

**Disposition of Radioactivity 72 Hours Following Oral Gavage Administration of 100 mg/kg
[¹⁴C]HMB to Male B6C3F₁/N Mice (Group E)^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	0.00115 ± 0.00088	0.342 ± 0.704	–	0.172 ± 0.0299	1.24 ± 0.23	–	1.75
8	0.674 ± 1.383	10.7 ± 13.0	–	0.473 ± 0.142	3.23 ± 0.50	–	15.1
12	9.42 ± 14.29	15.4 ± 13.2	–	0.639 ± 0.169	4.47 ± 0.67	–	29.9
24	17.1 ± 13.9	21.4 ± 11.2	36.2 ± 2.9	0.831 ± 0.202	5.51 ± 0.87	–	80.9
48	17.4 ± 14.0	22.6 ± 10.9	38.4 ± 2.8	–	–	–	84.7
72 ^c	17.5 ± 14.0	23.9 ± 10.6	38.7 ± 2.8	–	–	0.0567 ± 0.0543	87.1

Disposition in Tissues

Tissue	nmol-eq HMB per g Tissue	Tissue/Blood Ratio	Recovery (%)
Blood ^d	0.723 ± 0.076	unity	0.00865 ± 0.00092
Adipose ^d	1.38 ± 0.59	1.96 ± 0.93	0.0234 ± 0.0092
Muscle ^d	1.36 ± 0.44	1.91 ± 0.68	0.127 ± 0.038
Skin ^d	1.04 ± 0.21	1.44 ± 0.26	0.0418 ± 0.0075
Brain	0.309 ± 0.051	0.428 ± 0.067	0.00118 ± 0.00021
Heart	0.678 ± 0.302	0.937 ± 0.412	0.00068 ± 0.00024
Kidneys	0.685 ± 0.117	0.960 ± 0.211	0.00237 ± 0.00040
Liver	2.44 ± 0.21	3.41 ± 0.52	0.0291 ± 0.0035
Lung	0.718 ± 0.382	0.966 ± 0.413	0.00099 ± 0.00043
Spleen	2.16 ± 1.25	2.92 ± 1.52	0.00092 ± 0.00052
Adrenals	115 ± 132	153 ± 178	0.00048 ± 0.00040
Thymus	21.1 ± 36.6	29.5 ± 51.3	0.00263 ± 0.00353
Thyroid	69.9 ± 74.9	94.5 ± 104.7	0.00020 ± 0.00010
Urinary Bladder	2.38 ± 1.25	3.39 ± 1.85	0.00028 ± 0.00007
Pancreas	1.12 ± 0.77	1.51 ± 1.00	0.00066 ± 0.00029
Testes	0.527 ± 0.144	0.742 ± 0.247	0.00089 ± 0.00013
Cecum	2.58 ± 2.13	3.70 ± 3.18	0.00132 ± 0.00117
Large Intestine	1.13 ± 0.40	1.61 ± 0.67	0.00121 ± 0.00058
Small Intestine	0.661 ± 0.558	0.945 ± 0.852	0.00516 ± 0.00612
Stomach	0.927 ± 0.317	1.30 ± 0.49	0.00092 ± 0.00039

Disposition Summary

Sample	% Dose Recovered
Urine + Cage Rinse	41.6 ± 16.7
Urine	17.5 ± 14.0
Cage Rinse	23.9 ± 10.6
Feces	38.7 ± 2.8
VOCs	0.831 ± 0.202
CO ₂	5.51 ± 0.87
GI Content	0.0567 ± 0.0543
Carcass	1.53 ± 0.20
Tissues	0.25 ± 0.05
Total Recovered	88.9 ± 21.5

^aAll values expressed as mean ± standard deviation (SD) (N = 5). The actual dose delivered was 99.2 ± 0.8 mg/kg (90.1 ± 0.8 µCi).

^bCPDE = Cumulative percent dose excreted.

^c72 hour (h) 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 4.9%, muscle 38.4%, and skin 16.5% (International Life Sciences Institute, 1994).