

**Disposition of Radioactivity 24 Hours Following Oral Gavage Administration of
10 mg/kg [14C]HMB to Male Harlan Sprague Dawley Rats (Group I)^a**

Dose Recovered in Excreta (%)

End of Collection Period (h)	Urine CPDE ^b	Cage Rinse CPDE	Feces CPDE	Volatile Organics CPDE	CO ₂ CPDE	GI Content	Total
4	2.37 ± 4.73	1.00 ± 2.00	—	0.0109 ± 0.0035	0.109 ± 0.024	—	2.82
8	17.9 ± 2.3	4.68 ± 1.39	—	0.0192 ± 0.0069	0.208 ± 0.057	—	22.1
12	29.3 ± 4.8	7.05 ± 0.61	—	0.0334 ± 0.0069	0.329 ± 0.058	—	37.9
24 ^c	42.1 ± 6.5	9.60 ± 0.35	25.3 ± 6.8	0.0414 ± 0.0071	0.446 ± 0.0626	5.82 ± 0.96	78.6

Disposition in Tissues

Tissue	nmol-eq HMB per g Tissue	Tissue/ Blood Ratio	Recovery (%)
Blood ^d	1.05 ± 0.13	unity	0.220 ± 0.047
Adipose ^d	0.991 ± 0.559	0.916 ± 0.426	0.192 ± 0.098
Muscle ^d	0.298 ± 0.051	0.291 ± 0.078	0.336 ± 0.042
Skin ^d	0.688 ± 0.348	0.643 ± 0.269	0.368 ± 0.177
Brain	0.0850 ± 0.0510	0.0845 ± 0.0610	0.00135 ± 0.00108
Heart	0.361 ± 0.047	0.349 ± 0.063	0.00298 ± 0.00092
Kidneys	4.32 ± 1.00	4.08 ± 0.54	0.0693 ± 0.0086
Liver	3.47 ± 0.50	3.35 ± 0.61	0.356 ± 0.055
Lung	0.645 ± 0.313	0.604 ± 0.239	0.00750 ± 0.00274
Spleen	0.466 ± 0.245	0.433 ± 0.187	0.00273 ± 0.00131
Adrenals	0.868 ± 0.302	0.819 ± 0.234	0.00029 ± 0.00004
Thymus	0.239 ± 0.031	0.232 ± 0.046	0.00092 ± 0.00018
Thyroid	3.00 ± 2.47	2.88 ± 2.17	0.00009 ± 0.00002
Urinary Bladder	66.9 ± 62.6	62.7 ± 59.2	0.0403 ± 0.0478
Pancreas	0.989 ± 0.467	0.942 ± 0.392	0.00644 ± 0.00459
Testes	0.366 ± 0.173	0.343 ± 0.134	0.0123 ± 0.0078
Cecum	23.2 ± 8.1	21.9 ± 5.6	0.144 ± 0.040
Large Intestine	9.55 ± 4.96	9.15 ± 4.8	0.116 ± 0.064
Small Intestine	26.8 ± 6.6	25.5 ± 4.6	1.16 ± 0.29
Stomach	4.78 ± 2.36	4.72 ± 2.45	0.0668 ± 0.0377

Disposition Summary (Dose Recovered [%])

Sample	Mean ± Standard Deviation
Urine + Cage Rinse	52.9 ± 6.8
Urine	42.1 ± 6.5
Cage Rinse	9.60 ± 0.35
Feces	25.3 ± 6.8
VOCs	0.0414 ± 0.0071
CO ₂	0.446 ± 0.062
GI Content	5.82 ± 0.96
Carcass	0.0300 ± 0.0476
Tissues	3.10 ± 0.45
Total Recovered	81.7 ± 12.8

^aAll values expressed as mean ± SD (N = 5). The actual dose delivered was 9.22 ± 1.10 mg/kg (49.8 ± 5.9 µCi).

^bCPDE = Cumulative percent dose excreted.

^c24-hour urine collection includes urine present in the urinary bladder at study termination.

^dTissue weights for the dispersed tissues were calculated using the following percentages of body weight: adipose 7.0%, blood 7.4%, muscle 40.4%, and skin 19% (International Life Sciences Institute, 1994).