



just for kids

VITAMINS AND MINERALS A TO Z

Great nutrition can ensure your child's best potential growth and development. The ideal is to get plenty of vitamins and minerals from foods, but even if you serve three balanced meals a day, there's no guarantee that kids will eat everything in front of them. Supplements can help fill the gaps.

Keep all meds—including dietary supplements—out of kids' reach. Choose multis formulated for your child's age, and be sure to follow the recommended dose. Look for products with natural flavors and little or no added sugars and colorings. ●

SELECTED SOURCES "Multivitamins: Do Young Children Need Them?" by the Mayo Clinic staff, www.mayoclinic.com, 8/3/10 ● *Natural Baby and Childcare* by Lauren Feder, MD (\$17.95, Healthy Living Books, 2006) ● *Naturally Healthy Kids* by Jerry Rubin, MD; Dean Prina, MD; Nancy Lataitis, MD; and Jordan R. Klein, MD (\$24.95, Partners in Pediatrics, 2006) ● "Should More Kids Take Vitamins?" by Andrew Weil, MD, www.drweil.com

MINERAL	ACTION	FOOD SOURCES	SUPPLEMENT DOSAGE	NOTES
Important Minerals Because these naturally occurring elements remain in the body, pay attention to upper intake levels (UL).				
calcium	Essential for strong bones and teeth and healthy gums.	Dairy (and fortified substitutes), leafy greens, sardines.	1-3 yr 500 mg 4-8 800 mg 9-18 1,300 mg	Take with magnesium; adolescent girls should ensure that they get the RDA to help prevent osteoporosis later in life.
copper	Aids in red blood cell, bone, and collagen formation.	Almonds, avocados, legumes, broccoli, oats, seafood, soybeans.	1-3 yr 340 mcg (UL 1 mg) 4-8 440 mcg (UL 3 mg) 9-13 700 mcg (UL 5 mg) 14-18 890 mcg (UL 8 mg)	Consider hidden sources, which include copper pans and plumbing, to prevent levels that are too high.
iron	Essential to blood cell reproduction, growth, immune health, and energy production.	Eggs, fish, liver, meat, leafy vegetables, whole grains.	1-3 yr 7 mg (UL 40) 4-8 10 mg (UL 40) 9-13 8 mg (UL 40) 14-18 Males 11 mg (UL 45) Females 15 mg (UL 45)	Not recommended for anyone with a serious infection, as iron may enhance survival of infectious agents.
magnesium	Vital for enzyme activity and energy production.	Dairy, fish, leafy greens, meat, seafood.	1-3 yr 80 mg 4-8 130 mg 9-13 240 mg 14-18 410 mg	Fat-soluble vitamins and foods high in oxalic acid (chard, rhubarb, spinach) can hinder absorption.
manganese	Needed for fat and protein metabolism, energy production, healthy nerves, and immune system.	Avocados, nuts, seeds, sea vegetables, whole grains.	1-3 yr 1.2 mg (UL 2) 4-8 1.5 mg (UL 3) 9-13 1.9 mg (UL 6) 14-18 2.2 mg (UL 9)	Note upper intake levels.
selenium	Anticancer antioxidant; works best with vitamin E to protect heart and liver.	Brazil nuts, brewer's yeast, broccoli, brown rice, meat, seafood, whole grains.	1-3 yr 20 mcg 4-8 30 mcg 9-13 40 mcg 14-18 55 mcg	Selenium may be needed in supplement form because many soils in the U.S. are deficient in this mineral.
zinc	Important in immune health; deficiency results in loss of sense of smell and taste.	Egg yolks, legumes, soy, seafood, sea vegetables, whole grains.	1-3 yr 3 mg (UL 7) 4-8 5 mg (UL 12) 9-13 8 mg (UL 23) 14-18 Males 11 mg (UL 34) Females 9 mg (UL 34)	Note upper intake levels (too much can depress immune function); deficiencies have been linked to eating disorders and retarded growth.

VITAMIN	ACTION	FOOD SOURCES	SUPPLEMENT DOSAGE	NOTES
Fat-Soluble Vitamins These nutrients are stored in the body. Note recommended upper limits.				
a	Antioxidant needed for eye and skin health.	Animal foods, fish liver oil; manufactured in the body from brightly colored fruits and veggies.	1-3 yr 300 mcg (UL 600) 4-8 400 mcg (UL 900) 9-13 600 mcg (UL 1,700) 14-18 900 mcg (UL 2,800)	Parents should be aware of upper intake levels of vitamin A, especially since some children's cereals are fortified with this vitamin.
d	Controls calcium levels; critical for bone and tooth growth.	Cod liver oil, fatty fish, egg yolks, fortified dairy products.	1-18 yr 400 IU (UL 2,000)	Take with calcium. Although vitamin D is added to milk and other fortified products, many experts find children today need more.
e D-ALPHA TOCOPHEROL	Antioxidant that protects against cancer, cataracts, and heart disease.	Wheat germ oil, almonds and other nuts, cold-pressed vegetable oils.	1-3 yr 6 mg (UL 200) 4-8 7 mg (UL 300) 9-13 11 mg (UL 600) 14-18 15 mg (UL 800)	Avoid synthetic E (dl-alpha tocopherol).
k	Helps with blood clotting and bone formation and repair.	Cruciferous and leafy green vegetables, green tea.	1-3 yr 30 mcg 4-8 55 mcg 9-13 60 mcg 14-18 75 mcg	Antibiotics reduce vitamin K levels.

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Water-Soluble Vitamins Except for nontoxic B12, these vitamins are not stored in the body.				
b₁ THIAMINE	Enhances brain function, circulation, digestion, and energy production.	Brewer's yeast, dairy, egg yolks, soy milk, wheat germ, whole grains.	1-3 yr 0.5 mg 4-8 0.6 mg 9-13 0.9 mg 14-18 1.2 mg	Consumption of refined food increases need; antibiotics and other medications can deplete levels.
b₂ RIBOFLAVIN	Essential to antibody production, generation of energy, and tissue respiration; reduces effects of stress.	Almonds, brewer's yeast, meats, milk, soybeans.	1-3 yr 0.5 mg 4-8 0.6 mg 9-13 0.9 mg 14-18 1.3 mg	Easily destroyed by light.
b₃ NIACIN	Essential for healthy circulation, skin, and nerves; helps lower cholesterol; enhances memory.	Beef liver, brewer's yeast, broccoli, carrots, eggs, fish, nuts, wheat germ, whole wheat.	1-3 yr 6 mg 4-8 8 mg 9-13 12 mg 14-18 14 mg	Fatigue, irritability, and sleeplessness may signal niacin deficiency.
b₅ PANTOTHENIC ACID	Fights stress; enhances stamina.	Brewer's yeast, eggs, legumes, mushrooms, peas, whole wheat.	1-3 yr 2 mg 4-8 3 mg 9-13 4 mg 14-18 5 mg	Helps speed wound healing.
b₆	Promotes red blood cell formation; important in sodium/potassium balance.	Bananas, brown rice, carrots, chicken, eggs, fish, pork, potatoes, sunflower seeds, whole-grain cereals.	1-3 yr 0.5 mg 4-8 0.6 mg 9-13 1 mg 14-18 1.3 mg	Helpful for allergies, asthma, and PMS.
b₉ FOLIC ACID	Important in genetic, metabolic, and nervous system processes; needed for healthy red blood cells.	Asparagus, black-eyed peas, fortified grains, leafy greens, lentils, lima beans, soy flour, spinach.	1-3 yr 150 mcg 4-8 200 mcg 9-13 300 mcg 14-18 400 mcg	Food processing can destroy folic acid in foods, so manufacturers are beginning to add it back in; check labels.
b₁₂	Prevents anemia; needed for cell formation, digestion, absorption of food, and metabolism.	Brewer's yeast, clams, dairy, eggs, fish, sea vegetables, soy.	1-3 yr 0.9 mcg 4-8 1.2 mcg 9-13 1.8 mcg 14-18 2.4 mcg	Vegans often need B12 supplements.
c	Antioxidant needed for 300 metabolic functions in the body, including tissue growth and repair and anti-inflammatory action.	Berries, citrus fruits, leafy greens, cauliflower, winter squash, asparagus.	1-3 yr 15 mg 4-8 25 mg 9-13 45 mg 14-18 75 mg	Works synergistically with beta carotene, E, and selenium; children who live with someone who smokes are encouraged to meet the RDA for vitamin C.