

# Nutricheck



## Vitamin/Mineral Symptom Guide

### The Fat Soluble Vitamins

Please Note: This *Fat Soluble Vitamins Symptom Check* is not intended to be a recommendation for self-medication, or to replace medical services.

# **THE FAT SOLUBLE VITAMINS**

## *USE ONLY UNDER THE GUIDANCE OF A HEALTH PRACTITIONER*

### **VITAMIN A**

**The following symptoms and signs have been associated with a deficiency of Retinol (Vitamin A):**

Impaired night-vision, aching and tired and burning eyes, inflamed eyelids, painful eyes, xerophthalmia, headaches, sinus congestion, recurrent URTI and flu-like illness, dry and flaky skin, lumpy skin(toad skin), acne-type skin lesions, dull and lustreless hair, ridged nails, peeling nails, impaired libido, breast soreness. Mental changes: Insomnia, fatigue, depression, neuralgia in limbs.

**Supplemental dosage:**

Require 4000-5000 IU/day. Supplements of 10,000 IU daily in fish liver oil are usually well-tolerated by adults.

**Rich Natural Sources:**

Animal forms: Cod-liver oil, liver, kidney, egg yolk, butter milk, cheese. Plant forms (beta-carotene): Leafy green and red vegetables, carrots, sweet-potato, squash and yellow fruits.

**Therapeutic dosage:**

25,000 to 100,000 IU /day : NOTE -this is a potentially toxic dose range. Liver toxicity indices must be closely monitored.

**Signs of Toxicity:**

Cerebral symptoms: Irritability, insomnia, fatigue, depression, headache, intra-cranial pressure feeling. Gastro-intestinal symptoms: Anorexia, nausea, abdominal pains, tender liver, enlarged liver, jaundice, weight-loss, oedema.

Skin symptoms: Dry skin, cracked and flaky skin, cracked lips, hair loss, yellowed skin.

Bone symptoms: Irregular bone thickening, tender and aching bones, osteopenia, spontaneous fractures.

Miscellaneous: Muscle and joint aches and pains, sore eyes, eye haemorrhage, night sweats, irregular periods.

NOTE: Excessive Vitamin A is a potent teratogen (causes foetal damage).

### **VITAMIN D**

**The following symptoms and signs have been associated with a deficiency of Vitamin D:**

Burning mouth and throat, scalp sweating (esp. at night), insomnia myopia, aching and sore eyes, muscle pain, muscle cramps, bone pain, deformed bone growth, easy fractures, nervousness anxiety, restlessness, hypothyroidism(underactive thyroid).

**Supplemental dosage:**

Require approximately 400 I.U. /day. In winter: 1 tspn of cod liver oil is beneficial.

NOTE: Vitamin D is highly toxic in high dosage.

**Rich Natural Sources:**

Cod liver oil, dairy food, skin synthesis with sun exposure.

**Therapeutic dosage:**

1500 to 2500 IU/day from fish liver oil.

NOTE: Calcium and phosphorus must also be supplied AND patient monitored for toxicity symptoms.

**Signs of Toxicity:**

Headache, frequent urination, kidney damage, anorexia, nausea, vomiting, diarrhoea, muscular weakness, muscle pain, calcification of soft tissues.

## VITAMIN E

**The following signs and symptoms have been associated with a deficiency of Vitamin E:**

Impaired circulation, cold and pale peripheries, disturbed nail growth, hyperkeratosis of heels, muscle soreness with exercise, tender calf muscles, muscle weakness, muscle wasting, fatigue, restless sleep, insomnia, dizziness, impaired balance, gait disturbance (ataxia), premenstrual syndrome (PMT), breast soreness, menopause symptoms, loss of libido, impotence. Increased tissue damage: premature ageing, cataracts, retinal degeneration, haemolytic anaemia, thrombocytosis. Increased risk of arteriosclerosis, heart disease and stroke, liver damage (cirrhosis), and senile dementia.

**Supplemental dosage:**

RDA is nominally 15 IU/day. For optimum tissue protection, at least 200 - 800 IU/day is recommended for adults.

**Rich Natural Sources:**

Wheat germ, vegetable oils (only if cold-pressed), green-leafy vegetables, whole-grain cereals, nuts and seeds, egg-yolk, meats (especially organ meats such as liver). NOTE: the requirement for Vitamin E increases with oil intake.

**Therapeutic dosage:**

500 to 2000 IU for adults.

**Symptoms of Toxicity:**

Dizziness, headache, muscle weakness, raised blood pressure, immune system suppression at very high intake.

## VITAMIN K

**The following signs and symptoms have been associated with a deficiency of Vitamin K:**

Increased bleeding tendency and easy bruising. Recent research suggests impaired blood sugar control may occur with inadequate Vitamin K.

**Supplemental dosage:**

Theoretically unnecessary as Vitamin K is produced in intestine by the friendly flora. May be required if bowel flora is heavily disturbed (dysbiosis) or if alcohol intake is high.

**Rich Natural Sources:**

Normal intestinal bacterial flora, leafy-green vegetables, tomatoes, pork liver, lean meat, peas, carrots, soybeans, potatoes.

**Therapeutic dosage:**

200 to 1600 micrograms.

**Symptoms of Toxicity:**

May cause haemolytic anaemia and jaundice.

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