

WHOLE GRAINS

Canada's Food Guide recommends to "choose whole grain foods". Why whole grains?

Eating whole grains helps us:

- ✓ feel full and satisfied longer, which may help with **weight maintenance**
- ✓ maintain a lower and more steady blood sugar for **sustained energy** throughout the day
- ✓ maintain a healthy digestive tract, **avoiding constipation**
- ✓ obtain more phytochemical, antioxidants and nutrients in our diet (such as B vitamins, vitamin E, fibre, iron, zinc, magnesium and potassium) which are known to help **reduce the risk of diabetes and heart disease**



Avoiding "carbs" can mean missing out on important vitamins and minerals

If you have decided to cut back on bread or rice, or even eliminate "carbs" altogether, you may want to reconsider. Grain products, in particular whole grains, contain key vitamins and minerals that your body needs. Grains contain B vitamins that help the body convert food into energy, and minerals necessary for bone and cell growth (among many other functions!).

Not all grain products are equal

"Refined" grains like white rice and white flour have been stripped of fibre as well as many of the important vitamins and minerals (however in Canada, most white flour and white pasta is "enriched", in other words some of the nutrients are added back during processing). "Whole grains" are intact, nothing has been removed: amaranth, barley, bulgur, brown rice, cornmeal, millet, oats, quinoa, teff, whole grain whole-wheat and wild rice.

Different grains have different benefits so make sure to include several different kinds of grains in your weekly diet.

Mental Health Link:

Key nutrients in the production of the 'happy hormone'

serotonin

are niacin (B3), pyridoxine (B6), folate (B9) and iron; nutrients obtained by eating whole grain foods

Nutritional Winners

Amaranth.....highest in Vitamin B6, Iron, Magnesium, and Phosphorus
Millet.....containing high levels of vitamins B1, B2, B3, B6,B9, iron, Mg, K, Ph, Zn and Fibre
Bulgur, barley & buckwheat..... highest in Fibre
Oats.....highest in Thiamin
Quinoa..... highest in potassium and containing high levels of many other vitamins/minerals
Teff.....highest in Calcium and Iron
Wild Rice..... highest in Niacin and Zinc
White flour (bread) & pasta.....highest in folate (enriched with folic acid)

Key Nutrients in Grains (Highlighted information indicates highest nutrient content)

Per 100 g edible portion, dry: equivalent to 125 ml – 750 mL cooked, depending on the grain

	Thiamin (B1) mg	Riboflavin (B2) mg	Niacin (B3) mg	Vitamin B6 mg	Folate/Folic acid (B9) mcg	Calcium mg	Iron mg	Magnesium mg	Potassium mg	Phosphorus mg	Zinc mg	Fibre g
Amaranth*	0.12	0.20	0.92	0.59	82	159	7.6	248	508	557	2.87	6.7
Barley (not pearled)	0.65	0.29	4.6	0.32	19	33	3.6	133	452	264	2.77	17.3
Brown rice* , long grain	0.40	0.09	5.1	0.51	20	23	1.47	143	223	333	2.02	3.6
Buckwheat groats* , roasted (kasha)	0.22	0.12	5.14	0.35	42	17	2.5	221	320	319	2.42	10.3
Bulgur	0.23	0.12	5.1	0.34	27	35	2.5	164	410	300	1.93	18.3
Cornmeal* , whole grain (yellow)	0.39	0.20	3.63	0.30	25	6	3.5	127	287	241	1.82	7.3
Millet*	0.42	0.29	4.72	0.38	85	8	3.0	114	195	285	1.68	8.4
Oats*	0.76	0.14	0.97	0.12	56	54	4.7	177	429	523	3.97	10.6
Pasta, spaghetti (enriched); about 1½ cups cooked	1.07	0.36	6.7	0.14	253 (fortified)	21	3.3	53	223	189	1.41	3.2
Quinoa*	0.36	0.32	1.52	0.49	184	47	4.6	197	563	457	3.10	6.9
Teff*	0.39	0.27	3.36	0.48	n/a	180	7.6	184	427	429	3.63	8.0
Whole grain Whole-wheat flour	0.40	0.11	4.93	0.21	66	26	3.4	116	292	339	3.08	8.9
White flour , all purpose, unbleached (enriched)	0.71	0.40	6.1	0.06	214 (fortified)	14	5.0	29	103	120	0.97	2.7
White rice* , long grain	0.07	0.05	1.6	0.16	8	28	0.8	25	115	115	1.09	1.0
Wild rice*	0.12	0.26	6.73	0.39	95	21	2.0	177	427	433	5.96	6.2

*Indicates gluten-free options

Nutritional information from Health Canada's Canadian Nutrient File: [Health Canada Canadian Nutrient File \(CNF\) - Search by Food, 2012](https://www150.ca.na.nhs.gov/HealthCanada/CanadianNutrientFile/CNF/SearchByFood/2012)



QUICK & HEALTHY WHOLE GRAIN OATS

Combine **150 mL (2/3 c) water** with **75 mL (1/3 c) quick-cooking oats** in a microwave-safe bowl.

Cook for 60 seconds on HIGH, stir, and then cook for another 30 seconds. Cover with a paper towel; let stand to thicken for a few minutes.

Stir and top with fruit preserves, sliced banana, applesauce, honey, maple syrup, nuts or your favourite topping!