Tempeh

Ingredient of the Month

Presented by ACFEF Chef & Child Foundation and Clemson University
**Tempeh** is a soy-based protein food and is considered the “meatiest” of soy proteins. It is made from fermenting cooked soybeans, a process that requires at least a two-day fermentation period. Tempeh is originally from Indonesia, where its uses date back to 1815. Much like tofu, tempeh is firmer with a chewy texture and mild nutty flavor. Because of its firm texture and its ability to hold its shape when cooked, as well as absorb flavors, it is one of the more versatile meat substitutes. It is made from the whole soybean and therefore has a greater content of protein, fiber and vitamins than most soy products. It’s naturally low-fat, high-protein composition also lends to its popularity in vegetarian diets. Tempeh is available year-round and new types, made from barley and oats instead of soy beans, have recently been developed.

**Healthy ingredient contribution**

**FOLATE:** Tempeh is rich in folate. Folate is an essential nutrient for DNA synthesis and other metabolic functions. It is especially important during pregnancy. Minerals: Tempeh is a great source of a wide variety of minerals. These include calcium, iron, magnesium, phosphorus, potassium, sodium, zinc, copper and magnesium.

**NIACIN:** Tempeh provides the body with niacin. Niacin is important for metabolic energy transfer reactions of glucose, fat and alcohol. It also helps protect against neurological degeneration.

**PROTEIN:** Tempeh is an excellent source of protein. One cup of tempeh provides 30.8 grams, which is 62% of the daily value needed. Proteins are broken down into amino acids in the body and used to carry out cellular function in the body.

**RIBOFLAVIN:** Tempeh is a good source of riboflavin. Riboflavin acts as an enzyme in many reactions in the body—specifically in metabolic reactions.

**VITAMIN B6:** Tempeh contains vitamin B6. Vitamin B6 is important in cognitive functions, immune function and steroid hormone activity. It is stored extensively in muscle tissue.

**Varieties and uses**

Tempeh can be eaten raw, however, it is recommended to cook it before consuming to ensure digestibility and appeal. It can be cooked any way—grilled, sautéed, steamed and more. It takes on the flavors of the food in which it is cooked, so it can be used as a meat replacement, protein for a meal, or a textural addition to dips and sauces. Tempeh is best known as “vegetarian bacon.”

There are many different types of tempeh. The type of tempeh is determined by the grain that is used to produce it. Different types include soy, three grain, organic, flax seed, bean, barley and oat. Tempeh with different flavors and spices already mixed in is also available. Because one of tempeh’s most desirable qualities is its ability to take on the flavor of other food, plain soy tempeh is the most popular form.
Storage
Tempeh should be stored in the refrigerator for up to 2 weeks, or frozen for up to 3 months.

Serving size
A ½-cup serving of tempeh provides 160 calories, 9 grams fat, 0 grams cholesterol and 15 grams protein.

Karen Cuneo contributed to this article. The following recipe was created and tested by Clemson University’s Culinary Nutrition Undergraduate Student Research Group.

INGREDIENTS OF THE MONTH

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RECIPE

BARBEQUE TEMPEH PIZZA

Ingredients:
- 2 tablespoons apple cider vinegar
- 1 tablespoon liquid smoke
- 2 teaspoons chili powder
- 2 teaspoons agave syrup
- ½ teaspoon salt
- ¼ teaspoon ground black pepper
- 1 (8-oz.) package tempeh, cut into cubes
- 1 (13.8-oz.) can refrigerated pizza crust dough
- 1 tablespoon cornmeal
- ½ cup barbecue sauce
- 1 ½ cup shredded part-skim mozzarella cheese
- ¼ medium red onion, thinly sliced
- 2 tablespoons fresh cilantro
- Cooking spray
- 1 tablespoon cornmeal

1) Position oven rack to lowest setting. Preheat oven to 400°.

2) Combine liquid smoke with the next 5 ingredients (through pepper) in a bowl. Add tempeh. Toss well. Allow to marinate for at least 20 minutes.

3) Coat a baking sheet with cooking spray; sprinkle with cornmeal. Unroll dough onto prepared baking sheet, and pat into a 14 x 10-inch rectangle. Spread barbecue sauce evenly over dough, leaving a ½-inch border. Sprinkle mozzarella cheese over sauce and top with tempeh and onion slices. Bake at 400° for 10 minutes or until crust is golden and cheese is lightly browned. Remove from oven and garnish with cilantro.

4) Cut pizza into six rows by three rows.

Yield: 6 servings

Nutrition Information

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