

Nutrient Deficiency/Toxicity Symptoms

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tooth decay

BIOTIN DEFICIENCY

alopecia
anemia
anorexia and nausea
depression
fatigue
hypercholesterolemia
hyperglycemia (diabetes)
insomnia
muscle pain
muscle weakness
dry, grayish skin
pale smooth tongue

CALCIUM DEFICIENCY

arthritis
bone spurs
brittle fingernails
cognitive impairment
delusions
depression
eczema
hyperactivity
hypertension
insomnia
irritability
limb numbness
muscle cramps
nervousness
neuromuscular excitability
osteomalacia
osteoporosis
palpitations
paresthesia
periodontal disease
pica (eating lead paint)
rickets
retarded growth
tetany

CALCIUM TOXICITY

anorexia
aphasia
ataxia

depression
irritability
memory loss
muscle weakness
psychosis
arrhythmias
fat intolerance
gastric ulcers
growth retardation
hypertension
kidney disease
liver impairment

CHROMIUM DEFICIENCY

anxiety
fatigue
hypoglycemia
diabetes
retarded growth/short life span
hypercholesterolemia

CHROMIUM TOXICITY

dermatitis
GI ulcers
kidney dysfunction
liver dysfunction

COPPER DEFICIENCY

alopecia
anemia (microcytic)
aneurysm/cerebral hemorrhage
depression
dermatosis

diarrhea
fatigue
fragile bones/arthritis
hypercholesterolemia
respiratory disease
weakness/liver cirrhosis
Swachman's syndrome

COPPER TOXICITY

depression
irritability
joint pain
muscle pain
nervousness

FOLIC ACID DEFICIENCY

anemia (megaloblastic)
anorexia
apathy
birth defects (spina bifida,
hydroencephalocoele)
GI upsets/diarrhea
dyspepsia
fatigue
geographic tongue
growth retardation
headache
insomnia
memory loss
paranoia
vitiligo
weakness

ESSENTIAL FATTY ACID DEFICIENCY

acne
alopecia
arthritis
atrophy of endocrine glands
diarrhea
dry brittle hair
eczema
endocrine dysfunction

fatty degeneration of the
liver
gall stones
growth retardation
immunologic dysfunction
impaired wound healing
infertility
kidney dysfunction
positive sweat test
(cystic fibrosis,
anorexia nervosa, etc.)
xerosis

INOSITOL DEFICIENCY

alopecia
constipation
eczema
hypercholesterolemia

IODINE DEFICIENCY

goiter
fatigue
hypothyroidism
low basal body temperature
weight gain

IRON DEFICIENCY

anemia (microcytic)
angular stomatitis
anorexia
brittle nails
confusion
constipation
depression
dizziness
dysphagia
fatigue
fragile bones
GI upset
growth retardation
headaches ice eating (pica)
irritability
palpitations

IRON TOXICITY

anorexia
dizziness
fatigue
headaches

MAGNESIUM DEFICIENCY

anxiety/confusion/irritability/
restlessness
birth defects
depression
hyperactivity/sonophobia
hypotension
hypothermia
insomnia
muscle pain/muscle tremors/
muscle weakness
nervousness/neuromuscular
irritability
SIDS
seizures
tachycardia/palpitations

MANGANESE DEFICIENCY

ataxia
atherosclerosis
dizziness
hearing loss
hypercholesterolemia
hypoglycemia
muscle therapy
pancreatic atrophy
tinnitus

MANGANESE TOXICITY

anorexia
impaired judgment
Parkinsonism
memory loss

NIACIN DEFICIENCY

anorexia & nausea

canker sores
confusion
depression
dermatitis
 localized scaly,
 dark pigmented
 dermatitis
diarrhea
crying jags, emotional
fatigue
halitosis (bad breath)
headache
dyspepsia
insomnia
irritability
limb pains
memory loss
muscular weakness
skin eruptions/eczema

NIACIN TOXICITY

niacin "flush"
liver impairment

**PANTOTHENIC ACID
(B-5) DEFICIENCY**

abdominal pain
alopecia
burning feet
coordination impairment
depression
eczema
faintness
fatigue
hypotension
infections
insomnia
muscle spasms
nausea & vomiting
nervousness
tachycardia
weakness

**PARA AMINOBENZOIC
ACID (PABA) DEFICIENCY**

constipation
depression/headache/
irritability
GI disorders
fatigue
premature graying hair

PHOSPHORUS DEFICIENCY

anorexia
anxiety
apprehension
bone pain
dyspnea
fatigue
irritability
numbness
paresthesias
pica
tremulousness
weakness
weight loss

PHOPHORUS TOXICITY

calcium malabsorption
loose teeth
osteoporosis/arthritis
secondary
hyperparathyroidism
tooth loss
weight loss

POTASSIUM DEFICIENCY

acne
arrhythmia
cognitive impairment
constipation
depression
ECG changes
edema
fatigue
glucose intolerance

growth retardation
hypercholesterolemia
hyperreflexia
hypotension
insomnia
muscle weakness
nervousness
palpitations
polydipsia
proteinuria
respiratory distress
"salt" retention
tachycardia (rapid heart rate)
xerosis

POTASSIUM TOXICITY

cardiac arrest
cognitive impairment
dysarthria
dysphasia
weakness

**PYRIDOXINE (B-6)
DEFICIENCY**

acne
alopecia
anemia
anorexia & nausea
arthritis
cheilosis
conjunctivitis
depression
dizziness
facial oiliness
geographic tongue
impaired wound healing
irritability
nervousness
neurological symptoms
seizures
stomatitis
stunted growth
weakness

PYRIDOXINE TOXICITY

“electric shock” sensations
paresthesia

RIBOFLAVIN (B-2) DEFICIENCY

alopecia
blurred vision
cataracts
cheilosis
depression
dermatitis (drying, greasy,
scaling)
dizziness
eyes (itching, burning, red)
geographic tongue
growth retardation
pancreatic atrophy & fibrosis
photophobia

SELENIUM DEFICIENCY

cataracts
cancer risk
cystic fibrosis
growth retardation
“heart attack”
impaired immunity
Keshan Disease (myocardial
fibrosis)
muscular dystrophy
pancreatic atrophy & fibrosis
(cystic fibrosis)
liver cirrhosis
sterility in males

SELENIUM TOXICITY

alopecia
arthritis
brittle nails
garlic breath
metallic taste
kidney dysfunction
liver dysfunction

SODIUM DEFICIENCY

abdominal cramps
anorexia
ataxia
confusion
crying jags
depression
dermatosis
dizziness
fatigue
flatulence
hallucinations
headaches
hypotension
illusions
infections
lethargy
memory loss
muscular weakness
nausea & vomiting
seizures
taste loss
weight loss

SODIUM TOXICITY

anorexia
cognitive dysfunction
congestive heart failure
edema (especially low protein
diets)
hyperactivity
hypertension
hypertonia
irritability
polydipsia
polyuria
renal failure
seizures
tremors
weight gain

VITAMIN B-1 DEFICIENCY

anorexia
brain atrophy (senility)
confusion
constipation
coordination impairment
depression
dyspnea (labored breathing)
GI upset
edema
fatigue
irritability
memory loss
muscle atrophy
nervousness
numbness hands and feet
pain hypersensitivity
palpitations
sonophobia
weakness

VITAMIN B-12 DEFICIENCY

achlorhydria
anemia
birth defects
constipation
depression
dizziness
dyspnea (labored breathing)
fatigue
GI upset
geographic tongue
headache
irritability
moodiness
numbness
palpitations
psychosis
spinal cord degeneration

VITAMIN A DEFICIENCY

acne
anosmia (loss of smell)

birth defects
dry hair/alopecia
fatigue
growth retardation
hyperkeratosis
infections
infertility
insomnia
night blindness
weight loss
xerophthalmia
xerosis

VITAMIN A TOXICITY

abdominal pain
alopecia
amenorrhea
cheilosis
GI upset
hepatomegaly
hydrocephalus
irritability
joint pain
nausea & vomiting
pruritis
splenomegaly
weight loss

VITAMIN C DEFICIENCY

bleeding gums/loose teeth
depression/malaise/
tiredness
easy bruising
impaired wound healing
irritability
joint pain

VITAMIN D DEFICIENCY

burning in mouth
burning in throat
diarrhea
insomnia
myopia

nervousness
osteomalacia
rickets

VITAMIN D TOXICITY

angiotoxicity (calcification)
arteriosclerosis
(angiotoxicity)
liver dysfunction
"malignant" calcification

VITAMIN E DEFICIENCY

alopecia
areflexia
dermatitis
gait disturbances
infertility
malabsorption
muscular dystrophy
ophthalmoplegia
proprioception problems
RBC fragility
vibratory sense dysfunction

VITAMIN K DEFICIENCY

poor clotting time
osteoporosis

VANADIUM DEFICIENCY

diabetes
hypoglycemia

ZINC DEFICIENCY

acne
alopecia
anorexia
apathy
birth defects
brittle nails
depression
eczema
fatigue
growth retardation

hypercholesterolemia
hypogeusia (loss of
sensation of taste)
impaired wound healing
impotence
infertility
irritability
lethargy
malabsorption
memory loss
paranoia
sexual immaturity
sterility
white spots on nails