

**Disposition of Radioactivity 72 Hours Following Oral Gavage Administration of 100 mg/kg
[¹⁴C]HMB to Female B6C3F₁/N Mice (Group P)^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	0.00043 ± 0.00005	3.52 ± 3.98	—	0.0917 ± 0.0144	1.26 ± 0.31	—	4.87
8	1.02 ± 1.38	6.75 ± 6.54	—	0.219 ± 0.023	12.0 ± 21.6	—	20.0
12	2.70 ± 3.43	21.6 ± 7.3	—	0.370 ± 0.058	12.9 ± 21.5	—	37.5
24	3.37 ± 3.59	27.0 ± 7.5	22.0 ± 8.7	0.473 ± 0.052	13.6 ± 21.5	—	66.4
48	4.11 ± 4.35	27.5 ± 7.6	23.3 ± 9.0	0.596 ± 0.060	14.6 ± 21.5	—	70.1
72 ^c	4.24 ± 4.35	29.7 ± 7.0	23.9 ± 8.8	0.734 ± 0.065	15.6 ± 21.3	0.0596 ± 0.0366	75.7

Disposition in Tissues

Tissue	nmol-eq HMB per g Tissue	Tissue/Blood Ratio	Recovery (%)
Blood ^d	0.738 ± 0.122	unity	0.00836 ± 0.00190
Adipose ^d	0.949 ± 0.363	1.27 ± 0.37	0.0155 ± 0.0070
Muscle ^d	0.595 ± 0.180	0.814 ± 0.228	0.0526 ± 0.0163
Skin ^d	1.11 ± 0.29	1.49 ± 0.17	0.0425 ± 0.0129
Brain	0.278 ± 0.093	0.369 ± 0.071	0.00145 ± 0.00057
Heart	0.634 ± 0.280	0.853 ± 0.325	0.00064 ± 0.00035
Kidneys	0.515 ± 0.089	0.711 ± 0.165	0.00146 ± 0.00033
Liver	1.93 ± 0.52	2.63 ± 0.57	0.0219 ± 0.0072
Lung	0.625 ± 0.211	0.876 ± 0.394	0.00096 ± 0.00032
Spleen	0.953 ± 0.429	1.27 ± 0.47	0.00056 ± 0.00022
Adrenals	4.78 ± 1.41	6.47 ± 1.61	0.00042 ± 0.00013
Thymus	1.09 ± 0.35	1.45 ± 0.24	0.00050 ± 0.00009
Thyroid	24.9 ± 15.6	29.9 ± 16.6	0.00026 ± 0.00009
Urinary Bladder	1.24 ± 0.74	1.61 ± 0.77	0.00022 ± 0.00008
Pancreas	0.501 ± 0.171	0.688 ± 0.256	0.00156 ± 0.00062
Ovaries	0.499 ± 0.206	0.681 ± 0.253	0.00095 ± 0.00043
Cecum	1.35 ± 0.23	1.87 ± 0.47	0.00071 ± 0.00025
Large Intestine	0.655 ± 0.124	0.902 ± 0.195	0.00090 ± 0.00037
Small Intestine	0.972 ± 0.612	1.33 ± 0.83	0.00369 ± 0.00246
Stomach	1.42 ± 1.33	2.01 ± 2.09	0.00148 ± 0.00140

Disposition Summary

Sample	% Dose Recovered
Urine + Cage Rinse	34.5 ± 9.0
Urine	4.24 ± 4.35
Cage Rinse	29.7 ± 7.0
Feces	23.9 ± 8.8
VOCs	0.734 ± 0.065
CO ₂	15.6 ± 21.3
GI Content	0.0596 ± 0.0366
Carcass	0.120 ± 0.159
Tissues	0.157 ± 0.038
Total Recovered	76.0 ± 28.6

^aAll values expressed as mean ± standard deviation (SD) (N = 5). The actual dose delivered was 104 ± 2 mg/kg (129 ± 2 µCi).

^bCPDE = Cumulative percent dose excreted.

^c72 hours (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).