

## Full Report (All Nutrients) 12012, Seeds, hemp seed, hulled

Report Date: August 21, 2019 09:39 EDT

Nutrient values and weights are for edible portion.

Food Group : Nut and Seed Products

Carbohydrate Factor: 4.07 Fat Factor: 8.37 Protein Factor:3.47 Nitrogen to Protein Conversion Factor:5.3

Nutrient	Unit	1 Value Per100 g	Data points	Std. Error	3.0 tbsp 30g
<b>Proximates</b>					
Water <a href="#">1</a> <a href="#">2</a> <a href="#">3</a>	g	4.96	17	0.170	1.49
Energy	kcal	553	--	--	166
Energy	kJ	2313	--	--	694
Protein <a href="#">1</a> <a href="#">2</a> <a href="#">3</a>	g	31.56	17	1.530	9.47
Total lipid (fat) <a href="#">1</a> <a href="#">2</a> <a href="#">3</a>	g	48.75	17	1.780	14.62
Ash <a href="#">1</a> <a href="#">2</a> <a href="#">3</a>	g	6.06	11	0.430	1.82
Carbohydrate, by difference	g	8.67	--	--	2.60
Fiber, total dietary <a href="#">2</a> <a href="#">3</a>	g	4.0	2	--	1.2
Sugars, total <a href="#">2</a> <a href="#">3</a>	g	1.50	2	--	0.45
Sucrose <a href="#">2</a>	g	0.85	1	--	0.26
Glucose (dextrose) <a href="#">2</a>	g	0.20	1	--	0.06
Fructose <a href="#">2</a>	g	0.31	1	--	0.09
Lactose <a href="#">2</a>	g	0.07	1	--	0.02
Maltose <a href="#">2</a>	g	0.07	1	--	0.02
<b>Minerals</b>					
Calcium, Ca <a href="#">2</a> <a href="#">3</a>	mg	70	2	--	21
Iron, Fe <a href="#">2</a> <a href="#">3</a>	mg	7.95	2	--	2.38
Magnesium, Mg <a href="#">3</a>	mg	700	1	--	210
Phosphorus, P <a href="#">3</a>	mg	1650	1	--	495
Potassium, K <a href="#">3</a>	mg	1200	1	--	360
Sodium, Na <a href="#">2</a> <a href="#">3</a>	mg	5	2	--	2
Zinc, Zn <a href="#">3</a>	mg	9.90	1	--	2.97

Nutrient	Unit	1 Value Per100 g	Data points	Std. Error	3.0 tbsp 30g
Copper, Cu <a href="#">3</a>	mg	1.600	1	--	0.480
Manganese, Mn <a href="#">3</a>	mg	7.600	1	--	2.280
<b>Vitamins</b>					
Vitamin C, total ascorbic acid <a href="#">2</a> <a href="#">3</a>	mg	0.5	2	--	0.1
Thiamin <a href="#">2</a> <a href="#">3</a>	mg	1.275	2	--	0.383
Riboflavin <a href="#">2</a> <a href="#">3</a>	mg	0.285	2	--	0.085
Niacin <a href="#">3</a>	mg	9.200	1	--	2.760
Vitamin B-6 <a href="#">2</a> <a href="#">3</a>	mg	0.600	2	--	0.180
Folate, total <a href="#">3</a>	µg	110	1	--	33
Folic acid	µg	0	--	--	0
Folate, food	µg	110	1	--	33
Folate, DFE	µg	110	--	--	33
Vitamin A, RAE	µg	1	--	--	0
Carotene, beta <a href="#">3</a>	µg	7	1	--	2
Vitamin A, IU	IU	11	1	--	3
Vitamin E (alpha-tocopherol) <a href="#">3</a>	mg	0.80	1	--	0.24
<b>Lipids</b>					
Fatty acids, total saturated	g	4.600	2	--	1.380
16:0 <a href="#">2</a> <a href="#">3</a>	g	2.866	2	--	0.860
18:0 <a href="#">2</a> <a href="#">3</a>	g	1.244	2	--	0.373
20:0 <a href="#">2</a> <a href="#">3</a>	g	0.312	2	--	0.094
22:0 <a href="#">3</a>	g	0.121	1	--	0.036
24:0 <a href="#">3</a>	g	0.056	1	--	0.017
Fatty acids, total monounsaturated	g	5.400	2	--	1.620
18:1 undifferentiated <a href="#">2</a> <a href="#">3</a>	g	5.276	2	--	1.583
18:1 c <a href="#">3</a>	g	5.023	1	--	1.507
20:1 <a href="#">3</a>	g	0.124	1	--	0.037
Fatty acids, total polyunsaturated	g	38.100	2	--	11.430
18:2 undifferentiated <a href="#">2</a> <a href="#">3</a>	g	27.459	--	--	8.238
18:2 n-6 c,c <a href="#">2</a> <a href="#">3</a>	g	27.358	2	--	8.207
18:2 CLAs <a href="#">3</a>	g	0.202	1	--	0.061
18:3 undifferentiated <a href="#">2</a> <a href="#">3</a>	g	10.024	--	--	3.007

Nutrient	Unit	1 Value Per100 g	Data points	Std. Error	3.0 tbsp 30g
18:3 n-3 c,c,c (ALA) <a href="#">2</a> <a href="#">3</a>	g	8.684	2	--	2.605
18:3 n-6 c,c,c <a href="#">2</a> <a href="#">3</a>	g	1.340	2	--	0.402
18:4 <a href="#">3</a>	g	0.617	1	--	0.185
Fatty acids, total trans	g	0.000	1	--	0.000
Cholesterol <a href="#">2</a> <a href="#">3</a>	mg	0	2	--	0
<b>Amino Acids</b>					
Tryptophan <a href="#">1</a> <a href="#">3</a>	g	0.369	--	--	0.111
Threonine <a href="#">1</a> <a href="#">3</a>	g	1.269	--	--	0.381
Isoleucine <a href="#">1</a> <a href="#">3</a>	g	1.286	--	--	0.386
Leucine <a href="#">1</a> <a href="#">3</a>	g	2.163	--	--	0.649
Lysine <a href="#">1</a> <a href="#">3</a>	g	1.276	--	--	0.383
Methionine <a href="#">1</a> <a href="#">3</a>	g	0.933	--	--	0.280
Cystine <a href="#">1</a>	g	0.672	--	--	0.202
Phenylalanine <a href="#">1</a> <a href="#">3</a>	g	1.447	--	--	0.434
Tyrosine <a href="#">1</a> <a href="#">3</a>	g	1.263	--	--	0.379
Valine <a href="#">1</a> <a href="#">3</a>	g	1.777	--	--	0.533
Arginine <a href="#">1</a> <a href="#">3</a>	g	4.550	--	--	1.365
Histidine <a href="#">1</a> <a href="#">3</a>	g	0.969	--	--	0.291
Alanine <a href="#">1</a> <a href="#">3</a>	g	1.528	--	--	0.458
Aspartic acid <a href="#">1</a> <a href="#">3</a>	g	3.662	--	--	1.099
Glutamic acid <a href="#">1</a> <a href="#">3</a>	g	6.269	--	--	1.881
Glycine <a href="#">1</a> <a href="#">3</a>	g	1.611	--	--	0.483
Proline <a href="#">1</a> <a href="#">3</a>	g	1.597	--	--	0.479
Serine <a href="#">1</a> <a href="#">3</a>	g	1.713	--	--	0.514

**Other**

**Sources of Data**

<sup>1</sup>JD House, J Neufeld, G Leson Evaluating the quality of protein from hemp seed (Cannabis sativa L.) products through the use of the protein digestibility-corrected amino acid score method, 2010 Journal of Agricultural and Food Chemistry 58 pp.11801-11807

<sup>2</sup>HempNut, Inc Copyright 1999-2000 HempNut, Inc. www.hempfood.com, 2000

<sup>3</sup>Hemp Oil Canada Hemp Oil Canada analyses, 2010