

Recovery of Radioactivity 24 Hours Following Single Oral Administration of
 $^{51}\text{CrCl}_3$ plus Nonradiolabeled CrCl_3 (4 $\mu\text{mol}/\text{kg}$) to Male B6C3F₁ Mice (Study D)^a

Distribution in Tissues in Fasted Mice (24 hours)

Tissue	nmol-eq Chromium per g Tissue	Tissue/Blood Ratio	% Dose in Total Tissue
Blood ^b	0.191 \pm 0.350	unity	0.215 \pm 0.387
Forestomach ^c	0.284 \pm 0.369	2.51 \pm 4.48	0.0106 \pm 0.0128
Glandular Stomach ^c	0.185 \pm 0.203	4.01 \pm 5.16	0.0118 \pm 0.0078
Duodenum ^c	0.726 \pm 0.575	43.4 \pm 81.9	0.0758 \pm 0.0924
Jejunum ^c	0.212 \pm 0.232	3.76 \pm 4.57	0.0517 \pm 0.0540
Ileum ^c	0.185 \pm 0.295	1.04 \pm 0.87	0.0102 \pm 0.0137
Cecum ^c	0.182 \pm 0.199	2.55 \pm 3.16	0.00866 \pm 0.01151
Large Intestine ^c	0.132 \pm 0.191	1.25 \pm 1.23	0.0104 \pm 0.0132

Distribution in Tissues in Fed Mice (24 hours)

Tissue	nmol-eq Chromium per g Tissue	Tissue/Blood Ratio	% Dose in Total Tissue
Blood ^b	0.293 \pm 0.532	unity	0.361 \pm 0.658
Forestomach ^c	0.234 \pm 0.240	1.06 \pm 1.68	0.00857 \pm 0.00598
Glandular Stomach ^c	0.180 \pm 0.195	0.610 \pm 0.855	0.0138 \pm 0.0141
Duodenum ^c	0.0317 \pm 0.0148 ^d	0.296 \pm 0.471 ^d	0.00275 \pm 0.00261 ^d
Jejunum ^c	0.193 \pm 0.262	0.319 \pm 0.286	0.0246 \pm 0.0240
Ileum ^c	0.120 \pm 0.197	0.255 \pm 0.293	0.0124 \pm 0.0220
Cecum ^c	0.192 \pm 0.105 ^d	0.765 \pm 0.943 ^d	0.0123 \pm 0.0135 ^d
Large Intestine ^c	0.146 \pm 0.225	0.276 \pm 0.289	0.00856 \pm 0.01011

% Dose Recovered

Sample	Fasted	Fed
GI Tissues	0.185 \pm 0.133	0.0784 \pm 0.0840
Blood and GI Tissues	0.412 \pm 0.516	0.439 \pm 0.741

^aAll values expressed as mean \pm standard deviation (SD) (N = 4 for fasted mice and N = 4 for fed mice.) The target dose was 4 μmol chromium/kg. The actual dose delivered was 4.08 \pm 0.04 $\mu\text{mol}/\text{kg}$ (5.43 \pm 0.30 μCi). (N = 8).

^bPercent of dose in blood was calculated using the following percentages of body weight: blood 4.9% (International Life Sciences Institute. 1994. Physiological parameter values for PBPK models.)

^cDoes not include contents.

^dN = 3 due to one missing sample.