO: 92-1195-577

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

\* Heart \* Lung \* Pituitary Gland \* Urinary Bladder

**MISSING**

\* Adrenal Cortex \* Adrenal Medulla \* Islets, Pancreatic \* Lymph Node, Mandibular  
\* Lymph Node, Mesenteric \* Ovary \* Pancreas \* Thymus  
\* Thyroid Gland

**OBSERVATIONS**

\* Kidney Nephropathy Mild  
\* Liver Hemangiosarcoma  
Hepatocellular Carcinoma  
[ Hemangiosarcoma TGLS = 1-4 ]  
[ Hepatocellular Carcinoma TGLS = 1-4 ]  
\* Spleen Hemangiosarcoma  
[ Hemangiosarcoma TGLS = 2-4 ]  
\* Uterus Bilateral Cyst Mild

PRIMARY CAUSE OF DEATH - UNCERTAIN

CONTRIBUTORY CAUSE OF DEATH - Liver Hemangiosarcoma; Liver Hepatocellular Carcinoma

Animal Note: MASSES IN LIVER AND SPLEEN SEEN AT NECROPSY AND SPECIFIED AT TRIM.

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 92003-02

Test Type: CHRONIC

Species/Strain: Mouse/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: NTP 90 diet study

CAS Number: DIET90

Date Report Requested: 10/21/2014

Time Report Requested: 22:00:00

First Dose M/F: NA / NA

Lab: NIEHS

<b>ANIMAL ID:</b> 578	<b>TRT#:</b> 4	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 738
	<b>DOSE:</b> 9F	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 92-1195-578

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	* Heart	* Islets, Pancreatic	* Kidney
* Lymph Node, Mandibular	* Ovary	* Pancreas	* Pituitary Gland
* Urinary Bladder			

MISSING

\* Thymus

OBSERVATIONS

* Adrenal Cortex	Capsule	Hyperplasia	Mild
* Liver		Eosinophilic Focus	Multiple
		Hepatocellular Adenoma	
		Hepatocellular Carcinoma	
		[ Eosinophilic Focus TGLS = 2-7; 5-8 ]	
		[ Hepatocellular Adenoma TGLS = 3-4 ]	
		[ Hepatocellular Carcinoma TGLS = 1-4 ]	
* Lung		Alveolar/Bronchiolar Adenoma	
* Lymph Node, Mesenteric		Infiltration Cellular	Histiocyte, Mild
Mesentery	Fat	Necrosis	Marked
		[ Necrosis TGLS = 4-7 ]	
* Spleen		Hematopoietic Cell Proliferation	Mild
* Thyroid Gland	Follicle	Cyst	Minimal
	Follicular Cel	Hyperplasia	Minimal
* Uterus	Bilateral	Cyst	Minimal

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 22:00:00  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 579	<b>TRT#:</b> 4	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 738
	<b>DOSE:</b> 9F	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 92-1195-579

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Medulla	* Heart	* Islets, Pancreatic	* Kidney
* Lymph Node, Mandibular	* Lymph Node, Mesenteric	* Spleen	* Urinary Bladder

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**MISSING**

\* Thymus

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**OBSERVATIONS**

* Adrenal Cortex	Capsule	Hyperplasia	Mild
* Liver		Eosinophilic Focus	Multiple
[ Eosinophilic Focus TGLS = 1-4; 2-7 ]			
* Lung		Alveolar/Bronchiolar Adenoma	Multiple
* Ovary		Cyst	Minimal
* Pancreas	Acinus	Vacuolization Cytoplasmic	Minimal
* Pituitary Gland	Pars Distalis	Hyperplasia	Mild
* Thyroid Gland	Follicle	Cyst	Mild
	Follicular Cel	Hyperplasia	Moderate
* Uterus	Bilateral	Cyst	Moderate
[ Cyst TGLS = 3-6 ]			

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 22:00:00  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 581	<b>TRT#:</b> 4 <b>DOSE:</b> 9F	<b>SEX:</b> Female <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 737 <b>HISTO:</b> 92-1195-581
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Medulla	* Heart	* Islets, Pancreatic	* Liver
* Lung	* Lymph Node, Mandibular	* Ovary	* Pancreas
* Pituitary Gland	* Urinary Bladder		

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**OBSERVATIONS**

* Adrenal Cortex	Capsule	Hyperplasia	Mild
* Kidney	Bilateral	Nephropathy	Mild
* Lymph Node, Mesenteric		Infiltration Cellular	Histiocyte, Minimal
Mesentery	Fat	Necrosis	Marked
[ Necrosis TGLS = 1-7 ]			
* Spleen		Hematopoietic Cell Proliferation	Mild
* Thymus	Epithel Cell	Hyperplasia	Minimal
* Thyroid Gland	Follicular Cel	Hyperplasia	Mild
* Uterus	Bilateral	Cyst	Marked

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 22:00:00  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 582	<b>TRT#:</b> 4	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 574
	<b>DOSE:</b> 9F	<b>DISP:</b> Natural Death	<b>HISTO:</b> 92-1195-582

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**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Heart	* Kidney	* Lung
* Lymph Node, Mandibular	* Ovary	* Pancreas	* Pituitary Gland
* Thyroid Gland	* Urinary Bladder	* Uterus	

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**MISSING**

\* Thymus

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**OBSERVATIONS**

* Adrenal Cortex	Capsule	Hyperplasia	Mild
* Islets, Pancreatic		Hyperplasia	Mild
* Liver		Hepatocellular Carcinoma	
	Hepatocyte	Necrosis	Moderate
[ Hepatocellular Carcinoma TGLS = 2-4 ]			
* Lymph Node, Mesenteric		Infiltration Cellular	Histiocyte, Mild
Skin	Hair Follicle	Cyst	Moderate
[ Cyst TGLS = 1-7 ]			
* Spleen		Hematopoietic Cell Proliferation	Moderate

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**PRIMARY CAUSE OF DEATH** - Liver Hepatocellular Carcinoma

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 22:00:00  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 584	<b>TRT#:</b> 3 <b>DOSE:</b> 7F	<b>SEX:</b> Female <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 736 <b>HISTO:</b> 92-1195-584
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**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Heart	* Islets, Pancreatic	* Kidney
* Lung	* Lymph Node, Mandibular	* Lymph Node, Mesenteric	* Ovary
* Pancreas	* Pituitary Gland	* Spleen	* Urinary Bladder

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**MISSING**

\* Thymus

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**OBSERVATIONS**

* Adrenal Cortex	Capsule	Hyperplasia	Mild
* Liver		Clear Cell Focus	Multiple
		Eosinophilic Focus	
		Hepatocellular Carcinoma	
[ Clear Cell Focus TGLS = 2-4 ]			
[ Eosinophilic Focus TGLS = 2-4 ]			
[ Hepatocellular Carcinoma TGLS = 3-4 ]			
* Thyroid Gland	Follicle	Cyst	Mild
	Follicular Cel	Hyperplasia	Mild
* Uterus	Bilateral	Cyst	Marked
[ Cyst TGLS = 1-6 ]			

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 22:00:00  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 586	<b>TRT#:</b> 3 <b>DOSE:</b> 7F	<b>SEX:</b> Female <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 736 <b>HISTO:</b> 92-1195-586
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Medulla	* Heart	* Islets, Pancreatic	* Kidney
* Lung	* Lymph Node, Mandibular	* Ovary	* Pancreas
* Pituitary Gland	* Urinary Bladder		

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**MISSING**

\* Thymus

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**OBSERVATIONS**

* Adrenal Cortex	Capsule	Hyperplasia	Mild
* Liver		Hematopoietic Cell Proliferation	Mild
		Hepatocellular Adenoma	Multiple
	[ Hepatocellular Adenoma TGLS = 3-4; 4-4; 5-7 ]		
* Lymph Node, Mesenteric		Infiltration Cellular	Histiocyte, Minimal
* Spleen		Hematopoietic Cell Proliferation	Mild
	[ Hematopoietic Cell Proliferation TGLS = 1-4 ]		
* Thyroid Gland	Follicle	Cyst	Minimal
		Inflammation	Minimal
* Uterus	Bilateral	Cyst	Moderate
	[ Cyst TGLS = 2-6 ]		

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 22:00:00  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 587	<b>TRT#:</b> 4	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 738
	<b>DOSE:</b> 9F	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 92-1195-587

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Heart	* Islets, Pancreatic	* Kidney	* Pancreas
* Pituitary Gland	* Thymus	* Urinary Bladder	

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**MISSING**

* Adrenal Cortex	* Adrenal Medulla	* Lymph Node, Mandibular	* Lymph Node, Mesenteric
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**OBSERVATIONS**

* Liver		Hepatocellular Adenoma	
[ Hepatocellular Adenoma TGLS = 2-4 ]			
* Lung		Alveolar/Bronchiolar Adenoma	
* Ovary		Cyst	Mild
* Spleen		Hematopoietic Cell Proliferation	Mild
* Thyroid Gland	Follicle	Cyst	Mild
* Uterus	Bilateral	Cyst	Marked
[ Cyst TGLS = 1-6 ]			

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 22:00:00  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 588	<b>TRT#:</b> 4 <b>DOSE:</b> 9F	<b>SEX:</b> Female <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 737 <b>HISTO:</b> 92-1195-588
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Medulla	* Heart	* Kidney	* Liver
* Lung	* Lymph Node, Mandibular	* Lymph Node, Mesenteric	* Pituitary Gland
* Spleen	* Thyroid Gland	* Urinary Bladder	

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**MISSING**

* Islets, Pancreatic	* Pancreas	* Thymus	
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**OBSERVATIONS**

* Adrenal Cortex	Capsule	Hyperplasia	Mild
* Ovary [ Cystadenoma TGLS = 3-6 ]		Cystadenoma	
Skin [ Atrophy TGLS = 1-7 ]	Hair Follicle	Atrophy	Moderate
* Uterus [ Cyst TGLS = 2-6 ]	Bilateral	Cyst	Marked

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 22:00:00  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 589	<b>TRT#:</b> 4	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 737
	<b>DOSE:</b> 9F	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 92-1195-589

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Heart	* Islets, Pancreatic	* Kidney	* Lung
* Pancreas	* Urinary Bladder		

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**MISSING**

* Adrenal Cortex	* Adrenal Medulla	* Pituitary Gland	* Thymus
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**OBSERVATIONS**

* Liver		Hepatocellular Carcinoma	Multiple
[ Hepatocellular Carcinoma TGLS = 2-4; 5-7 ]			
* Lymph Node, Mandibular		Erythrophagocytosis	Minimal
* Lymph Node, Mesenteric		Infiltration Cellular	Histiocyte, Minimal
* Ovary		Cyst	Marked
[ Cyst TGLS = 1-6 ]			
* Spleen		Hematopoietic Cell Proliferation	Moderate
* Thyroid Gland	Follicular Cel	Hyperplasia	Mild
* Uterus		Cyst	Mild

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**PRIMARY CAUSE OF DEATH** -

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Animal Note: L-3 and L-4 lines were filled in by mistake.

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\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 22:00:00  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 590	<b>TRT#:</b> 3 <b>DOSE:</b> 7F	<b>SEX:</b> Female <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 736 <b>HISTO:</b> 92-1195-590
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Medulla	* Heart	* Islets, Pancreatic	* Liver
* Lung	* Ovary	* Pancreas	* Pituitary Gland

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**MISSING**

* Thymus	* Urinary Bladder
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**OBSERVATIONS**

* Adrenal Cortex	Capsule	Hyperplasia	Moderate
* Kidney	Pelvis	Lymphoma Malignant	
		Metaplasia	Osseous, Minimal
* Lymph Node, Mandibular [ Lymphoma Malignant TGLS = 3-1 ]		Lymphoma Malignant	
* Lymph Node, Mesenteric		Lymphoma Malignant	
* Spleen [ Lymphoma Malignant TGLS = 2-4 ]		Lymphoma Malignant	
* Thyroid Gland	Follicle	Cyst	Minimal
* Uterus [ Cyst TGLS = 1-6 ]	Bilateral	Cyst	Marked

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 22:00:00  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 591	<b>TRT#:</b> 3 <b>DOSE:</b> 7F	<b>SEX:</b> Female <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 736 <b>HISTO:</b> 92-1195-591
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Medulla	* Heart	* Islets, Pancreatic	* Kidney
* Liver	* Lung	* Lymph Node, Mandibular	* Lymph Node, Mesenteric
* Ovary	* Pancreas	* Pituitary Gland	* Spleen
* Urinary Bladder			

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**MISSING**

\* Thymus

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**OBSERVATIONS**

* Adrenal Cortex	Capsule	Hyperplasia	Mild
* Thyroid Gland	Follicle	Cyst	Mild
* Uterus	Bilateral	Cyst	Marked

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 22:00:00  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

<b>ANIMAL ID:</b> 592	<b>TRT#:</b> 3 <b>DOSE:</b> 7F	<b>SEX:</b> Female <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 736 <b>HISTO:</b> 92-1195-592
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**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Heart	* Islets, Pancreatic	* Kidney
* Lymph Node, Mesenteric	* Ovary	* Pancreas	* Pituitary Gland
* Urinary Bladder			

**MISSING**

\* Thymus

**OBSERVATIONS**

* Adrenal Cortex	Capsule	Hyperplasia	Mild
* Liver		Eosinophilic Focus	Multiple
		Hepatocellular Adenoma	Multiple
		Infiltration Cellular	Mast Cell, Diffuse, Mild
		[ Eosinophilic Focus TGLS = 5-7 ]	
		[ Hepatocellular Adenoma TGLS = 3-9; 4-4; 6-8 ]	
* Lung		Alveolar/Bronchiolar Adenoma	
* Lymph Node, Mandibular		Infiltration Cellular	Mast Cell, Moderate
Mesentery	Fat	Necrosis	Marked
		[ Necrosis TGLS = 1-7 ]	
* Spleen		Infiltration Cellular	Mast Cell, Moderate
		[ Infiltration Cellular TGLS = 2-4 ]	
* Thyroid Gland	Follicle	Cyst	Moderate
* Uterus	Bilateral	Cyst	Mild
		[ Cyst TGLS = 7-6 ]	

PRIMARY CAUSE OF DEATH

-

Animal Note: THE MAST CELL INFILTRATES IN LIVER, SPLEEN, AND MANDIBULAR LYMPH NODE IS HIGHLY SUGGESTIVE OF A MAST CELL LEUKEMIA.

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 92003-02  
Test Type: CHRONIC  
Species/Strain: Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
Test Compound: NTP 90 diet study  
CAS Number: DIET90

Date Report Requested: 10/21/2014  
Time Report Requested: 22:00:00  
First Dose M/F: NA / NA  
Lab: NIEHS

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<b>ANIMAL ID:</b> 595	<b>TRT#:</b> 4	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 737
	<b>DOSE:</b> 9F	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 92-1195-595

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Medulla	* Heart	* Islets, Pancreatic	* Kidney
* Liver	* Lung	* Pancreas	* Urinary Bladder

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**MISSING**

* Pituitary Gland	* Thymus
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**OBSERVATIONS**

* Adrenal Cortex		Carcinoma	
	Capsule	Hyperplasia	Moderate
[ Carcinoma TGLS = 3-2,6 ]			
* Lymph Node, Mandibular		Erythrophagocytosis	Moderate
* Lymph Node, Mesenteric		Infiltration Cellular	Plasma Cell, Moderate
Mesentery	Fat	Necrosis	Marked
[ Necrosis TGLS = 2-7 ]			
* Ovary		Cyst	Mild
* Spleen		Hematopoietic Cell Proliferation	Moderate
[ Hematopoietic Cell Proliferation TGLS = 1-4 ]			
* Thyroid Gland	Follicle	Cyst	Mild
	Follicular Cel	Hyperplasia	Minimal
* Uterus		Cyst	Moderate

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PRIMARY CAUSE OF DEATH

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Animal Note: MASS RECORDED AS INVOLVING THE LEFT KIDNEY (L3) IS AN ADRENAL CORTICAL CARCINOMA .

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 92003-02  
Test Type: CHRONIC  
Species/Strain: Mouse/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA  
Test Compound: NTP 90 diet study  
CAS Number: DIET90

Date Report Requested: 10/21/2014  
Time Report Requested: 22:00:00  
First Dose M/F: NA / NA  
Lab: NIEHS

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ANIMAL ID: 598	TRT#: 3 DOSE: 7F	SEX: Female DISP: Terminal Sacrifice	DAY ON TEST: 653 HISTO: 92-1195-598
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Medulla	* Heart	* Islets, Pancreatic	* Kidney
* Lung	* Lymph Node, Mandibular	* Ovary	* Pancreas
* Pituitary Gland	* Urinary Bladder		

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**MISSING**

\* Thymus

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**OBSERVATIONS**

* Adrenal Cortex	Capsule	Hyperplasia	Mild
* Liver		Hepatocellular Adenoma	
[ Hepatocellular Adenoma TGLS = 1-4 ]			
* Lymph Node, Mesenteric		Hyperplasia Infiltration Cellular	Lymphoid, Moderate Histiocyte, Mild
* Spleen		Hemangiosarcoma	
* Thyroid Gland	Follicle	Cyst	Mild
* Uterus	Bilateral	Cyst	Moderate

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 22:00:00  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 599	<b>TRT#:</b> 3 <b>DOSE:</b> 7F	<b>SEX:</b> Female <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 736 <b>HISTO:</b> 92-1195-599
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Medulla	* Heart	* Kidney	* Lung
* Lymph Node, Mandibular	* Ovary	* Pancreas	* Pituitary Gland
* Spleen	* Thymus	* Urinary Bladder	

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**OBSERVATIONS**

* Adrenal Cortex	Capsule	Hyperplasia	Minimal
* Islets, Pancreatic		Hyperplasia	Minimal
* Liver		Clear Cell Focus	Multiple
		Mixed Cell Focus	Multiple
			[ Clear Cell Focus TGLS = 1-8; 4-7 ]
			[ Mixed Cell Focus TGLS = 2,3-4 ]
* Lymph Node, Mesenteric		Infiltration Cellular	Histiocyte, Mild
* Thyroid Gland	Follicular Cel	Hyperplasia	Mild
* Uterus	Bilateral	Cyst	Marked
			[ Cyst TGLS = 5-6 ]

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PRIMARY CAUSE OF DEATH

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 22:00:00  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 600	<b>TRT#:</b> 4	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 697
	<b>DOSE:</b> 9F	<b>DISP:</b> Natural Death	<b>HISTO:</b> 92-1195-600

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Medulla	* Heart	* Lung
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**MISSING**

* Islets, Pancreatic	* Lymph Node, Mandibular	* Lymph Node, Mesenteric	* Ovary
* Pancreas	* Pituitary Gland	* Thymus	* Thyroid Gland
* Urinary Bladder			

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**AUTO PRECLUDES DIAG.**

* Kidney	* Spleen
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**OBSERVATIONS**

* Adrenal Cortex	Capsule	Hyperplasia	Mild
* Liver		Hepatocellular Adenoma	
* Uterus		Cyst	Marked

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<b>PRIMARY CAUSE OF DEATH</b>	- UNCERTAIN
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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 92003-02

Test Type: CHRONIC

Species/Strain: Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

Test Compound: NTP 90 diet study

CAS Number: DIET90

Date Report Requested: 10/21/2014

Time Report Requested: 22:00:00

First Dose M/F: NA / NA

Lab: NIEHS

ANIMAL ID: 601

TRT#: 3

SEX: Female

DAY ON TEST: 737

DOSE: 7F

DISP: Terminal Sacrifice

HISTO: 92-1195-601

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

\* Adrenal Medulla  
\* Lymph Node, Mandibular  
\* Thyroid Gland

\* Heart  
\* Pancreas  
\* Urinary Bladder

\* Kidney  
\* Pituitary Gland

\* Lung  
\* Spleen

**MISSING**

\* Thymus

**OBSERVATIONS**

\* Adrenal Cortex  
\* Islets, Pancreatic  
\* Liver

Capsule

Hyperplasia  
Hyperplasia  
Clear Cell Focus  
Eosinophilic Focus

Mild  
Minimal  
Multiple

[ Clear Cell Focus TGLS = 2-4 ]

[ Eosinophilic Focus TGLS = 1-4; 3-7 ]

\* Lymph Node, Mesenteric  
\* Ovary  
\* Uterus

Infiltration Cellular  
Cyst  
Cyst

Histiocyte, Mild  
Mild  
Marked

[ Cyst TGLS = 4-6 ]

Bilateral

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE



Experiment Number: 92003-02  
 Test Type: CHRONIC  
 Species/Strain: Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
 Test Compound: NTP 90 diet study  
 CAS Number: DIET90

Date Report Requested: 10/21/2014  
 Time Report Requested: 22:00:00  
 First Dose M/F: NA / NA  
 Lab: NIEHS

<b>ANIMAL ID:</b> 602	<b>TRT#:</b> 3 <b>DOSE:</b> 7F	<b>SEX:</b> Female <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 736 <b>HISTO:</b> 92-1195-602
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**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Heart	* Kidney	* Lung
* Lymph Node, Mandibular	* Ovary	* Pancreas	* Pituitary Gland
* Spleen	* Thymus	* Urinary Bladder	

**OBSERVATIONS**

* Adrenal Cortex	Capsule	Hyperplasia	Moderate
* Islets, Pancreatic		Hyperplasia	Mild
* Liver		Eosinophilic Focus	
		Hepatocellular Adenoma	
		Inflammation	Focal, Moderate
[ Eosinophilic Focus TGLS = 2-7 ]			
[ Hepatocellular Adenoma TGLS = 1-4 ]			
* Lymph Node, Mesenteric		Infiltration Cellular	Histiocyte, Mild
Mesentery	Fat	Necrosis	Marked
[ Necrosis TGLS = 3-7 ]			
* Thyroid Gland	Follicle	Cyst	Mild
* Uterus	Bilateral	Cyst	Moderate
[ Cyst TGLS = 4-6 ]			

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 92003-02

Test Type: CHRONIC

Species/Strain: Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

Test Compound: NTP 90 diet study

CAS Number: DIET90

Date Report Requested: 10/21/2014

Time Report Requested: 22:00:00

First Dose M/F: NA / NA

Lab: NIEHS

ANIMAL ID: 603

TRT#: 3

SEX: Female

DAY ON TEST: 736

DOSE: 7F

DISP: Terminal Sacrifice

HISTO: 92-1195-603

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

\* Heart

\* Lung

\* Lymph Node, Mandibular

\* Spleen

\* Urinary Bladder

**MISSING**

\* Adrenal Cortex

\* Pituitary Gland

\* Thymus

**AUTO PRECLUDES DIAG.**

\* Adrenal Medulla

**OBSERVATIONS**

\* Islets, Pancreatic

Hyperplasia

Moderate

\* Kidney

Nephropathy

Minimal

\* Liver

Eosinophilic Focus

Multiple

Hepatocellular Adenoma

[ Eosinophilic Focus TGLS = 4-4 ]

[ Hepatocellular Adenoma TGLS = 5-8; 6-4 ]

\* Lymph Node, Mesenteric

Infiltration Cellular

Histiocyte, Mild

Mesentery

Fat

Necrosis

Moderate

[ Necrosis TGLS = 1-7 ]

\* Ovary

Cyst

Mild

Cystadenoma

[ Cystadenoma TGLS = 2-6 ]

\* Pancreas

Acinus

Inflammation

Mild

\* Thyroid Gland

Follicular Cel

Hyperplasia

Mild

\* Uterus

Bilateral

Cyst

Marked

PRIMARY CAUSE OF DEATH

- UNCERTAIN

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 22:00:00  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 604	<b>TRT#:</b> 4	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 737
	<b>DOSE:</b> 9F	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 92-1195-604

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Medulla	* Heart	* Islets, Pancreatic	* Kidney
* Lung	* Lymph Node, Mandibular	* Ovary	* Pancreas
* Thymus	* Urinary Bladder		

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**OBSERVATIONS**

* Adrenal Cortex	Capsule	Hyperplasia	Mild
* Liver		Hepatocellular Adenoma	Multiple
	[ Hepatocellular Adenoma TGLS = 1-8; 2-9; 3-4 ]		
* Lymph Node, Mesenteric		Infiltration Cellular	Histiocyte, Mild
Mesentery	Fat	Necrosis	Marked
	[ Necrosis TGLS = 4-7 ]		
* Pituitary Gland	Pars Distalis	Hyperplasia	Mild
* Spleen		Hematopoietic Cell Proliferation	Mild
* Thyroid Gland	Follicle	Cyst	Mild
	Follicular Cel	Hyperplasia	Mild
* Uterus	Bilateral	Cyst	Moderate
	[ Cyst TGLS = 5-6 ]		

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 22:00:00  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 605	<b>TRT#:</b> 3 <b>DOSE:</b> 7F	<b>SEX:</b> Female <b>DISP:</b> Natural Death	<b>DAY ON TEST:</b> 634 <b>HISTO:</b> 92-1195-605
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Medulla	* Heart	* Kidney	* Liver
* Lung	* Thyroid Gland		

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**MISSING**

* Islets, Pancreatic	* Lymph Node, Mandibular	* Lymph Node, Mesenteric	* Ovary
* Pancreas	* Thymus	* Urinary Bladder	* Uterus

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**INSUFFICIENT TISSUE**

\* Pituitary Gland

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**OBSERVATIONS**

* Adrenal Cortex	Capsule	Hyperplasia	Moderate
* Spleen		Hematopoietic Cell Proliferation	Marked

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**PRIMARY CAUSE OF DEATH** - UNCERTAIN

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 22:00:00  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 606	<b>TRT#:</b> 4 <b>DOSE:</b> 9F	<b>SEX:</b> Female <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 737 <b>HISTO:</b> 92-1195-606
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Heart	* Kidney	* Ovary	* Pancreas
* Pituitary Gland	* Urinary Bladder	* Uterus	

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**MISSING**

* Adrenal Medulla	* Lymph Node, Mandibular		
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**OBSERVATIONS**

* Adrenal Cortex	Capsule	Hyperplasia	Mild
* Islets, Pancreatic		Hyperplasia	Mild
* Liver		Hepatocellular Carcinoma	
[ Hepatocellular Carcinoma TGLS = 3-7 ]			
* Lung		Hepatocellular Carcinoma	Metastatic (Liver)
* Lymph Node, Mesenteric		Hyperplasia	Lymphoid, Mild
* Spleen		Hematopoietic Cell Proliferation	Moderate
[ Hyperplasia TGLS = 2-4 ]		Hyperplasia	Lymphoid, Moderate
* Thymus		Lymphoma Malignant	
[ Lymphoma Malignant TGLS = 1-2 ]			
* Thyroid Gland	Follicle	Cyst	Mild

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 22:00:00  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 607	<b>TRT#:</b> 3 <b>DOSE:</b> 7F	<b>SEX:</b> Female <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 737 <b>HISTO:</b> 92-1195-607
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Medulla	* Heart	* Islets, Pancreatic	* Kidney
* Lung	* Lymph Node, Mandibular	* Ovary	* Pancreas
* Pituitary Gland	* Spleen	* Thymus	* Thyroid Gland
* Urinary Bladder			

---

**OBSERVATIONS**

* Adrenal Cortex	Capsule	Hyperplasia	Mild
* Liver		Clear Cell Focus	
		Eosinophilic Focus	
		Hepatocellular Adenoma	Multiple
Note: TGL 2-NST [ Clear Cell Focus TGLS = 3-9 ] [ Eosinophilic Focus TGLS = 1-8 ] [ Hepatocellular Adenoma TGLS = 4-7; 5-10; 6-4 ]			
* Lymph Node, Mesenteric		Infiltration Cellular	Histiocyte, Mild
* Uterus [ Cyst TGLS = 7-6 ]		Cyst	Marked

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**PRIMARY CAUSE OF DEATH** -

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 22:00:00  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 608	<b>TRT#:</b> 4 <b>DOSE:</b> 9F	<b>SEX:</b> Female <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 738 <b>HISTO:</b> 92-1195-608
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**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Heart	* Islets, Pancreatic	* Liver	* Lung
* Lymph Node, Mandibular	* Lymph Node, Mesenteric	* Pancreas	* Pituitary Gland
* Spleen			

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**MISSING**

* Adrenal Cortex	* Adrenal Medulla	* Urinary Bladder	
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**INSUFFICIENT TISSUE**

\* Thyroid Gland

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**OBSERVATIONS**

* Kidney	Bilateral	Nephropathy	Minimal
* Ovary		Cyst	Mild
[ Cyst TGLS = 2-6 ]			
* Thymus	Epithel Cell	Hyperplasia	Mild
* Uterus	Bilateral	Cyst	Moderate
[ Cyst TGLS = 1-6 ]			

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**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 22:00:00  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 609	<b>TRT#:</b> 3 <b>DOSE:</b> 7F	<b>SEX:</b> Female <b>DISP:</b> Natural Death	<b>DAY ON TEST:</b> 421 <b>HISTO:</b> 92-1195-609
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**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Heart	* Islets, Pancreatic	* Kidney	* Liver
* Ovary	* Pancreas	* Pituitary Gland	* Uterus

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**MISSING**

* Adrenal Medulla	* Lymph Node, Mandibular	* Thymus	* Thyroid Gland
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**AUTO PRECLUDES DIAG.**

* Lymph Node, Mesenteric	* Urinary Bladder
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**OBSERVATIONS**

* Adrenal Cortex	Capsule	Hyperplasia	Moderate
* Lung	Alveolus	Alveolar/Bronchiolar Carcinoma Infiltration Cellular	Histiocyte, Mild
[ Alveolar/Bronchiolar Carcinoma TGLS = 3-5 ] [ Infiltration Cellular TGLS = 1-5 ]			
Mesentery	Fat	Necrosis	Marked
[ Necrosis TGLS = 2-7 ]			
* Spleen		Hematopoietic Cell Proliferation	Moderate

---

**PRIMARY CAUSE OF DEATH** - Lung Alveolar/Bronchiolar Carcinoma

---

\* PROTOCOL REQUIRED TISSUE



Experiment Number: 92003-02  
Test Type: CHRONIC  
Species/Strain: Mouse/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA  
Test Compound: NTP 90 diet study  
CAS Number: DIET90

Date Report Requested: 10/21/2014  
Time Report Requested: 22:00:00  
First Dose M/F: NA / NA  
Lab: NIEHS

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ANIMAL ID: 610	TRT#: 3 DOSE: 7F	SEX: Female DISP: Terminal Sacrifice	DAY ON TEST: 736 HISTO: 92-1195-610
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Heart	* Islets, Pancreatic	* Kidney	* Lung
* Lymph Node, Mandibular	* Pancreas	* Pituitary Gland	* Spleen
* Thymus	* Thyroid Gland	* Urinary Bladder	

---

**MISSING**

\* Adrenal Medulla

---

**OBSERVATIONS**

* Adrenal Cortex	Capsule	Hyperplasia	Mild
* Liver		Hepatocellular Adenoma	Multiple
[ Hepatocellular Adenoma TGLS = 1,2-4 ]			
* Lymph Node, Mesenteric		Infiltration Cellular	Histiocyte, Mild
* Ovary		Cyst	Minimal
* Uterus	Bilateral	Cyst	Minimal

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PRIMARY CAUSE OF DEATH

-

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 92003-02

Test Type: CHRONIC

Species/Strain: Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

Test Compound: NTP 90 diet study

CAS Number: DIET90

Date Report Requested: 10/21/2014

Time Report Requested: 22:00:00

First Dose M/F: NA / NA

Lab: NIEHS

ANIMAL ID: 611

TRT#: 3

SEX: Female

DAY ON TEST: 737

DOSE: 7F

DISP: Terminal Sacrifice

HISTO: 92-1195-611

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

\* Adrenal Medulla  
\* Lymph Node, Mandibular

\* Heart  
\* Pancreas

\* Kidney  
\* Spleen

\* Lung  
\* Urinary Bladder

**MISSING**

\* Thymus

**OBSERVATIONS**

\* Adrenal Cortex  
\* Islets, Pancreatic  
\* Liver

Capsule

Hyperplasia  
Hyperplasia  
Eosinophilic Focus  
Hepatocellular Adenoma

Mild  
Moderate  
Multiple

[ Eosinophilic Focus TGLS = 3-8; 4-9; 5-10 ]

[ Hepatocellular Adenoma TGLS = 2-4; 1-7 ]

\* Lymph Node, Mesenteric  
\* Ovary  
\* Pituitary Gland  
\* Thyroid Gland

Follicle  
Follicular Cel

Erythrophagocytosis  
Cyst  
Adenoma  
Cyst  
Hyperplasia  
Cyst

Mild  
Mild  
Minimal  
Minimal  
Mild

[ Cyst TGLS = 6-6 ]

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 22:00:00  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 612	<b>TRT#:</b> 3 <b>DOSE:</b> 7F	<b>SEX:</b> Female <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 736 <b>HISTO:</b> 92-1195-612
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**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

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* Heart	* Kidney	* Lymph Node, Mandibular	* Lymph Node, Mesenteric
* Ovary	* Pancreas	* Pituitary Gland	* Spleen
* Thyroid Gland	* Urinary Bladder		

---

**MISSING**

\* Thymus

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**OBSERVATIONS**

---

* Adrenal Cortex	Capsule	Hyperplasia	Mild
* Adrenal Medulla		Pheochromocytoma Benign	
* Islets, Pancreatic		Hyperplasia	Minimal
* Liver		Hepatocellular Adenoma	Multiple
[ Hepatocellular Adenoma TGLS = 3,4-4; 5-8; 6-7 ]			
* Lung		Alveolar/Bronchiolar Adenoma	
Mesentery	Fat	Necrosis	Marked
[ Necrosis TGLS = 2-7 ]			
* Uterus	Bilateral	Cyst	Marked
[ Cyst TGLS = 1-6 ]			

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**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 92003-02  
Test Type: CHRONIC  
Species/Strain: Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
Test Compound: NTP 90 diet study  
CAS Number: DIET90

Date Report Requested: 10/21/2014  
Time Report Requested: 22:00:00  
First Dose M/F: NA / NA  
Lab: NIEHS

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<b>ANIMAL ID:</b> 613	<b>TRT#:</b> 3 <b>DOSE:</b> 7F	<b>SEX:</b> Female <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 737 <b>HISTO:</b> 92-1195-613
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**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

* Heart	* Kidney	* Lung	* Lymph Node, Mandibular
* Pancreas	* Urinary Bladder		

---

**MISSING**

* Adrenal Cortex	* Adrenal Medulla	* Pituitary Gland	* Thymus
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**OBSERVATIONS**

* Islets, Pancreatic		Hyperplasia	Minimal
* Liver		Eosinophilic Focus	
		Hepatocellular Adenoma	Multiple
	[ Eosinophilic Focus TGLS = 3-4 ]		
	[ Hepatocellular Adenoma TGLS = 2-4; 5-8 ]		
* Lymph Node, Mesenteric		Erythrophagocytosis	Minimal
* Ovary		Cyst	Mild
* Spleen		Hematopoietic Cell Proliferation	Moderate
* Thyroid Gland	Follicle	Cyst	Minimal
	Follicular Cel	Hyperplasia	Minimal
* Uterus	Bilateral	Cyst	Marked
	[ Cyst TGLS = 4-6 ]		

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**PRIMARY CAUSE OF DEATH**

-

Animal Note: CARCASS, MASS- HEMANGIOSARCOMA. TGL 1-7

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 92003-02

Test Type: CHRONIC

Species/Strain: Mouse/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: NTP 90 diet study

CAS Number: DIET90

Date Report Requested: 10/21/2014

Time Report Requested: 22:00:00

First Dose M/F: NA / NA

Lab: NIEHS

ANIMAL ID: 614

TRT#: 4

SEX: Female

DAY ON TEST: 738

DOSE: 9F

DISP: Terminal Sacrifice

HISTO: 92-1195-614

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Heart	* Ovary	* Pancreas	* Pituitary Gland
* Urinary Bladder			

MISSING

\* Thymus

AUTO PRECLUDES DIAG.

* Adrenal Cortex	* Adrenal Medulla	Harderian Gland	* Lymph Node, Mandibular
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OBSERVATIONS

* Islets, Pancreatic		Hyperplasia	Mild
* Kidney		Nephropathy	Minimal
* Liver		Eosinophilic Focus	
		Hepatocellular Carcinoma	
	[ Eosinophilic Focus TGLS = 4-7 ]		
	[ Hepatocellular Carcinoma TGLS = 3-4 ]		
* Lung		Pigmentation	Moderate
* Lymph Node, Mesenteric		Infiltration Cellular	Histiocyte, Mild
Mesentery	Fat	Inflammation	Minimal
	[ Inflammation TGLS = 2-8 ]		
* Spleen		Hematopoietic Cell Proliferation	Mild
		Lymphoma Malignant	
	[ Hematopoietic Cell Proliferation TGLS = 1-4 ]		
	[ Lymphoma Malignant TGLS = 1-4 ]		
* Thyroid Gland	Follicle	Cyst	Minimal
	Follicular Cel	Hyperplasia	Mild
* Uterus	Bilateral	Cyst	Moderate

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 22:00:00  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 615	<b>TRT#:</b> 3 <b>DOSE:</b> 7F	<b>SEX:</b> Female <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 736 <b>HISTO:</b> 92-1195-615
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Medulla	* Heart	* Kidney	* Liver
* Lymph Node, Mandibular	* Pancreas	* Spleen	* Urinary Bladder

---

**MISSING**

\* Thymus

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**OBSERVATIONS**

* Adrenal Cortex	Capsule	Hyperplasia	Mild
* Islets, Pancreatic		Hyperplasia	Minimal
* Lung	Alveolar Epith	Hyperplasia	Mild
		Infiltration Cellular	Lymphocyte, Moderate
* Lymph Node, Mesenteric		Infiltration Cellular	Histiocyte, Minimal
* Ovary		Cyst	Mild
* Pituitary Gland		Adenoma	
* Thyroid Gland		Cyst	Minimal
* Uterus	Bilateral	Cyst	Marked

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[ Cyst TGLS = 1-6 ]

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**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 22:00:00  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 616	<b>TRT#:</b> 4	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 737
	<b>DOSE:</b> 9F	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 92-1195-616

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Heart	* Liver	* Lung	* Lymph Node, Mandibular
* Ovary	* Pancreas	* Pituitary Gland	* Spleen
* Thymus	* Urinary Bladder		

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**MISSING**

* Adrenal Cortex	* Adrenal Medulla		
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**OBSERVATIONS**

* Islets, Pancreatic		Hyperplasia	Minimal
* Kidney		Nephropathy	Minimal
* Lymph Node, Mesenteric		Infiltration Cellular	Histiocyte, Mild
* Thyroid Gland	Follicle	Cyst	Mild
	Follicular Cel	Hyperplasia	Minimal
* Uterus	Bilateral	Cyst	Moderate

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[ Cyst TGLS = 1-6 ]

**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 22:00:00  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 617	<b>TRT#:</b> 4	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 665
	<b>DOSE:</b> 9F	<b>DISP:</b> Natural Death	<b>HISTO:</b> 92-1195-617

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Medulla	* Heart	* Kidney	* Pancreas
* Pituitary Gland	* Spleen		

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**MISSING**

* Lymph Node, Mandibular	* Lymph Node, Mesenteric	* Thymus	
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**AUTO PRECLUDES DIAG.**

\* Urinary Bladder

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**OBSERVATIONS**

* Adrenal Cortex	Capsule	Hyperplasia	Mild
* Islets, Pancreatic		Hyperplasia	Minimal
* Liver		Hepatocellular Carcinoma	
* Lung	Alveolus	Infiltration Cellular	Histiocyte, Mild
Note: TGL 3-NCL			
Mammary Gland		Carcinoma	
Note: CARCINOMA SITE- SUBQ THORACIC, HOWEVER TERM NOT AVAILABLE. [ Carcinoma TGLS = 1-7 ]			
* Ovary		Cyst	Minimal
* Thyroid Gland	Follicle	Cyst	Mild
* Uterus		Cyst	Mild

---

**PRIMARY CAUSE OF DEATH** - Liver Hepatocellular Carcinoma

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\* PROTOCOL REQUIRED TISSUE



Experiment Number: 92003-02

Test Type: CHRONIC

Species/Strain: Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

Test Compound: NTP 90 diet study

CAS Number: DIET90

Date Report Requested: 10/21/2014

Time Report Requested: 22:00:00

First Dose M/F: NA / NA

Lab: NIEHS

ANIMAL ID: 618

TRT#: 3

SEX: Female

DAY ON TEST: 736

DOSE: 7F

DISP: Terminal Sacrifice

HISTO: 92-1195-618

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

\* Adrenal Medulla  
\* Lymph Node, Mandibular  
\* Spleen

\* Heart  
\* Lymph Node, Mesenteric  
\* Urinary Bladder

\* Kidney  
\* Ovary

\* Lung  
\* Pancreas

**MISSING**

\* Thymus

**OBSERVATIONS**

\* Adrenal Cortex  
\* Islets, Pancreatic  
\* Liver

Capsule

Hyperplasia  
Hyperplasia  
Clear Cell Focus  
Hepatocellular Adenoma

Mild  
Minimal  
Multiple

[ Clear Cell Focus TGLS = 2-7; 5-4 ]

[ Hepatocellular Adenoma TGLS = 3-8 ]

\* Pituitary Gland  
\* Thyroid Gland

Follicle  
Follicular Cel  
Thoracic

Adenoma  
Cyst  
Hyperplasia  
Hemangiosarcoma

Mild  
Minimal

Tissue NOS

[ Hemangiosarcoma TGLS = 4-7 ]

\* Uterus

Bilateral

Cyst

Marked

[ Cyst TGLS = 1-6 ]

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 22:00:00  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 619	<b>TRT#:</b> 3 <b>DOSE:</b> 7F	<b>SEX:</b> Female <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 736 <b>HISTO:</b> 92-1195-619
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Medulla	* Heart	* Kidney	* Liver
* Lung	* Lymph Node, Mandibular	* Ovary	* Pancreas
* Spleen	* Urinary Bladder		

---

**MISSING**

* Lymph Node, Mesenteric	* Pituitary Gland	* Thymus	
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**OBSERVATIONS**

* Adrenal Cortex	Capsule	Hyperplasia	Mild
* Islets, Pancreatic		Hyperplasia	Minimal
* Thyroid Gland	Follicle	Cyst	Mild
	Follicular Cel	Hyperplasia	Minimal
* Uterus	Bilateral	Cyst	Moderate

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PRIMARY CAUSE OF DEATH

-

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 92003-02

Test Type: CHRONIC

Species/Strain: Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

Test Compound: NTP 90 diet study

CAS Number: DIET90

Date Report Requested: 10/21/2014

Time Report Requested: 22:00:00

First Dose M/F: NA / NA

Lab: NIEHS

ANIMAL ID: 621

TRT#: 4

SEX: Female

DAY ON TEST: 738

DOSE: 9F

DISP: Terminal Sacrifice

HISTO: 92-1195-621

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

\* Adrenal Medulla

\* Heart

\* Islets, Pancreatic

\* Kidney

\* Lung

\* Ovary

\* Pituitary Gland

\* Urinary Bladder

**MISSING**

\* Lymph Node, Mandibular

\* Thymus

**OBSERVATIONS**

\* Adrenal Cortex

Capsule

Hyperplasia

Moderate

\* Liver

Clear Cell Focus

Hepatocellular Adenoma

[ Clear Cell Focus TGLS = 3-7 ]

[ Hepatocellular Adenoma TGLS = 2-4 ]

\* Lymph Node, Mesenteric

Infiltration Cellular

Histiocyte, Minimal

\* Pancreas

Acinus

Hypertrophy

Minimal

\* Spleen

Lymphoma Malignant

[ Lymphoma Malignant TGLS = 1-4 ]

\* Thyroid Gland

Follicular Cel

Adenoma

Follicle

Cyst

Mild

Follicular Cel

Hyperplasia

Minimal

\* Uterus

Bilateral

Cyst

Marked

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 22:00:00  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 622	<b>TRT#:</b> 4	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 738
	<b>DOSE:</b> 9F	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 92-1195-622

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Medulla	* Heart	* Islets, Pancreatic	* Kidney
* Liver	* Lymph Node, Mandibular	* Lymph Node, Mesenteric	* Ovary
* Pancreas	* Pituitary Gland	* Spleen	* Urinary Bladder

---

**MISSING**

\* Thymus

---

**OBSERVATIONS**

* Adrenal Cortex	Capsule	Hyperplasia	Moderate
* Lung		Alveolar/Bronchiolar Carcinoma	
	[ Alveolar/Bronchiolar Carcinoma TGLS = 2-7 ]		
* Thyroid Gland	Follicle	Cyst	Minimal
	Follicular Cel	Hyperplasia	Minimal
* Uterus	Bilateral	Cyst	Marked
	[ Cyst TGLS = 1-6 ]		

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**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 22:00:00  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

---

<b>ANIMAL ID:</b> 623	<b>TRT#:</b> 3	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 736
	<b>DOSE:</b> 7F	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 92-1195-623

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**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

* Adrenal Medulla	* Heart	* Kidney	* Lung
* Lymph Node, Mandibular	* Pancreas	* Spleen	* Thymus
* Urinary Bladder			

---

**OBSERVATIONS**

* Adrenal Cortex	Capsule	Hyperplasia	Moderate
* Islets, Pancreatic		Hyperplasia	Mild
* Liver		Hepatocellular Adenoma	Multiple
[ Hepatocellular Adenoma TGLS = 2-8; 3-4 ]			
* Lymph Node, Mesenteric		Infiltration Cellular	Histiocyte, Mild
Mesentery	Fat	Necrosis	Moderate
[ Necrosis TGLS = 1-7 ]			
* Ovary		Cyst	Mild
* Pituitary Gland		Adenoma	
[ Adenoma TGLS = 5-2 ]			
* Thyroid Gland	Follicle	Cyst	Minimal
* Uterus	Bilateral	Cyst	Marked
[ Cyst TGLS = 4-6 ]			

---

**PRIMARY CAUSE OF DEATH** -

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 22:00:00  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 624	<b>TRT#:</b> 4	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 648
	<b>DOSE:</b> 9F	<b>DISP:</b> Natural Death	<b>HISTO:</b> 92-1195-624

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**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

* Heart	* Kidney	* Liver	* Pituitary Gland
* Spleen			

---

**MISSING**

* Adrenal Cortex	* Adrenal Medulla	* Islets, Pancreatic	* Lymph Node, Mandibular
* Lymph Node, Mesenteric	* Ovary	* Pancreas	* Thymus
* Thyroid Gland	* Urinary Bladder		

---

**OBSERVATIONS**

* Lung		Alveolar/Bronchiolar Adenoma	
* Uterus	Bilateral	Cyst	Moderate

---

**PRIMARY CAUSE OF DEATH** - UNCERTAIN

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 22:00:00  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 625	<b>TRT#:</b> 3 <b>DOSE:</b> 7F	<b>SEX:</b> Female <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 736 <b>HISTO:</b> 92-1195-625
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Medulla	* Heart	* Islets, Pancreatic	* Liver
* Lung	* Lymph Node, Mandibular	* Ovary	* Pancreas
* Pituitary Gland	* Spleen	* Urinary Bladder	

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**MISSING**

\* Thymus

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**OBSERVATIONS**

* Adrenal Cortex	Capsule	Hyperplasia	Moderate
* Kidney		Nephropathy	Minimal
* Lymph Node, Mesenteric		Infiltration Cellular	Histiocyte, Mild
* Thyroid Gland	Follicle	Cyst	Mild
* Uterus	Bilateral	Cyst	Marked

[ Cyst TGLS = 1-6 ]

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**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 92003-02  
Test Type: CHRONIC  
Species/Strain: Mouse/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA  
Test Compound: NTP 90 diet study  
CAS Number: DIET90

Date Report Requested: 10/21/2014  
Time Report Requested: 22:00:00  
First Dose M/F: NA / NA  
Lab: NIEHS

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ANIMAL ID: 626	TRT#: 3 DOSE: 7F	SEX: Female DISP: Terminal Sacrifice	DAY ON TEST: 736 HISTO: 92-1195-626
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Medulla	* Heart	* Islets, Pancreatic	* Kidney
* Liver	* Lung	* Lymph Node, Mandibular	* Ovary
* Pancreas	* Pituitary Gland	* Spleen	* Urinary Bladder

---

**MISSING**

\* Thymus

---

**OBSERVATIONS**

* Adrenal Cortex	Capsule	Hyperplasia	Moderate
* Lymph Node, Mesenteric		Infiltration Cellular	Histiocyte, Mild
* Thyroid Gland	Follicle	Cyst	Mild
	Follicular Cel	Hyperplasia	Mild
* Uterus	Bilateral	Cyst	Moderate

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[ Cyst TGLS = 1-6 ]

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 22:00:00  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 627	<b>TRT#:</b> 4	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 737
	<b>DOSE:</b> 9F	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 92-1195-627

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Medulla	* Heart	* Islets, Pancreatic	* Kidney
* Lung	* Ovary	* Pituitary Gland	* Spleen
* Urinary Bladder			

---

**MISSING**

\* Thymus

---

**OBSERVATIONS**

* Adrenal Cortex	Capsule	Hyperplasia	Moderate
* Liver		Hepatocellular Adenoma	
[ Hepatocellular Adenoma TGLS = 2-4 ]			
* Lymph Node, Mandibular		Hemorrhage	Minimal
* Lymph Node, Mesenteric		Infiltration Cellular	Histiocyte, Mild
* Pancreas	Acinus	Hypertrophy	Minimal
* Thyroid Gland	Follicle	Cyst	Mild
	Follicular Cel	Hyperplasia	Mild
* Uterus	Bilateral	Cyst	Marked
[ Cyst TGLS = 1-6 ]			

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 22:00:00  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 628	<b>TRT#:</b> 3 <b>DOSE:</b> 7F	<b>SEX:</b> Female <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 736 <b>HISTO:</b> 92-1195-628
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Medulla	* Heart	* Kidney	* Liver
* Lung	* Lymph Node, Mandibular	* Pancreas	* Pituitary Gland
* Spleen	* Thymus	* Urinary Bladder	

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**OBSERVATIONS**

* Adrenal Cortex	Capsule	Hyperplasia	Mild
* Islets, Pancreatic		Hyperplasia	Mild
* Lymph Node, Mesenteric		Infiltration Cellular	Histiocyte, Minimal
* Ovary	Bilateral	Cyst	Minimal
* Thyroid Gland	Follicle	Cyst	Mild
* Uterus	Bilateral	Cyst	Mild

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 22:00:00  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 629	<b>TRT#:</b> 4	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 738
	<b>DOSE:</b> 9F	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 92-1195-629

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Medulla	* Heart	* Kidney	* Liver
* Lung	* Lymph Node, Mandibular	* Pancreas	* Pituitary Gland
* Spleen	* Thymus	* Urinary Bladder	

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**MISSING**

\* Lymph Node, Mesenteric

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**OBSERVATIONS**

* Adrenal Cortex	Capsule	Hyperplasia	Mild
* Islets, Pancreatic		Hyperplasia	Minimal
* Ovary		Cyst	Moderate
* Thyroid Gland	Bilateral, Follicular Cel	Adenoma	
	Follicle	Cyst	Minimal
* Uterus	Bilateral	Cyst	Mild

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 22:00:00  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

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<b>ANIMAL ID:</b> 631	<b>TRT#:</b> 4	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 650
	<b>DOSE:</b> 9F	<b>DISP:</b> Natural Death	<b>HISTO:</b> 92-1195-631

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

\* Pituitary Gland

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**MISSING**

\* Adrenal Cortex

\* Adrenal Medulla

\* Islets, Pancreatic

\* Lymph Node, Mesenteric

\* Pancreas

\* Thymus

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**AUTO PRECLUDES DIAG.**

\* Heart

\* Liver

\* Lung

\* Lymph Node, Mandibular

\* Ovary

\* Spleen

\* Thyroid Gland

\* Urinary Bladder

\* Uterus

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**OBSERVATIONS**

\* Kidney

Sarcoma

[ Sarcoma TGLS = 2-6 ]

\* Spleen

Note: TGL 1-NST

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PRIMARY CAUSE OF DEATH

- UNCERTAIN

CONTRIBUTORY CAUSE OF DEATH

- Kidney Sarcoma

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 92003-02  
Test Type: CHRONIC  
Species/Strain: Mouse/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA  
Test Compound: NTP 90 diet study  
CAS Number: DIET90

Date Report Requested: 10/21/2014  
Time Report Requested: 22:00:00  
First Dose M/F: NA / NA  
Lab: NIEHS

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ANIMAL ID: 632	TRT#: 4 DOSE: 9F	SEX: Female DISP: Natural Death	DAY ON TEST: 497 HISTO: 92-1195-632
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Medulla	* Heart	* Kidney	* Liver
* Ovary	* Pancreas	* Pituitary Gland	* Spleen
* Urinary Bladder	* Uterus		

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**MISSING**

* Lymph Node, Mandibular	* Thymus
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**AUTO PRECLUDES DIAG.**

* Lymph Node, Mesenteric
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**OBSERVATIONS**

* Adrenal Cortex	Capsule	Hyperplasia	Mild
* Islets, Pancreatic		Hyperplasia	Minimal
* Lung		Osteosarcoma	Metastatic (Uncertain Primary Site)
[ Osteosarcoma TGLS = 1-5 ]			
* Thyroid Gland	Follicular Cel	Hyperplasia	Minimal

---

PRIMARY CAUSE OF DEATH - Lung Osteosarcoma Uncertain Primary Site

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 92003-02  
**Test Type:** CHRONIC  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** NTP 90 diet study  
**CAS Number:** DIET90

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 22:00:00  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

**ANIMAL ID:** 633

**TRT#:** 4  
**DOSE:** 9F

**SEX:** Female  
**DISP:** Natural Death

**DAY ON TEST:** 623  
**HISTO:** 92-1195-633

**ORGAN AND ACCOUNTABLE SITE STATUS**

**MISSING**

\* Lymph Node, Mesenteric

\* Pituitary Gland

\* Thymus

**AUTO PRECLUDES DIAG.**

\* Adrenal Cortex

\* Adrenal Medulla

\* Heart

\* Islets, Pancreatic

\* Kidney

\* Liver

\* Lung

\* Lymph Node, Mandibular

\* Ovary

\* Pancreas

\* Skin

\* Spleen

\* Thyroid Gland

\* Urinary Bladder

\* Uterus

**OBSERVATIONS**

\* Liver

Note: TGL 1-NST

**PRIMARY CAUSE OF DEATH**

- UNCERTAIN

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 92003-02  
Test Type: CHRONIC  
Species/Strain: Mouse/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA  
Test Compound: NTP 90 diet study  
CAS Number: DIET90

Date Report Requested: 10/21/2014  
Time Report Requested: 22:00:00  
First Dose M/F: NA / NA  
Lab: NIEHS

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ANIMAL ID: 636	TRT#: 3 DOSE: 7F	SEX: Female DISP: Terminal Sacrifice	DAY ON TEST: 736 HISTO: 92-1195-636
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Medulla	* Heart	* Islets, Pancreatic	* Kidney
* Lung	* Lymph Node, Mandibular	* Ovary	* Pancreas
* Spleen	* Urinary Bladder		

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**MISSING**

* Lymph Node, Mesenteric	* Thymus
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**OBSERVATIONS**

* Adrenal Cortex	Capsule	Hyperplasia	Mild
* Liver		Clear Cell Focus	
		Hepatocellular Adenoma	Multiple
	[ Clear Cell Focus TGLS = 4-7 ]		
	[ Hepatocellular Adenoma TGLS = 1,2-4; 3-8 ]		
* Pituitary Gland	Pars Distalis	Adenoma	
	[ Adenoma TGLS = 5-2 ]		
* Thyroid Gland	Follicle	Cyst	Minimal
	Follicular Cel	Hyperplasia	Minimal
* Uterus		Cyst	Mild

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PRIMARY CAUSE OF DEATH

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**\*\* END OF REPORT \*\***

\* PROTOCOL REQUIRED TISSUE