

**Study Number:** R92025

**Test Type:** RACB - Range Finding

**Route:** Dosing in Feed

**Species/Strain:** Rat/Sprague-Dawley

**C Number:**

R92025

**Study Gender:**

Both

**PWG Approval Date**

See web page for date of PWG Approval

**I06: Mean Feed Consumption**

**Test Compound:** 4-Methylimidazole

**CAS Number:** 822-36-6

**Date Report Requested:** 09/18/2018

**Time Report Requested:** 08:34:57

**Lab:** RTI

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F0 Males

Treatment Groups (ppm)

Phase	Litter ID	Days	0			625			1250		
			Wt (g/animal/day)	Wt (g/kg/animal/day)	N	Wt (g/animal/day)	Wt (g/kg/animal/day)	N	Wt (g/animal/day)	Wt (g/kg/animal/day)	N
Study	0 - 3		19.6 ± 0.8 **	83.0 ± 2.6 **	8	19.3 ± 0.4	82.7 ± 1.7	8	17.3 ± 0.5 *	74.3 ± 2.0 *	7
	3 - 7		20.6 ± 0.5 **	81.3 ± 2.9 **	8	20.0 ± 0.6	79.4 ± 2.2	8	19.1 ± 0.4	77.0 ± 1.5	8
	7 - 10		20.8 ± 0.3	76.7 ± 1.6 **	8	21.3 ± 0.4	79.7 ± 1.6	8	20.6 ± 0.4	77.8 ± 1.2	8
	10 - 14		20.9 ± 0.2 **	73.1 ± 1.0	8	21.1 ± 0.5	74.7 ± 1.2	8	20.5 ± 0.4	72.8 ± 1.5	8
	14 - 17		20.7 ± 0.3 **	68.8 ± 1.6	8	21.2 ± 0.6	71.4 ± 1.6	8	21.6 ± 0.6	72.7 ± 2.2	8
	17 - 21		19.8 ± 0.2 *	63.6 ± 0.7	8	19.8 ± 0.6	64.7 ± 1.4	8	21.5 ± 1.0	69.9 ± 3.2	8
	21 - 24		20.4 ± 0.5 **	63.6 ± 1.8	8	20.4 ± 0.8	64.8 ± 2.1	8	23.2 ± 1.5	73.0 ± 4.5	8
	24 - 28		20.2 ± 0.3 **	61.1 ± 0.8	8	20.2 ± 0.6	62.2 ± 1.3	8	21.5 ± 1.1	66.1 ± 3.2	7
	28 - 31		21.3 ± 0.5 **	62.8 ± 1.6	8	20.8 ± 0.7	62.3 ± 1.7	8	24.2 ± 2.2	72.2 ± 6.6	8
	31 - 35		20.8 ± 0.3 **	59.9 ± 1.2	8	20.1 ± 0.7	58.5 ± 1.1	7	20.7 ± 0.9	60.8 ± 2.1	5
	35 - 38		22.4 ± 0.4 **	63.0 ± 1.1 **	8	22.0 ± 0.8	63.2 ± 2.1	8	23.8 ± 1.3	67.4 ± 3.1	7
	38 - 42		19.9 ± 0.3 **	54.8 ± 0.5	8	20.2 ± 0.7	56.7 ± 1.2	8	21.2 ± 1.0	58.9 ± 2.2	7
	42 - 45		20.4 ± 0.2 **	55.6 ± 0.8 *	8	20.6 ± 0.7	56.8 ± 1.3	8	24.2 ± 2.1	66.1 ± 5.4	8
	45 - 49		19.9 ± 0.2 **	53.7 ± 1.0 *	8	20.5 ± 0.7	55.7 ± 1.1	8	21.0 ± 1.1	56.7 ± 2.4	7
	49 - 52		20.9 ± 0.4 **	55.6 ± 1.2 *	8	21.7 ± 0.6	58.0 ± 1.1	8	22.6 ± 1.3	60.2 ± 2.8	7
	52 - 56		20.2 ± 0.3 **	53.0 ± 0.8 **	8	20.5 ± 0.9	53.8 ± 1.7	8	20.7 ± 0.8	54.8 ± 2.1	6
	56 - 59		20.4 ± 0.2 **	52.8 ± 0.8	8	21.3 ± 0.8	55.3 ± 1.5	8	22.6 ± 1.5	58.5 ± 3.7	8
	59 - 63		19.8 ± 0.3 *	50.5 ± 0.5	8	20.5 ± 0.8	52.6 ± 1.5	8	21.8 ± 0.9	55.8 ± 2.1	8
63 - 66		20.7 ± 0.4 *	52.4 ± 1.3	8	21.0 ± 0.7	53.3 ± 1.1	8	23.4 ± 1.7	59.3 ± 4.2	8	
66 - 70		19.2 ± 0.4	48.1 ± 0.7	8	20.0 ± 0.7	50.2 ± 1.1	8	20.7 ± 0.7	51.6 ± 1.1	7	
0 - 70		20.4 ± 0.2 **	60.3 ± 0.6	8	20.6 ± 0.6	61.5 ± 1.1	8	21.9 ± 1.0	65.1 ± 2.7	8	

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I06: Mean Feed Consumption

Test Compound: 4-Methylimidazole

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Date Report Requested: 09/18/2018

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Lab: RTI

F0 Males

Treatment Groups (ppm)

Phase	Litter ID	Days	2500			5000			10000		
			Wt (g/animal/day)	Wt (g/kg/animal/day)	N	Wt (g/animal/day)	Wt (g/kg/animal/day)	N	Wt (g/animal/day)	Wt (g/kg/animal/day)	N
Study		0 - 3	13.4 ± 0.8 **	58.9 ± 2.8 **	6	8.6 ± 0.3	38.7 ± 0.7	2	28.0 ± 9.9	132.6 ± 50.1	2
		3 - 7	17.4 ± 0.2 **	74.8 ± 0.9 *	8	13.9 ± 0.4 **	65.1 ± 1.8 **	8	7.2 ± 0.5 **	38.2 ± 2.6 **	8
		7 - 10	20.5 ± 0.8	82.2 ± 3.7	8	20.4 ± 0.5	89.9 ± 2.6 **	8	NR	NR	
		10 - 14	18.5 ± 0.4 **	69.9 ± 1.0	8	18.6 ± 0.5 **	76.0 ± 1.4	8	NR	NR	
		14 - 17	19.2 ± 0.3 *	69.1 ± 1.3	8	18.5 ± 0.5 **	71.0 ± 1.8	8	NR	NR	
		17 - 21	19.1 ± 0.4	65.9 ± 1.1	8	17.9 ± 0.5	65.4 ± 1.5	8	NR	NR	
		21 - 24	18.9 ± 0.4	63.1 ± 1.5	8	18.0 ± 0.4 **	63.4 ± 1.3	8	NR	NR	
		24 - 28	19.1 ± 0.3	61.9 ± 0.8	8	18.3 ± 0.5 *	62.2 ± 1.7	8	NR	NR	
		28 - 31	19.2 ± 0.6 *	60.5 ± 1.5	8	18.7 ± 0.7 *	61.1 ± 1.9	8	NR	NR	
		31 - 35	18.9 ± 0.4 **	58.3 ± 0.9	8	17.7 ± 0.6 **	56.2 ± 1.7	8	NR	NR	
		35 - 38	19.2 ± 0.4 **	58.2 ± 1.6	8	18.3 ± 0.6 **	57.1 ± 1.7 *	8	NR	NR	
		38 - 42	17.9 ± 0.4 *	53.2 ± 1.0	8	17.1 ± 0.4 **	52.1 ± 1.4	8	NR	NR	
		42 - 45	18.6 ± 0.4 *	54.2 ± 1.0	8	17.6 ± 0.4 **	52.6 ± 0.9	8	NR	NR	
		45 - 49	18.3 ± 0.4 *	52.3 ± 1.0	8	17.7 ± 0.8 *	51.9 ± 2.2	8	NR	NR	
		49 - 52	18.9 ± 0.5 *	53.2 ± 1.3	8	17.9 ± 0.6 **	51.7 ± 2.0	8	NR	NR	
		52 - 56	18.3 ± 0.3 **	50.8 ± 0.8	8	16.9 ± 0.8 **	47.7 ± 2.1 *	8	NR	NR	
		56 - 59	18.8 ± 0.4 *	51.7 ± 0.8	8	17.8 ± 0.7 **	49.4 ± 1.8	8	NR	NR	
		59 - 63	19.0 ± 0.3	51.6 ± 0.7	8	17.7 ± 0.7	48.7 ± 2.1	8	NR	NR	
	63 - 66	19.9 ± 0.5	53.3 ± 1.3	8	19.2 ± 0.6	52.1 ± 0.9	8	NR	NR		
	66 - 70	18.8 ± 0.4	49.7 ± 0.9	8	17.7 ± 0.8	47.3 ± 2.0	8	NR	NR		
	0 - 70	18.7 ± 0.3 *	58.8 ± 0.9	8	17.7 ± 0.4 **	57.8 ± 1.3	8	NR	NR		

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F0 Females

Treatment Groups (ppm)

Phase	Litter ID	Days	0			625			1250		
			Wt (g/animal/day)	Wt (g/kg/animal/day)	N	Wt (g/animal/day)	Wt (g/kg/animal/day)	N	Wt (g/animal/day)	Wt (g/kg/animal/day)	N
Study		0 - 3	16.0 ± 0.8	78.6 ± 2.7	7	15.7 ± 0.8	78.6 ± 3.4	8	14.8 ± 1.1	74.8 ± 5.4	8
		3 - 7	16.3 ± 0.6 **	78.2 ± 3.3 **	7	16.4 ± 0.7	78.2 ± 2.9	8	14.2 ± 0.5 *	71.1 ± 2.0	8
		7 - 10	16.6 ± 1.1	77.5 ± 4.3	8	18.8 ± 1.4	86.9 ± 6.6	7	14.8 ± 0.4	72.6 ± 1.8	8
		10 - 14	17.1 ± 0.8	76.4 ± 1.9	8	14.8 ± 1.3	67.3 ± 5.0	8	14.9 ± 0.3	70.9 ± 0.9	8
		0 - 14	16.4 ± 0.6	77.4 ± 2.0	8	16.2 ± 0.8	76.8 ± 3.2	8	14.7 ± 0.4	72.1 ± 1.5	8
Gestation	A	0 - 3	18.8 ± 0.6 **	80.3 ± 2.7	6	19.3 ± 0.8	82.5 ± 3.6	7	16.8 ± 0.6	75.8 ± 3.0	7
		3 - 6	19.8 ± 0.5 **	78.8 ± 1.0 *	6	19.5 ± 0.8	78.7 ± 3.6	6	17.0 ± 0.4 **	73.2 ± 1.6	7
		6 - 9	20.9 ± 0.4 **	79.1 ± 2.0	6	20.2 ± 1.1	77.4 ± 4.3	7	17.7 ± 0.5 **	72.9 ± 2.3	7
		9 - 12	21.6 ± 0.3 **	77.5 ± 1.3	6	20.1 ± 0.7	73.0 ± 2.0	7	18.1 ± 0.4 **	71.3 ± 1.7	7
		12 - 15	21.4 ± 0.4 **	72.4 ± 1.2	6	20.9 ± 0.9	72.2 ± 2.4	7	18.8 ± 0.6 **	70.0 ± 2.3	7
		15 - 18	23.6 ± 0.2 **	72.1 ± 0.4 **	6	22.2 ± 0.9 *	70.4 ± 1.8	7	20.4 ± 0.7 **	69.1 ± 1.9	7
		18 - 21	25.0 ± 0.7 **	66.3 ± 1.1 **	6	23.8 ± 0.8	66.5 ± 1.4	7	22.4 ± 0.8 *	66.4 ± 1.4	7
		0 - 21	21.6 ± 0.2 **	74.2 ± 0.7 **	6	21.0 ± 0.8	73.9 ± 2.3	7	18.8 ± 0.5 **	70.6 ± 1.6	7
Lactation	A	1 - 4	37.7 ± 2.2 **	126.3 ± 6.2	6	32.2 ± 1.7	113.9 ± 6.5	7	30.1 ± 2.2 *	111.7 ± 8.6	6
		4 - 7	47.9 ± 2.0 **	154.1 ± 5.2	6	41.6 ± 2.7	143.5 ± 10.6	7	40.4 ± 3.3	145.3 ± 12.9	7
		7 - 14	63.0 ± 1.3 **	199.0 ± 3.6	6	47.1 ± 4.9 *	159.5 ± 18.4	7	47.3 ± 5.7 *	156.0 ± 22.2	6

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Phase	Litter ID	Days	Treatment Groups (ppm)					
			2500			5000		
			Wt (g/animal/day)	Wt (g/kg/animal/day)	N	Wt (g/animal/day)	Wt (g/kg/animal/day)	N
Study		0 - 3	11.7 ± 0.8	61.2 ± 4.2	6	25.0 ± 3.3	130.3 ± 17.0	8
		3 - 7	14.8 ± 0.4 *	75.9 ± 1.3	8	11.3 ± 0.3 **	60.4 ± 1.4 **	8
		7 - 10	15.4 ± 0.5	76.0 ± 2.0	8	17.5 ± 1.4	90.5 ± 7.4	8
		10 - 14	13.9 ± 0.6 *	67.6 ± 2.4	8	15.5 ± 0.7	76.6 ± 2.7	8
		0 - 14	14.2 ± 0.5 *	71.0 ± 1.6	8	16.8 ± 0.8	85.8 ± 4.2	8
Gestation	A	0 - 3	15.6 ± 0.8	71.7 ± 3.4	7	15.8 ± 2.0	75.3 ± 6.2	3
		3 - 6	16.4 ± 0.4 **	72.2 ± 1.5	7	16.0 ± 1.1 *	73.6 ± 4.2	3
		6 - 9	17.0 ± 0.4 **	71.7 ± 1.4	7	16.6 ± 1.8 *	73.2 ± 3.7	3
		9 - 12	17.9 ± 0.5 **	72.2 ± 2.0	7	17.1 ± 1.8 **	73.1 ± 4.3	3
		12 - 15	17.9 ± 0.4 **	68.6 ± 1.4	7	19.4 ± 2.2 *	78.1 ± 6.2	3
		15 - 18	18.9 ± 0.6 **	66.2 ± 1.4 **	7	17.1 ± 1.4 **	63.4 ± 2.7 **	3
		18 - 21	19.5 ± 0.4 **	60.7 ± 0.7 **	7	16.2 ± 0.9 **	54.3 ± 3.1 **	3
		0 - 21	17.6 ± 0.4 **	68.3 ± 1.3	7	16.9 ± 1.5 **	69.1 ± 3.4	3
Lactation	A	1 - 4	28.4 ± 1.4 **	112.6 ± 5.8	7	23.2	107.1	1
		4 - 7	38.4 ± 1.1 **	146.1 ± 3.7	7	17.2	76.8	1
		7 - 14	48.7 ± 1.8 **	179.4 ± 6.2	6	NR	NR	

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#### LEGEND

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Reported as the mean  $\pm$  SEM. N is the number of animals, number of cages for group housed adult animals or number of litters.

Statistical analysis performed by Jonckheere (trend) and Shirley or Dunn (pairwise) tests (unless otherwise noted).

Statistical significance for the control group indicates a significant trend test

Statistical significance for a treatment group indicates a significant pairwise test compared to the vehicle control group

\* Statistically significant at  $P \leq 0.05$

\*\* Statistically significant at  $P \leq 0.01$

Consumption is not reported for the non-pregnant animals during gestation and lactation phases

Consumption is not reported for animals during mating

Data with sample sizes of 1 or 2 were excluded from the trend and multiple comparisons tests.

Consumption data is not analyzed for lactation periods that end after LD 14 due to possible consumption by pups.

NR not recorded

**\*\* END OF REPORT \*\***