

Happy Trails to You

Target Audience:

Pregnant Women and Teens

Adults

Adults with children

Teens

Topic Areas This Lesson Can be Used For:

Healthy Eating on the Go

Fun & Easy Foods For Kids

Quick, Low-Cost Breakfasts

Objectives:

- Plan ahead and bring quick and easy foods from home for breakfast or snack
- Prepare fun and easy foods with your children that are good sources of whole grains, calcium, and iron

Audience Alert!

Read through the lesson ahead of time and decide which activities are best for your participants. There are different activities for:

- Pregnant adults and teens,
- Adults who want to learn about low-fat snacks
- Adults with children
- Teens

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Purpose:

The purpose of this lesson is to teach participants to prepare trail mix that is right for their needs and which they can use to plan healthy snacks for eating on the go.

What the Nutrition Educator Needs to Know So that Participants' Questions can be Answered:

This lesson can be used with many audiences. If you are working with pregnant teens, you might want to use this lesson to help them make healthy snacks with more iron. If you are working with adults and your topic is healthy snacks, you can use this lesson to show how to make easy and tasty snacks low in solid fat, added sugar and sodium. You can also use this lesson with children or their parents to teach them how to make trail mixes that are healthy, sweet and colorful. The trail mix for children can also be high in iron and low in solid fat, added sugar and salt. This lesson would also be good to use with Teens to show them healthy ways to eat breakfast or a snack while on the go or at school and how to add calcium to their diet each day.

Cereal can be thought of in a new way as a snack. You can make trail mix with cereal and mix it with other things you like such as dried fruits and seeds or nuts. This is a good way to eat breakfast on the run or a meal on the go as well as an easy to carry snack. Trail Mix is easy to make ahead of time and have on hand. Read the material below and decide which trail mix activities will work with your group. You don't have to always use the trail mix lesson with the recommended audience if you feel your audience would benefit from it.

PREGNANT ADULTS OR PREGNANT TEENS – TRAIL MIX HIGH IN IRON:

Iron is key for healthy blood. It helps prevent anemia. Anemia is when the number and size of red blood cells is low. This makes it hard for your body to get oxygen to the cells so they can work right. This can make you feel weak, dizzy and tired. Many women do not get enough iron. Menstruating women should have 18 mg of iron a day since they are losing blood regularly. Pregnant women need almost twice that amount. They need about 27 mg of iron each day to stay healthy and to have enough iron for their growing child.¹ One way to get more iron is to eat foods rich in iron. Iron is found in animal foods like meat some poultry, some fish and some shell fish like oysters. It is also found in plant foods and iron-fortified foods like cereal and bread. It is harder for your body to use iron from plant foods and fortified foods. If you use plant foods or iron fortified foods as a source of iron it is best to eat them with foods that have vitamin C, like oranges or orange juice or animal foods that have iron too.¹ However, you should avoid eating iron-rich foods with foods that are high in calcium like milk or calcium supplements. Milk or calcium supplements make it harder for your body to use the iron in your food.^{1,2}

Some iron rich foods are:²

- **Whole grains**
- **Iron-fortified cereals and breads**
- **Dried fruits like raisins, craisins, etc**
- **Dried beans and legumes**
- **Sunflower seeds, pumpkin seeds**
- **Almonds and other nuts**
- **Dark Chocolate** – the darker the chocolate the more iron
- Eggs (especially egg yolks)
- Liver
- Lean red meat (especially beef)
- Oysters
- Poultry, dark red meat
- Salmon
- Tuna
- Dark green leafy vegetables

Many of these foods like the ones that are in **bold** type can be used for quick and healthy snacks at home or eating on the go.

Having healthy, iron-rich snacks is a great way to get more iron in your diet. You can make these snacks ahead of time and store them for later. They are easy to add to a lunch and you can take them with you to work, school or when you are on the go. You can make an iron rich trail mix by mixing 6 cups of any iron-rich cereal with 2 cups of other ingredients like raisins and pretzels. Raisins also have iron. An iron-rich cereal has at least a 20% DV or daily value for iron.³ You can find the DV or Daily Value at the bottom of the nutrient label on the package. The

recipe below can be placed on a note card and handed to participants as an example of a trail mix snack.

IRON-RICH HAWAIIAN TRAIL MIX

6 cups whole grain iron fortified cereal
1-6 ounce package or 1 cup of dried fruit like raisins, craisins or other dried fruit
½ cup almonds or sunflower seeds
½ cup coconut flakes

Combine all ingredients and separate into 1 cup servings. Place into self-closing sandwich bags and enjoy!

ADULTS – TRAIL MIX LOW IN SOLID FAT AND ADDED SUGAR:

Eating healthy snacks is a great way to: ⁴

- Keep from getting too hungry during the day. Being too hungry can cause you to eat more during meal times.
- Keep your blood sugar levels more stable if you have blood sugar problems.
- Increase your veggies and fruits for the day.

Snacking can be healthy but sometimes too much snacking or snacking with not so healthy foods is not a good thing. Some of the reasons are: ⁵

- Snacks can have too much solid fat and added sugar
- Snacks high in solid fats and added sugar can have too many calories
- Most of the calories in snacks high in solid fats and added sugar are empty calories
- Snacks with too many calories can cause weight gain and make it difficult to stay at a healthy weight

Cutting back on solid fat and added sugar is a good way to stay healthy and fit. Solid fat is also called saturated fat. Many processed foods are high in solid fat and added sugar. Eating less processed foods is a good way to cut back too. Meals that are high in solid fat can cause high cholesterol and heart disease. Solid fat is found mostly in animal products like milk and milk products, cheeses, butter and meats. Cholesterol is found only in animal products. Right now, Americans get an average of 11% of their total calories from solid or saturated fats.⁶ The Dietary Guidelines for Americans 2010 (DGAs) recommends that only 10% of your total calories come from solid fats.⁷ It is best if most of your daily fat calories come from healthier oils that are found in foods like nuts, seeds, and oils like olive oil or canola oil rather than solid fat.

The DGAs also say that Americans get 16% of their calories from added sugar each day.⁷ For an 1800 calorie diet that would be 72 grams or 18 tsps of sugar

each day! The American Heart Association (AHA) says that each day women should have no more than 100 calories or 6tsps and men have no more than 150 calories or 9 tsps of added sugar.⁸ Added sugar is sugar or sweetener that is not normally found in foods. Added sugars, like high fructose corn syrup, are added to make the foods sweeter. This does not mean sugar that is naturally found in food like the sugar in fruit.⁸ The foods with the most added sugar are foods like regular soft drinks, candy, cakes, cookies, pies and fruit drinks, fruit-ades and fruit punch. Added sugar is also in many dairy desserts and milk products like ice cream, sweetened yogurt and sweetened milk. Even cereals and other sweet breakfast foods can have added sugar. You can limit the how much added sugar you eat each day by eating less of those kinds of foods.

This is why it is important to plan snacks and read food labels so that they can be part of a healthy diet.

There are ways to be sure that you are not getting too many calories or empty calories from solid fat and added sugars in your snacks. One way is to **read the food label** to find the total calories from fat and grams of sugar. A DV% of 5 or less means the food is low in that nutrient and 20% or more means the food is high in that nutrient. The DGAs recommends that solid fat which is called saturated fat on the label should not be more than 10% of our total calories for the day. Remember to read how many servings are in each package. If there are 2 servings in the package and you eat the whole package, you will be getting twice as much solid fat than is on the label. You should also look at grams of sugar on the label of your snack foods. You want to keep these low. Remember every four grams of sugar is the same as 1 teaspoon. You can also judge how much added sugar is in the package by looking at the ingredients on the label. If an added sugar like fructose is one of the first few ingredients then most of the sweetener will come from added sugar.

The trail mix recipe below is low in fat and added sugar. It is a good way to get an energy boost during the day. It can be used in larger amounts for lunches or even breakfast on the run. You can make a big batch and divide it and store it in small containers or sandwich bags. That way in the morning all you have to do is grab the container and eat it while you are on your way to school or work. This trail mix can also be used in for quick snacks at home, at school or also while on the go. You can tell them they change the recipe from time to time and try a different kind of cereal that is also low-fat and low in sugar. High fiber cereals are the best to use. Examples for your participants are given in the “Materials Needed” section of this lesson.

GOOD FOR YOU HEALTHY HAPPY TRAIL MIX

6 cups of cereal low in added fat and sugar and with at least 3 grams of fiber per serving like wheat, corn, or multi-grain enriched cereals

$\frac{3}{4}$ cup mini pretzels

$\frac{1}{2}$ cup raisins or your favorite dried fruit

$\frac{1}{2}$ cup sunflower seeds or other nuts or seeds

$\frac{1}{4}$ cup of dark chocolate chips

Combine all ingredients and separate into 1 cup servings. Place each serving in a self-closing sandwich bag, and enjoy!

You might also suggest using small amounts of some of the following ingredients as mix-ins with the trail mix to add sweetness and make it fun:

- dried figs, apricots, or pineapple
- pretzels
- black or red licorice bits
- mini marshmallows
- small amounts of other healthy seeds and nuts
- chocolate chips

CHILDREN - TRAIL MIX FOR A HEALTHY SNACK

Children need calories to grow and for energy. They also need to eat enough iron for healthy blood. Getting children to eat healthy snacks that are low in solid fat and added sugar and high in important nutrients like iron can be hard to do. One way to get children to eat more healthy snacks is to let them make their own trail mix out of foods they like that are healthy, low in solid fat and added sugar, colorful and fun to eat. Children are more likely to eat foods that they make themselves. They are proud of what they made.

The trail mix below is high in iron, low in solid fat, is colorful and sweet, but not too sweet. It has marshmallows and red licorice bits added for a little bit of fun and sweetness. While these foods are low in fat they can be high in sugar and are sometimes foods that are best to eat in small amounts. Participants may think that sugar will lead to diabetes and hyperactivity in children. However, there are no strong facts to back this up. Sugar does add extra calories and may lead to cavities if you do not take proper care of your teeth. Too much added sugar can cause weight gain. Weight gain can lead to obesity. Obesity can increase the risk for diabetes and heart disease when children become adults. You can vary the foods you put in your trail mix to include foods that they know their children will eat. **Sometimes foods** that you can **add in small amounts** could be gummy bears, Swedish fish, chocolate chips or jellybeans. You can even clean out your cabinets and use whatever is on hand. This can be fun and exciting for children. It can also help parents to use old boxes of cereal and snacks that are around the house.

NOT TOO SWEET SENSATIONS TRAIL MIX:

3 cups toasted oat cereal
3 cups Life® or other iron rich Cereal
½ cup mini pretzels
½ cup mini marshmallows
½ cup red licorice bits

Remember an iron rich cereal should have a DV of at least 20% on the label. For even more iron you can add raisins.

Combine all ingredients, separate into 1 cup servings, place into self-closing sandwich bags and enjoy! You can substitute the marshmallows and licorice bits with a cup of another sweet treat your child likes.

TEENS –TRAIL MIX FOR GOOD HEALTH AND STRONG BONES AND BREAKFAST ON THE GO!

All the information in the sections above about creating trail mix low in solid fat and added sugar is especially important if you are working with teens. Review it before teaching. The information below is specifically for teen audiences.

The percentage of adolescents aged 12–19 years who were obese increased almost 21% in the last 30 years. In fact, studies are finding that teens have a large increase in risk factors that can lead to adult chronic diseases like diabetes, heart disease and some cancers.⁹ The way you learn to eat as a child and in your teens often is the way you will eat as an adult. If you have bad eating habits and are overweight or obese as a child it is likely you will be the same as an adult.⁹ If kids start eating healthy and being active at an early age they can help themselves become more healthy as adults.⁹

Getting enough calcium is also very important for growing teens. However, according to a large government study in 2006 only 42% of boys and 10% of girls get enough calcium in their diet.¹⁰ The teen years are the most important time for bone health. In fact you build almost half of your adult bone mass during the teen years.¹¹ The bone mass children and teens build is very important in making sure they have healthy bones for life and are at less risk for osteoporosis when they are adults. This is especially true for teen girls. Osteoporosis is when bones become fragile and break easily. Getting enough calcium is key so that teens will have strong bones as they age. “The more they can put away when they're young, the longer it should last as they get older.”¹²

Eating snacks that are low in solid fat and added sugar can make it easier to have a healthy weight. They can also be a good source of calcium to help teens build the bone mass they need to be healthy as adults.

Eating healthy snacks are a great way to:

- Keep from getting too hungry during the day. Being too hungry can cause you to eat more during meal times.
- Keep your blood sugar levels more stable if you have blood sugar problems.
- Help you to eat more veggies and fruits for the day.

- Add calcium to your diet to help build bone mass
- And most importantly, give you a way to have a **healthy breakfast or a snack on the run.**

As many as 1/3 of all teens do not eat breakfast. We know that breakfast can:¹³

- Increase your energy
- Help you think better when you are in class
- Improve your concentration so you can get better grades
- Help you keep a healthy weight.

The Dietary Guidelines for Americans or DGAs tell us that if they do not eat breakfast children and adolescents are much more likely to be overweight.⁷ There are studies that show if you eat breakfast it is easier to lose weight and keep it off. There is also a study that found that teens that did not eat breakfast were at higher risk for metabolic syndrome later in life.¹⁴ Metabolic syndrome can increase the risk for heart disease. Metabolic syndrome includes people who have abdominal obesity, high blood pressure and high fasting blood sugar which can put you at higher risk for diabetes.¹⁴ Having breakfast can help you avoid these problems. A healthy trail mix is a good way to get breakfast when you are in a hurry and do not have time to sit down and eat a meal.

Snacking can be a healthy but sometimes too much snacking or snacking with not so healthy foods is not a good thing. Some of the reasons are:⁵

- Snacks can have too much solid fat and added sugar
- Snacks high in solid fats and added sugar can have too many calories
- Snacks high in solid fats and added sugar can have too many empty calories.
- Snacking on too many empty calories keep you from getting the nutrients you need to be healthy

The trail mix recipe below is low in solid fat and added sugar. It also adds calcium by starting with calcium enriched cereal as a base. Look for cereal that says calcium enriched and cereals with DV for calcium of 10% or more. Check the nutrition label on the package. You can also add foods that have calcium like almonds, walnuts and pumpkin seeds. Other things you can add which also have calcium are

- soy nuts
- dried chick peas
- dried figs
- yogurt covered raisins

Remember every little bit helps.

STRONG BONES HEALTH TRAIL MIX

6 cups of any low-sugar calcium fortified cereal

½ cup of almonds or walnuts

½ cup of pumpkin seeds

½ cup of yogurt covered raisins

¼ cup roasted soy nuts

¼ cup of dark chocolate chips

Enjoy!

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For Additional Reading:

Snacks and Eating on the Go. Snacking. American Heart Association, 2010, : <https://www.goredforwomen.org/home/live-healthy/snacks-and-eating-on-the-go/>

Snacks and Dashboard Dining, American Cancer Society, 2013. <http://www.cancer.org/Healthy/EatHealthyGetActive/TakeControlofYourWeight/snacks-and-dashboard-dining>

Happy Trails to You

Main Themes:

Nutrition & Diet

Cooking & Food Storage

Shopping

Budgeting

Safety & Sanitation

Materials Needed:

Be sure that you know what audience you are teaching, because there are different activities for pregnant adults and teens, adults, adults with children and teens.

Depending on what audience you work with and which trail mix you make, you will want to choose different cereals and snacks to bring to the class. The following are some examples of things you can bring. Be sure to bring the items mentioned in the trail mix recipe you are using. But also, be creative, and think about what your class would like, or may already have in their kitchens.

Here are some ideas:

-4 to 6 boxes of low added sugar, iron fortified and or calcium fortified cereals such as Cheerios®, Multi-grain cereals, Product 19®, Total®, Special K®, or Frosted Mini Wheats® Use store brands to save money. Check the label to be sure that there is at least 20% daily value if you are looking for iron fortified cereal and 10% DV for calcium if you are using calcium fortified cereal. **Store brands can be the best value and it will give participants a chance to taste them.**

Suggested ingredients in addition to what is in the trail mix recipe depending on which group you are teaching:

-dried fruit such as raisins, craisins, dates, apples, pears, banana chips.

-dried figs

-Licorice bites (red and black), gummy bears, Swedish fish®

-marshmallows

-mini pretzels

-sunflower seeds

-pumpkin seeds

-almonds or walnuts

-dark chocolate chips or other flavored chips

Plus bring the following:

Small plastic bowls or some kind of container to present the cereals and snacks.
Serving utensils for the cereals and snacks – participants should not use their hands to serve themselves.

Large self-closing plastic sandwich or small paper bags – at least one per participant

Poster board and markers

Blank index cards – 1 for every 2-3 people

Handout “Trail Mix Recipes” – 1 for each participant

Handout “My Own Snack Mix Recipes” – 1 per participant

Time the Activity is Expected to Take:

Activity 1: 15 minutes

Activity 2: 15 minutes

Activity 3: 20-30 minutes

Next Week’s Goals: 5 minutes

Happy Trails to You

Lesson Plan:

WHEN WORKING WITH PREGNANT TEENS AND ADULTS: Use the following two activities and then go to **ACTIVITY 3** at the end of the lesson.

Activity 1: “What Foods are High in Iron?” (15 minutes)

1. Introduce the lesson by telling the group that you will be helping them figure out how to get more iron in their diets. Ask each question and wait for the group to give their answers. Then discuss their answers to these questions and be sure they have the correct information:
 - How does the body use iron?
Iron is used in the body to make healthy blood which carries oxygen and other nutrients to your brain and other parts of the body.
 - Why is iron important?
You need iron to keep your blood healthy. It also helps prevent anemia. Anemia is when you do not have enough red blood cells which can make you tired and not feel well because your cells are not get the oxygen they need. Both men and women need iron to prevent anemia.
 - Why do women need more iron than men?
Because women lose some blood each month, they need more iron than men. Pregnant women need almost twice the amount they normally get to stay healthy and to have enough iron for their growing child.

Ask the participants if any of this is a surprise to them

2. Break the class into groups of 2-3 and ask them to come up with 3 or 4 foods that they think are good sources of iron. Pass out empty note cards or pieces of poster board to the class for the participants to use to list their iron rich food.
3. Travel around the room, talking to the groups and be sure they do not need help.
4. Bring the group back together, and discuss the iron-rich foods they listed. Be sure that they include the foods below. You can ask each group to go through their suggestions, and then ask the rest of the groups for comments.

Some good sources of iron rich foods are:

- **Dried beans and legumes like chick peas**
- **Dried fruits like raisins or craisins**
- Eggs (especially egg yolks)
- **Iron-fortified cereals and breads**
- Liver
- Lean red meat (especially beef)
- Oysters
- Poultry, dark red meat
- Salmon
- Tuna
- Whole grains
- **Sunflower and pumpkin seeds**
- **Almonds and other nuts**
- **Dark chocolate – the darker the chocolate the more iron**
- dark leafy greens

5. Introduce the next activity by asking the group if they have ever tried any iron-fortified cereals such as Cheerios, Total, Special K, Life, or store brands like these types of cereal, etc. Have boxes of these cereals up at the front of the room so participants can see them while you talk about them.

Activity 2: “Preparing the Trail Mix” (15 minutes)

1. Break the participants into groups for this activity, or you can keep them in the same groups as they were in for Activity 1.
2. Pass out the handout “Trail Mix Recipes” to each participant. Let the participants know that the first recipe on the handout is high in iron: *Iron Rich Hawaiian Trail Mix*.
3. Tell the participants that they can either prepare the trail mix as directed on the handout, or make another mix by blending 6 cups of the iron fortified cereal with 2 cups of other iron-rich ingredients of their choice. Have cereals and other ingredients at the front of the room. This way, participants can choose what they would like and will be more likely to make at home. Be sure that all but a few of the extra ingredients are high in iron. The foods that are bold on the list above are high in iron.

If you need to you can give the participants less cereal if that works for you.

4. Be sure that they use $\frac{2}{3}$ as much cereal as other ingredients in their mix.
5. Provide self-closing plastic sandwich or paper bags to the participants to mix up and package the trail mix they made to take home.

WHEN WORKING WITH ADULTS TO CREATE SNACKS LOW IN SOLID FAT AND ADDED SUGAR: Use the following two activities and then go to ACTIVITY 3 at the end of the lesson.

Activity 1: “Snacking the Healthy Way” (15 minutes)

1. Introduce the topic by asking the group to share some of the snacks that they enjoy.
2. Ask the group to talk about some feelings they have about snacking.
3. Ask if they think that snacks can be healthy.
4. Ask why they think snacking can be healthy. Answers can include:
 - *Helps keep you from getting too hungry during the day. Being too hungry can cause you to eat more during meal times which makes it hard to keep a healthy weight*
 - *Helps keep your blood sugar levels more stable if you have blood sugar problems.*
 - *Helps you to increase your veggies and fruits each day.*
 - *Can be good for eating on the run if you don't have time for breakfast, a snack or other meals during the day*
5. Ask the class if they know if there is anything that can make a snack not so healthy. Answers should include:
 - *Snacks can have too much solid fat and added sugar*
 - *Snacks high in solid fats and added sugar can have too many calories*
 - *Snacks high in solid fats and added sugar can have too many empty calories*
 - *Too many empty calories can make you gain weight*
6. Ask the group to briefly describe why it is a good idea to have less solid fat and added sugar in foods. Be sure they mention:
7.
 - *It can cause weight gain and too much*
 - *Weight gain can cause obesity.*
 - *Obesity is linked to increased risk of diseases such as heart disease and diabetes.*You can share additional facts from the background information.
8. Ask the group to come up with some ideas for cutting back on the fat in their diets. Be sure they mention:

- *Eating less food high in solid fat and added sugar*
- *Eating less processed foods*
- *Eating more fruits and vegetables for snacks, etc.*
- *Reading the label to see how much solid fat and added sugar are in the food you are going to eat.*

You can talk about these ideas as a large group, or break the class up into small groups and have them write their answers on poster boards.

9. Have the group name some cereals they like to eat. Share with them that many cereals are low in solid fat and can be a good energy source that is low in added sugar. Remind them that many cereals can have a lot of added sugar. Tell them that there may be a few that are also high in fat like Granolas and Cracklin' Oat Bran®. They need to check the nutrition label on the package to see how much fat and added sugar is in the cereal they chose.
10. Explain in the next activity they are going to make a healthy trail mix. Tell the group to try to think about cereals in a different way. Rather than eating them with milk for breakfast, they could make their favorite cereals into healthy snacks!

Activity 2: “Making a healthy trail mix” (15 minutes)

1. Break the participants into groups for this activity, or you can keep them in the same groups as they were in Activity 1.
2. Pass out the handout “Trail Mix Recipes” to each participant. Let the participants know that the second recipe, *Happy Trails Healthy Trail Mix* is low in solid fat and added sugar.
3. Tell the participants that they can either prepare the trail mix as directed on the handout, or make another mix by blending 6 cups of cereal with 2 cups of other ingredients of their choice. Have cereals and other ingredients that are low in solid fat and added sugar at hand at the front of the room. This way, participants can choose what they would like and will be more likely to make at home. Here are some other ingredients:
 - dried figs, apricots, or pineapple
 - pretzels
 - black or red licorice bits
 - dark chocolate chips
 - mini marshmallows
 - small amounts of other healthy seeds and nuts

You can use less cereal if that works for your group. Be sure that 2/3 of their trail mix is cereal.

4. Provide self-closing plastic bags or small paper bags to the participants to mix up and package the trail mix they made to take home.

WHEN WORKING WITH ADULTS WITH CHILDREN or CHILDREN: Use the following two activities and then go to ACTIVITY 3 at the end of the lesson.

Activity 1: “Making Healthy Snacks” (15 minutes)

1. Ask participants if they (or their children) like snacks.
2. Ask them to name some of their (or their child’s) favorite snacks and talk about why they are favorites.
3. Mention some of the good things about snacking. Some answers are:
 - *It gives children energy to grow and play*
 - *Keeps children from getting to hungry at meal time*
 - *It gives children’s the nutrients they need to be healthy and strong*
 - *It is a way to get more veggies and fruit*
4. Ask the participants to think of snacks they are good for them (or their child). Help them out with examples if they need it. Some examples are:
 - *Veggies and low-fat dip*
 - *A piece of fruit or cut up pieces of fruit*
 - *Whole wheat crackers and low fat cheese*
 - *Dried fruit bits*
 - *Nuts and seeds*
 - *Popcorn*
 - *Pretzels*
5. Introduce the next activity by showing the participants the boxes of cereals, marshmallows, licorice, raisins, and other treats that you have. Tell them that you will all work together to create some snack mixes that are healthy but also colorful, sweet, and good to eat!

Activity 2: “Let’s Make a Trail Mix” (15 minutes)

1. Pass out the handout “Trail Mix Recipes” to each participant. Let the participants know that the third recipe, *Not Too Sweet Sensations Fun Trail Mix* is fun to make, good to eat and does not have too much added sugar.
2. Break the participants or class into groups of about 2-3. Have each of the groups choose a box (or boxes of cereal) and 2 other ingredients. They can

choose foods that they or their child likes to eat or that are colorful and would make a good mix. Or, they can follow the *Not Too Sweet Sensations Fun Trail Mix* recipe.

3. Have each group use the ingredients they chose to prepare a trail mix. If 6 cups of cereal and 2 cups of other ingredients will not work for your site, be sure that 2/3 of the ingredients in each trail mix is cereal.
4. Provide small self-closing plastic sandwich bags or small paper bags to the participants to mix up and package the trail mix they made to take home.

WHEN WORKING WITH TEENS TO CREATE SNACKS LOW IN SOLID FAT AND ADDED SUGAR THAT CAN ADD CALCIUM TO THEIR DIET: Use the following two activities and then go to ACTIVITY 3 at the end of the lesson.

Activity 1: “Snacking the Healthy Way” (15 minutes)

1. Introduce the topic by asking the group to share some of the snacks that they enjoy.
2. Ask if they think that snacks can be healthy.
3. Ask why they think snacking can be healthy. Answers can include:
 - *Helps keep you from getting too hungry during the day. Being too hungry can cause you to eat more during meal times.*
 - *Helps you to increase your veggies and fruits and other nutrients you need each day.*
 - *Can be good for eating on the run if you don't have time for breakfast or other meals during the day.*

Make sure you mention the last bullet point if they do not.

4. Ask the class if they know if there is anything that can make a snack not so healthy. Answers should include:
 - *Snacks can have too much solid fat and added sugar.*
5. Ask the group to briefly describe why it is a good idea to decrease the amount of solid fat and added sugar in foods in their diets. Be sure they mention:
 - *Snacks high in solid fats and added sugar can have too many empty calories.*

- *Too many empty calories can make you gain weight.*
- *Foods high in solid fat and added sugar can cause weight gain*
- *Gaining too much weight can cause obesity.*
- *Obesity is linked to increased risk of diseases such as heart disease and diabetes. This is important to emphasize.*

You can share additional facts from the background information.

6. Ask the group to come up with some ideas for cutting back on the solid fat and added sugar in their diets. Be sure they mention:

- *Read labels and choose food lower in solid fat and added sugar like chips, candy, cookies and cakes.*
- *Eat less processed foods.*
- *Eat more veggies and fruits for snacks.*
- *Choose low fat dairy products like yogurt, milk and cheese*
- *Eat pizza with vegetable toppings instead of things higher in fat*
- *Eat less fried foods*
- *Use less fatty toppings like mayonnaise and sour cream or use low fat versions.*

7. Ask the group if they think food with calcium is important for them to have each day.

Answer: Yes.

8. Ask them why it might be important specifically for teens. Answers should include:

- *You need calcium to build strong bones*
- *The teen years are the most important time to build bone mass.*
- *Almost half your adult bone mass is built during your teen years.*
- *Optimal bone mass is important as you age and can prevent osteoporosis which is a disease where your bones become fragile and break more easily. This is especially important for girls.*

9. Have the group name some cereals they enjoy eating and ask them if they have ever thought about including cereal in a snack.

10. Share with them that many cereals can be a low solid fat and a good energy source low in added sugar. They can also be fortified with calcium. However tell them some cereals may be higher in added sugar. Tell them that there may be a few that are high in fat like Granolas and Cracklin' Oat Bran®. To be sure how much solid fat, added sugar and calcium is in the cereal they eat they need to check the nutrition label on the package. It is recommended that that a cereal have at least 10% DV for calcium.

11. Explain in the next activity they are going to make a healthy trail mix using cereal. Tell the group to try to think about cereals in a different way. Rather than eating them with milk for breakfast, they could make their favorite cereals into healthy snacks or even a breakfast on the go!
12. Trail mix is easy to make ahead of time and separate into small sandwich bags or containers. That way they can just grab a bag or container and have their breakfast while they are on their way to school. They can also save the trail mix for later for a snack.

Activity 2: “Making a strong bones healthy trail mix” (15 minutes)

1. Break the participants into groups for this activity, or you can keep them in the same groups as they were in Activity 1.
2. Pass out the handout “Trail Mix Recipes” to each participant. Let the participants know that the fourth recipe, *Strong Bones Healthy Trail Mix* is fun to make and includes ingredients that have calcium. It is low in solid fat and added sugar and adds calcium by starting with calcium enriched cereal as a base. It also includes ingredients that have calcium. Look for cereals that say calcium enriched and cereals with DV for calcium of 10% or more on the nutrition facts label. Other things not in the recipe they can add which also have calcium are:
 - soy nuts
 - dried chick peas
 - dried figs
3. Provide self-closing plastic bags or small paper bags to the participants to mix up and package the trail mix they made to take home.

USE WITH ALL THE AUDIENCES:

Activity 3: “Pulling it All Together” (20-30 minutes)

1. Bring the groups back together. Ask those that made a different recipe than the one you gave them to share which ingredients they used that were different.
2. Now pass out the handout “My Own Snack Mix Recipe.”
3. Ask them to think about what they have at home that they think would make a good trail mix. Or, if they cannot think of anything that they have at home, invite the group to use their imagination to think of foods that would go well together to make a trail mix that is good for them. Remind

the participants that they should think about a trail mix that they would eat at home!

4. Give the group a few minutes to complete their recipes. Then, ask if anyone wants to share his or her ideas.
5. Once a few people have shared, challenge the group to make and try out their creations at home during the coming week. Let them know that you will be asking them about it next class!

Next Week's Goals (5 minutes):

1. Ask the participants to name one thing that they learned in today's class that they will use. Make sure that each learning objective is mentioned, and if not, be sure to re-state that objective. Ask them to choose a related goal to work on during the week. Let them know that they will be sharing their personal experiences during the next class.
2. Invite comments, suggestions, or questions.
3. Thank the participants for coming and tell them what the class will be about in the next lesson.

For the Teacher: "What Makes This Lesson Behaviorally Focused?"

- Facilitated discussions like those in Activity 1 allow the group to focus on those behaviors that they may need to change. It gives participants a personal connection with the lesson being presented.
- In Activity 2, participants are invited to make their own trail mix by choosing items that they enjoy eating. This way, participants will be more likely to make the mix at home. Also participants are given small plastic or paper bags to take the extra trail mix home for sharing with friends and family members.
- In Activity 3, participants are asked to think of ingredients in their own homes that they think would make a good trail mix. They are challenged to make and try the mix during the coming week.
- In Next Week's Goals, the participants are invited to name one thing that they learned during the class that they will use. Through this activity and by reviewing the objectives again, the participants are reminded of the many topics discussed during the lesson. They will choose the behaviors that they will want to work on during the coming week.



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Trail Mix Recipes

Iron Rich Hawaiian Trail Mix

- 6 cups whole grain iron fortified cereal
- 1 cup of dried fruit like raisins, craisins or other dried fruit
- ½ cup almonds or sunflower seeds
- ½ cup coconut flakes

Happy Trails Healthy Trail Mix

- 6 cups of cereal low in fat and sugar with at least 3 grams of fiber per serving
- ¾ cup mini pretzels
- ½ cup raisins or your favorite dried fruit
- ½ cup sunflower seeds or other nuts or seeds
- ¼ cup of dark chocolate chips

Not Too Sweet Sensations Fun Trail Mix

- 3 cups toasted oat cereal
- 3 cups Life® or other iron rich Cereal
- ½ cup mini pretzels
- ½ cup mini marshmallows
- ½ cup red licorice bits

You can a replace mini marshmallows and licorice bits with other sweets your child likes.

STRONG BONES HEALTHY TRAIL MIX

- 6 cups of any low-sugar calcium fortified cereal
- ½ cup of almonds or walnuts
- ½ cp of pumpkin seeds
- ½ cup of yogurt covered raisins
- ¼ cup roasted soy nuts
- ¼ cup of dark chocolate chips

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