

Supporting Information
For

Perfluorooctane Sulfonate (PFOS) Plasma Half-Life Determination and 1 Long Term Tissue Distribution in Beef Cattle (*Bos taurus*).

Sara J. Lupton*,†, Kerry L. Dearfield‡, John J. Johnston§, Sarah Wagner#, Janice K. Huwe

†Biosciences Research Laboratory, Agricultural Research Service, USDA, 1605 Albrecht Boulevard, Fargo, North Dakota 58102, United States.

‡Office of Public Health Science, Food Safety and Inspection Service, USDA, 1400 Independence Avenue SW, Washington, DC 20250, United States.

§Office of Public Health Science, Food Safety and Inspection Service, USDA, 2150 Centre Avenue, Building D Suite 320, Fort Collins, Colorado 80526, United States.

#Department of Veterinary Technology, North Dakota State University, Hultz Hall Rm 165, Fargo, North Dakota 58102, United States.

Retired, Biosciences Research Laboratory, ARS, USDA, 1605 Albrecht Boulevard, Fargo, North Dakota 58102, United States.

AUTHOR INFORMATION

Corresponding Author

*Tel: (701)239-1236. Fax: (701)239-1430. E-mail: Sara.Lupton@ars.usda.gov.

Table S1. Individual steer time course plasma PFOS concentrations for dosed (0.098 mg/kg bw) and control steer.

Day	Steer 183 ^a	Steer 184 ^b	Steer 185 ^a	Steer 186 ^b	Average ^a	Average ^b
0.17	0.02	n.d.	0.05	0.01	0.04	0.01
0.5	0.14	0.01	0.28	0.01	0.21	0.01
1	0.26	0.01	0.29	0.01	0.27	0.01
2	0.39	0.01	0.40	0.01	0.39	0.01
6	0.65	0.01	0.57	0.01	0.61	0.01
9	0.37	0.01	0.39	0.01	0.38	0.01
15	0.38	0.03	0.36	0.02	0.37	0.03
22	0.60	0.03	0.60	0.02	0.60	0.03
35	0.40	0.04	0.35	0.03	0.37	0.04
56	0.56	0.05	0.65	0.06	0.60	0.06
77	0.49	0.07	0.42	0.09	0.45	0.08
105	0.52	0.08	0.67	0.16	0.60	0.12
119	0.52	0.10	0.52	0.17	0.52	0.13
133	0.40	0.07	0.41	0.13	0.40	0.10
161	0.41	0.07	0.37	0.13	0.39	0.10
175	0.30	0.05	0.31	0.11	0.31	0.08
203	0.21	0.05	0.22	0.08	0.22	0.06
238	0.17	0.04	0.23	0.06	0.20	0.05
266	0.23	0.05	0.29	0.07	0.26	0.06
294	0.17	0.03	0.17	0.07	0.17	0.05
329	0.09	0.03	0.13	0.08	0.11	0.05
343	0.13	0.02	0.16	0.08	0.15	0.05

^a Dosed steers (n=2 for averages)

^b Control steers (n=2 for averages)

Table S2. Individual heifer time course plasma PFOS concentrations dosed at 9.1 mg/kg bw.

Day	Heifer 187 ^a	Heifer 188	Heifer 189 ^a	Heifer 190	Average ^b $\pm$ SD ^c
0.17	4.01	3.09	5.33	3.97	4.10 $\pm$ 0.925
0.5	26.26	23.82	31.27	25.61	26.74 $\pm$ 3.191
1	52.38	56.66	32.78	34.75	44.14 $\pm$ 12.136
3	79.18	68.87	56.77	54.10	64.73 $\pm$ 11.580
6	47.85	43.45	39.27	43.56	43.53 $\pm$ 3.503
9	39.39	71.09	32.11	63.51	51.53 $\pm$ 18.716
15	39.66	45.93	33.56	34.01	38.29 $\pm$ 5.801
22	52.81	48.13	45.23	46.17	48.09 $\pm$ 3.374
30	50.88	56.01	46.07	50.46	50.86 $\pm$ 4.067
42	64.55	77.47	72.51	71.37	71.48 $\pm$ 5.322
56	47.15	42.13	40.57	38.70	42.14 $\pm$ 3.624
77	46.10	40.52	28.93	36.92	38.12 $\pm$ 7.196
105	41.49	38.23	36.99	32.58	37.32 $\pm$ 3.688
119		33.70		35.93	34.82
133		34.17		30.41	32.29
161		30.80		31.23	31.02
175		22.42		27.46	24.94
203		14.91		12.34	13.63
238		15.36		17.27	16.32
266		16.88		19.03	17.96
294		19.18		12.20	15.69
329		9.417		9.52	9.47
343		7.55		9.11	8.33

^a Heifers slaughtered at 105 d.

^b Time point averages from 0.17 d to 105 d are n=4 and averages for time points after 105 d are n=2.

^c SD is standard deviation for averages at time points from 0.17 d to 105 d.