

spotting nutrient shortfalls

Am I
getting enough
vitamins?

FIND OUT IF YOU
COULD BE LOW IN
ESSENTIAL VITAMINS
AND MINERALS

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Nutrient deficiencies aren't a thing of the past—they're just often overlooked. In some cases, you may be getting enough vitamins and minerals to prevent obvious signs of deficiency but not enough to support optimal health. The 2015 Dietary Guidelines Advisory Committee reported that Americans underconsume several nutrients, including vitamins A, C, D, and E, folate, and magnesium, among other nutrients in certain population groups.

Nutrient-deficiency risk is greater in people who are following restrictive diets, suffering from certain health conditions, or taking medications. Brush up on deficiency signs and symptoms, so you can consult your health care provider about any that may surface. ➔



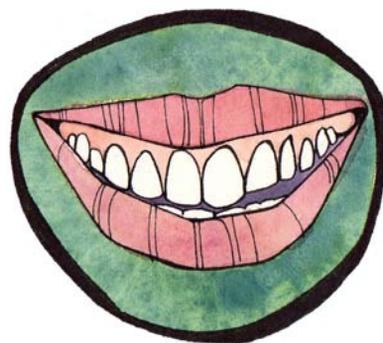
Symptom: symmetric low-back pain

POSSIBLE DEFICIENCY: Vitamin D.

Sun exposure generates less vitamin D in darker-skinned people and the elderly. Obesity increases the risk of vitamin D deficiency, too.

WHAT TO EAT: salmon, egg yolks, vitamin D-fortified milk, and vitamin D-enhanced mushrooms

SUPPLEMENT WITH: 6,000 IU vitamin D3 daily for eight weeks for deficiency, then 1,500–2,000 IU daily to maintain levels



Symptom: swollen and/or bleeding gums

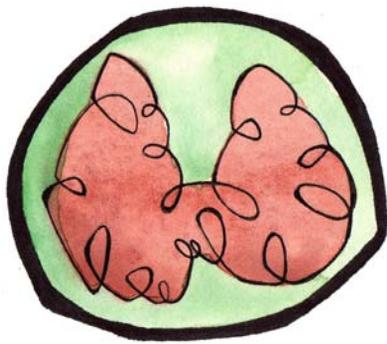
POSSIBLE DEFICIENCY: Vitamin C.

About 6 percent of U.S. adults are vitamin C deficient. Vitamin C's ability to shorten the common cold is strongest in those with a vitamin C deficiency or those who are under great physical stress, such as soldiers and marathoners.

WHAT TO EAT: red peppers, citrus fruits, broccoli, tomatoes, and kiwifruit
SUPPLEMENT WITH: 200 mg vitamin C daily for optimal health



Supplement doses are for adults, unless otherwise specified. Always talk to your health care provider before starting a new supplement.



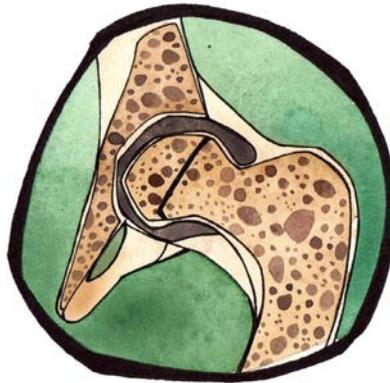
Symptom: goiter (swelling around neck) or hypothyroidism

POSSIBLE DEFICIENCY: Iodine.

Especially at risk are pregnant women and those with hypertension who limit salt. Processed foods supply most salt intake, which is usually noniodized.

WHAT TO EAT: seaweed, saltwater fish, eggs, dairy products

SUPPLEMENT WITH: 150 mcg potassium iodide daily, or more if directed and monitored by your doctor



Symptom: angina (severe chest pain) or bone loss

POSSIBLE DEFICIENCY: Vitamin K2.

Vitamin K2 directs calcium to bones, keeping them strong, and prevents calcium from accumulating in arteries, promoting flexibility.

WHAT TO EAT: cheese, natto (fermented soy), butter from grass-fed cows, liver

SUPPLEMENT WITH: 120–240 mcg MK-7 daily; consult your doctor if taking an anticoagulant drug



Symptom: numbness or tingling in limbs

POSSIBLE DEFICIENCY: Vitamin B12.

Most at risk for vitamin B12 deficiency are vegans, older adults, weight loss surgery patients, antacid users, and those taking metformin (a diabetes drug).

WHAT TO EAT: fish, beef, yogurt, cheese, tempeh, nutritional yeast

SUPPLEMENT WITH: 500–750 mcg each of methylcobalamin and adenosylcobalamin daily



Symptom: poor attention span or the craving to chew ice

POSSIBLE DEFICIENCY: Iron.

Low stores of iron (ferritin) may contribute to attention deficit hyperactivity disorder (ADHD). Iron is needed to make the brain chemical dopamine, necessary for focus.

WHAT TO EAT: lean beef, spinach, dark chocolate, cashews, fortified cereal

SUPPLEMENT WITH: 12–60 mg daily for deficiency, based on age



Symptom: muscle spasms or twitches

POSSIBLE DEFICIENCY: Magnesium.

A majority of Americans don't get enough of this mineral. Shortfalls may increase risk of heart disease, diabetes, osteoporosis, and migraine headaches.

WHAT TO EAT: nuts, seeds, legumes, spinach, oats, barley

SUPPLEMENT WITH: 300–400 mg chelated magnesium (such as magnesium glycinate, or other form of magnesium ending in "ate") daily



Symptom: miscarriages or male infertility

POSSIBLE DEFICIENCY: Folate.

The MTHFR gene directs processing of folate. A common mutation in this gene (C677T) may increase miscarriages and male infertility. Supplementing with methylated folate may help.

WHAT TO EAT: dark green vegetables, legumes, asparagus, sunflower seeds

SUPPLEMENT WITH: 400–600 mcg L-5-methyltetrahydrofolate daily for fertility, guided by a trained doctor (find one at mthfr.net)



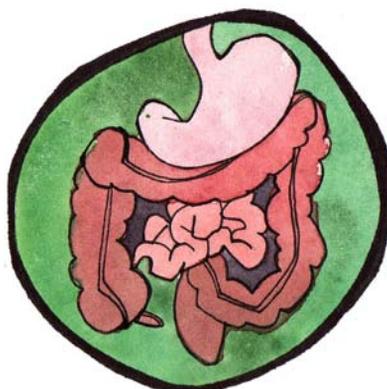
Symptom: distorted taste or poor appetite

POSSIBLE DEFICIENCY: Zinc.

Although blatant zinc deficiency is uncommon in the U.S., it's more likely in the elderly. Deficiency contributes to changes of aging, such as impaired immunity and increased inflammation.

WHAT TO EAT: oysters, beef, turkey breast, sprouted watermelon seeds, pumpkin seeds, cashews

SUPPLEMENT WITH: 15–25 mg chelated zinc (such as zinc glycinate) daily



Symptom: poor immunity or muscle weakness

POSSIBLE DEFICIENCY: Vitamin E.

Overt deficiency is uncommon, but more than 90 percent of Americans don't meet the dietary recommendations (RDA). Vitamin E intake above the RDA may improve immune function, especially in the elderly.

WHAT TO EAT: certain unroasted nuts and nut oils, including almonds, peanuts, hazelnuts, and sunflower seeds

SUPPLEMENT WITH: 200–800 mg mixed tocopherols daily to support immunity

FINDING DEFICIENCIES

Some symptoms of nutrient deficiency are vague and difficult to pin on a specific vitamin or mineral. Lab tests can help your health care practitioner discover the culprit.

STANDARD BLOOD TESTS: Can be ordered by any physician to identify several (but not all) nutrient deficiencies, such as iron, folate, and vitamins B12, C, D, and E.

URINE TESTS: Measure nutrient levels or break-down products (metabolites) of some nutrients in urine to evaluate nutrient status. For example, your doctor can assess iodine status with a 24-hour urine test.

DRIED URINE SPOT TESTS: Can test for iodine deficiency more easily than the 24-hour urine test but with similar accuracy. Find test labs at zrtlab.com.

FUNCTIONAL NUTRIENT TESTS: Micronutrient testing, such as NutrEval from Genova Diagnostics, evaluates up to 35 nutrients in white blood cells, which reflect nutrition over the past 4 to 6 months. 