

MIX IT UP AND HIT THE TRAILS!

To earn a panoramic trailside scenic overlook, you've first got to climb the mountain! Hiking, backpacking, and backcountry camping are physical activities that take a lot of energy. Maintaining energy while exploring the great outdoors requires attention not only to foods that will give you a quick boost, but also to those that will keep you going the whole day. Healthy snacking between meals is a great way to get your body the energy and nutrients it needs.

Trail mix is one of the most popular snacks for hiking...after all, how do you think it got its name?! It provides important nutrients that we need each day, but can be high in fat, sugar, and salt. Also, some trail mixes are more expensive than others. There are many different types of trail mixes available. Granola bars have many of the same ingredients, but trail mixes tend to be less coated in glazes that are high in sugar and fat.

The following information will help you choose a healthy and affordable trail mix:

Cost

The cost of trail mix varies a lot. The packaging, brand name, ingredients, and processing all contribute to the cost. You can cut out some of the packaging and brand name costs by making it yourself: buy individual ingredients from bulk bin dispensers or large packages then mix them together. When comparing the cost of different trail mixes, you can figure out the best deal by calculating the price per serving. Serving sizes on nutrition labels will vary, so be sure to make any calculations needed to be able to compare equal serving sizes between types.

To determine the price per serving, check the Nutrition Facts label to see how many servings are in the package. Divide the price by the number of servings to determine the price per serving. For example, a trail mix that costs \$4 and has 4 servings would cost \$1 per serving ($\$4/4$ servings = \$1 per serving). If you are mixing ingredients yourself, then you have an extra step of adding the price per serving of each ingredient together to get the total cost per serving.

Nutritional Value

Trail mixes typically contain foods from at least two food groups: fruit and protein. Some mixes have dried vegetables or ingredients made of grain. When eating trail mix as a snack, be sure to choose meals that include grains, dairy, and vegetables to fill your plate.

Trail mix is a good source of nutrients, including vitamins, minerals, and calorie-dense carbohydrates, fat, and protein. The only type of nutrient that is not supplied by trail mix is water, so be sure to bring along enough drinking water for your hike. Also be aware that trail mix can be high in salt and sugar.



Calories: Carbohydrates, Fat, and Protein

When you are hiking all day, your body requires more calories than when you are not as active, but the high calorie content of trail mix means it is not the best snack choice on less active days. Reading the Nutrition Facts label on products lets you know how many total calories are in each serving and where the calories come from. Carbohydrate and protein provide 4 calories per gram, while fat provides 9 calories per gram.

Carbohydrates

Fiber

Carbohydrates from fiber are beneficial to your health by causing you to feel full for longer and helping with digestion.

Sugar

Carbohydrates from sugar are present in naturally sweet foods like fruits, but may also be added as an additional ingredient to further sweeten the flavor of a food. Many trail mixes contain dried fruits like raisins, cherries, and pineapple. These dried fruits provide a quick energy boost from the sugar and often bring some vitamins and fiber along with them. Added sugars only supply calories with few or no nutrients and no dietary fiber.

Fat

Our bodies need fat to provide energy and carry nutrients, but not too much. The American Heart Association recommends that you get less than 30% of your total calories from fat. Nuts and seeds are relatively high in fat and sometimes additional oils are added to trail mixes, increasing the fat content. Saturated and trans fat should be eaten as little as possible to decrease heart disease risk.

Protein

Protein not only provides energy, but also helps build muscle – which you'll need out there on the trail! In trail mixes, nuts and seeds provide most of the protein.

Vitamins and Minerals

Vitamins and minerals are listed on nutrition labels as a percent daily value (%DV). The goal is to get 100% of the DV from foods each day. A vitamin and mineral-rich trail mix provides all four that are listed on the Nutrition label: Vitamin A, which is good for eyes and skin; Vitamin C, which helps the immune system protect from disease; Calcium, which helps build strong bones; Iron, which helps circulation and energy levels.

Salt

Our bodies need sodium (salt) to function, but too much leads to high blood pressure and is harmful to your health. The 2010 Dietary Guidelines for Americans lowered the previous recommended amount of sodium to 1500 mg/day. Be sure to check the label and think about the other sources of salt in your daily diet. If you feel dizzy while hiking then a handful of salty trail mix could help – you lose salt from sweating and low levels make people feel dizzy.

When choosing a trail mix, examine the ingredients list and the nutrition facts label.

In the ingredients list, look for:

- a short list of recognizable whole-foods
- less sugar and syrups
- no partially hydrogenated oils

In the nutrition facts label, use these guidelines per serving:

- at least 3 grams fiber
- 5 to 10 grams protein
- less than 250 milligrams sodium
- less than 10 grams sugar
- less than 2 grams saturated fat and 0 grams trans fat

CHECK YOUR KNOWLEDGE (answers on the next page)

1. If you are looking only at price, which trail mix is the better buy?
 - a. Happy Trails Mix - \$4 for 8 servings. Serving size: ½ cup.
 - b. Fuel for the Trail Mix - \$5 for 6 servings. Serving size: 1 cup.
2. If you were snacking on a fruit and nuts trail mix, what meal would make a good choice for lunch to get all five food groups?
3. If a trail mix has a total of 14g carbohydrates, 1g fiber and 13g sugars, then is it more likely to contain added sugar or natural sugars from fruits?
4. Which trail mix is the best choice in regard to salt/sodium?
 - a. 200 mg
 - b. 1500 mg
5. Which trail mix is the best choice in regard to Iron?
 - a. 3%
 - b. 17%

References

“Are Nutrition bars really all that healthy?” *TuftsNow*. 30 July 2012. Retrieved from <http://now.tufts.edu/articles/are-nutrition-bars-really-all-healthy>

Cavanagh, J. & Granovsky, N.L. *Texas 4-H Consumer Decision Making Study Guide*. (2006). Texas AgriLife Extension Service.

ChooseMyPlate.gov. USDA. Retrieved from www.choosemyplate.gov

Dietary Guidelines for Americans, 2010. (2010). U.S. Department of Health and Human Services, Office of Disease Prevention and Health Promotion. Retrieved from <http://health.gov/dietaryguidelines/2010.asp>

Check Your Knowledge Answers

1. b
2. Any meal with a significant portion of vegetables, dairy, and whole grains
3. Added sugar
4. a
5. b

Written by: Kasey Christian, MEd, Program Coordinator, and Elizabeth L. Andress, PhD, Professor and Extension Food Safety Specialist, Foods and Nutrition Extension. University of Georgia, Athens.

May 2015