

Statistics Report 09226, Papayas, raw [c](#)
Report Date: July 19, 2019 18:58 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
Proximates													
Water 1 2 3 4 5 6	g	88.06	72	1.090	84.9	93.34	5.0	85.24	90.87	6	Analytical or derived from analytical	--	07/2010
Energy	kcal	43	--	--	0	0	--	--	--	--	Calculated or imputed	--	08/2010
Energy	kJ	179	--	--	0	0	--	--	--	--	Calculated or imputed	--	08/2010
Protein 1 2	g	0.47	9	0.090	0.25	0.75	1.0	-0.72	1.66	2	Analytical or derived from analytical	--	07/2010
Total lipid (fat) 1 2	g	0.26	9	0.140	0	0.6	1.0	-1.58	2.1	2	Analytical or derived from analytical	--	07/2010
Ash 1 2	g	0.39	9	0.080	0.23	0.51	1.0	-0.71	1.48	2	Analytical or derived from analytical	--	07/2010
Carbohydrate, by difference	g	10.82	--	--	0	0	--	--	--	--	Calculated or imputed	--	08/2010
Fiber, total dietary 1 2 3 4	g	1.7	9	0.100	1.2	2.3	3.0	1.1	2.2	4	Analytical or derived from analytical	--	07/2010
Sugars, total 2	g	7.82	3	1.400	5.19	9.99	2.0	1.77	13.86	1	Analytical or derived from analytical	--	07/2010

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Sucrose 2	g	0.00	3	0.000	0	0	2.0	--	--	1	Analytical or derived from analytical	--	07/2010
Glucose (dextrose) 2	g	4.09	3	0.680	2.83	5.18	2.0	1.14	7.03	1	Analytical or derived from analytical	--	07/2010
Fructose 2	g	3.73	3	0.720	2.36	4.81	2.0	0.62	6.83	1	Analytical or derived from analytical	--	07/2010
Lactose 2	g	0.00	3	0.000	0	0	2.0	--	--	1	Analytical or derived from analytical	--	07/2010
Maltose 2	g	0.00	3	0.000	0	0	2.0	--	--	1	Analytical or derived from analytical	--	07/2010
Galactose 2	g	0.00	3	0.000	0	0	2.0	--	--	1	Analytical or derived from analytical	--	07/2010
Starch 2	g	0.00	1	--	0	0	--	--	--	--	Analytical or derived from analytical	--	07/2010
Minerals													
Calcium, Ca 1257	mg	20	70	2.000	10	32	3.0	13.0	26.0	4	Analytical or derived from analytical	--	07/2010
Iron, Fe 1257	mg	0.25	70	0.060	0.14	0.66	3.0	0.05	0.45	4	Analytical or derived from analytical	--	07/2010
Magnesium, Mg 1257	mg	21	70	1.000	16	33	3.0	15.0	26.0	4	Analytical or derived from analytical	--	07/2010

Nutrient	Unit	Value Per100 g	Data Points	Std. Error	Min	Max	df	LB	UB	# Studies	Source	NDB Ref	Last Modified
Phosphorus, P 125	mg	10	69	2.000	5	20	2.0	--	19.0	3	Analytical or derived from analytical	--	07/2010
Potassium, K 1257	mg	182	70	11.000	90	223	3.0	146.0	217.0	4	Analytical or derived from analytical	--	07/2010
Sodium, Na 1257	mg	8	70	2.000	4	24	3.0	1.0	14.0	4	Analytical or derived from analytical	--	07/2010
Zinc, Zn 1257	mg	0.08	70	0.008	0.05	0.11	3.0	0.05	0.1	4	Analytical or derived from analytical	--	07/2010
Copper, Cu 1257	mg	0.045	70	0.012	0.03	0.14	3.0	0.006	0.084	4	Analytical or derived from analytical	--	07/2010
Manganese, Mn 1257	mg	0.040	70	0.016	0.01	0.09	3.0	-0.012	0.091	4	Analytical or derived from analytical	--	07/2010
Selenium, Se	µg	0.6	--	--	0	0	--	--	--	--	Calculated or imputed	--	02/2003
Vitamins													
Vitamin C, total ascorbic acid 12513	mg	60.9	73	3.800	24.6	93.1	3.0	48.6	73.0	4	Analytical or derived from analytical	--	07/2010
Thiamin 12	mg	0.023	9	0.006	0.01	0.03	1.0	-0.054	0.099	2	Analytical or derived from analytical	--	07/2010
Riboflavin 12	mg	0.027	9	0.005	0.01	0.04	1.0	-0.042	0.096	2	Analytical or derived from analytical	--	07/2010

Nutrient	Unit	Value Per100 g	Data Points	Std. Error	Min	Max	df	LB	UB	# Studies	Source	NDB Ref	Last Modified
Niacin 1 2	mg	0.357	9	0.027	0.26	0.49	1.0	0.018	0.695	2	Analytical or derived from analytical	--	07/2010
Pantothenic acid 1 2	mg	0.191	9	0.052	0.13	0.38	1.0	-0.475	0.857	2	Analytical or derived from analytical	--	07/2010
Vitamin B-6 1 2	mg	0.038	9	0.012	0.03	0.06	1.0	-0.109	0.185	2	Analytical or derived from analytical	--	07/2010
Folate, total 1 2 a	µg	37	8	1.000	26	44	1.0	17.0	55.0	2	Analytical or derived from analytical	--	07/2010
Folic acid	µg	0	--	--	0	0	--	--	--	--	Assumed zero	--	01/2001
Folate, food	µg	37	8	1.000	26	44	1.0	17.0	55.0	2	Analytical or derived from analytical	--	08/2010
Folate, DFE	µg	37	--	--	0	0	--	--	--	--	Calculated or imputed	--	08/2010
Choline, total	mg	6.1	--	--	0	0	--	--	--	--	Calculated or imputed	09236	01/2007
Vitamin B-12	µg	0.00	--	--	0	0	--	--	--	--	Assumed zero	--	08/1982
Vitamin B-12, added	µg	0.00	--	--	0	0	--	--	--	--	Assumed zero	--	09/2004
Vitamin A, RAE 1 2 5 8 9 10	µg	47	--	--	0	0	--	--	--	--	Analytical or derived from analytical	--	07/2010
Retinol	µg	0	--	--	0	0	--	--	--	--	Assumed zero	--	06/2002
Carotene, beta 1 2 5 6 8 9 10	µg	274	76	122.000	31	910	6.0	-24.0	572.0	7	Analytical or derived from analytical	--	07/2010

Nutrient	Unit	Value Per100 g	Data Points	Std. Error	Min	Max	df	LB	UB	# Studies	Source	NDB Ref	Last Modified
Carotene, alpha 2 5 6 10	µg	2	67	2.000	0	17	3.0	-4.0	9.0	4	Analytical or derived from analytical	--	07/2010
Cryptoxanthin, beta 1 2 5 8 9 10	µg	589	75	160.000	13	1,264	5.0	175.0	1002.0	6	Analytical or derived from analytical	--	07/2010
Vitamin A, IU 1 2 5 8 9 10	IU	950	--	--	0	0	--	--	--	--	Analytical or derived from analytical	--	07/2010
Lycopene 2 5 6 b	µg	1828	22	206.000	678	3,674	2.0	939.0	2717.0	3	Analytical or derived from analytical	--	07/2010
Lutein + zeaxanthin 2 5 10 12	µg	89	67	31.000	31	318	3.0	-11.0	189.0	4	Analytical or derived from analytical	--	07/2010
Vitamin E (alpha-tocopherol) 2 11	mg	0.30	5	0.090	0.11	0.68	1.0	-0.93	1.52	2	Analytical or derived from analytical	--	07/2010
Vitamin E, added	mg	0.00	--	--	0	0	--	--	--	--	Assumed zero	--	09/2004
Tocopherol, beta 2 11	mg	0.02	5	0.010	0.01	0.06	1.0	-0.14	0.19	2	Analytical or derived from analytical	--	07/2010
Tocopherol, gamma 2 11	mg	0.09	5	0.009	0.02	0.14	1.0	-0.02	0.2	2	Analytical or derived from analytical	--	07/2010
Tocopherol, delta 2 11	mg	0.01	5	0.010	0	0.04	1.0	-0.14	0.17	2	Analytical or derived from analytical	--	07/2010

Nutrient	Unit	Value Per100 g	Data Points	Std. Error	Min	Max	df	LB	UB	# Studies	Source	NDB Ref	Last Modified
Tocotrienol, alpha 2 11	mg	0.00	5	0.003	0	0.01	1.0	-0.02	0.03	2	Analytical or derived from analytical	--	07/2010
Tocotrienol, beta 2 11	mg	0.07	5	0.060	0	0.23	1.0	-0.76	0.89	2	Analytical or derived from analytical	--	07/2010
Tocotrienol, gamma 2 11	mg	0.01	5	0.005	0	0.02	1.0	-0.05	0.06	2	Analytical or derived from analytical	--	07/2010
Tocotrienol, delta 2 11	mg	0.00	5	0.000	0	0	1.0	-0.003	0.003	2	Analytical or derived from analytical	--	07/2010
Vitamin D (D2 + D3)	µg	0.0	--	--	0	0	--	--	--	--	Assumed zero	--	11/2008
Vitamin D	IU	0	--	--	0	0	--	--	--	--	Assumed zero	--	02/2009
Vitamin K (phylloquinone)	µg	2.6	--	--	0	0	--	--	--	--	Calculated or imputed	09236	02/2003
Lipids													
Fatty acids, total saturated	g	0.081	--	--	0	0	--	--	--	--	Analytical or derived from analytical	--	08/2010
4:0	g	0.000	--	--	0	0	--	--	--	--	Analytical or derived from analytical	--	09/2002
6:0	g	0.000	--	--	0	0	--	--	--	--	Analytical or derived from analytical	--	09/2002
8:0	g	0.000	--	--	0	0	--	--	--	--	Analytical or derived from analytical	--	09/2002

Nutrient	Unit	Value Per100 g	Data Points	Std. Error	Min	Max	df	LB	UB	# Studies	Source	NDB Ref	Last Modified
10:0	g	0.000	--	--	0	0	--	--	--	--	Analytical or derived from analytical	--	09/2002
12:0	g	0.002	2	--	0	0	--	--	--	--	Analytical or derived from analytical	--	08/2010
14:0	g	0.013	3	--	0	0	--	--	--	--	Analytical or derived from analytical	--	08/2010
16:0	g	0.060	3	--	0	0	--	--	--	--	Analytical or derived from analytical	--	08/2010
18:0	g	0.004	3	--	0	0	--	--	--	--	Analytical or derived from analytical	--	08/2010
Fatty acids, total monounsaturated	g	0.072	--	--	0	0	--	--	--	--	Analytical or derived from analytical	--	08/2010
16:1 undifferentiated	g	0.038	3	--	0	0	--	--	--	--	Analytical or derived from analytical	--	08/2010
18:1 undifferentiated	g	0.034	3	--	0	0	--	--	--	--	Analytical or derived from analytical	--	08/2010
20:1	g	0.000	--	--	0	0	--	--	--	--	Analytical or derived from analytical	--	09/2002
22:1 undifferentiated	g	0.000	--	--	0	0	--	--	--	--	Analytical or derived from analytical	--	09/2002

Nutrient	Unit	Value Per100 g	Data Points	Std. Error	Min	Max	df	LB	UB	# Studies	Source	NDB Ref	Last Modified
Fatty acids, total polyunsaturated	g	0.058	--	--	0	0	--	--	--	--	Analytical or derived from analytical	--	08/2010
18:2 undifferentiated	g	0.011	3	--	0	0	--	--	--	--	Analytical or derived from analytical	--	08/2010
18:3 undifferentiated	g	0.047	3	--	0	0	--	--	--	--	Analytical or derived from analytical	--	08/2010
18:4	g	0.000	--	--	0	0	--	--	--	--	Analytical or derived from analytical	--	09/2002
20:4 undifferentiated	g	0.000	--	--	0	0	--	--	--	--	Analytical or derived from analytical	--	09/2002
20:5 n-3 (EPA)	g	0.000	--	--	0	0	--	--	--	--	Analytical or derived from analytical	--	09/2002
22:5 n-3 (DPA)	g	0.000	--	--	0	0	--	--	--	--	Analytical or derived from analytical	--	09/2002
22:6 n-3 (DHA)	g	0.000	--	--	0	0	--	--	--	--	Analytical or derived from analytical	--	09/2002
Fatty acids, total trans	g	0.000	--	--	0	0	--	--	--	--	Assumed zero	--	06/2015
Cholesterol	mg	0	--	--	0	0	--	--	--	--	Assumed zero	--	08/1982
Amino Acids													
Tryptophan	g	0.008	6	--	0	0	--	--	--	--	Analytical or derived from analytical	--	08/2010

Nutrient	Unit	Value Per100 g	Data Points	Std. Error	Min	Max	df	LB	UB	# Studies	Source	NDB Ref	Last Modified
Threonine	g	0.011	1	--	0	0	--	--	--	--	Analytical or derived from analytical	--	08/2010
Isoleucine	g	0.008	1	--	0	0	--	--	--	--	Analytical or derived from analytical	--	08/2010
Leucine	g	0.016	1	--	0	0	--	--	--	--	Analytical or derived from analytical	--	08/2010
Lysine	g	0.025	7	--	0	0	--	--	--	--	Analytical or derived from analytical	--	08/2010
Methionine	g	0.002	5	--	0	0	--	--	--	--	Analytical or derived from analytical	--	08/2010
Phenylalanine	g	0.009	1	--	0	0	--	--	--	--	Analytical or derived from analytical	--	08/2010
Tyrosine	g	0.005	1	--	0	0	--	--	--	--	Analytical or derived from analytical	--	08/2010
Valine	g	0.010	1	--	0	0	--	--	--	--	Analytical or derived from analytical	--	08/2010
Arginine	g	0.010	1	--	0	0	--	--	--	--	Analytical or derived from analytical	--	08/2010
Histidine	g	0.005	1	--	0	0	--	--	--	--	Analytical or derived from analytical	--	08/2010

Nutrient	Unit	Value Per100 g	Data Points	Std. Error	Min	Max	df	LB	UB	# Studies	Source	NDB Ref	Last Modified
Alanine	g	0.014	1	--	0	0	--	--	--	--	Analytical or derived from analytical	--	08/2010
Aspartic acid	g	0.049	1	--	0	0	--	--	--	--	Analytical or derived from analytical	--	08/2010
Glutamic acid	g	0.033	1	--	0	0	--	--	--	--	Analytical or derived from analytical	--	08/2010
Glycine	g	0.018	1	--	0	0	--	--	--	--	Analytical or derived from analytical	--	08/2010
Proline	g	0.010	1	--	0	0	--	--	--	--	Analytical or derived from analytical	--	08/2010
Serine	g	0.015	1	--	0	0	--	--	--	--	Analytical or derived from analytical	--	08/2010
Other													
Alcohol, ethyl	g	0.0	--	--	0	0	--	--	--	--	Assumed zero	--	09/2002
Caffeine	mg	0	--	--	0	0	--	--	--	--	Assumed zero	--	09/2002
Theobromine	mg	0	--	--	0	0	--	--	--	--	Assumed zero	--	09/2002

Nutrient	Unit	Value Per100 g	Data Points	Std. Error	Min	Max	df	LB	UB	# Studies	Source	NDB Ref	Last Modified
Flavonoids													
Flavones													
Apigenin 15	mg	0.0	--	0	0.01	0.01	--	--	--	--	--	--	--
Luteolin 15	mg	0.0	--	0	0.02	0.02	--	--	--	--	--	--	--
Flavonols													
Kaempferol 15 16	mg	0.0	--	0	0	0.01	--	--	--	--	--	--	--
Myricetin 14 15 16	mg	0.0	--	0.01	0	0.03	--	--	--	--	--	--	--
Quercetin 14 15 16	mg	0.0	--	0	0	0	--	--	--	--	--	--	--
Isoflavones													
Daidzein 17	mg	0.00	--	--	0	0	--	--	--	--	--	--	--
Genistein 17	mg	0.00	--	--	0	0	--	--	--	--	--	--	--
Total isoflavones 17	mg	0.00	--	--	0	0	--	--	--	--	--	--	--

Sources of Data

- ¹Produce Marketing Association (PMA) **Nutrient Content of Papaya**, 1984
- ²Nutrient Data Laboratory, ARS, **USDA National Food and Nutrient Analysis Program Wave 12i**, 2008 Beltsville MD
- ³N Vollendorf, J Marlett **Comparison of Two Methods of Fiber Analysis of 58 Foods**, 1993 Journal of Food Composition and Analysis 6 pp.203-214
- ⁴K. Mahattanatawee, J.A. Manthey, G. Luzio, S. T. Talcott, K. Goodner et al **Total antioxidant activity and fiber content of select Florida-grown tropical fruits**, 2006 Journal of Agricultural and Food Chemistry 54 pp.7355-7363
- ⁵M.M. Wall **Ascorbic acid, vitamin A, & mineral composition of banana & papaya cultivars grown in Hawaii**, 2006 Journal of Food Composition and Analysis 19 pp.434-445
- ⁶J. Lako, V.C. Trenerry, M. Wahlqvist, N. Wattanapenpaiboon, S. Sotheeswaran, R. Premier **Phytochemical flavonols, carotenoids and the antioxidant properties of a wide selection of Fijian fruit, vegetables and other readily available foods**, 2007 Food Chemistry 101 pp.1727-1741
- ⁷N.J. Miller-Ihli **Atomic absorption and atomic emission spectrometry for the determination of the trace element content of selected fruits consumed in the United States**, 1996 Journal of Food Composition and Analysis 9 4 pp.301-311
- ⁸T Philip, T S Chen **Quantitative analyses of major carotenoid fatty acid esters in fruits by liquid chromatography: Persimmon and Papaya.**, 1988 J. Food Science 53 6 pp.1720-1722
- ⁹T Philip, T S Chen **Development of a method for the quantitative estimation of provitamin A carotenoids in some fruits.**, 1988 J. Food Science 53 pp.1703-1707
- ¹⁰National Institutes of Health (NIH) **Carotenoid analyses of U.S. foods**, Food Composition Laboratory, 1997
- ¹¹A.A. Franke, Suzanne Murphy, R. Lacey, L.J. Custer **Tocopherol and tocotrienol levels of foods consumed in Hawaii**, 2007 Journal of Agricultural and Food Chemistry 55 pp.769-778
- ¹²J.M. Humphries, F Khachik **Distribution of lutein, zeaxanthin, & related geometrical isomers in fruit, vegetables, wheat, & pasta products**, 2003 Journal of Agricultural and Food Chemistry 51 pp.1322-1327
- ¹³A.A. Franke, L.J. Custer, Christi Arakaki, Suzanne Murphy **Vitamin c and flavonoid levels of fruits and vegetables consumed in Hawaii.**, 2004 Journal of Food Composition and Analysis 17 pp.1-35

¹⁴Ocern Spray **Personal communications**, 2017

¹⁵Franke, A.A., Custer, L.J., Arakaki, C., and Murphy, S.P. **Vitamin C and flavonoid levels of fruits and vegetables consumed in Hawaii.**, 2004 J. Food Comp. Anal. 17 pp.1-35

¹⁶Lako, J., Trenerry, V. C., Wahlqvist, M., Wattanapenpaiboon, N., Sotheeswaran, S., Premier, R. **Phytochemical flavonols, carotenoids and the antioxidant properties of a wide selection of Fijian fruit, vegetables and other readily available foods.**, 2007 Food Chemistry 101 pp.1727-1741

¹⁷Horn-Ross, P. L., Barnes, S., Lee, M., Coward, L., Mandel, E., Koo, J., John, E. M., and Smith, M. **Assesing phytoestrogen exposure in epidemiologic studies: development of a database (United States).**, 2000 Cancer Causes and Control 11 pp.289-298

Footnotes

- ^a Mean value contains data based on the analysis of 5-methyltetrahydrofolate plus total folate determined microbiologically
- ^b Based on red-fleshed papaya; yellow-orange-fleshed papayas have 0 mcg lycopene/100 g.
- ^c Large variability in weight of whole fruit, especially between different cultivars.