

**Supporting Table S1.** Organ weights, kcal and ascorbic acid content of a medium-sized reindeer (135 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	0.0043	5.8	0.680	4	0.3920	2.3	Rodahl (1949) <sup>b</sup>	Crile and Quiring (1940) <sup>c</sup>	Estimated as testes
Bile	0.0398	53.8	0.045	2	0.0100	0.5	Rodahl (1949) <sup>b</sup>	Kirton <i>et al.</i> (1972) <sup>d</sup>	Derived from Barrett (2012) <sup>e</sup>
Blood	3.4052	4597.0	0.700	3218	0.0007	3.2	Richmond <i>et al.</i> (1940) <sup>f</sup>	Awuk and Tamir (2007) <sup>f</sup>	Nollet and Toldrá (2011) <sup>f</sup>
Brain	0.2210	298.3	1.370	409	0.128	38.2	Rodahl (1949) <sup>b</sup>	Crile and Quiring (1940) <sup>d</sup>	Kuhnlein and Soueida (1992) <sup>c</sup>
Digestive tract	5.3000	7155.0	0.960	6869	0.0045	32.2	Fediuk <i>et al.</i> (2002) <sup>c</sup>	Crile and Quiring (1940) <sup>f</sup>	Kuhnlein and Soueida (1992) <sup>c</sup>
Epididymis	0.1098	148.2	0.680	101	0.0420	6.2	Rodahl (1949) <sup>b</sup>	Bercovitch and Rodriguez (1993) <sup>g</sup>	Estimated as testes
Eyes	0.0393	53.1	3.260	173	0.0070	0.4	Rodahl (1949) <sup>b</sup>	Crile and Quiring (1940) <sup>d</sup>	USDA, FDC ID: 169801 <sup>c</sup>
Heart	0.7843	10,58.8	1.120	1186	0.0260	27.5	Fediuk <i>et al.</i> (2002) <sup>c</sup>	Crile and Quiring (1940) <sup>c</sup>	Kuhnlein and Soueida (1992) <sup>c</sup> ; Kuhnlein <i>et al.</i> (2002) <sup>c</sup>
Kidney	0.1119	151.0	0.917	138	0.0888	13.4	Fediuk <i>et al.</i> (2002) <sup>c</sup>	Crile and Quiring (1940) <sup>c</sup>	Guil-Guerrero (2017) <sup>h</sup>
Liver	1.7729	2393.5	1.240	2968	0.1782	426.5	Fediuk <i>et al.</i> (2002) <sup>c</sup> ; Hassan <i>et al.</i> (2012) <sup>c</sup>	Crile and Quiring (1940) <sup>c</sup>	Kuhnlein <i>et al.</i> (2002) <sup>c</sup>
Lung	1.7693	2388.6	1.090	2604	0.0810	193.5	Rodahl (1949) <sup>b</sup>	Crile and Quiring (1940) <sup>c</sup>	Kuhnlein and Soueida (1992) <sup>c</sup>
Pancreas	0.1405	189.7	2.350	446	0.0390	7.4	Rodahl (1949) <sup>b</sup>	Sebsibe <i>et al.</i> (2007) <sup>f</sup>	USDA, FDC ID: 169452 <sup>i</sup>
Spleen	0.2239	302.2	0.901	272	0.0600	18.1	Rodahl (1949) <sup>b</sup>	Crile and Quiring (1940) <sup>c</sup>	Guil-Guerrero (2017) <sup>h</sup>
Testes	0.5160	696.6	0.680	474	0.1820	126.8	Rodahl (1949) <sup>b</sup>	Kirton <i>et al.</i> (1972) <sup>d</sup>	USDA, FDC ID: 172619 <sup>d</sup>
Tongue	0.1891	255.3	2.600	664	0.0100	2.6	Rodahl (1949) <sup>b</sup>	Kirton <i>et al.</i> (1972) <sup>d</sup>	USDA, FDC ID: 168985 <sup>c</sup>
Thyroid	0.0060	8.2	0.680	6	0.0380	0.3	Rodahl (1949) <sup>b</sup>	Kirton <i>et al.</i> (1972) <sup>d</sup>	Estimated as testes
<i>Total viscera</i>	14.6334	19,755.1	-	19,532	-	899.1	.	-	-.
<i>Bones</i>	14.2750	19,271.3	-	-	-	-	.	Adamczewski <i>et al.</i> (1997) <sup>b</sup>	-
Bone marrow	2.5000	3375.0	4.837	16,325	0.0000	0.000	Hassan <i>et al.</i> (2012) <sup>c</sup>	Niemenen and Laitinen (1986) <sup>c</sup>	Guil-Guerrero (2017) <sup>h</sup>
<i>Disectible fat</i>	17.7099	23,908.4	7,638	182,612	0.0090	215.2	Geraci and Smith (1979) <sup>c</sup> ; Hassan <i>et al.</i> (2012) <sup>c</sup>	Adamczewski <i>et al.</i> (1997) <sup>b</sup>	Guil-Guerrero (2017) <sup>c</sup>
<i>Total fat</i>	20.2099	27,283.4	-	198,937	-	215.2	-	-	-
<i>Muscles</i>	41.9080	56,575.8	1.161	65,685	0.0075	424.3	Fediuk <i>et al.</i> (2002) <sup>c</sup> ; Geraci and Smith (1979) <sup>c</sup> ; Hassan <i>et al.</i> (2012) <sup>c</sup>	Adamczewski <i>et al.</i> (1997) <sup>b</sup>	Guil-Guerrero (2017) <sup>c</sup>
<i>Skin</i>	9.0043	12,155.8	5.44	66,128	0.0050	60.8	USDA, FDC ID: 2341308 <sup>j</sup>	Awuk and Tamir (2007) <sup>f</sup>	USDA, FDC ID: 2341308 <sup>j</sup>
<i>Rest</i> <sup>k</sup>	3.6675	4951.1	1.000	4951	0.0010	5.0	Estimated	Estimated	Estimated

<sup>a</sup> Body weight was taken from Knott *et al.* (2005); <sup>b</sup> Muskox sample; <sup>c</sup> *Rangifer* sample; <sup>d</sup> Sheep sample; <sup>e</sup> Based on 0.51% fats in bile; <sup>f</sup> Goat sample; <sup>g</sup> Macaco samples; <sup>h</sup> Mean values obtained from several food animals; <sup>i</sup> Beef sample; <sup>j</sup> Pork skin rinds; <sup>k</sup> Tendon, blood vessels, etc.

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