

**Distribution of Radioactivity in Tissues 2 Hours Following Oral Administration
of 100 mg/kg [¹⁴C]DMAE to Male Wistar Han Rats (DMAE Study I)^{a,b}**

Distribution in Tissues (2 hours)

Tissue	nmol-eq DMAE per g Tissue	Tissue/Blood Ratio	Dose in Total Tissue (%)
Adipose ^c	82.6 ± 24.6	0.354 ± 0.114	0.518 ± 0.155
Urinary Bladder	1620 ± 2050	6.84 ± 8.56	0.0643 ± 0.103
Blood ^c	235 ± 9	Unity	1.55 ± 0.06
Brain	410 ± 57	1.75 ± 0.23	0.0261 ± 0.0023
Heart	540 ± 60	2.30 ± 0.22	0.0318 ± 0.0015
Kidney	3720 ± 166	15.9 ± 0.5	0.279 ± 0.049
Liver	6150 ± 645	26.2 ± 2.5	21.3 ± 1.8
Lung	1930 ± 394	8.24 ± 1.55	0.151 ± 0.083
Muscle ^c	354 ± 107	1.50 ± 0.43	12.8 ± 3.9
Skin ^c	334 ± 20	1.42 ± 0.06	5.68 ± 0.35
Spleen	1110 ± 138	4.72 ± 0.51	0.0571 ± 0.0113
Thyroid	2120 ± 485	9.07 ± 2.24	0.00389 ± 0.00196
Testes	262 ± 37	1.12 ± 0.15	0.0225 ± 0.041
Stomach ^d	NA ^e	NA	7.64 ± 5.76
Small Intestine ^d	NA	NA	3.32 ± 0.36
Cecum ^d	NA	NA	0.296 ± 0.066
Large Intestine ^d	NA	NA	0.410 ± 0.046
Carcass ^f	NA	NA	1.19 ± 0.99

^aAll values expressed as mean ± standard deviation (SD) (N = 5). The target dose was 100 mg DMAE/kg. The actual dose delivered was 99.5 ± 0.2 mg/kg (50.0 ± 0.1 µCi/kg).

^bExcreted data (urine, feces, volatile organs, and CO₂) were not collected.

^cPercent of dose in these tissues calculated using the following percentages of body weight: adipose 7.0%, blood 7.4%, muscle 40.4%, and skin 19.0%.

^dIncludes contents.

^eNA = Not applicable.

^fCarcass values are based on the residual digested carcass after the removal of the listed tissues (i.e., percent dose measured in skin, adipose, blood, and muscle was subtracted from the total percent dose measured in the carcass).