

**Disposition of Radioactivity 72 Hours Following Dermal Application of 10 mg/kg [¹⁴C]HMB,
Formulated in Coconut Oil, to Male Harlan Sprague Dawley Rats (Group B)^a**

Dose Recovered in Excreta (%)

End of Collection Period (h)	Urine CPDE ^b	Cage Rinse CPDE	Feces CPDE	GI Content	Total
4	0.189 ± 0.227	0.105 ± 0.135	—	—	0.294
8	1.48 ± 0.53	0.489 ± 0.265	—	—	1.97
12	3.16 ± 0.87	1.28 ± 0.76	—	—	4.44
24	8.97 ± 1.50	2.10 ± 1.47	4.78 ± 1.99	—	15.9
48	20.4 ± 1.7	4.09 ± 1.89	9.97 ± 2.09	—	34.5
72c	26.4 ± 2.1	5.66 ± 2.14	15.3 ± 1.9	2.38 ± 0.95	50.2

Disposition in Tissues

Tissue	nmol-eq HMB per g Tissue	Tissue/ Blood Ratio	Recovery (%)
Blood ^d	0.535 ± 0.101	unity	0.0955 ± 0.0169
Adipose ^d	1.86 ± 0.60	3.46 ± 0.70	0.314 ± 0.094
Muscle ^d	0.601 ± 0.243	1.18 ± 0.57	0.585 ± 0.228
Skin ^d	14.0 ± 14.5	28.5 ± 30.3	6.38 ± 6.44
Brain	0.194 ± 0.079	0.386 ± 0.223	0.00305 ± 0.00132
Heart	0.217 ± 0.069	0.411 ± 0.128	0.00183 ± 0.00055
Kidneys	1.76 ± 0.23	3.33 ± 0.39	0.0294 ± 0.0030
Liver	0.794 ± 0.476	1.57 ± 0.89	0.0815 ± 0.0494
Lung	0.328 ± 0.098	0.627 ± 0.217	0.00394 ± 0.00125
Spleen	0.240 ± 0.176	0.437 ± 0.260	0.00155 ± 0.00109
Adrenals	0.626 ± 0.350	1.27 ± 0.82	0.00030 ± 0.00015
Thymus	0.169 ± 0.144	0.346 ± 0.313	0.00075 ± 0.00062
Thyroid	4.07 ± 6.28	6.96 ± 9.47	0.00003 ± 0.00003
Urinary Bladder	14.6 ± 20.6	29.9 ± 43.0	0.00654 ± 0.00872
Pancreas	1.17 ± 1.13	2.06 ± 1.66	0.0134 ± 0.0180
Testes	0.211 ± 0.130	0.384 ± 0.173	0.00646 ± 0.00373
Cecum	11.2 ± 9.2	19.8 ± 12.6	0.0405 ± 0.0272
Large Intestine	4.48 ± 2.96	8.13 ± 4.21	0.0294 ± 0.0134
Small Intestine	12.1 ± 7.9	21.7 ± 11.3	0.284 ± 0.133
Stomach	0.946 ± 0.333	1.73 ± 0.37	0.00941 ± 0.00222

Disposition Summary

Sample	% Dose Recovered
Total Unabsorbed Dose	10.7 ± 2.9
Applicator	0.834 ± 0.478
Tape/Glue	5.05 ± 1.53
Dose Site Swipes	4.76 ± 1.25
Total Dose Site Skin	0.431 ± 0.226
Total Absorbed Dose	64.3 ± 8.2
Urine + Cage Rinse	32.3 ± 2.6
Urine	26.4 ± 2.1
Cage Rinse	5.66 ± 2.14
Feces	15.3 ± 1.9
GI Content	2.38 ± 0.95
Carcass	3.36 ± 5.27
Tissues	8.31 ± 6.83
Total Recovered	72.5 ± 5.3

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

The actual dose delivered was 9.57 ± 0.29 mg/kg (44.5 ± 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 7.4%, muscle 40.4%, and skin 19% (International Life Sciences Institute, 1994).