Vitamins

Periodic Table of **Vitamins**

With new gimmicky health products hitting the shelf daily, it can sometimes be difficult to distinguish those that are beneficial from those that are not. As an essential source of nutrients, vitamins do play an important role in our health. Below is a guide of the important vitamins, minerals and antioxidants, and some tips on where they can be found.

100-200 mg a Carnosine **Cr**																	90.0 mg v Vitamin C **C**
1000 mg a Superoxice Dismutas **Sd**	8-11 mg m Zinc **Zn**															1800 mg a Acetylcysteine **Ay**	30-60 mg a Pycnogenol **Py**
N/A v Alpha Carotene **Ac**	500 mg a Taurine **Ta**	5.0-10 mcd v Vitamin D **D**														6.5 mg a Lycopene **Ly**	200 mg a Genistein **Ge**
N/A v Paba **Pb**	N/A a Gluthathione **Gt**	1-2 mg a Lutein **Lu**	200 mg m Magnesium **Mg**	900 mcd m Copper **Cu**	220 mcd m Iron **Fe**	425-550 mg v Choline **Ch**	1.2 mg v Vitamin B1 **B1**	1.3 mg v Vitamin B2 **B2**	N/A a Germanium **Gm**								
900 mcd v Vitamin A **A**	2-15 mg a Glutamine **Gu**	1-10 mg a Zeaxanthin **Ze**	N/A m Boron **Bo**	120-240 mg v Ginkgo Biloba **GB**	500 mg a Resveratrol **Re**	N/A a Coenzyme Q10 **Q10**	5.0 mg v Vitamin B5 **B5**	16.0 mg v Vitamin B3 **B3**	500 mg a Quercetine **Qc**								
30.0 mcd v Vitamin B7 **B7**	25 mg a DHEA **Dh**	500 mg a Curcumin **Cc**	1000 mg m Calcium **Ca**	1.3-1.7 mg v Vitamin B6 **B6**	2.4 mcd v Vitamin B12 **B12**	120 mcd v Vitamin K **K**	6 mg v Beta Carotene **Bc**	100-300 mg a DMAE **Dm**	N/A a Cryptoxanthin **Cy**								
										N/A a Catalase **Ct**	200 mg a Alpha-lipoic Acid **Ap**	200 mcg m Chromium **Cr**	330-400 mg m Manganese **Mn**	55 mcg m Selenium **Se**	1000 mg v Inositol **In**	15.0 mg v Vitamin E **E**	400 mcd v Vitamin B9 **B9**

Daily RDA*
Sample Vitamin
Sv

IMMUNITY HEART BEAUTY MENTAL BODY ALL

antioxidant
mineral
vitamin

Found In:

Meat Dairy Pork Chicken Eggs Fruit Vegetables Whole Grain Spices Red Wine Liver Pills Tea Aloe Vera Sunlight

* RDA (Recommended Dietary Allowance) Daily.

daily burn

1️⃣ Vitamins = Activators
They turn enzymes and reactions on, making energy, neurotransmitters, and hormones possible.
➡️Example: B12 and folate drive methylation, critical for DNA repair and brain function.

2️⃣ Minerals = Spark Plugs
Minerals act like cofactors that help enzymes run.
➡️ Example: Magnesium is needed in more than 300 reactions, from ATP production to muscle relaxation.

3️⃣ Antioxidants = Shields
They neutralize free radicals that damage cells.
➡️ Example: Vitamin C recycles Vitamin E, while CoQ10 protects mitochondria.

4️⃣ It’s a Network, Not Solo Players
These nutrients recycle and regenerate each other. One deficiency can drag the whole system down.
➡️ Example: Without selenium, glutathione can’t work; without B2, folate can’t activate.

5️⃣ Food Sources Matter Most
Vitamins and minerals don’t float alone. They come packaged with synergistic compounds in real food.
➡️ Example: Eggs give you choline + B12 + selenium, a combination you’ll never get from an isolated pill.

Where vitamins and minerals are stored in the body

Vitamins and minerals use different storage strategies. Some are stockpiled in organs and tissues, while others are used immediately and must be replenished often. Storage pattern explains why some deficiencies appear quickly and why a few nutrients can accumulate to toxic levels if over consumed.

1️⃣ Water-soluble vitamins (B-complex, vitamin C)
Mostly circulate in blood and are not stored in large amounts. Excess is lost in urine, so steady intake matters. Vitamin B12 is the notable exception and is stored in the liver for years.
➡️ Example: a few weeks with little vitamin C can cause fatigue and gum irritation, while low B12 may not show up for months because liver stores buffer intake.
➡️ Example: intense sweating or diuretics can raise B-vitamin needs since these dissolve and leave with fluids.

2️⃣ Fat-soluble vitamins (A, D, E, K)
Absorbed with dietary fat and stored in liver, adipose tissue, and to a lesser extent skin. Deficiency develops slowly, and excess intake can accumulate.
➡️ Example: vitamin D stored in liver and fat can help maintain status through winter when sunlight is low.
➡️ Example: chronic high vitamin A intake from supplements can build up in the liver and cause

headaches or skin peeling.

3. Major minerals (calcium, magnesium, phosphorus, potassium, sodium, chloride, sulfur)
Stored mainly in bone, muscle, and extracellular fluids. They maintain structure and electrical balance.
- Example: about 99 percent of calcium is stored in bone; low dietary calcium draws from bone reserves over time, weakening bone density.
- Example: magnesium is stored in bone and muscle; heavy sweating or stress can deplete it and trigger muscle cramps or irregular heartbeat.
- Example: sodium and chloride are held in extracellular fluids; high salt intake increases extracellular volume and can raise blood pressure in salt-sensitive people.

4. Trace minerals (iron, zinc, copper, selenium, iodine, manganese, chromium, molybdenum, fluoride)
Required in small amounts with specific storage sites.
- Example: iron is stored as ferritin in liver, spleen, and bone marrow; low ferritin reduces red blood cell production and causes fatigue.
- Example: iodine concentrates in the thyroid gland to make thyroid hormones; low iodine intake slows metabolism and can enlarge the thyroid.
- Example: zinc is distributed in skin, pancreas, and brain; low zinc impairs wound healing and blunts taste and smell.

5. Choline and other water-soluble nutrients
Choline is stored in the liver and incorporated into phospholipids and acetylcholine.
- Example: inadequate choline raises risk for fatty liver and can affect memory because the body cannot synthesize enough to cover needs in many people.

Water-soluble vitamins are used quickly and need regular intake. Fat-soluble vitamins and many minerals can be stored for longer periods, delaying deficiency but increases the risk of buildup with excessive intake.

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