

Deficiencies caused by Vitamin or Mineral Shortage

Vitamin	Deficiency Diseases
Folic acid (Folacin)-1946	Anemia, poor growth, birth defects (spina bifida).
Biotin-1936	Eczema, alopecia (baldness), depression, hyperesthesia, paraesthesia, lepharitis, gray or white hair.
Vitamin C (Ascorbic acid)	Scurvy, bleeding gums, anemia, poor appetite, poor growth, high risk for infection, high risk for cancer, loosened teeth, skin hemorrhages, swollen wrist and ankle joints, rib/cartilage fractures.
Choline	Fatty liver, kidney hemorrhage, Alzheimer's disease, tardive dyskinesia, Huntington's disease (treatment requires 20 G per day).
Inositol	Fat metabolism problems
Bioflavonoids -1936	capillary hemorrhage, reduced immune function.

FAT SOLUBLE

A (Retinol) -1913	Night blindness (Nyctalopia), conjunctivitis, xerophthalmia, keratomalacia (cornea! ulcers), infertility, birth defects, depressed immune system, bone disease, poor growth, acne, dermatitis, hyperkeratosis ("goose flesh"), ichthyosis, increased cancer risk.
D	Rickets, rachitic rosary, bow-legs, knock-knees, osteomalacia, osteoporosis, arthritis, pigeon chest, profuse sweating, restless leg syndrome, enlarged wrists, delayed or poor tooth development.
E (Tocopherol) -1922	Infertility, lowered immune system, age spots (liver spots, lipid peroxidation, free radicals), ischemic heart disease, fibrocystic breast disease, muscle weakness, myalgia, muscular dystrophy, anemia (hemolysis), increased risk of cancer, Alzheimer's syndrome.
K (Menaquinone) -1939	Extended clotting time, hemorrhage, osteoporosis (osteocalcin deficiency).

WATER SOLUBLE

B₁ (Thiamine) -1897,1911	Congestive heart failure (Beriberi), loss of memory (Wernicke-Korsakoff syndrome), mental confusion, depression, lethargy, muscular weakness, paralysis, emotional instability, loss of appetite.
B₂ (Riboflavin) -1879,1932	Soreness and burning of lips, mouth and tongue, erosions and swelling of tongue ("geographic" tongue), magenta tongue, photophobia, lacrimation (tearing), chelosis, angular stomatitis, seborrheic dermatitis of the nasal folds, capillary "injection" of cornea, anemia, neuropathy.
B₃ (Niacin) -1900	Pellagra (dermatitis, diarrhea, dementia and retardation), muscular weakness, anorexia, sore "beef tongue," darkened skin pigmentation, scaly dermatitis.
B₅ (Pantothenic acid) • 1940	Dermatitis, burning of feet, loss of appetite, quarrelsome, sullen, depressed, tachycardia, fainting, indigestion.
B₆ (Pyridoxine)	Depression, nausea, vomiting, seborrheic dermatitis, mucus membrane lesions and peripheral neuritis, ataxia (instability), hyperirritability, head tic (Tourette's syndrome), convulsions.
B₁₂ (Cobalamin, see Co) -1948	Spinal cord demyelination, progressive neuropathy, pernicious anemia.

Common Calcium Deficiency Diseases

Osteoporosis
Kyphosis
Dowager's hump
Lordosis
Legg-Perthe's disease
Compression fractures
Spontaneous fractures
Receding gums
Osteomalacia
Osteoarthritis
Degenerative arthritis
Ankylosing spondylitis
Hypertension
Insomnia
Kidney stones
Bone spurs (heel spurs)
Calcium deposits
Cramps and twitches
PMS
Sciatica
Low back pain
Bell's Palsy
Tinnitus
Wallach's vertigo
Trigeminal neuralgia
Spinal stenosis
Nutritional secondary hyperparathyroidism
Osteofibrosis
Tetany
Panic attacks
Elevated blood calcium
Prolonged clotting time

Magnesium Deficiency Diseases

Asthma
Anorexia
Menstrual migraines
Growth failure
EGG changes
Neuromuscular problems
Tetany (convulsions)
Depression
Muscular weakness
Muscle "ties"
Tremors
Vertigo
Calcification of arterial media
"Malignant calcification" of soft tissue

Common Chromium Deficiency Diseases

Low blood sugar
Prediabetes
Diabetes (adult onset, Type II)
Hyperinsulinemia
Hyperactivity
Learning disabilities
ADD/ADHD
Hyperirritability
Depression
Manic depression
Bi-polar disease
Anxiety attacks
Panic attacks
Dr. Jekyll/Mr. Hyde rages - "Bad seeds"
Impaired growth
Peripheral neuropathy
Negative nitrogen balance—protein loss
Elevated blood triglycerides
Elevated blood cholesterol
Coronary blood vessel disease
Aortic cholesterol plaque
Infertility
Decreased sperm count
Shortened life span

Copper Deficiency Symptoms and Diseases

White, grey, and silver hair
Dry brittle hair ("steely wool" in sheep)
Ptosis (sagging tissue—eye lids, "crow's feet,"
skin, breasts, stomach, etc.)
Hernias (congenital and acquired)
Varicose veins (including hemorrhoids)
Spider veins
Aneurysms (cerebral artery, coronary artery,
and large artery blowouts)
Kawasaki disease (congenital aneurysms with
streptococcal infection)
Anemia (especially common in high milk and
vegan diets)
Hypo and Hyperthyroid dysfunction
Arthritis (especially where bone growth plates
are involved)
Ruptured vertebral discs
Liver cirrhosis
Violent behavior, blind rage, explosive
outbursts, and "criminal behavior"
Learning disabilities
Cerebral palsy and hypoplasia of the
cerebellum (congenital ataxia in
sheep)
High blood cholesterol
Iron storage disease (hemosiderosis)
Reduced carbohydrate tolerance
Neutropenia (low neutrophil count)

Symptoms of Nickel Deficiency

Poor growth
Anemia
Depressed oxidative ability of the liver
Increased newborn mortality
Rough/dry hair
Dermatitis
Delayed puberty
Poor zinc absorption

Deficiency Diseases of Manganese

Congenital ataxia
Deafness (malformation of otolithes) Asthma
Chondromalacia
Chondrodystrophy "Slipped Tendon"
Defects of chondroitin sulfate metabolism (poor cartilage formation)
TMJ
Repetitive motion syndrome
Carpal tunnel syndrome
Convulsions
Infertility (failure to ovulate, testicular atrophy)
Still births/spontaneous abortions (miscarriages)
Loss of libido in males and females
Retarded growth rate
Shortened long bones

Congenital Birth Defects Associated with Zinc Deficiency

Down's Syndrome
Cleft lip
Cleft palate
Brain defects (dorsal herniation, hydroencephalocoe)
Micro or anophthalmia (small or absent eyes)
Agnathia (small lower jaw)
Spinabifida
Clubbed limbs
Syndactyly (webbed toes and fingers)
Polydactyly (extra limbs and digits)
Atresia (failure to develop limbs, digits, organs, anal opening, etc.) ;
Hernias (hiatal, diaphragmatic, umbilical, inguinal, etc.)
Heart defects
Lung defects
Urogenital defects (horseshoe kidney, small kidney, intersex malformations of the male and female genitalia)

Selenium Deficiency Diseases

Direct Results

Anemia
"Age spots" & "Liver spots"
Fatigue
Muscular weakness
Myalgia (muscle pain and soreness)
Fibromyalgia
Scoliosis
Muscular dystrophy (MD, White Muscle Disease, Stiff Lamb Disease)
Cardiomyopathy (Keshan Disease, "Mulberry heart" Disease)
Heart palpitations
Atrial fibrillation
Liver cirrhosis
Pancreatitis
Pancreatic atrophy
Infertility
Low birth weight
High infant mortality
SIDS (Sudden Infant Death Syndrome)
Cystic Fibrosis (congenital)

Indirect Results

HIV (increased rate of conversion to AIDS and transmission to fetus)
ALS (Lou Gehrig's Disease)
MS (Multiple sclerosis)
Alzheimer's Disease
Cancer (increases cancer risk significantly)

Clinical Diseases Associated with Vanadium

Slow growth
Increased infant mortality
Infertility
Elevated cholesterol
Elevated triglycerides
Hypoglycemia
Hyperinsulinemia
Narcolepsy
Prediabetes
Diabetes
ADD.ADHD
Depression
Manic depression, Bi-polar disease
Tourette's syndrome
Cardiovascular disease
Obesity

Symptoms and Diseases of Zinc Deficiency

Pica/Cribbing (geophagia, wool eating, hair eating, etc.)

Loss of sense of smell

Loss of sense of taste

Infertility

Failure of wounds and ulcers to heal

Immune status failure

Poor growth (short stature)

High infant mortality

Hypogonadism (small poorly functioning ovaries and testes)

Perpetual prepubic state

Anemia

Alopecia (hair loss)

Acrodermatitis enteropathica (parakeratosis)

"Frizzy" hair

Diarrhea

Depression

Paranoia

Oral and perioral dermatitis

Weight loss (anorexia nervosa)

Benign prostatic hypertrophy (noncancerous prostatic enlargement)

Severe body odor ("smelly tennis shoe" syndrome)

Anorexia and Bulimia

All information taken from the book "Dead Doctors Don't lie"

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Two web sites with a lot of information are:

www.longevinst.org and www.youngevity.com/info_center.htm