

Nutrition Nibbles

Break through common nutrition myths, see what's trending, catch up on latest research, and get great tips from our team of Registered Dietitians.



More Food FAQs

What about the arsenic found in rice?

Arsenic is a natural mineral found in soil, air and water, and also present in food products. Arsenic in large doses is a poison that causes brain damage. The USA and Canada have done extensive testing of rice products for arsenic levels. The Canadian food inspection agency inspected 105 rice products, and found that all contained detectable levels of arsenic, but not in the amount to pose a human health risk. In regards to infant feeding, ESPGHAN committee on Nutrition recommend: children and infants should not consume rice beverages, they should consume a variety of grains not just limited to rice, and only rice that contains the lowest arsenic levels should be used in commercial infant food preparations. From a nutritional perspective, it is beneficial to choose from a variety of whole grains.

[PEN: Practice-based Evidence in Nutrition](#)

[Arsenic Speciation in Rice and Pear Products](#)

I was told that I have kidney stones. Should I avoid dairy products and calcium supplements?

Individuals with calcium oxalate stones are often advised to restrict their intake of calcium rich foods. However, research does not support this recommendation. Observational studies indicate that consuming adequate dietary calcium is associated with a reduced risk of calcium oxalate stones, whereas a low intake is correlated with an increased risk. Dietary calcium binds with oxalate in the intestines prior to entering the kidneys, reducing the amount excreted in the urine and the likelihood of stone formation. Individuals with calcium oxalate stones should consume adequate dietary calcium to achieve the dietary reference value. Ideally, calcium requirements should be obtained by food, as research suggests that supplemental calcium is associated with a low to moderate increased risk of kidney stones.

[Calcium Oxalate Stones](#)

[Urinary tract stone occurrence in the Women's Health Initiative \(WHI\) randomized clinical trial of calcium and vitamin D supplements](#)

Jiminy Crickets! Are bugs really a good source of protein?

Entomophagy (the consumption of insects) have always been a part of human diets, however they are most popular in Asian countries where they are seen as a delicacy or tasty snack. The most popular insect for food are beetles. Insects are thought to be a good alternative food source for a rapidly growing population, with environmental and health benefits. The environmental benefits include: reduced green house gas, efficient use of feed vs animal protein sources, less water and land needed for production. Insects also contain high quality protein, along with being a good source of iron, fatty acids, biotin, zinc, and others. Bugs are arthropods (they don't have an internal skeleton) and are closely related to crustaceans like shrimp, crab, crawfish and lobster. So a concern for some people, is possible allergic reaction in individuals with allergies to crustacean. Additionally, those with a predisposed allergy to insect bites or stings should proceed with caution.

[The contribution of insects to food security, livelihoods and the environment](#)

[Insects for Food and Feed](#)

[Allergic risks of consuming edible insects: A systematic review.](#)



I heard coffee prevents diabetes. Is that true?

Risk for diabetes has been shown to decrease with increasing consumption of coffee, both caffeinated and decaffeinated. However, currently there are no randomized control trials. The association between type 2 diabetes and tea consumption is less clear. A 2018 Meta-analysis showed that every 1 cup increase in coffee per day resulted in a 6% reduced risk of T2DM, not controlling for cream or sugar intake. The reason for this association is unclear. Some theories include: supporting a healthy gut microbiota, reduced inflammation, source of antioxidants and nutrients (potassium, magnesium, vit E, niacin, polyphenols), reduced GI glucose absorption, and hepatic release, and reduced storage of glucose. Keep in mind, the amount of coffee consumed varied in the studies, from 0-10 cups/d. Health Canada recommends a maximum of 400 mg caffeine/d, 1 cup of caffeinated coffee contains 80-120mg caffeine, so up to about three cups of coffee a day is okay.

[Facts on Caffeine](#)

- 1) PEN- Do healthy individuals who consume caffeine-containing beverages have an increased risk of developing diabetes? (2013)
- 2) [Coffee consumption and reduced risk of developing type 2 diabetes: a systematic review with meta-analysis.](#)

What is spirulina?

Spirulina is a blue-green algae that is available as a dietary supplement. It comes in a dried form and is rich in protein. It does not contain vitamin B12 naturally so it is not a suitable source. Spirulina is being investigated to address food security and malnutrition and interestingly, for dietary support in long-term space missions. Doses of 10-19 g/d over several months have been used safely. Adverse effects may include nausea, diarrhea, fatigue or headache. Spirulina may have adverse interactions when taken with drugs that affect blood clotting and the immune system. Moreover, there are concerns with some spirulina supplements being contaminated with microcystins. Microcystins have various potential toxicity, especially to children, including liver damage, shock and death. Because spirulina is considered a dietary supplement, there is no active, industry-wide regulation of its production and no enforced safety standards exist for its production or purity. Therefore, consumers cannot be certain that spirulina supplements are free of contamination.

"Blue-green algae". MedlinePlus, National Library of Medicine, US National Institutes of Health. 1 November 2017.

Riley, Tess (12 September 2014). "Spirulina: a luxury health food and a panacea for malnutrition". The Guardian, London, UK

"Ready for dinner on Mars?". European Space Agency. 13 June 2005.

What is acrylamide and how is it linked to cancer?

Recently, a Los Angeles judge ruled that coffee sold in California must carry cancer warnings because of the presence of acrylamide. Acrylamide is not added to food. It is a chemical that naturally forms during the Maillard reaction - the interaction of an amino acid and a carbohydrate during high-temperature cooking. It is found in coffee, personal care products, food packaging, household items, second hand smoke and a wide range of foods. Rats fed large quantities of acrylamide in their drinking water had an increased risk of developing cancer. The amount consumed by the rodents was 1000 to 100 000 times higher than amounts humans are exposed to through dietary sources. Based on this research, many organizations have classified acrylamide as a probable human carcinogen. Most human studies have found no statistically significant association between the consumption of acrylamide and various cancers. For some types of cancer (kidney, endometrial and ovarian) the results have been mixed. Although acrylamide is listed as a probable carcinogen, coffee consumption is associated with many health benefits. In 2016, the International Agency for Research on Cancer (IARC) concluded that coffee is not linked with cancer and removed it from its list of possible carcinogens. The IARC also acknowledged that coffee can potentially lower the risk of some diseases, including cancer.

Overall, coffee is linked with a wide range of health benefits. However, the risks of dietary acrylamide in humans remain unclear. Further human studies are required to fully understand the associations of coffee drinking, acrylamide exposure, and cancer risk.

[Coffee and Cancer: What the Research Really Shows](#)

[Acrylamide and Cancer Risk](#)

[Dietary Acrylamide and Human Cancer: A Systematic Review of Literature](#)

Talk to your Registered Dietitian for more information



Recipe of the Month

Chocolate Chip Cricket Cookies (entomofarms.com)

Makes 40 bite-size cookies

Ingredients

- ½ cup butter (soft)
- ½ cup sugar
- ½ cup brown sugar
- 1 egg
- 1 tsp vanilla
- ½ tsp baking soda
- 1 tsp hot water
- ¼ tsp salt
- 1 ¼ cup flour
- ¼ cup (35 g) cricket powder
- ¾ cup mini chocolate chips



Instructions

1. Preheat oven to 350F
2. In large mixing bowl cream together butter and sugars.
3. Beat in egg and vanilla.
4. Dissolve baking soda in hot water and add to butter mix with the salt.
5. In a second bowl whisk together the flour and cricket powder, then add to the wet mix. Stir just until combined and fold in the mini chocolate chips.
6. Use a tsp to spoon dough onto a cookie sheet and bake for 10 –12 minutes until edges are golden brown. You can also roll the dough into a cylinder and cut off cookie circles to bake.

These freeze well and make excellent one-bite cookies for school days or late night sweets! Enjoy!

