



RD Resources for Consumers:

Choline in Vegetarian Diets

Choline is a nutrient commonly grouped with B-vitamins. Choline has a variety of functions: It is part of cell membranes, helps nerves function properly, plays a role in liver function and also works with folic acid during pregnancy for the development of a baby's brain and nervous system.

Meeting Your Daily Choline Requirement

Based on the most current studies, the recommended Adequate Intake listed in the chart to the right meets the needs of most men and women. Women who want to become pregnant should include choline-rich foods to meet the daily choline requirement in order to reduce the risk of neural tube defects.

Special Considerations

Vegan women who may become pregnant or vegans with special dietary concerns should consult with a registered dietitian. An RD can provide individual recommendations for a healthy eating plan to meet your needs.

Food Sources of Choline

Eating a well-balanced vegetarian diet with plenty of whole foods should ensure you are getting enough choline. Although eggs and meat tend to be the highest sources of choline, it is found in a wide range of plant foods in smaller amounts.

Recommended Choline Intake *

Age	Female (mg)	Male (mg)
0-6 months	125	
7-12 months	150	
1-3 years	200	
4-8 years	250	
9-13 years	375	
14-18 years	400	550
≥ 19 yrs	425	550
Pregnant	450	N/A
Breastfeeding	550	N/A

*Based on DRI for Choline, Adequate Intake (AI) 1998.



Sample of a Choline-rich Vegetarian Diet

Breakfast

- 1 cup of instant oats
- 1/4 cup of almonds
- 1 cup of soymilk
- 1 medium orange

Snack

- 1/4 cup of pistachios
- 1 cup soymilk

Lunch

- 1 cup of quinoa with 1/2 cup of edamame in a tossed salad
- 1 cup of grilled asparagus

Dinner

- 1 cup of soymilk
- 1 cup of refried pinto beans
- 1/2 avocado, sliced
- 1/4 cup of salsa
- 2 yellow corn tortillas

Snack

- 5 pieces of Medjool dates

A registered dietitian can help you develop a healthy vegetarian eating plan that meets your needs. **To find an RD in your area, visit**

www.eatright.org

Resources

<http://lpi.oregonstate.edu/infocenter/othernuts/choline/>

Dietary Reference Intakes for Thiamin, Riboflavin, Niacin, Vitamin B6, Folate, Vitamin B12, Pantothenic Acid, Biotin, and Choline. A Report of the Standing Committee on the Scientific Evaluation of Dietary Reference Intakes and its Panel on Folate, Other B Vitamins, and Choline and Subcommittee on Upper Reference Levels of Nutrients. Food and Nutrition Board, Institute of Medicine. 1998:390-422.

Choline Content of Selected Foods

	Serving Size	Choline (mg)
Legumes & Soy Products		
Soy milk	1 C	57
Tofu	1/2 C	35
Edamame	1/2 C, cooked	44
Peanut butter	2 T	20
Pinto beans	1/2 C, boiled	30
Green peas	1/2 C, boiled	22
Grains		
Oats	Instant 1 C, cooked	17
Bread (whole wheat)	1 slice	7
Quinoa	1 C, cooked	42
Nuts		
Almonds	1/4 C, dry roasted	18
Pistachios	1/4 C, dry roasted	22
Walnuts	1/4 C, halves	10
Vegetables		
Artichoke	1/2 med, cooked	21
Asparagus	1/2 C, boiled	23
Brussel sprouts	1/2 C, boiled	32
Cauliflower	1/2 C, boiled	24
Salsa	1/4 C	8
Broccoli (chopped)	1/2 C, boiled	31
Potatoes	1 C, boiled w/ skin	22
Carrots	1 med, raw	5
Fruit		
Banana	medium, raw	12
Orange	large, raw	15
Dates (Medjool)	5 pcs	12
Avocado	1/4 C, cubes	5
Apple	large, raw	8
Animal Products		
Yogurt	1/2 C	19
Swiss cheese	1/2 C	10
Milk (2% fat)	1 C	40
Egg	1 large, hard-boiled	113