

Vitamins and Minerals in Substance Use Recovery

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Vitamins and minerals, also called micronutrients, are necessary for healthy development, disease prevention, optimal metabolism and overall well-being, especially during recovery from substance use. Unlike macronutrients, such as [carbohydrates](#), [fats and proteins](#), which provide energy to the body, micronutrients are needed in much smaller amounts, obtained from a variety of nutritious foods, and support the body's critical functions. Like putting gas in a car, [macronutrients](#) provide fuel to the body whereas, micronutrients, like oil and transmission fluid in a car, help the body run better.

Micronutrients are essential for the maintenance and stability of the body's organ systems as a whole. For example, bone health is dependent on calcium, vitamin D and magnesium, all of which are commonly deficient among those who use substances, especially young adult, reproductive-age women who use stimulants. To lower the chances of developing osteoporosis, people need to make sure they are eating foods that give them plenty of these nutrients.

Various micronutrients are not only important to one's physical health, but also mental health, such as mood regulation. Nutrient deficiencies, or not getting enough of a certain nutrient, are associated with depression, poor attention span and difficulty sleeping, all of which commonly plague those in recovery.¹ Certain vitamins and minerals have a direct role in the production of serotonin and dopamine, known as the "happy" and "pleasure" hormones. A few micronutrients noteworthy for their roles in mental health include iron, folate, vitamin B6 and vitamin B12.²

Why nutrient deficiencies are common

Poor nutrition is not uncommon to people who use substances and may impede their ability to resist substances and recover from substance use.³ People who use substances are more likely to be malnourished, which means they are not getting enough nutrients in their body to support basic function, development, maintenance and repair. Poor nutrition, a primary cause

of malnourishment, happens for a variety of reasons. These include:

- Using substances that change the body in ways that make it hard to absorb, digest, use or excrete nutrients⁴
- Not eating a variety of nutritious foods
- Not eating meals and snacks regularly or on a schedule
- Not having access to or eating enough food

Appetite changes, cravings and overall metabolism can be changed during use or recovery depending on the substance used, which leads to further loss of important nutrients. Stimulants, for example, may cause decreased food intake because they decrease appetite and disrupt metabolic and neuroendocrine regulation. In addition, substances can interfere with how hormones signal in our body, and people may lose their ability to tell if they are hungry or full. When this happens, people are more likely to eat foods such as candies, cakes and soda, which are high in energy but have very few micronutrients that the body needs.

Malnourishment often happens during detoxification, early in the recovery period. During this time, the body is healing and uses most of the body's nutrients. Symptoms of withdrawal, including vomiting or diarrhea, may also contribute to nutrient loss over time. Replacing these nutrients is critical to recovery and physical healing.

Strategies to increase vitamins and minerals in the diet

Vitamin and mineral deficiencies common among those who use substances include B1-thiamine, B2-riboflavin, B6-pyridoxine, B9-folate, vitamin C, vitamin D, magnesium, iron, calcium, zinc, copper and selenium. Replacing micronutrients during the detoxification process and early in recovery should be a priority to help the body heal properly.² Understanding how to add

vitamins and minerals to the diet is important for drug treatment providers, nutrition educators, caregivers and loved ones of those in recovery, and those in recovery themselves. Practical ways to help individuals add more nutritious foods and micronutrients to the diet include:

- 1. Add more fruits and vegetables to the daily diet in various ways.** Nutritious produce can come in many forms. Individuals should consider canned, fresh or frozen options to add micronutrients to the diet and focus on a variety of choices, when possible, recognizing that everyone's choices may be different based on what's available and affordable for them.
- 2. Choose a colorful diet,** a.k.a. "eat the rainbow." Different colors of fruits and vegetables contain different nutrients. Helping individuals to focus on creating colorful plates at snack and mealtimes can be a simple way for them to get a variety of vitamins and minerals into the diet. Encourage individuals to eat two different colored foods at snack time and three or more different colored foods during mealtime.
- 3. Choose foods with little nutrition less often,** since they contain little to no vitamins and minerals. Choose highly nutritious foods more often, such as fruits, vegetables and whole grains.
- 4. Build cooking skills to help add nutrient-rich foods to the diet.** Even though a food may be a rich source of a certain vitamin or mineral, the way the food is prepared and cooked can change the micronutrient contents availability for the body to absorb and use it. Preparing foods in different ways, such as roasting, sautéing and steaming vegetables, can increase the chance the body can get the nutrients from certain foods.
- 5. Talk with health care providers about dietary supplements.** The goal should be to get important vitamins and minerals from foods we eat. However, supplementation may be helpful during recovery and may be necessary for people who are living with certain health conditions. Before taking any nutrient supplements, individuals should talk to their health care provider about their unique needs. Dietary supplements may only be needed temporarily, and as the name suggests, should only supplement the diet and not replace nutritious food choices. Some individuals should take caution, especially those who previously used "pill" substances, who may have a higher risk of misusing supplements.

Nutrition Facts	
6 servings per container	
Serving size	1 cup (230g)
Amount per serving	
Calories	245
% Daily Value*	
Total Fat 12g	14%
Saturated Fat 2g	10%
Trans Fat 0g	
Cholesterol 8mg	3%
Sodium 210mg	9%
Total Carbohydrate 34g	12%
Dietary Fiber 7g	25%
Total Sugars 5g	
Includes 4g Added Sugars	8%
Protein 11g	
Vitamin D 4mcg	20%
Calcium 210mg	16%
Iron 3mg	15%
Potassium 380mg	8%
*The % Daily Value (DV) tells you how much a nutrient in a serving of food contributes to a daily diet. 2,000 calories a day is used for general nutrition advice.	

- 6. Learn how to read the nutrition facts label.** While the nutrition label doesn't include all nutrients, it is an easy tool to help decide if a food is high in important nutrients. To determine the nutrient value of a particular food, look at the percent daily value written as % Daily Value (or %DV) on the right-hand side of the label. If the %DV for a desired vitamin or mineral is 20% or greater, that food is an excellent source of that micronutrient.

Although small amounts of each micronutrient are needed each day, they play a large role in overall health, well-being and how people feel. By prioritizing nutritious foods, people will naturally add more variety and nutrients to their diet, help the body heal, and become their best self.

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