# Micronutrients

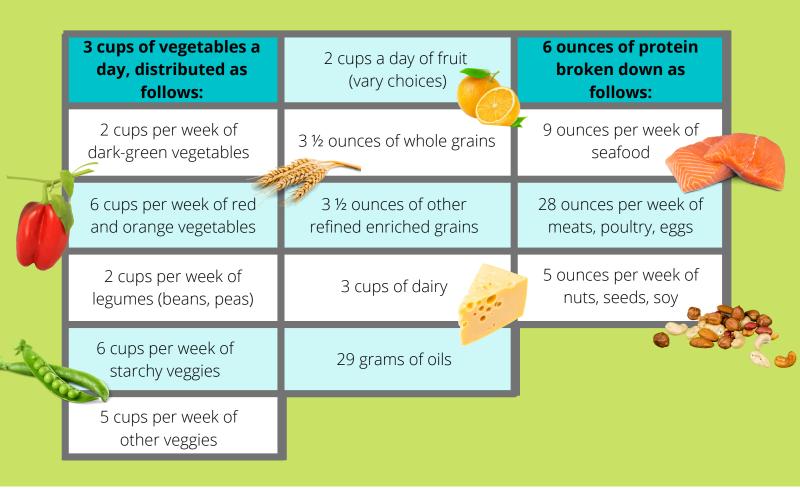
There are approximately 30 vitamins and minerals that are needed for all aspects of metabolism, health, and longevity.

- B vitamins are needed to extract energy (calories) from food
- Vitamin B12 is required for proper nerve function and to make red blood cells
- Vitamin A is needed for good vision, immunity, and healthy skin
- Vitamin D is required to form bone and strong immune function
- Calcium is needed for muscle contraction and bone formation
- Iron is required to transport oxygen throughout the body
- Magnesium regulates muscle contraction and nerve transmission

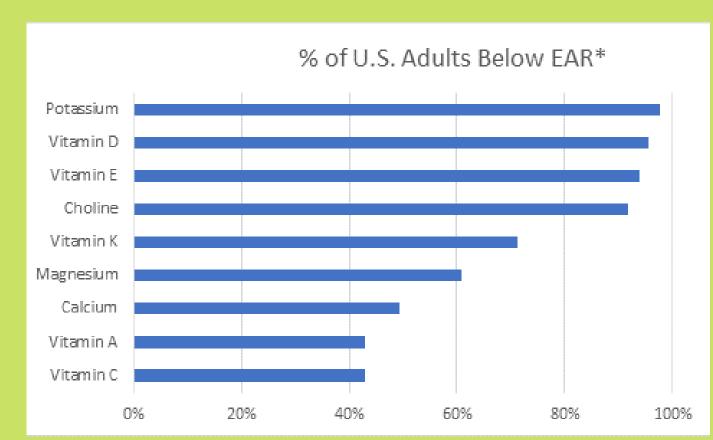
Our bodies do not make vitamins and minerals, so we must get them from an outside source. They are essential nutrients for human health.



Eating a wide variety of foods from all major food groups helps boost your micronutrient intake. Here's what a micronutrient rich diet looks like for someone who eats 2,200 calories:



Most Americans do not consume a micronutrient rich diet. Although overt deficiencies of vitamins and minerals are rare, many fall short of recommended levels, resulting in undetectable damage and health consequences later in life.



Percentage of American adults (>19 yrs) NOT consuming recommended amounts of micronutrients:

\*EAR (estimated average requirement): average daily intake for a nutrient estimated to meet the needs of 50% of healthy individuals

### Weight Loss and Micronutrients

If you're cutting calories to lose weight or avoiding one or more food groups as is the case with vegan or vegetarian diets, Paleo diets, gluten free diets, and ketogenic diets, micronutrient insufficiencies are common.

## One study found the following:

- A Vegan diet failed to provide sufficient amounts of seven micronutrients: B3, B12, vitamin D, vitamin E, calcium, selenium, and zinc
- A low carb, high protein diet failed to provide six micronutrients: B1, vitamin D, vitamin E, calcium, magnesium, and potassium
- A balanced weight maintenance diet was missing three micronutrients: vitamin D, calcium, and potassium



### **Nutritional Insurance**

A daily multivitamin and mineral with a wide range of vitamins and minerals is an effective tool for eliminating micronutrient insufficiencies.

One study showed that compared to food alone, taking a multivitamin and mineral was associated with a lower prevalence of inadequacies for 15 of 17 micronutrients examined.

Another study showed that multivitamin and mineral supplements significantly reduced the prevalence of insufficient intakes of calcium, magnesium, vitamins A, C, D and E.

The formula should be suitable for your age, gender, life stage and activity level.

# When it comes to micronutrients, a little insurance goes a long way.

References: PMIDs 21865568, 28792457, 20537171, 29361684, 24724766

