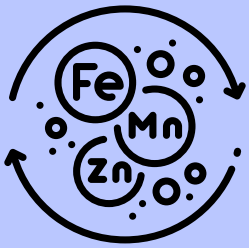
Micronutrients on a Plant-Based Diet

Micronutrients are vitamins and minerals that are essential for good health. They each play unique roles in our health and work together to make sure the body systems are functioning properly. Too much or too little of a certain vitamin or mineral can contribute to adverse health outcomes.



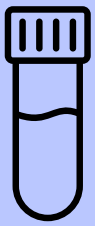
Any eating pattern can be susceptible to micronutrient inadequacies. Plant-based diets tend to provide more of certain micronutrients and less of others, while many common nutrient shortfalls affect both plant-based and omnivorous eaters.

It's important to be aware of which nutrients might be the most vulnerable so that you can take action to get enough of each of these nutrients.

One of the best ways to prevent micronutrient deficiencies is to eat a variety of nutrient-dense foods every day and supplement when needed.

Nutrients that commonly fall short on any diet

- Vitamin D
- Calcium
- Iron
- Choline
- Vitamin E



Nutrients to pay extra attention to on a plant-based diet

- Vitamin B12
- Iodine
- Zinc
- Selenium

Nutrients plant-based diets tend to provide more of

- Vitamin C
- Vitamin A / carotenoids
- Vitamin K
- Folate (B9)
- Magnesium
- Potassium

Check out the next pages for an introduction to these nutrients so you can help yourself thrive on a plant-based diet!

Vitamin D

Vitamin D is essential for calcium absorption, strong bones, immune health, and brain health.

Sources

- Sunlight
- Vitamin D fortified foods
- Supplements

It's encouraged to get your vitamin D levels tested regularly.
Vitamin D production from sunlight varies between individuals.

Vitamin B12

Vitamin B12 is essential for energy production, red blood cell creation, and DNA synthesis.

Sources

- B12 fortified foods like nutritional yeast, plant-based milk, and cereals.
- Supplements

B12 supplements are the most reliable way to meet vitamin B12 needs.

Calcium

Calcium is important for bone health, muscle contraction, and nerve conduction.

Sources

- Calcium fortified plant-based milk
- Tofu
- Kale, bok choy
- Chia seeds
- Edamame
- Almonds

Leafy greens like kale and bok choy have great calcium bioavailability, especially when cooked.

Iron

Iron is important for making hemoglobin in red blood cells, which transports oxygen throughout the body, and supports energy production.

Sources

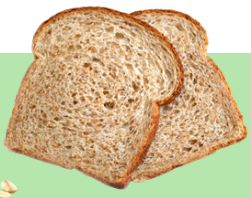
- Legumes like lentils
- Tofu
- Pumpkin seeds
- Some protein powders
- Fortified cereals
- Blackstrap molasses

Tea and coffee inhibit iron absorption when consumed with or near iron-rich foods or supplements. Consume iron almond with vitamin C to boost its bioavailability.

Zinc

Zinc Supports immune function, wound healing, DNA synthesis and normal growth and development.

Sources



- Beans and lentils
- Pumpkin seeds
- Tofu
- Whole grains like oats
- Whole wheat bread
- Wheat germ
- Hemp seeds

Sprouting legumes and grains helps increase zinc bioavailability.

Selenium

Sources

Selenium is essential for thyroid function, antioxidant defences, reproduction and immune function.

- Brazil nuts*
- Sunflower seeds
- Whole wheat foods
- Tofu
- Mushrooms like shiitake
- Legumes like lentils

*One brazil nut provides approximately the entire daily selenium recommendation. Because Brazil nuts are so high in selenium, it's possible to overdo it, so avoid eating more than about 4-5 Brazil nuts daily.

Iodine

Iodine is needed to make thyroid hormones that regulate metabolism, growth and development.

Sources

- Iodized salt
- Some types of seaweed: kombu, dulse
- Iodine supplements

Many people choose sea salt or himalayan salt, which usually lacks iodine, so it's helpful to consider other iodine sources.

Choline

Choline is important for brain and nervous-system function (including acetylcholine production), cell membranes, and healthy liver function.

Sources

- Broccoli
- Soybeans
- Red potatoes
- Soy milk
- Green peas
- Sunflower lecithin

Choline technically isn't a vitamin or mineral, but it's a similar organic compound that's essential for good health.

Vitamin E

Vitamin E is an antioxidant that helps protect against oxidative damage. It also supports hair and skin health.

Sources

- Sunflower seeds
- Avocado
- Almonds
- Peanut butter

Vitamin E is fat soluble, so pairing it with a source of fat helps improve its absorption. Many vitamin E sources are already a good source of fats.

Nutrients Plant-Based Diets Tend to Provide More of

Vitamin C: Supports immune function, collagen production, antioxidant protection, and absorption of plant-based iron.

Potassium: Helps regulate fluid balance, muscle and nerve function, and blood pressure.

Vitamin A / carotenoids: Supports vision, immune function, reproduction and healthy skin and tissues.

Folate (B9): Needed for DNA synthesis and cell division and is especially important during pregnancy for fetal development.

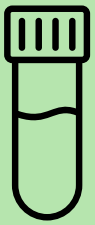
Vitamin K: Essential for normal blood clotting and contributes to bone health.

Magnesium: Involved in hundreds of enzymatic reactions, including energy production, muscle and nerve function, and bone health.

Extra Tips for Success

- Eat a variety of nutrient-dense whole foods.
- Include foods from each plant food group daily: vegetables, fruits, legumes, whole grains, and nuts/seeds.
- Get bloodwork or other valid biomarkers for status of relevant nutrients like Vitamin D and B12

- Prioritize getting nutrients from whole foods first, but take supplements if needed.
- Try tracking your food intake on food tracking software to get a snapshot of your estimated intake to help identify potential nutrient gaps.



- Vitamin and mineral needs vary between individuals. If you have a certain health condition that impacts your nutrient needs or ability to obtain adequate vitamins and minerals, it's important to work with a qualified healthcare professional to help you stay healthy.

- Vitamin and mineral needs are different during pregnancy and breastfeeding, so seek support and/or adjust your intake accordingly.
- If you're confused about how to make sure you're getting the nutrients you need, you can consider working with a Registered Dietitian.

averyzenkernutrition.com

@averyzenkernutrition