

# CHOLINE in a Healthy Vegetarian Diet

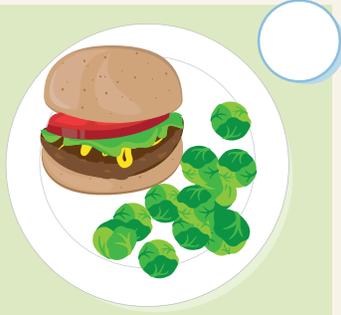
## VEGAN?

If you're following a vegan diet, consider smart substitutions like quinoa, avocado, chickpeas, sunflower seeds, almond or soy cheese, tofu, sour cream and coconut oil.

The U.S. Healthy Vegetarian Eating Pattern is one of three eating patterns included in the 2015–2020 Dietary Guidelines for Americans, and it's rich in legumes, soy products, nuts and seeds, and whole grains.<sup>1</sup> For people on a vegetarian diet, it can be especially important to make sure food choices are helping meet daily nutritional needs. Choline is an essential nutrient for health at all life stages<sup>2</sup> and it is most abundant in animal-based foods. Nine out of 10 Americans don't meet the daily recommended choline goal of 550 mg,<sup>3</sup> and this can be even more challenging for vegetarians. To ensure choline needs are met, vegetarian eaters should aim to make choline a priority, and choline-fortified foods and supplements may be critical.

## VEGETARIAN DIET\*

## CHOLINE-FOCUSED VEGETARIAN DIET\*

	VEGETARIAN DIET*	CHOLINE-FOCUSED VEGETARIAN DIET*
<b>BREAKFAST</b>	<p><b>Fruit &amp; Nut Oatmeal</b>                      1 cup cooked oats                      1/3 cup raspberries                      1 tablespoon each: honey + flaxseeds                      2 tablespoons low-fat granola                      1/2 oz. chopped walnuts                      1 cup soy milk</p>	<p><b>Fruit Smoothie + Trail Mix Bar</b>                      1/2 cup nonfat Greek yogurt                      1/2 cup soy milk                      1 cup spinach                      1/2 cup each: frozen peaches + frozen raspberries  <b>1 tablespoon wheat germ</b>                      1 trail mix bar</p> 
<b>SNACK</b>	<p><b>Apple + Cheddar Cheese Stick</b>                      1 1/2 oz. low-fat cheddar cheese                      1 small apple</p>	<p><b>Apple + Roasted Almonds</b>                      1/2 oz. roasted, unsalted almonds (about 11 almonds)                      1 small apple</p> 
<b>LUNCH</b>	<p><b>Latin-loaded Sweet Potato</b>                      1 medium baked sweet potato with skin                      1/2 cup cooked brown rice                      1/4 cup low-sodium black beans                      1 tablespoon reduced-fat sour cream                      2 tablespoons each: guacamole + cotija cheese                      Season with cumin + chili powder + cilantro</p>	<p><b>Caprese Pasta</b>                      1 1/2 cups cooked whole grain pasta                      1/3 cup cherry tomatoes                      2 oz. part skim mozzarella cheese                      2 tablespoons each: chopped basil + olive oil                      1 teaspoon balsamic vinegar</p> 
<b>SNACK</b>	<p><b>Banana + Granola Bar</b>                      1 large banana                      1 granola bar</p>	<p><b>Protein Power-up</b>  <b>1 hard-boiled egg</b>                      1 1/2 oz. low-fat cheddar cheese + 5 whole grain crackers</p> 
<b>DINNER</b>	<p><b>Asian-style Tofu Bowl</b>                      1/2 cup firm tofu                      1 cup cooked quinoa                      1/2 cup each: boiled bok choy + broccoli                      1/3 cup cabbage                      1/2 oz. roasted, unsalted cashews                      1 cup soy milk                      1 tablespoon each: rice vinegar + sesame oil + olive oil                      1 teaspoon low-sodium soy sauce</p>	<p><b>Veggie Burger + Roasted Brussels Sprouts</b>                      2 1/2 oz. veggie burger                      1 whole wheat hamburger bun                      2 leaves romaine lettuce                      2 slices tomato                      1 thick slice red onion                      2 teaspoons yellow mustard  <b>1 cup roasted Brussels sprouts</b>, with olive oil + garlic                      1 cup soy milk</p> 
	<b>Total Calories: 2,094</b>	<b>Total Calories: 2,110</b>
	<b>Total Choline: 331 mg</b>	<b>Total Choline: 431 mg</b> <span style="float: right;">Items in bold are higher in choline.</span>

**It can be difficult to meet daily choline needs, even when following a choline-focused diet. Consider a supplement to meet the recommended 550 mg of choline each day.**

1. U.S. Department of Health and Human Services and U.S. Department of Agriculture. 2015–2020 Dietary Guidelines for Americans. 8th Edition. December 2015.

Internet: <http://health.gov/dietaryguidelines/2015/guidelines/>.

2. Linus Pauling Institute Micronutrient Information Center: Choline. <http://lpi.oregonstate.edu/mic/other-nutrients/choline>. Last Updated: January 2015. Accessed June 21, 2016.

3. Wallace TA and Fulgoni VL 3rd. Assessment of Total Choline Intakes in the United States, Journal of the American College of Nutrition, DOI: 10.1080/07315724.2015.1080127. Published online February 17, 2016.

\*Based on a 2,000 calorie diet; dietary patterns based on recommendations from the 2015-2020 Dietary Guidelines for Americans, Healthy Vegetarian sample eating pattern. <https://health.gov/dietaryguidelines/2015/guidelines/appendix-5/>.



For more tips and tools, visit [VitaCholine.com](http://VitaCholine.com).