

**Disposition of Radioactivity 72 Hours Following Oral Co-Administration of Kava
(Normalized to 100 mg/kg Kavalactones) and Tracer Levels of [¹⁴C]Kawain to
Female B6C3F₁ Mice (Group 5)^a**

Dose Recovered in Excreta (%)

End of Collection Period (h)	Urine CPDE ^b	Feces CPDE	Total CPDE
8	4.9 ± 5.5	c	4.9 ± 5.5
24	36.3 ± 13.0	21.2 ± 5.6	57.55 ± 13.6
48	47.3 ± 10.3	26.9 ± 1.1	74.2 ± 10.5
72	51.5 ± 8.3	27.6 ± 1.0	79.1 ± 8.3

Distribution in Tissues (72 hours)

Tissue	ng-eq Kawain per g Tissue	Tissue/Blood Ratio	% Dose in Total Tissue
Blood	143.5 ± 29.5	Unity	0.030 ± 0.01
Brain	7.96 ± 1.62	0.056 ± 0.01	0.001 ± 0.00
Heart ^d	73.5 ± 13.7	0.466 ± 0.06	0.0017 ± 0.00
Kidney ^d	212.6 ± 47.7	1.344 ± 0.20	0.0141 ± 0.00
Liver	797 ± 185	5.54 ± 0.61	0.154 ± 0.02
Lung	94.9 ± 26.7	0.655 ± 0.07	0.004 ± 0.00
Muscle	44.3 ± 15.1	0.312 ± 0.09	0.074 ± 0.03
Skin	120.1 ± 46.1	0.842 ± 0.27	0.085 ± 0.04
Total in Tissues	—	—	0.363 ± 0.010

^aAll values expressed as mean ± standard deviation (SD) (N = 4). The target dose was kava normalized to 100 mg kavalactones/kg body weight and contained tracer levels (5.44-7.30 µCi) of [¹⁴C](+)-kawain. (+)-Kawain is a constituent of kava extract (kava). Kava extract contains ca. 40% kavalactones of which the major constituents (96%) are 5,6-dehydrokawain; 7,8-dihydrokawain; 7,8-dihydromethysticin; kawain; methysticin; and yangonin.

^bCPDE = Cumulative percent dose excreted.

^cThe first feces collection was at 24 hours (h)

^dN = 3. Data from Mouse 4 was excluded from mean calculations due to high variability.

Data from Mouse 4

ng-eq Kawain/g tissue: heart = 450.88, kidney = 17.53;

Tissue to Blood Ratio: heart 4.374, kidney = 0.170;

% dose in total tissue: heart = 0.14, kidney = 0.001.