

___ minerals and ___ trace minerals are essential for life	21; 14
2 most frequently consumed minerals	calcium and iron
3 minerals that are thought to effect physical performance	zinc, magnesium and chromium
3 types of mineral bioavailability	<ol style="list-style-type: none"> <li>1. mineral-mineral</li> <li>2. vitamin-mineral</li> <li>3. fiber-mineral</li> </ol>
80% of the body's iron is found where	hemoglobin and myoglobin
all vitamins are necessary in the diet except?	vitamin D
bone density more than 2.5 standard deviations below normal; mostly occurs in women	osteoporosis
cofactor for over 300 enzymes	magnesium
depletion of B complex vitamins will result in what 5 things	<ol style="list-style-type: none"> <li>1. decrease in VO<sub>2</sub>max</li> <li>2. decrease in onset of blood lactate accumulation</li> <li>3. decrease in VO<sub>2</sub> at CBLA</li> <li>4. decrease in peak power</li> <li>5. decrease in mean power</li> </ol>
excess levels of what amino acid causes a rare genetic disorder of premature arterial hardening	homocysteine

how many minerals are in the body	22
if you are deficient in this mineral, it causes anemia	iron
lactate dehydrogenase depends on what mineral for structure and function	zinc
magnesium is required for what 3 things	1. glycolytic pathway 2. synthesis and oxidation of FFA 3. production of ATP and ATPase
mineral that increases insulin effect	chromium
mineral that is required for structure and function of over 300 enzymes	zinc
mineral that transports oxygen in blood	iron
name the 5 antioxidants	1. vitamin E 2. vitamin C 3. beta-carotene 4. vitamin A 5. selenium
name the 6 B vitamins	thiamin, riboflavin, vitamin B6, niacin, pantoic acid and biotin
organic substances that contain carbon, needed in small amounts	vitamins

RDA for chromium	no RDA
RDA for iron	1-1.5 mg/day
RDA for magnesium	310-400 mg/day
RDA for zinc	8-11 mg/day
RDA of calcium for adults	1000 mg/day
reduced levels of hemoglobin; low iron	sports anemia
required for protein synthesis and muscle function	zinc
unpaired electron in outer valence shell	free radical
what 4 things make it so active individuals need more vitamins?	<ol style="list-style-type: none"> <li>1. altered distribution due to decreased transit time</li> <li>2. increased need due to biochemical adaptations</li> <li>3. increased mitochondrial enzymes that require co-enzymes</li> <li>4. increased need for tissue maintenance and repair</li> </ol>
what are your fat soluble vitamins	D, E, K, A