

**Supporting Table S4.** Organ weights, kcal and ascorbic acid content of a medium-sized bison (~910 kg)<sup>a</sup>

	Body%	g	Energy kcal/g	Total kcal	Vit C mg/g	Vit C in organs mg	Reference for Vit C	Reference for %organ wt	Reference for Energy
<i>Viscera</i>									
Adrenal	0.0073	66.4	0.680	46	0.392	26.0	Rodahl (1949) <sup>b</sup>	Crile and Quiring (1940) <sup>c</sup>	Estimated as testes
Bile	0.0398	362.3	0.045	16	0.01	3.6	Rodahl (1949) <sup>b</sup>	Kirton <i>et al.</i> (1972) <sup>d</sup>	Derived from Barrett (2012) <sup>e</sup>
Blood	3.4052	30,987.1	0.700	21,691	0.0007	21.7	Richmond <i>et al.</i> (1940) <sup>f</sup>	Awuk and Tamir (2007) <sup>f</sup>	Nollet and Toldrá (2011) <sup>f</sup>
Brain	0.0860	782.6	1.235	967	0.128	100.2	Rodahl (1949) <sup>b</sup>	Crile and Quiring (1940) <sup>g</sup>	Guil-Guerrero (2017) <sup>h</sup>
Digestive tract	5.3000	48,230.0	0.960	46,301	0.074	3569.0	Rodahl (1949) <sup>b</sup>	Crile and Quiring (1940) <sup>f</sup>	Kuhnlein and Soueida (1992) <sup>i</sup>
Epididymis	0.1098	999.0	0.680	679	0.042	42.0	Rodahl (1949) <sup>b</sup>	Bercovitch and Rodriguez (1993) <sup>j</sup>	Estimated as testes
Eyes	0.0393	357.9	3.260	1167	0.007	2.5	Rodahl (1949) <sup>b</sup>	Crile and Quiring (1940) <sup>d</sup>	USDA, FDC ID: 169801 <sup>i</sup>
Heart	0.4769	4339.8	1.120	4861	0.015	65.1	Fediuk <i>et al.</i> (2002) <sup>i</sup>	Crile and Quiring (1940) <sup>g</sup>	Kuhnlein and Soueida (1992) <sup>i</sup> ; Kuhnlein <i>et al.</i> (2002) <sup>i</sup>
Kidney	0.2404	2187.6	0.917	2006	0.059	129.1	Fediuk <i>et al.</i> (2002) <sup>i</sup>	Crile and Quiring (1940) <sup>g</sup>	Guil-Guerrero (2017) <sup>h</sup>
Liver	1.0157	9242.9	1.240	11,461	0.104	961.3	Fediuk <i>et al.</i> (2002) <sup>i</sup> ; Hassan <i>et al.</i> (2012) <sup>i</sup>	Crile and Quiring (1940) <sup>g</sup>	Kuhnlein <i>et al.</i> (2002) <sup>i</sup>
Lung	1.3528	12,310.5	1.090	13,418	0.081	997.1	Rodahl (1949) <sup>b</sup>	Crile and Quiring (1940) <sup>d</sup>	Kuhnlein and Soueida (1992) <sup>i</sup>
Pancreas	0.1405	1278.6	2.350	3005	0.039	49.9	Rodahl (1949) <sup>b</sup>	Sebsibe <i>et al.</i> (2007) <sup>f</sup>	USDA, FDC ID: 169452 <sup>k</sup>
Spleen	0.2284	2078.5	0.901	1873	0.06	124.7	Rodahl (1949) <sup>b</sup>	Crile and Quiring (1940) <sup>b</sup>	Guil-Guerrero (2017) <sup>h</sup>
Testes	0.5160	4695.9	0.680	3193	0.182	854.6	Rodahl (1949) <sup>b</sup>	Kirton <i>et al.</i> (1972) <sup>d</sup>	USDA, FDC ID: 172619 <sup>d</sup>
Tongue	0.1891	1720.7	2,600	4474	0.01	17.2	Rodahl (1949) <sup>b</sup>	Kirton <i>et al.</i> (1972) <sup>d</sup>	USDA, FDC ID: 168985 <sup>i</sup>
Thyroid	0.0196	178.2	0.680	125	0.038	6.8	Rodahl (1949) <sup>b</sup>	Crile and Quiring (1940) <sup>d</sup>	Estimated as testes
<i>Total viscera</i>	13.1668	119,817.8	-	115,276	-	6970.8	-	-	-
Bones	14.2750	129,902.5	-	-	-	-	-	Adamczewski <i>et al.</i> (1997) <sup>b</sup>	-
Bone marrow	2.5000	22,750.0	4.837	110,042	0.0000	-	Hassan <i>et al.</i> (2012) <sup>i</sup>	Nieminen and Laitinen (1986) <sup>i</sup>	Guil-Guerrero (2017) <sup>h</sup>
Dissectible fat	17.7099	161,160.3	6.828	1,100,403	0.0000	0.0000	Geraci and Smith (1979) <sup>i</sup> ; Hassan <i>et al.</i> (2012) <sup>i</sup>	Adamczewski <i>et al.</i> (1997) <sup>b</sup>	Guil-Guerrero (2017) <sup>l</sup>
<i>Total fat</i>	20.2099	183,910.3	-	1,210,444	-	-	-	-	-
<i>Muscles</i>	41.9084	381,366.4	1.090	415,689	0.0000	0.0000	Driskell <i>et al.</i> (2004) <sup>l</sup> ; Marchello <i>et al.</i> (2001) <sup>l</sup>	Adamczewski <i>et al.</i> (1997) <sup>b</sup>	USDA, FDC ID: 173851 <sup>l</sup>
<i>Skin</i>	9.0043	81,939.2	3.5	286,787	0.0050	409.7	USDA, FDC ID: 2341308 <sup>m</sup>	Awuk and Tamir (2007) <sup>f</sup>	USDA, FDC ID: 2341308 <sup>m</sup>
<i>Rest</i> <sup>n</sup>	3.6675	33,374.1	1.000	33,374	0.0010	33.4	Estimated	Estimated	Estimated

<sup>a</sup> Live weight from Martin *et al.* (2018); <sup>b</sup> Muskox sample; <sup>c</sup> Red deer sample; <sup>d</sup> Sheep sample; <sup>e</sup> Based on 0.51% fats in bile; <sup>f</sup> Goat sample; <sup>g</sup> Buffalo sample; <sup>h</sup> Mean for several food animals; <sup>i</sup> *Rangifer* sample; <sup>j</sup> Macaco sample; <sup>k</sup> Beef sample; <sup>l</sup> Bison sample; <sup>m</sup> Pork skin rinds; <sup>n</sup> Tendon, blood vessels, etc.

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