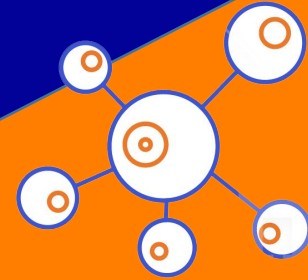


Micronutrients - what's it Mean? 12.15.20



Don't worry, just the basics

Let's assume you have an event coming up and you wanna look **great**.

...A birthday, your best friend's wedding, a lifetime promotion... anything - and it's looming date means you begin to HIT IT HARD!

Daily workouts increase with intensity and you feel the barriers of fitness melt away as your routine foment in your mind and inside your Google calendar.

But you're constantly dehydrated.

Like so many, you pontificate the *why's*: "why am I tired, why am I thirsty, why am I sleepy midday, even though I workout A LOT?"

A deeper look reveals the need for quality endogenous sources of electrolytes and not just the few you were taking.

Luckily, you could take a global look at your nutrients, your **micronutrients** and feel better about your future purchases of Himalayan Pink Salts and lime juice (some curatives for chronic dehydration).

Oh wait, you don't understand them?? No worries - let's take a look.

Vitamin	Common Name	Recommended Dietary Allowance	Common Foods	Common Deficiency
A (Fat soluble)	Retinal, Retinol, Beta-Carotene (4 other carotenoids)	900 µg	Leafy vegetables, carrots, squash, milk	Night blindness
B1	Thiamine	1.2 mg	Pork, oatmeal, brown rice, eggs	Beriberi
B2	Riboflavin	1.3 mg	Dairy products, bananas, popcorn, green beans, asparagus	glossitis, angular stomatitis
B3	Niacin, niacinamide	16 mg <small>wikipedia.org</small>	mushrooms, tree nuts, eggs, many energy drinks	Pellagra

Vitamin	Common Name	Recommended Dietary Allowance	Common Foods	Common Deficiency
B5	Pantothenic acid	5.0 mg (<i>Adequate Intake</i>)	Meat, broccoli, avocados	Paresthesia
B6	Pyridoxine , pyridoxamine, pyridoxal	1.3–1.7 mg	Meat, vegetables, tree nuts, bananas	Anemia, peripheral neuropathy
B7	Biotin	30.0 µg	Raw egg yolk, liver, peanuts, leafy green vegetables	Dermatitis, enteritis
B9	Folate, Folic Acid	400 µg	Leafy vegetables, pasta, bread, cereal, liver	Spina Bifida

Vitamin	Common Name	Recommended Dietary Allowance	Common Foods	Common Deficiency
B12	Cobalamine, Cyanocobalamin	2.4 µg	Meat, poultry, fish, eggs, milk	Pernicious anemia
C	Ascorbic acid (ascorbate)	90.0 mg	Many fruits and vegetables, liver	Scurvy
D (Fat soluble)	Cholecalciferol	10 µg	Fish, eggs, liver, mushrooms	Rickets and osteomalacia
E (Fat soluble)	Tocopherols (alpha, beta etc.), tocotrienols	15.0 mg	Fruits, vegetables, nuts and seeds	
K (Fat soluble)	Phylloquinone, menaquinones	120 µg	Leafy green vegetables, egg yolks, liver	Bleeding diathesis

Wait, wait.... all you gotta do is remember some KEYS. Like:

- Take note of the common names or the names that like niacin, riboflavin, and tocopherol.
- Take note what each one is called.
- Note: vitamins ADEK, A, D, E and K are *fat soluble*
- versus the B complex and C, which are water soluble. That means that ADEK are stored fat cells and as such are much slower to deplete.

Notice the RDAs - essentially the amount you need to stave off disease in daily amounts. Some of these only have an *adequate intake*, which is the accepted value to intake with no known disease prevention associated with it. Notice that some of these are in micrograms and others aren't in milligrams.

Mineral name (+ Elemental Abbv.)	Recommended Dietary Allowance	Common Foods	Biological Use
Calcium (Ca)	1.2 grams	Dairy, eggs, canned fish with bones (like sardines), leafy greens, nuts, seeds	Needed for muscle, heart and digestive system health, builds bone, supports synthesis and function of blood cells
Chromium (Cr)	0.035mg	Broccoli, grape juice (especially red), meat, whole grain products	Involved in glucose and lipid metabolism, although its mechanisms of action in the body and the amounts needed for optimal health are not well-defined
Chlorine (Cl)	2.3grams	Table salt (sodium chloride) is the main dietary source.	Needed for production of hydrochloric acid in the stomach and in cellular pump functions
Cobalt (Co)	--	--	Required in the synthesis of vitamin B12, but because bacteria are required to synthesize the vitamin, it is usually considered part of vitamin B12 which comes from eating animals and animal-sourced foods (eggs...)
Copper (Cu)	0.9	Liver, seafood, oysters, nuts, seeds; some: whole grains, legumes	Required component of many redox enzymes, including cytochrome c oxidase

Iron (Fe)	18mg
Iodine (I)	0.15mg
Magnesium (Mg)	420
Manganese (Mn)	2.3
Molybdenum (Mo)	0.045
Phosphorus (P)	700
Potassium (K)	4.7grams

Mineral name (+ Elemental Abbv.)	Recommended Dietary Allowance	Common Foods	Biological Use
Selenium (Se)	0.055	Brazil nuts, seafoods, organ meats, meats, grains, dairy products, eggs	Essential to activity of antioxidant enzymes like glutathione peroxidase
Sodium (Na)	1.5grams	Table salt (sodium chloride, the main source), sea vegetables, milk, and spinach.	A systemic electrolyte and is essential in reregulating ATP with potassium
Zinc (Zn)	11 mg	Oysters*, red meat, poultry, nuts, whole grains, dairy products	Pervasive and required for several enzymes such as carboxypeptidase, liver alcohol dehydrogenase, and carbonic anhydrase

Notice the larger requirements like Calcium, 1.2 grams per day.
Take notice of which foods offer deficiencies like iron.

Cooking on an iron skillet is supposed to provide more iron in traces, helping reverse iron deficiencies like anemia.

Because of its function as the facilitator of action potentials in your muscles and heart, you need a lot of K - potassium.

Same thing with sodium. You need a lot of it because it's constantly being used in your, your body for contractions and provides a gradient along with calcium, sodium, potassium which helps your muscles act.