

Dietitian Tip **July**
Tuesday **21/20**

Spotlight on Magnesium

Did you know..

Magnesium is a mineral that helps keep our bones, nerves, heart, and muscles healthy. In our cells, magnesium plays a role in producing energy and building proteins. It also helps keep blood pressure normal and makes sure the heart beats regularly. In addition, magnesium can help lower the risk of developing type 2 diabetes.

You can find more information on nutrition and healthy eating at www.grandeprairiepcn.com/resources/dietitiantip



Spotlight on Magnesium

What is magnesium and what does it do in the body?

Magnesium is a mineral that helps keep our bones, nerves, heart, and muscles healthy^{1,2}. Most of the magnesium in our bodies is stored in the bones, where it works with calcium and vitamin D to keep bones strong². The rest of the magnesium in our bodies is stored in soft tissue cells, like our muscles and organs, and in the fluid inside our cells¹. In our cells, magnesium plays a role in producing energy and building proteins. It also helps keep blood pressure normal and makes sure the heart beats regularly^{1,2,3}. In addition, magnesium can help lower the risk of developing type 2 diabetes⁴.

How much magnesium do we need?

Magnesium requirements are different depending on age and sex. See the chart below to know how much you need!

Age (years)	Amount needed per day (mg)
Men 19-30	400 mg
Women 19-30	310 mg
Men 31 and older	420 mg
Women 31 and older	320 mg
Pregnant women 19-30	350 mg
Pregnant women over 30	360 mg
Breastfeeding women 19-30	310 mg
Breastfeeding women over 30	320 mg

(Dietitians of Canada, 2020)

What foods are high in magnesium?

Magnesium is found in many different foods, mainly nuts, seeds, whole grains, leafy greens, and fish⁵. In spite of this, many Canadians do not get enough magnesium in

their diets⁶. If you are not sure whether or not you get enough magnesium, talk to your doctor.

Here are some examples of good sources of magnesium:

Food	Serving Size	Magnesium amount (mg)
Pumpkin seeds	¼ cup	307 mg
Oats	½ cup	145 mg
Almonds	¼ cup	88-109 mg
Swiss chard, boiled and drained	½ cup	80 mg
Dark chocolate (70-85%)	30 g	75 mg
Beans (any variety)	¾ cup	58-89 mg
Salmon	100 g	30-37 mg

(Health Canada, 2015)

Should I take a magnesium supplement?

It is best to get magnesium from food sources whenever possible, because these foods also provide a variety of other nutrients that help to keep us healthy. Before taking a supplement, talk to your doctor about what magnesium supplement is best for you. It is important to note that taking large doses of magnesium supplements can cause diarrhea, nausea and stomach cramps, and in some cases can lead to acid-base imbalances, dehydration, cardiac arrest, and death².

References:

1. Mahan, K.J., Raymond J.L. (2017). *Krause's Food & the Nutrition Care Process: 14th Edition*. St. Louis, Missouri: Elsevier Inc.
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4. Fang, X., Han, H., Li, M., Liang, C., Fan, Z., Aaseth, J., He, J... Cao, Y. (2016). Dose-response relationship between dietary magnesium intake and risk of type 2 diabetes mellitus: A systematic review and meta-regression analysis of prospective cohort studies. *Nutrients*, 8(11), 739.
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