Magnesium

Micronutrient Spotlight

Nearly 50% of the population in the United States does not consume adequate amounts of magnesium through food

Chronic, inadequate intake of magnesium can increase risk of some diseases like cardiovascular disease and diabetes. It can also decrease overall health status and quality of life

@notable_nutrition

Magnesium

Function and Purpose

- Cofactor for enzymatic reactions: oxidative phosphorylation, glycolysis (think energy)
- Bone development
- DNA/RNA synthesis
- Cell transportation of calcium and potassium (think heart and skeletal muscle function)
- Blood glucose control

Magnesium

Needs and Sources

- Pepitas (pumpkin seeds)
- Chia seeds
- Almonds, cashews, peanuts
- Spinach
- Edamame, soy milk
- Potatoes (with skin)

*contains 10% DV or more per serving

Recommended Dietary Allowance (RDA)

Children:

- 1-3 y/o: 80 mg
- 4-8 y/o: 130 mg
- 9-13 y/o: 240 mg
- 14-18 y/o: 360-410 mg

Adults:

- 19-30 y/o: 310-400 mg
- 31-50 y/o: 320-420 mg
- 51+ y/o: 320-420 mg

Magnesium

Clinical and Therapeutic Uses

- Adequate intake of magnesium is important in ensuring adequate vitamin D levels (may need to be evaluated together)
- Magnesium supplementation may be used for the treatment/prevention of migraines, due to impact on neurotransmitter release and vasoconstriction
- Magnesium may be helpful in the treatment of menstrual cramps or skeletal muscle soreness
- Magnesium is being studied for its impact on mood disorders (depression and anxiety); human studies are limited, but the mechanisms for impact have been identified.
- Magnesium has been shown to have a positive impact on the components of metabolic syndrome (blood pressure, lipid levels, glucose measures)
- If you are struggling to meet your magnesium needs, discuss with your healthcare team (primary care provider, pharmacist, dietitian)

Magnesium

Literature Review

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Literature Review

- Guerrero-Romero F, Jaquez-Chairez FO, Rodríguez-Morán M. Magnesium in metabolic syndrome: a review based on randomized, double-blind clinical trials. Magnes Res. 2016 Apr 1;29(4):146-153. doi: 10.1684/mrh.2016.0404. PMID: 27834189.

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