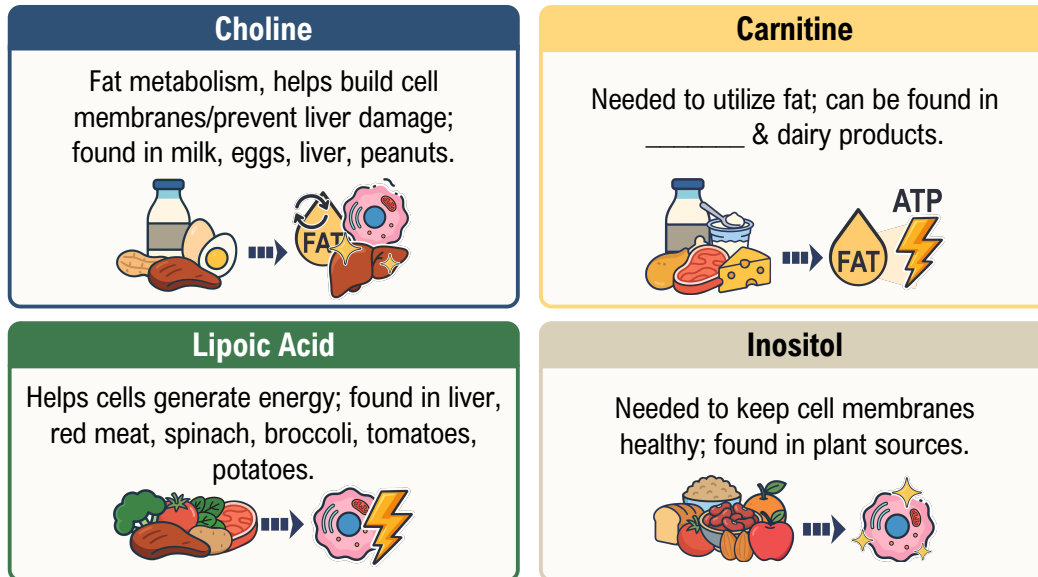


TOPIC: OTHER VITAMIN-LIKE NUTRIENTS

Other Vitamin-Like Nutrients

- ◆ Recall: **Vitamins:** *organic, noncaloric, essential* micronutrients important for overall health.
- ◆ Some nutrients are *conditionally* essential making them “vitamin-_____” nutrients.
 - These “vitamin-like” compounds include:



PRACTICE

True or False: if false, select the answer that best corrects the statement.

Choline, carnitine, lipoic acid & inositol are not considered true vitamins because they can provide some energy & therefore are *caloric*.

- a) True.
- b) False; they are not considered vitamins because the body needs them in larger quantities.
- c) False; they are not considered vitamins because they are not organic.
- d) False; they are not considered vitamins because they are considered conditionally essential.

PRACTICE

Which of these substances cannot be synthesized by the human body & must be obtained from the diet?

- a) Vitamin D.
- b) Carnitine, lipoic acid, and inositol.
- c) Vitamin E.
- d) All of the above can be synthesized by the human body

TOPIC: VITAMINS - APPENDIX

Recommended Daily Intake for Vitamins

Vitamin	RDA/AI	Upper Limit
Vitamin A	900µg RAE (men), 700µg RAE (women)	3,000µg RAE
Vitamin D	15µg	100µg
Vitamin E	15mg	1,000mg
Vitamin K	120µg (men), 90c (women)	Not established
Thiamin (B₁)	1.2mg (men), 1.1mg (women)	Not established
Riboflavin (B₂)	1.3mg (men), 1.1mg (women)	Not established
Niacin (B₃)	16mg NE (men), 14mg NE (women)	35mg
Pantothenic Acid (B₅)	5mg	Not established
Pyridoxine (B₆)	1.3mg	100mg
Biotin (B₇)	30µg	Not established
Folate (B₉)	400µg DFE	1,000µg
Cobalamin (B₁₂)	2.4µg	Not established
Vitamin C	90mg (men), 75mg (women)	2,000mg

Notes
RAE (Retinol Activity Equivalents): a measure of vitamin A activity from retinol & provitamin A.
NE (Niacin Equivalents): a measure accounting for niacin from food & tryptophan conversion.
DFE (Dietary Folate Equivalents): a measure of folate intake.
When upper limit is “Not established”, there is insufficient data to determine an exact value. It does not imply that an excessive intake poses no risk.
RDAs & AIs vary based on age, sex, & life stage (e.g. pregnancy, lactation, etc.)