

---

**FEATURE**

# School-agers: Make granola for snack

---

**M**any school cafeterias give children new choices for lunch as a way of lessening obesity and helping to establish lifelong healthy eating habits. You can complement children's choices by offering healthy snacks when they arrive at your program in mid-afternoon, hungry as bears.

Homemade granola packs a powerful nutritional punch for this age group. And children will show more interest in eating the snack when they make it themselves.

## Nutrients school-agers need

Children 5 to 8 years old need a variety of foods from all the basic food groups. Important nutrients for this age group are the following.

- Iron, needed for red blood cells. Iron deficiency, or anemia, can be a problem in some school children. Important sources of iron are red meats, egg yolks, and dark leafy greens as well as granola ingredients such as dried fruits (figs, dates, raisins, prunes, apricots), molasses, and whole grains.
- Vitamins A and C, needed for growth, healthy skin, and iron absorption. Carrots, leafy greens, and cantaloupe are some of the best sources. Dried apricots, another top source, are a tasty addition to granola.
- B vitamins (a complex of eight nutrients including niacin, thiamine, and riboflavin), which promote healthy skin, hair, eyes, liver, and nerves. B vitamins are found in many foods, including whole grains and nuts common in granola.
- Potassium, important for proper function of all cells, tissues, and organs. Rich sources include salmon, halibut, potatoes, and beans as well as granola ingredients such as raisins and dates.
- Calcium, needed for strong bones and teeth. Milk, yogurt, and cheese are the obvious sources, but nuts and seeds are also rich in calcium.
- Protein, needed for growth. Most U.S. children get enough protein from meats, eggs, and dairy products, but nuts and seeds contain protein as well.
- Carbohydrates and fats, needed for energy. Unfortunately, many



PHOTO BY SUSAN GAETZ

children—and adults—consume foods from this group in excess. Those foods with the poorest nutritional value include sugars, highly refined grains (such as white flour), and trans fat (found in margarine and many fried foods). Better for health are the complex carbs (notably whole grains), vegetable oils (olive, canola), and nuts and seeds. Although nuts are high in fat, the fat is the unsaturated, or healthy, type.

Granola can be high in calories, depending upon the ingredients and portion size. A half cup of the basic recipe below, when made with raisins and pecans, contains about 415 calories, an amount that represents about a third of the total recommended caloric intake for children at this age. Fortunately, granola is also filling.

Encourage small helpings by serving in small paper cups.

Many people like to eat granola on yogurt or cottage cheese for breakfast or snack. A half cup of plain low-fat yogurt would add about 70 calories to a half cup of granola, for a total of 485, plus lots of calcium and protein.

## Use rolled oats

Granola is essentially oats toasted with a sweet coating and enhanced with dried fruit, nuts, and seeds. Oats are whole grains, which means they consist of the whole kernel: bran, germ, and endosperm.

After harvesting, the oat kernels, called **groats**, may be split into several pieces, producing **steel-cut oats**; or steamed, pressed between rollers, and dried. The more thinly the groats are rolled,

the faster they cook. **Rolled oats**, sometimes called “old-fashioned,” are the thickest and retain much of their texture. Instant oats are the thinnest and often turn into mush when cooked. “Quick” oats fall somewhere in the texture middle.

Regardless of the type of processing, oats retain their nutritional value. Instant oatmeal, however, contains some added salt, color, and stabilizer and is usually enriched with more calcium, iron, and vitamin A.

The recipes below call for rolled oats. For variety, you can also use rolled wheat, rolled rye, rolled barley, or a combination of these grains.

## Be alert to food allergies

Before offering the granola cooking activity, find out about any food allergies in children. Some children are allergic to peanuts, for example, and should avoid peanuts, peanut butter, and peanut oil. Peanuts are actually legumes, not nuts, and they are a good source of certain B vitamins and protein.

Some children may be sensitive to **gluten**, a protein in many grains (wheat, barley, rye) that makes dough elastic. Gluten can damage the small intestine in people with celiac disease. Rice and corn are gluten-free. Oats are usually tolerable, depending upon the variety of the grain and the person’s sensitivity.

In addition to avoiding the food causing the allergy, cooks need to clean work surfaces, bowls, utensils, and pans that have been used with the problem food to avoid cross-contamination.

PHOTO BY SUSAN GAETZ



## Cooking tips

Before children begin, demonstrate safe and hygienic cooking techniques, including the proper use of measuring cups and spoons, cutting boards, and hot pads. Insist on these precautions:

- Wash hands thoroughly before handling food.
- Use appliances only with supervision.
- Use plastic knives with serrated edges for cutting.
- Keep long hair tied back or under a hair net.
- Avoid sampling with fingers or licking stirring spoons.

Divide children into small groups of three or four. For children who cannot read a standard recipe, make a picture or rebus recipe. Place the recipe in a plastic sleeve or sheet protector.

The procedure for making granola is simple: mix, bake, and cool, as indicated in the basic recipe below. Start with the basic recipe, and allow children to customize it to their tastes with a few different ingredients.

## Basic granola

- 3 cups rolled oats
- 3 tablespoons light brown sugar, packed
- ½ teaspoon ground cinnamon
- ¼ teaspoon coarse salt
- ⅓ cup honey
- ¼ cup canola oil
- 1 teaspoon vanilla extract
- ½ cup diced dried fruit
- ½ cup chopped raw or toasted nuts or seeds

1. Heat the oven to 300 degrees Fahrenheit. Arrange a rack in the middle. Line a rimmed baking pan with parchment paper or spray lightly with cooking spray.

2. Place the oats, brown sugar, cinnamon, and salt in a large bowl, and stir with a large spoon to combine. Set aside.
3. Place the honey, oil, and vanilla in a small pitcher, and stir. Pour the honey mixture over the oat mixture, and mix until the oats are thoroughly coated. Spread the mixture evenly in the baking pan.
4. Bake for 15 minutes, then stir to avoid burning. Continue baking until the granola is light golden brown, 5 to 15 minutes more.
5. Place the baking pan on a wire rack, and cool to room temperature for about 20 minutes. Stir the granola occasionally. It will harden as it cools.
6. Add the fruit and nuts or seeds to the mixture, and toss to combine. Makes about 4 cups.
7. Store granola in airtight, plastic

containers. It's good for up to 2 weeks, without refrigeration.

## Variations

Invite children to make substitutions, one or two at a time, while staying within the amounts in the basic recipe. One group might like to vary the spice by using ¼ teaspoon of ginger with only ¼ teaspoon of cinnamon, for example, or use ¼ cup of raisins and ¼ cup of dates for the dried fruit. Other choices:

**Molasses:** Instead of honey and oil, use 2 tablespoons molasses, 2 tablespoons unsweetened applesauce, and 2 tablespoons water. If the mixture seems too dry, add a bit more water or applesauce.

**Syrup:** Instead of honey, use maple syrup or agave nectar. Don't substitute low-sugar or



PHOTO BY SUSAN GAETZ

---

light syrup. The natural sugar in syrup and honey acts as a preservative.

**Oil:** Instead of canola oil, use olive, coconut, or sesame oil. Or use a nut butter or tahini (ground sesame seeds).

**Spice:** Use ground ginger, anise, cardamom, allspice, nutmeg, or cloves.

**Dried fruit:** For this ingredient, use dates and raisins (dried plums) or other dried fruits, such as apricots, prunes, cranberries, blueberries, and figs.

**Mixed nuts and seeds:** For this ingredient, use seeds such as sunflower, sesame, pumpkin, or flax, and chopped nuts such as walnuts, pecans, almonds, or cashews. Or substitute unsweetened shredded coconut.

## From granola to trail mix

Trail mix is granola with the addition of more fruits, nuts, or other ingredients. If children are interested in making trail mix, avoid offering such sugars as marshmallows and candy that are often found in commercially prepared varieties.

Instead of chocolate chips, use carob chips. Carob comes from the pulp of pods on a tree that grows along the Mediterranean Sea. The pods are harvested, and the pulp is dried, roasted, and ground into a powder, like cocoa powder. Unlike cocoa or chocolate, however, carob is naturally sweet, low in fat, and high in fiber. It also contains calcium but no caffeine.

## References

Bell, Becky. 2011. The nutritional value of instant oats v. rolled

oats, [Livestrong.com](http://Livestrong.com), [www.livestrong.com/article/537479-the-nutritional-value-of-instant-oats-vs-rolled-oats/](http://www.livestrong.com/article/537479-the-nutritional-value-of-instant-oats-vs-rolled-oats/).

Koszewski, Wanda and Natalie Sehi. 2012. Nutrition for the school-age child, NebGuide. University of Nebraska at Lincoln, [www.ianrpubs.unl.edu/live/g1086/build/g1086.pdf](http://www.ianrpubs.unl.edu/live/g1086/build/g1086.pdf).

Sugar, Alana. 2010. The advantages of carob, Whole Foods Market.com, [www.wholefoodsmarket.com/blog/whole-story/advantages-carob](http://www.wholefoodsmarket.com/blog/whole-story/advantages-carob).

“What’s the difference? Steel-cut, rolled, and quick oats,” Thekitchen.com, [www.thekitchen.com/whats-the-difference-steelcut-138355](http://www.thekitchen.com/whats-the-difference-steelcut-138355). ■