

**Statistics Report 09088, Elderberries, raw**
**Report Date: July 15, 2019 20:17 EDT**

Nutrient values and weights are for edible portion.

Nutrient	Unit	Value Per100 g	Data Points	Std. Error	Min	Max	df	LB	UB	# Studies	Source	NDB Ref	Last Modified
<b>Proximates</b>													
Water	g	79.80	--	--	0	0	--	--	--	--	Analytical or derived from analytical	--	08/1982
Energy	kcal	73	--	--	0	0	--	--	--	--	Calculated or imputed	--	08/1982
Energy	kJ	305	--	--	0	0	--	--	--	--	Calculated or imputed	--	01/2012
Protein	g	0.66	12	0.040	0	0	--	--	--	--	Analytical or derived from analytical	--	08/1982
Total lipid (fat)	g	0.50	--	--	0	0	--	--	--	--	Analytical or derived from analytical	--	08/1982
Ash	g	0.64	12	0.020	0	0	--	--	--	--	Analytical or derived from analytical	--	08/1982
Carbohydrate, by difference	g	18.40	--	--	0	0	--	--	--	--	Calculated or imputed	--	08/1982
Fiber, total dietary	g	7.0	--	--	0	0	--	--	--	--	Calculated or imputed	--	08/1982
<b>Minerals</b>													
Calcium, Ca	mg	38	--	--	0	0	--	--	--	--	Analytical or derived from analytical	--	08/1982
Iron, Fe	mg	1.60	--	--	0	0	--	--	--	--	Analytical or derived from analytical	--	08/1982
Magnesium, Mg	mg	5	--	--	0	0	--	--	--	--	Calculated or imputed	--	04/1985

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Phosphorus, P	mg	39	12	2.000	0	0	--	--	--	--	Analytical or derived from analytical	--	08/1982
Potassium, K	mg	280	12	10.000	0	0	--	--	--	--	Analytical or derived from analytical	--	08/1982
Sodium, Na	mg	6	--	--	0	0	--	--	--	--	Analytical or derived from analytical	--	04/1985
Zinc, Zn	mg	0.11	--	--	0	0	--	--	--	--	Calculated or imputed	--	04/1985
Copper, Cu	mg	0.061	--	--	0	0	--	--	--	--	Calculated or imputed	--	04/1985
Selenium, Se	µg	0.6	--	--	0	0	--	--	--	--	Calculated or imputed	--	12/1997
<b>Vitamins</b>													
Vitamin C, total ascorbic acid	mg	36.0	--	--	0	0	--	--	--	--	Analytical or derived from analytical	--	08/1982
Thiamin	mg	0.070	--	--	0	0	--	--	--	--	Analytical or derived from analytical	--	08/1982
Riboflavin	mg	0.060	--	--	0	0	--	--	--	--	Analytical or derived from analytical	--	08/1982
Niacin	mg	0.500	--	--	0	0	--	--	--	--	Analytical or derived from analytical	--	08/1982
Pantothenic acid	mg	0.140	--	--	0	0	--	--	--	--	Analytical or derived from analytical	--	08/1982
Vitamin B-6	mg	0.230	--	--	0	0	--	--	--	--	Analytical or derived from analytical	--	08/1982
Folate, total	µg	6	--	--	0	0	--	--	--	--	Calculated or imputed	--	04/1985
Folic acid	µg	0	--	--	0	0	--	--	--	--	Assumed zero	--	01/2001
Folate, food	µg	6	--	--	0	0	--	--	--	--	Calculated or imputed	--	04/1985

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Folate, DFE	µg	6	--	--	0	0	--	--	--	--	Calculated or imputed	--	01/2001
Vitamin B-12	µg	0.00	--	--	0	0	--	--	--	--	Assumed zero	--	08/1982
Vitamin A, RAE	µg	30	--	--	0	0	--	--	--	--	Analytical or derived from analytical	--	06/2002
Retinol	µg	0	--	--	0	0	--	--	--	--	Assumed zero	--	06/2002
Vitamin A, IU	IU	600	--	--	0	0	--	--	--	--	Analytical or derived from analytical	--	08/1982
<b>Lipids</b>													
Fatty acids, total saturated	g	0.023	--	--	0	0	--	--	--	--	Analytical or derived from analytical	--	04/1985
4:0	g	0.000	--	--	0	0	--	--	--	--	Calculated or imputed	--	02/1995
6:0	g	0.000	--	--	0	0	--	--	--	--	Calculated or imputed	--	02/1995
8:0	g	0.000	--	--	0	0	--	--	--	--	Calculated or imputed	--	02/1995
10:0	g	0.000	--	--	0	0	--	--	--	--	Calculated or imputed	--	02/1995
12:0	g	0.000	--	--	0	0	--	--	--	--	Calculated or imputed	--	02/1995
14:0	g	0.000	--	--	0	0	--	--	--	--	Calculated or imputed	--	02/1995
16:0	g	0.018	--	--	0	0	--	--	--	--	Calculated or imputed	--	02/1995
18:0	g	0.005	--	--	0	0	--	--	--	--	Calculated or imputed	--	02/1995
Fatty acids, total monounsaturated	g	0.080	--	--	0	0	--	--	--	--	Analytical or derived from analytical	--	04/1985
16:1 undifferentiated	g	0.000	--	--	0	0	--	--	--	--	Calculated or imputed	--	02/1995
18:1 undifferentiated	g	0.080	--	--	0	0	--	--	--	--	Calculated or imputed	--	02/1995

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20:1	g	0.000	--	--	0	0	--	--	--	--	Calculated or imputed	--	02/1995
22:1 undifferentiated	g	0.000	--	--	0	0	--	--	--	--	Calculated or imputed	--	02/1995
Fatty acids, total polyunsaturated	g	0.247	--	--	0	0	--	--	--	--	Analytical or derived from analytical	--	04/1985
18:2 undifferentiated	g	0.162	--	--	0	0	--	--	--	--	Calculated or imputed	--	02/1995
18:3 undifferentiated	g	0.085	--	--	0	0	--	--	--	--	Calculated or imputed	--	02/1995
18:4	g	0.000	--	--	0	0	--	--	--	--	Calculated or imputed	--	02/1995
20:4 undifferentiated	g	0.000	--	--	0	0	--	--	--	--	Calculated or imputed	--	02/1995
20:5 n-3 (EPA)	g	0.000	--	--	0	0	--	--	--	--	Calculated or imputed	--	02/1995
22:5 n-3 (DPA)	g	0.000	--	--	0	0	--	--	--	--	Calculated or imputed	--	02/1995
22:6 n-3 (DHA)	g	0.000	--	--	0	0	--	--	--	--	Calculated or imputed	--	02/1995
Fatty acids, total trans	g	0.000	--	--	0	0	--	--	--	--	Assumed zero	--	06/2015
Cholesterol	mg	0	--	--	0	0	--	--	--	--	Assumed zero	--	08/1982
<b>Amino Acids</b>													
Tryptophan	g	0.013	3	--	0	0	--	--	--	--	Analytical or derived from analytical	--	08/1982
Threonine	g	0.027	3	--	0	0	--	--	--	--	Analytical or derived from analytical	--	08/1982
Isoleucine	g	0.027	3	--	0	0	--	--	--	--	Analytical or derived from analytical	--	08/1982
Leucine	g	0.060	3	--	0	0	--	--	--	--	Analytical or derived from analytical	--	08/1982

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Lysine	g	0.026	3	--	0	0	--	--	--	--	Analytical or derived from analytical	--	08/1982
Methionine	g	0.014	3	--	0	0	--	--	--	--	Analytical or derived from analytical	--	08/1982
Cystine	g	0.015	3	--	0	0	--	--	--	--	Analytical or derived from analytical	--	08/1982
Phenylalanine	g	0.040	3	--	0	0	--	--	--	--	Analytical or derived from analytical	--	08/1982
Tyrosine	g	0.051	3	--	0	0	--	--	--	--	Analytical or derived from analytical	--	08/1982
Valine	g	0.033	3	--	0	0	--	--	--	--	Analytical or derived from analytical	--	08/1982
Arginine	g	0.047	3	--	0	0	--	--	--	--	Analytical or derived from analytical	--	08/1982
Histidine	g	0.015	3	--	0	0	--	--	--	--	Analytical or derived from analytical	--	08/1982
Alanine	g	0.030	3	--	0	0	--	--	--	--	Analytical or derived from analytical	--	08/1982
Aspartic acid	g	0.058	3	--	0	0	--	--	--	--	Analytical or derived from analytical	--	08/1982
Glutamic acid	g	0.096	3	--	0	0	--	--	--	--	Analytical or derived from analytical	--	08/1982
Glycine	g	0.036	3	--	0	0	--	--	--	--	Analytical or derived from analytical	--	08/1982
Proline	g	0.025	3	--	0	0	--	--	--	--	Analytical or derived from analytical	--	08/1982

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Serine	g	0.032	3	--	0	0	--	--	--	--	Analytical or derived from analytical	--	08/1982
<b>Other</b>													
Alcohol, ethyl	g	0.0	--	--	0	0	--	--	--	--	Assumed zero	--	04/1985
<b>Flavonoids</b>													
<b>Anthocyanidins</b>													
Cyanidin <a href="#">1</a> <a href="#">2</a> <a href="#">3</a> <a href="#">4</a>	mg	485.3	94	31.53	132.99	1,067.33	--	--	--	--	--	--	--
Petunidin <a href="#">2</a>	mg	0.0	55	0	0	0	--	--	--	--	--	--	--
Delphinidin <a href="#">2</a>	mg	0.0	55	0	0	0	--	--	--	--	--	--	--
Pelargonidin <a href="#">2</a> <a href="#">4</a>	mg	0.0	56	0.02	0	1.13	--	--	--	--	--	--	--
<b>Flavonols</b>													
Isorhamnetin <a href="#">2</a>	mg	5.4	55	0.54	0.16	10.26	--	--	--	--	--	--	--
Kaempferol <a href="#">2</a>	mg	0.6	55	0.06	0.23	1.27	--	--	--	--	--	--	--
Quercetin <a href="#">1</a> <a href="#">2</a> <a href="#">3</a>	mg	26.8	93	1.78	8.47	60	--	--	--	--	--	--	--
<b>Proanthocyanidin</b>													
Proanthocyanidin dimers <a href="#">5</a>	mg	10.6	--	--	0	0	--	--	--	--	--	--	--
Proanthocyanidin trimers <a href="#">5</a>	mg	5.6	--	--	0	0	--	--	--	--	--	--	--
Proanthocyanidin 4-6mers <a href="#">5</a>	mg	10.8	--	--	0	0	--	--	--	--	--	--	--
Proanthocyanidin 7-10mers <a href="#">5</a>	mg	0.0	--	--	0	0	--	--	--	--	--	--	--
Proanthocyanidin polymers (>10mers) <a href="#">5</a>	mg	0.0	--	--	0	0	--	--	--	--	--	--	--

<sup>1</sup>Kaack, K., and Austed, T. **Interaction of vitamin C and flavonoids in elderberry (Sambucus nigra L.) during juice processing**, 1998 Plant Foods Hum. Nutr. 52 pp.187-198

<sup>2</sup>Lee, J., and Finn, C. E. **Anthocyanins and other polyphenolics in American elderberry (Sambucus Canadensis) and European elderberry (S. nigra) cultivars**, 2007 J. Sci. Food Agric. 87 pp.2665-2675

<sup>3</sup>Veberic, R., Jakopic, J., Stampar, F., and Schmitzer, V. **European elderberry (Sambucus nigra L.) rich in sugars, organic acids, anthocyanins and selected polyphenols**, 2009 Food Chemistry 114 pp.511-515

<sup>4</sup>Wu, X., Gu, L., Prior, R. L., and McKay, S. **Characterization of anthocyanins and proanthocyanidins in some cultivars of Ribes, Aronis, and Sambucus and their antioxidant capacity**, 2004 J. Agric. Food Chem. 52 pp.7846-7856

<sup>5</sup>Wu, X., Gu, L., Prior, R. L., and McKay, S. **Characterization of anthocyanins and proanthocyanidins in some cultivars of Ribes, Aronis, and Sambucus and their antioxidant capacity**, 2004 J. Agric. Food Chem. 52 pp.7846-7856