



Nutrition News

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Brought to you by:

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Comparing Cheeses!

In the course of our research, we found more than a few surprises about some of our favorite cheeses. For example, the sodium content of Parmesan cheese was truly shocking -- 330 mg of sodium in a single ounce! American cheese and the vegan cheese alternative were also surprisingly high in sodium. Saturated fat, another food element that we're always looking to reduce, also had some revelations for us. American cheese had the most saturated fat, while mozzarella, the reduced-fat cheeses, goat cheese, and the vegan cheese alternative all had the least. In terms of total fat, all those same cheeses had the least, while American once again had the most.

Now let's explore the nutrients we do want. Swiss cheese had the most calcium in a single serving, while goat cheese had the least. And parmesan was a protein powerhouse, followed closely by Swiss, while the vegan cheese alternative had no protein at all.

By Judy Doherty, BS, PCII



Sheet Pan Dinner



Ingredients:

- 8 ounces firm tofu chunks
- 1 cup bell pepper, diced
- 1 cup zucchini, diced
- 1 cup eggplant, diced
- 1 cup cherry tomatoes, halved
- 1 cup red onion, diced
- 1 cup broccoli florets
- 2 tablespoons basil pesto or Italian dressing
- sprinkle or spray of olive oil
- 1/8th cup grated mozzarella cheese
- 1 tablespoon grated Parmesan cheese
- 1/2 cup fresh basil leaves

Directions:

Preheat oven to 450 F. Oil a half-sized sheet tray. Place the tofu on the tray. Toss the veggies in the pesto in a large mixing bowl and pour them out onto the tray over the tofu. Carefully spread to an even layer.

Bake the tofu and veggies in the oven for 20 minutes. Top with cheese and bake another 3-5 minutes or until the cheese is melted.

Garnish with fresh basil leaves. Serve hot.

Chef's Tips:

Instead of cutting the tofu in cubes, break it up into chunks so it looks more natural and like chicken nuggets. Use firm or extra-firm tofu.

This dish goes great with a side of jasmine rice and a salad.

Serves 6. Per 2-cup serving: 128 calories, 5g fat, 2g saturated fat, 0g trans-fat, 11 mg cholesterol, 120 mg sodium, 13g carbohydrate, 3g fiber, 7g sugars, 9g protein.

Vegetarian Kung Pao

Make this delicious Chinese entree in a wok and serve hot.



Ingredients:

- 8 ounces extra-firm tofu
- 1 tablespoon olive oil
- pinch crushed red pepper flakes
- 2 tsp grated fresh ginger
- 1 cup diced assorted colored bell peppers (or green)
- 1 cup broccoli florets
- 1 cup eggplant, diced
- Sauce:
- 1 tsp cornstarch
- 1/4 cup of low-sodium vegetable broth
- 1 tsp low-sodium soy sauce
- 1/2 tsp sugar
- 1 tsp hot sauce
- 1 tsp vinegar
- 1/2 tsp sesame oil
- Garnish:
- 1/4 cup roasted peanuts
- 1/4 cup sliced green onion
- Side dish:
- 2 cups cooked brown rice

Directions:

Preheat a non-stick wok over medium-high heat. Add the olive oil. Sauté the tofu briefly until browned and remove from the pan. Add the rest of the vegetables and seasonings and sauté until crisp-tender.

Mix the sauce ingredients with a whisk in a bowl. Pour into the wok. Toss all ingredients together until sauce boils and steam is coming out of the pan.

Add the tofu and toss. Top with roasted peanuts and sliced green onion. Serve hot over rice.



Nutrition Information

Nutrition Facts: Serves 4. Each 2-cup serving: 271 calories, 11g fat, 2g saturated fat, 0g trans-fat, 1mg cholesterol, 137mg sodium, 33g carbohydrate, 5g fiber, 5g sugars, 12g protein.

Calculating Calories

By Lynn Grieger, RDN, CDE, CPT, CHWC



Do you ever find yourself standing in line at a coffee shop or restaurant with a large display board that lists all the available foods and beverages along with their calorie content, trying to decide if you really want the large size fries with 490 calories or whether the medium size with 320 calories will feel satisfying? We think about calories in terms of body weight: eat fewer calories to lose weight, eat more calories to gain weight, run on the treadmill to burn more calories. But just what is a calorie?

What Are Calories?

A calorie is a measure of energy. More specifically, one calorie is the amount of energy it takes to heat one kilogram of water 1 degree Celsius at sea level. When scientists first started to measure the energy, or calories in food, they used a bomb calorimeter. A sample of food like that large portion of fries is placed into a metal

container called a bomb. The bomb is filled with oxygen and placed in another container where it is surrounded by water. The researchers ignite the food with an electric current, the water absorbs the heat released as the food burns, and a thermometer measures the changes in temperature in the water. Finally, the calories are determined by calculating the change in water temperature multiplied by the volume of water.

Calories on Food Labels

The 1990 Nutrition Labeling and Education Act (NLEA) for the first time required that food manufacturers put the amounts of nutrients and calories on the package label. Instead of using the bomb calorimeter method to establish calories in foods, manufacturers began using an easier process: the Atwater method (see below).

The Atwater Method

In the 1800s, William O. Atwater developed a process to determine the average number of calories in the three macronutrients in food: protein, fat, and carbohydrate. His 4-9-4 method came up with an average of 4 calories per gram of protein, 9 calories per gram of fat, and 4 calories per gram of carbohydrate that is still in use today.

It's important to recognize that 4-9-4 is an average, and not an exact amount. Further, the NLEA labeling rules require that the calories from carbohydrate, fat and protein are rounded to the nearest whole number. And finally, the Atwater method doesn't take into account the fact that the number of calories actually absorbed and used by the body can vary depending on the type of food, and even the individual person.

Food Safety Tips for Cooking Demonstrations

By Cheryle Jones Syracuse, MS

People Will Notice What You Do

It's well known that people take in more than just what you say in a cooking demonstration. What you do is so important too, and I'm not just talking about your amazing knife skills or organizational prowess. When you give a cooking demonstration, it's important to demonstrate healthy food safety techniques. People will learn healthful techniques if they see you practicing what you preach.



Be Thoughtful with Your Hands

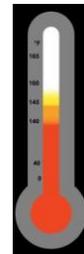
Wash your hands before you cook. Make it obvious. Also consider what jewelry you're wearing. Avoid rings, bracelets, and watches. You might also want to avoid long sleeves.

If you're wearing gloves, use care to keep them clean. Wash your hands before you put your gloves on. Change the gloves when you change tasks. Don't use your phone while you're wearing gloves.

Consider Temperature

Use a food thermometer. Demonstrate how to use it and encourage its use for all foods, not just meats.

Follow the "two hour rule." Don't allow folks to eat food that has been sitting at room temperature for more than two hours.



Be a Good Sample Example

Keep samples at the proper temperature and make sure the serving utensils are clean. If you're only partially cooking something due to time, do not allow people to eat the partially cooked portions. And finally, don't put the tasting spoon in the food or stand over the food while tasting. It is best to place samples in small containers and pass them out. This way you can use clean, gloved hands to scoop small amounts into clean, disposable containers. Avoid the buffet approach!

Tips to Halt Inflammatory and Autoimmune Disease

By Lisa Andrews, MEd, RD, LD

Could cutting back on certain foods high in the amino acid methionine halt the development and progression of inflammation and autoimmune diseases such as multiple sclerosis in those at high risk? New research published in *Cell Metabolism* says yes.

When healthy tissue in the immune system is mistakenly attacked and destroyed, autoimmune disorders develop. Multiple sclerosis is the most common central nervous system disease. The immune system targets the myelin sheath that protects nerve cells in the brain and spinal cord. This damage impairs messages meant to travel to and from the brain, which leads to progressively worsening symptoms including numbness, muscle weakness, balance and coordination problems and decline in cognitive function. Currently, there are not treatments that slow or stop multiple sclerosis without adding risk of infection or cancer.

Dr. Catherine Larochelle, study co-author and clinician-scientist in neuroimmunology and neurologist at the Multiple Sclerosis Clinic at the Centre of Hospitalier de Universidad in Montreal notes that the cause of multiple sclerosis is poorly understood. Scientists recognize that genes related to the immune system are suspect and the environment also plays a role. Metabolic factors such as obesity also raise the risk of multiple sclerosis, which makes the thought of dietary intervention to reduce the work on the immune system attractive.

According to Jones, limiting methionine in the diet is like cutting off the fuel supply for the over-active inflammatory response without impacting the rest of the immune system. He notes that research must be trialed in humans prior to dietary guidelines being drafted. His team also has plans to study whether novel medications can be developed that impact metabolism of methionine.

A previous study in 2019 from Locasale Lab at Duke University found that limiting methionine could improve the chemotherapy and radiation effects during cancer treatment. In addition, other research finds that restricting methionine can possibly reverse fatty liver disease and may have implications for brain health and longevity.

For clinicians working with individuals with autoimmune disease or those at risk for autoimmune conditions (family history), a diet restricted in methionine may be too early to suggest but reducing sources of methionine from animal sources such as eggs, fish, nuts/seeds, meat and whole grains certainly cannot hurt. Foods that are low in methionine include:

- Beans, legumes
- Fruit
- Vegetables
- Low-fat dairy products
- Pea protein

By Lisa Andrews, MEd, RD, LD