

Recovery of Radioactivity 24 Hours Following Single Oral Administration of
 $^{51}\text{CrCl}_3$ plus Nonradiolabeled CrCl_3 (2 $\mu\text{mol/kg}$) to Male F344 Rat (Study G)^a

Distribution in Tissues in Fasted Rats (24 hours)

Tissue	nmol-eq Chromium per g Tissue	Tissue/Blood Ratio	% Dose in Total Tissue
Blood ^b	0.0045 ± 0.0057	unity	0.0169 ± 0.0207
Forestomach ^c	0.0305 ± 0.0165	24.9 ± 35.6 ^d	0.0028 ± 0.0012
Glandular Stomach ^c	0.0536 ± 0.0347	51.2 ± 75.4 ^d	0.0088 ± 0.0060
Duodenum ^c	0.0245 ± 0.0106	18.5 ± 24.8 ^d	0.0029 ± 0.0014
Jejunum ^c	0.0114 ± 0.0064	10.9 ± 15.7 ^d	0.0086 ± 0.0050
Ileum ^c	0.0036 ± 0.0067	0.615 ± 0.527 ^d	0.0005 ± 0.0009
Cecum ^c	0.0150 ± 0.0136	17.9 ± 25.8 ^d	0.0031 ± 0.0027
Large Intestine ^c	0.0061 ± 0.0071	5.14 ± 6.53 ^d	0.0013 ± 0.0015

Distribution in Tissues in Fed Rats (24 hours)

Tissue	nmol-eq Chromium per g Tissue	Tissue/Blood Ratio	% Dose in Total Tissue
Blood ^b	0.0045 ± 0.0062	unity	0.0155 ± 0.0213
Forestomach ^c	0.0153 ± 0.0232	3.15 ± 3.41	0.0012 ± 0.0019
Glandular Stomach ^c	0.0188 ± 0.0115	16.2 ± 15.7	0.0031 ± 0.0018
Duodenum ^c	0.0134 ± 0.0020	8.41 ± 6.61	0.0027 ± 0.0013
Jejunum ^c	0.0039 ± 0.0007	2.55 ± 1.89	0.0030 ± 0.0008
Ileum ^c	0.0010 ± 0.0009	1.00 ± 1.12	0.0001 ± 0.0001
Cecum ^c	0.0375 ± 0.0148 ^e	31.6 ± 21.0 ^e	0.0058 ± 0.0020 ^e
Large Intestine ^c	0.0180 ± 0.0161 ^e	19.0 ± 20.0 ^e	0.0037 ± 0.0037 ^e

% Dose Recovered

Sample	Fasted	Fed
GI Tissues	0.0279 ± 0.0134	0.0172 ± 0.0065
Blood and GI Tissues	0.0448 ± 0.0220	0.0326 ± 0.0167

^aAll values expressed as mean ± standard deviation (SD) (N = 4 for fasted rats and N = 4 for fed rats.) The target dose was 2 μmol chromium/kg. The actual dose delivered was 2.11 ± 0.10 $\mu\text{mol/kg}$ (4.02 ± 0.23 μCi). (N = 8).

^bPercent of dose in blood was calculated using the following percentages of body weight: blood 7.4% (International Life Sciences Institute. 1994. Physiological parameter values for PBPK models.)

^cDoes not include contents.

^dN = 3, due to no radioactivity in one animal's blood

^eN = 3, due to one sample missing