

Chloride (Cl)

UL (Adults): 3,600 mg*

- Major extracellular electrolyte (w/ _____).
- Maintain _____ balance.
- Buffer in _____.
- Part of HCl in stomach acid.

PRACTICE

a) Phosphate.

b) Sodium.

c) Calcium.

d) Phosphorous.

PRACTICE

- I. Functions as a buffer in blood.
- II. Major intracellular electrolyte.
- III. Deficiency is rare but can be caused by dehydration.

- a) I & II. b) I & III. c) II & III. d) I, II, & III.

TOPIC: MAJOR MINERALS: CHLORIDE, MAGNESIUM, & SULFUR

Magnesium (Mg)

◆ **Main bodily functions:** cofactor for hundreds of _____.

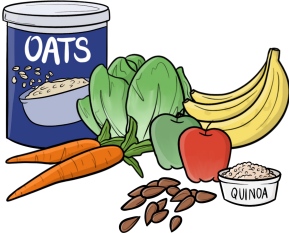

- Aids in metabolism of macronutrients.
- DNA, RNA, & _____ synthesis.
- As _____, nerve & _____ function; heart health.

RDA (Males 19-30): 400 mg

RDA (Females 19-30): 310 mg

UL (Adults): 350 mg

*from _____.

Food Sources	Deficiency	Excess/Toxicity
Vegetables, whole grains, nuts (esp. almonds), fruits. 	Hypo _____: kidneys compensate. ◆ <i>Acute</i> : cramps, seizures, nausea, confusion. ◆ <i>Chronic</i> : osteoporosis, diabetes, heart disease, & _____.	Hypermagnesemia: only from _____ – can cause diarrhea, nausea, muscle weakness.
◆  Main dietary concern: most Americans don't consume enough magnesium.		

EXAMPLE

Certain diuretics may increase the risk of hypomagnesemia. Why do you think an individual taking a diuretic may be at an increased risk for hypomagnesemia?

PRACTICE

A lack of magnesium in the diet would NOT potentially increase the risk for which of the following diseases?

- a) Osteoporosis. b) Hypertension. c) Diabetes. d) Celiac disease.

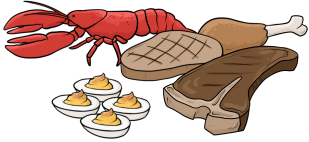

TOPIC: MAJOR MINERALS: CHLORIDE, MAGNESIUM, & SULFUR

Sulfur (S)

___ DRI or UL

◆ **Main bodily functions:** component of other molecules, esp. some _____ acids.

- Stabilizes the structure of many _____.
- Forms some ____ vitamins.
- Sulfites (SO_3): common _____.

Food Sources	Deficiency	Excess/Toxicity
Protein (amino acids: methionine, cysteine, homocysteine, & taurine). 	Not a concern.	Not a concern.
Main dietary concern: _____. 		

PRACTICE

Sulfur is important component of which vitamins?

- a) Vitamins A and K.
- b) Water soluble vitamins.
- c) Fat soluble vitamins.
- d) B vitamins.

PRACTICE

Which of the following would be a good source of sulfur?

- a) High protein foods.
- b) High carbohydrate foods.
- c) High fat foods.
- d) High fiber foods.