

**Disposition of Radioactivity 72 Hours Following Oral Gavage Administration of 500 mg/kg
[¹⁴C]HMB to Male B6C3F₁/N Mice (Group F)^a**

Dose Recovered in Excreta (%)

End of Collection Period (h)	Urine CPDE ^b	Cage Rinse CPDE	Feces CPDE	GI Content	Total
4	–	0.886 ± 1.917	–	–	0.886
8	6.26 ± 12.49	8.05 ± 5.81	–	–	13.1
12	5.81 ± 11.25	13.0 ± 10.4	–	–	18.8
24	17.2 ± 22.1	18.0 ± 9.7	21.6 ± 7.6	–	59.1
48	17.9 ± 22.6	19.7 ± 9.3	23.0 ± 7.6	–	53.3
72 ^c	18.2 ± 22.8	21.5 ± 8.7	24.3 ± 8.0	0.0500 ± 0.0187	66.7

Disposition in Tissues

Tissue	nmol-eq HMB per g Tissue	Tissue/Blood Ratio	Recovery (%)
Blood ^d	8.42 ± 2.39	unity	0.0188 ± 0.0062
Adipose ^d	20.7 ± 10.5	3.00 ± 2.66	0.0637 ± 0.0278
Muscle ^d	20.7 ± 24.4	2.32 ± 2.11	0.361 ± 0.456
Skin ^d	6.20 ± 2.22	0.844 ± 0.496	0.0456 ± 0.0164
Brain	1.48 ± 0.20	0.196 ± 0.091	0.00096 ± 0.00008
Heart	6.45 ± 2.12	0.885 ± 0.626	0.00100 ± 0.00014
Kidneys	3.79 ± 0.60	0.512 ± 0.278	0.00270 ± 0.00099
Liver	15.9 ± 3.6	2.19 ± 1.39	0.339 ± 0.0042
Lung	6.56 ± 3.38	0.966 ± 0.932	0.00132 ± 0.00017
Spleen	16.6 ± 12.3	2.58 ± 3.12	0.00122 ± 0.00019
Adrenals	1560 ± 1180	164 ± 116	0.00083 ± 0.00047
Thymus	26.6 ± 13.5	3.69 ± 3.11	0.00113 ± 0.00033
Thyroid	182 ± 136	26.8 ± 23.9	0.00026 ± 0.00015
Urinary Bladder	14.6 ± 6.4	2.05 ± 1.67	0.00030 ± 0.00005
Pancreas	9.67 ± 11.86	1.25 ± 1.38	0.00120 ± 0.00038
Testes	4.76 ± 1.78	0.649 ± 0.439	0.00121 ± 0.00037
Cecum	26.9 ± 17.5	4.09 ± 4.58	0.00151 ± 0.00045
Large Intestine	5.30 ± 1.77	0.723 ± 0.491	0.00133 ± 0.00031
Small Intestine	5.93 ± 7.04	1.04 ± 1.62	0.00435 ± 0.00452
Stomach	8.85 ± 5.34	1.33 ± 1.41	0.00144 ± 0.00056

Disposition Summary

Sample	% Dose Recovered
Urine + Cage Rinse	39.9 ± 18.9
Urine	18.2 ± 22.8
Cage Rinse	21.5 ± 8.7
Feces	24.3 ± 8.0
GI Content	0.0500 ± 0.0187
Carcass	0.697 ± 0.482
Tissues	0.55 ± 0.42
Total Recovered	69.0 ± 15.2

^aAll values expressed as mean ± standard deviation (SD) (N = 5). The actual dose delivered was 504 ± 7 mg/kg (90.2 ± 1.3 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).