Disposition of Radioactivity 72 h Following Oral Gavage Administration of 500 mg/kg [¹⁴C]HMB to Male Harlan Sprague Dawley Rats (Group B)^a

End of Collection Period (h)	Urine CPDE ^b	Cage Rinse CPDE	Feces CPDE	Total
4	3.33 ± 3.22	0.946 ± 0.565	-	4.27
8	11.0 ± 4.2	3.95 ± 2.62	-	15.0
12	23.5 ± 2.4	7.44 ± 3.01	-	30.9
24	36.5 ± 4.9	10.2 ± 2.9	33.0 ± 5.8	73.7
48	40.9 ± 6.2	10.9 ± 2.8	40.3 ± 3.8	92.1
72 ^c	41.3 ± 6.3	11.7 ± 2.8	41.0 ± 3.8	94.3

Dose Recovered in Excreta (%)

Disposition in Tissues

Tissue	nmol-eq HMB per g Tissue	Tissue/ Blood Ratio	Recovery (%)
Blood ^d	10.5 ± 1.4	unity	0.0372 ± 0.0051
Adipose ^d	8.33 ± 1.03	0.800 ± 0.079	0.0280 ± 0.0033
Muscle ^d	6.54 ± 0.82	0.634 ± 0.107	0.127 ± 0.016
Skin ^d	9.44 ± 1.70	0.912 ± 0.170	0.0861 ± 0.0146
Brain	3.05 ± 0.58	0.293 ± 0.047	0.00078 ± 0.00014
Kidneys	13.2 ± 2.7	1.26 ± 0.14	0.00403 ± 0.00094
Liver	33.5 ± 11.3	3.14 ± 0.76	0.0751 ± 0.0284

Disposition Summary (% Dose Recovered)

Mean ± SD	
53.1 ± 4.1	
41.3 ± 6.3	
11.7 ± 2.8	
41.0 ± 3.8	
0.360 ± 0.051	
94.6 ± 2.6	

^aAll values expressed as mean \pm standard deviation (SD) (N = 5).

The actual dose delivered was 513 \pm 3 mg/kg (41.9 \pm 0.2 $\mu Ci).$

^bCPDE = Cumulative percent dose excreted

°72 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 7.4%, muscle 40.4%, and skin 19%. International Life Sciences Institute (1994) Physiological Parameter Values for PBPK Models.