



Strong in Body and Spirit Healthy Choices
Lesson Four: Eating Smarter



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Welcome!

It's so nice to see you again. We are so happy that you are here! You and your family are important to us. As we usually do, let's take a few minutes to review our last time together. Let's continue on our journey together!

Exercise Lowers Blood Sugar

We hope that you are doing well and being successful in reaching the goals that you have set for yourself with exercise and eating less fat. So far we've talked about exercises and fat in the foods we eat. We said healthy exercise is that you do:

- At least 20 minutes, all at one time.
- 3-4 times per week.
- Your heart beats faster.
- You sweat a little.
- You breathe a little harder than usual.
- You feel you are working a little.
- You walk slow enough to be able to talk while exercising, and it's fun!

Eating Less Fat is Important

Now, the eagle has seen our ancestors exercising their bodies and eating foods that are naturally low in fat. The eagle is very pleased with all the successes you have had in reaching your goals. We said eating less fat is important and ways you could eat less fat are:

- Cook with less butter and lard.
- Buy leaner cuts of meat.
- Rinse and drain cooked ground meat with hot water.
- Trim the fat off of meat and chicken and throw it away before cooking.
- Skim fat off soup and stews.
- Bake, broil, grill, and boil meat instead of frying.
- Drink low fat or non-fat milk instead of regular whole milk.

In the story, the eagle also saw our ancestors eating less sugar. Our ancestors did not have foods that had lots of sugar in them. For a sweet treat, they used honey and plants that are naturally sweet, like berries and corn.

What's the Big Deal About Sugar?

Today, the eagle sees us buying many foods that have lots of sugar, like pop, energy drinks, pastries, candy, and many snack foods. But, in the vision the eagle had, he could see that we are learning ways to eat less sugar through making one change, then two.

What's the big deal about sugar?

Everyone benefits by eating less sugar, not just people with diabetes. When you eat food, your body changes that food into sugar and uses that sugar for energy. When you have diabetes, your body is not able to use the sugar for energy. The sugar floats around in your blood. That is why people with diabetes have too much sugar in their blood.

Eating too much food, especially carbohydrates (sugars and starches), can cause high blood glucose in people with diabetes or those at a higher risk for diabetes.

Too much sugar in the blood is unhealthy!

Too much sugar in your blood over the years can lead to serious complications, like blindness, amputations, foot problems, and kidney problems if you have diabetes. That is why your health care provider is always checking your blood sugar and why you should monitor your blood sugar daily.

Regular, daily exercise and eating less fat and sugar will lower your blood sugar and prevent or delay serious complications. Exercise and eating healthier can also prevent or delay diabetes in our family and friends



How can I Eat Less Sugar?

How can I eat less sugar? We can eat less sugar by:

1. Learning to read food labels.
2. Understanding what carbohydrates are and the role they have in controlling blood sugars.
3. Learning which foods have lots of sugar and eat less of them.
4. Learning ways to prepare foods using less sugar.
5. Learning how to make low sugar choices when eating away from home.

Food Label

So, let's get started with looking at the food label once again.

In the session on eating less fat, we looked at:

- Serving size
- Number of servings in the package
- Calories
- Calories from fat
- Total fat and
- Types of fat

Carbohydrates and Sugar grams

This is the next portion of the food label for: This tells us that there are a certain number of grams of carbohydrates, dietary fiber and grams of sugars in one serving of the specific food.

How many of you know how to read food labels?

LABEL for Macaroni and Cheese

Macaroni and Cheese Total Carbohydrates 31 g OR 10%

Dietary Fiber 0 g 0%

Sugars 5 g

Protein 5 g

Carbohydrates

What are carbohydrates?

Carbohydrates are the body's main source of energy. The foods that we eat break down into sugars (glucose) providing us with energy to do all the things we want to do on a daily basis.

There are two types of carbohydrates:

Simple carbohydrates, or the simple sugars, are found mainly in fruits and sweet processed foods such as candy. These are quickly absorbed once we eat them and are changed into glucose. This results in a burst of energy that comes quickly and leaves you quickly. Many foods made up of simple sugars, except fruit, lack vitamins, minerals, and fiber and are high in empty calories.

Complex carbohydrates, also known as starches and fiber, provide the body with a steady flow of energy that lasts over a longer period of time. Foods made of complex carbohydrates contain nutrients the body needs so the calories are not empty. We should have more of these kinds of carbohydrates every day.

Foods such as whole wheat breads, pastas, vegetables and legumes contain complex carbohydrates and they change more slowly into glucose after we eat them.

How much carbohydrate can I eat to keep in balance?

Carbohydrates are the most important source of fuel for our bodies. About 55% of the foods we eat should be carbohydrates. If a person has diabetes, too many carbohydrates can raise the blood glucose levels faster than proteins or fats. The amount of carbohydrates a person can eat is different for every individual. It is important to work closely with your physician, dietitian and diabetes educator to determine the amount of carbohydrates that are right for you to reach your target blood glucose.

The key to good blood glucose control is a balance between foods (especially carbohydrates), physical activity, and if needed, medicine. Blood glucose checks before and after meals help people with diabetes to see if they are in their target blood glucose range. These blood glucose checks also help to determine how to plan a meal and the carbohydrates that can be included in a meal.

Let's READ about CARB COUNTING

Counting carbohydrates is one of several ways to help you reach your blood glucose goals and prevent diabetes complications. You can learn to use carbohydrate counting to choose what and how much to eat. Carbohydrate counting is easier for some people to use than other diabetes meal planning methods. If you take insulin, you can use carbohydrate counting to decide how much insulin to take.

To get information on carbohydrate counting, go to www.diabetes.org and Click on Nutrition/Weight Control: Exchange Lists/Carb Counting.

Another helpful website: www.diabetes/niddk/nih.gov/dm/pubs/eating. Gaining information on label reading and learning which foods are high in sugar and carbohydrates, can help you make wiser food choices and can help you eat less sugar.

Under the Carbohydrate section on the food label, the next thing to look at would be the sugar grams. This will tell you how much natural sugar or added refined sugar is in one serving of that food.

To visually think about how much sugar there is in a serving, keep in mind that every **4 grams of sugar is equal to 1 level teaspoon of sugar**.

To find out the kinds of sugar that are in the food you are eating, you need to look at the list of ingredients that is provided on the food label. Food labels list ingredients in the order of their amount in the product.

For example, if sugar is listed as the first ingredient, then the product has more of this ingredient than any other ingredient. This would not be a healthy choice.

Gaining information on label reading and learning which foods are high in sugar and carbohydrates, can help you make wiser food choices and can help you eat less sugar.

Kinds of Sugar

Sugar: The many names for sugar. Sugar has many names that we need to be able to recognize. Sugar can be listed on a food label as:

- Honey
- Molasses
- Lactose
- Corn syrup
- Glucose
- Maple syrup
- Sucrose





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Foods With Lots of sugar

These foods have lots of sugar

- pies
- cakes
- candy
- Donuts
- Cookies
- ice cream
- pastries
- fruit drinks
- regular soda pop
- flavored gelatin, like Jell-o™

As you can see, this list consists of sweets that we probably would eat as a snack. These all have the simple carbohydrates that are empty calories and no nutritional value.

Can I ever eat these foods again?

It is okay to eat these foods once in a while, but not every day. After a meal, a small treat is okay. Remember that the portion size is really important. Smaller is better.

You can use less of these foods, eat a smaller portion, make low sugar choices, and use less sugar when cooking, and still enjoy foods that taste great!

Five Ways to Eat Less Sugar

Where does all the sugar come from?

1. **Some foods have sugar naturally.** Sometimes sugar is found in foods naturally, as in fresh fruits, dried fruit, molasses, and honey. You can enjoy these foods, just don't eat too much at one time or eat them too often. Four to six servings of fruit a day is a good amount to have, and remember to eat different kinds of fruit. Fresh fruit makes a delicious snack or sweet dessert.
2. **Cooking with sugar makes foods high in sugar.** Often when we cook or bake, we add sugar to the foods. And, guess what? We have foods that are high in sugar! Try using less sugar in your recipes by cutting the amount called for in half or use a sugar substitute such as Splenda or Stevia, for example.
3. **Adding sugar to foods makes them high in sugar!** At other times, we add sugar to foods at the table.
4. **Sugar can be hidden in your food.** Some foods have hidden sugar. To find out how many teaspoons of sugar there are in the food that you are eating, look at the food label.
 - Corn sweetener
 - Maltose
 - Juice concentrates
 - Dextrose
 - Natural sweeteners
 - Fructose
 - High fructose corn syrup

5. **Read the label. Sugar is in many different foods.** Take the number of sugar grams and divide by 4. This will give you the number of teaspoons per serving size. That is how we got the teaspoons of sugar for the following foods. Food made with sugar make high sugar foods.

Cooking With Sugar Makes Foods High in Sugar

Cakes + Frosting = high sugar food Cookies + Frosting = high sugar food

Cereal + Sugar = high sugar food Iced Tea + Sugar = high sugar food

Food Additions

Cereal + Sugar = high sugar food

Iced Tea + Sugar = high sugar food

Consider some of your recipes!

Take the number of sugar grams on the label and divide by 4. This will give you the number of teaspoons per serving size. That is how we got the teaspoons of sugar for the following foods.

2 Tablespoons of ketchup = 2 teaspoons of sugar 15 oz. milk shake = 15 teaspoons of sugar

½ cup of vanilla ice cream = 3 teaspoons of sugar 1 can regular pop = 9 to 14 teaspoons of sugar

1 can diet pop = 0 teaspoons of sugar

1 regular size Snickers Bar™ = 7 teaspoons of sugar

So how can we eat less sugar?

Six Helpful Tips and Ideas

Here are a few tips to make it easier for you:

1. **Eat less sugar, and less often.** Check the food labels to find out how much sugar the serving size has, eat smaller portions and choose drinks that have less sugar in them. Less is better!
2. **Choose foods high in complex carbohydrates.** Choose foods that have complex carbohydrates rather than simple sugars, such as whole grains, pasta, vegetables, and legumes.
3. **Use sugar substitutes, in small amounts, if they fit your food rules.** Sugar substitute examples that are currently found safe in small amounts include: Stevia™, Equal™, Sweet One™, Sugar Twin™, or Splenda™. We promote no product over the other.
4. **Use Less sugar.** Gradually reduce the sugar called for in your favorite recipes up to ½ the amount. Try using natural sugar fruit juices, with no added sugar, instead of sugar to add sweetness to foods.
5. **Sugar-free foods, for occasional use if they fit your food rules,** that may taste good are: sugar-free Jell-O™ and pudding, and naturally sweetened fruit jams.
6. **Drink less sugar.** Water is the original soft drink – it is a great beverage for meals and between meals - depending on our size, we need about 6 to 8 cups each day. Consider black coffee or tea – why does it need all that sugar and sugared whitener added? Occasionally, a sugar-free soda pop, punch mixes, iced teas, Crystal Lite™, might be a fun beverage.

These Foods Have the Eagle's Approval

How to handle a sweet tooth. Do you think your family will feel OK if you ask them to eat fewer sweets? Let's make a list of some low sugar ideas to keep the sweet tooth in your family satisfied. Here is a list of foods that can satisfy anyone who wants something sweet to eat.

- Fresh Fruit
- Fresh veggies
- Simply Fruit Jam™ Fresh fruit smoothies
- Canned fruit, packed in its own juice
- Unsweetened 100% fruit juice



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Traditional Native American Foods were Low in Sugar

Traditional Native American foods are lower in sugar. There was no such thing as sugar, soda pop, punch, candy bars or Jell-O™. For a sweet taste, our ancestors used plants that had natural sugars in them, such as the wild fruit (apples, plums, grapes), berries and corn. While these traditional foods contain natural sugars, they contain less sugar than many of the other foods that we eat today, and they also contain many vitamins and minerals and are high in fiber.

Besides having fewer sweet foods, our ancestors did not eat sweet foods as often as we do today. Traditional sweet foods were used in smaller amounts and only on special occasions.

What examples of traditional sweet foods can you think of?

Now that we have learned ways to eat less sugar, get the sugar out of breakfast.

Let's Get the Sugar Out of Breakfast and snacks

How can you get the sugar out of breakfast? Try it!

What about snacks ideas? Can you think of some healthy choices for snacks that don't contain a lot of sugar?

Some healthy snacks that are low in added sugar:

- Nuts
- Pretzels
- Dried fruit
- Fresh fruit
- Cheese sticks
- Vegetable sticks
- Air popped popcorn
- Plain yogurt with fresh fruit
- Unsweetened cereal such as Cheerios™, chex mix, Life cereal, etc.
- There are a lot of choices out there, isn't there?

Eating Away From Home

What about when I eat away from home?

When eating out and away from home, just remember what you have learned in this section

1. Think of a balanced meal when you eat out. Make sure that you eat your vegetables and drink plenty of water.
2. Make choices from the menu that are lower in sugar.
 - When eating breakfast out
 - What about Lunch time?
 - Think about the "Super-size" offers and pop refills?
 - Choose healthy snack alternatives.
 - For festive occasions and parties eat a snack before going.
 - Share dessert or order a smaller portion size.

It is your choice, but we know that with knowledge, you can make healthier choices.

Advice from Marketers, Pyramids Schemes, "Do- Gooders" and "Know It All's"

What about those low-carbohydrate diets and other diets?

Yes, there are many new diets out there that we are hearing about. There are the low-carbohydrate diets, low protein diet and brands like Atkins, MonaVee, Isogenix, Herbo-Life, the South Beach Diet, and the Zone diet, just to name a few. People were made to eat food. If there is money for profit involved, we tell people to be careful and consider your wallet!

For more information on these and other diets, you can go to www.eatright.org This is the web site for the Academy of Nutrition and Dietetics, and they provide updated information on various diets.

A low-carbohydrate diet can change your blood glucose levels after meals. So it is best to discuss any diet changes with your healthcare team, especially if you take insulin.

Reflections on Our Journey

Reflection on our journey

This section has given us more information on how we can be healthier and eat less sugar.

- We have learned more on reading food labels and finding out how much sugar is in a serving size.
- We have a better understanding of what carbohydrates are and their role in controlling blood sugars.
- We have learned which foods have lots of sugar and how to eat less of them.
- We have learned ways to prepare foods using less sugar.
- We now have the information we need to make healthier choices when eating away from home.

Plan to Eat Less Sugar

Set a goal to eat less sugar!

We have been setting small, reachable goals all along with each new topic. We are successful in reaching goals that we set to get more exercise, and to eat less fat. Now, let's take a few minutes to think of a small, reachable goal for ourselves to eat less sugar.

Keep track on a calendar to serve as a reminder and to motivate you to keep up with the goals that you have set to exercise, and eat healthier.

A New Vision

As the eagle soars overhead, he is proud of what he sees. People are getting together and making changes in their lives to make them healthier. The eagle sees that not only are people exercising more, but they are eating less fat and less sugar.

Foods are being chosen with health in mind. These foods include more fruits, more vegetables, more grains and fiber and less of the fatty and sugary kinds of foods. Our children and grandchildren are learning from us, through examples that we show them. We must also give them the wisdom of the Eagle and prevent disease.

Prayer

Thank you, Great Spirit, for the sweet rewards that come from the soil that we work with our hands. May the rewards be plentiful as our families grow healthier to live longer and healthier lives.

Resources

American Diabetes Association – www.diabetes.org Academy of Nutrition and Dietetics – www.eatright.org

Local Tribal Diabetes Program

<http://www.standingrock.org/tribalPrograms/> http://www.mhanation.com/main2/health_care/diabetes_program.html

<http://www.ihs.gov/greatplains/healthcarefacilities/spiritlake/> [https://www.facebook.com/](https://www.facebook.com/TurtleMountainDiabetesPrevention)

[TurtleMountainDiabetesPrevention](https://www.facebook.com/TurtleMountainDiabetesPrevention)

State Department of Health

http://ndhealth.gov/chronicdisease/Publications/2012_CD_Status%20Report.pdf page 35

State Extension Program – <http://www.ag.ndsu.edu/extension/>

The National Diabetes Education Program – www.niddk.nih.gov/health-information

United Tribes Technical College – <http://landgrant.uttc.edu/resources/>



Objectives

Lesson 4: Eating Smarter - Less Sugar

The learner will:

- Be able to identify the two types of carbohydrates
- Recognize where carbohydrates, fiber, and sugar are listed on a food label
- Be able to name one easy way to eat less sugar
- Be able to use new ideas learned to make future meals with less sugar

Program Evaluation

Title of Workshop Strong in Body and Spirit - Healthy Choices/
Lesson 4: Eating Smarter - Less Sugar

Presenter(s) _____ Date _____

On a scale of 1 to 5, with 1 being the least confident and 5 the most confident, please circle one per question:

Not Confident

Very Confident

Please rate how confident you feel naming the two types of carbohydrates

1 2 3 4 5

Please rate how confident you are to locate where carbohydrates, fiber, and sugar are listed on a food label

1 2 3 4 5

Please rate how confident you are to name one easy way to eat less sugar

1 2 3 4 5

Please rate how confident you feel to plan future meals with less sugar

1 2 3 4 5

Comments

What did you like about this lesson?

Thank you! Your feedback is very important to us.



Fruits & Vegetables

Antioxidants for Good Health - It's About the Color

Oxidation, or the **normal aging process**, allows free radicals to cause stress or damage to cells. Antioxidants, by their very nature, are capable of stabilizing those free radicals before they cause harm. Because oxidation occurs naturally to everyone as we age, we need to balance the aging process by eating functional foods which are high in antioxidants.

Degenerative diseases associated with aging, cardio-vascular disease, cognitive impairment, Alzheimer's disease, immune dysfunction, cataracts, macular degeneration, as well as cancers are found to also **be slowed if the intake of fruit and vegetables is high.**

Plant foods, such as fruits, vegetables, and whole grains contain many components that support health. These foods contain antioxidants and may delay the onset of age-related cell damage and diseases. Antioxidants are present in foods as vitamins, minerals, carotenoids, and polyphenols, among others. Many antioxidants are identified in food by their **distinctive colors** — the **deep red** in cranberries, buffalo berries, and cherries; the white of turnips, roots, onions, and potatoes; the **green** in cattail shoots, beans, and peas, the **yellow** of corn, mangos, and squash; and the **blue-purple** of chokecherries, Juneberries, blueberries, blackberries, and wild grapes.

Traditional foods gathered and eaten by indigenous families were filled with these antioxidant components supporting healthy bodies. These components include vitamins A, C, and E; β -carotene; the mineral selenium; and lycopene, Resveratrol, indoles, anthoxanthins, and anthocyanines.



Green fruits and vegetablescontain plant pigment called “chlorophyll.” Dark leafy greens, green peppers, peas, cucumber and celery, contain lutein. Lutein works with zeaxanthin, found in corn, red peppers, oranges, grapes and egg yolks to help keep eyes healthy, which helps reduce risk of cataracts and age-related blurring. “Indoles” in cabbage may help protect against some macular degeneration and types of cancer.

- Avocados
- Green beans
- Broccoli
- Brussels sprouts
- Green cabbage
- Cucumbers
- Green grapes
- Honeydew melon
- Kiwi
- Lettuce
- Green onions
- Limes
- Peas
- Green Pepper
- Spinach & Zucchini

Red fruits and vegetablescontain pigments called “lycopene” or “anthocyanins.” Lycopene in tomatoes or pink grapefruit may help reduce risk of several types of cancer. Anthocyanins in strawberries, or red grapes act as powerful antioxidants. The antioxidants are linked with healthy hearts.

- Red Apples
- Beets
- Buffalo Berries
- Red potatoes
- Radishes
- Raspberries
- Cherries
- Cranberries
- Pink grapefruit
- Red grapes
- Red peppers
- Pomegranates
- Red Rhubarb
- Strawberries
- Tomatoes & Watermelon

Orange/yellow fruits and vegetablescontain pigments called “carotenoids.” Beta-carotene in sweet potatoes, pumpkins and carrots is converted to vitamin A, which helps maintain healthy mucous membranes and healthy eyes, reducing risk for macular degeneration. Carotenoids also may be good for your heart. Citrus fruits are excellent sources of vitamin C and folate, necessary for cell growth and immunity.

- Carrots
- Yellow summer or winter squash
- Lemons
- Nectarines
- Oranges & Tangerines
- Papayas
- Peaches
- Yellow peppers
- Carrots
- Pineapple
- Pumpkin
- Sweet corn
- Sweet potatoes & Yams

Blue/purple fruits and vegetables contain natural plant pigments called “anthocyanins.” Anthocyanins in blueberries, grapes and raisins act as powerful antioxidants that protect cells from damage. They may help reduce risk of cancer, stroke and heart disease.

- Blackberries
- Blueberries
- Chokecherries
- Plums
- Juneberries
- Figs
- Eggplant
- Purple Grapes & Raisins

White fruits and vegetables.....are colored by pigments called anthoxanthins.” They may contain health-promoting chemicals such as allixin, which may help lower cholesterol and blood pressure.

- Bananas
- Garlic
- Jicama
- Mushrooms & Parsnips
- Cauliflower
- Ginger
- Onions



Where Do I Start To Lose Weight?

Should I start pricing frying pans or moccasins?

To find out if you would do better losing weight by eating less food or by increasing physical activity, circle either yes or no to each of the statements listed below. Then count the total number of moccasins or frying pans circled and follow the scoring directions on the back of this sheet.

1. I prepare most of my meals at home.



2. My main goal is to look more toned.



3. I'll measure my progress on a scale.



4. I'm good at planning ahead when it comes to where and what I'll be eating.



5. I'm under a lot of stress, and it sometimes gets me down.



6. I really feel cheated when I have to say no to foods I love.



7. I enjoyed sports and other physical activities when I was younger.



8. My schedule is hectic, so it's hard to set aside time for me.



9. I battle aches and pains every day.



10. I'm not good with details.



11. I want to lose weight to lower my risks of diabetes or heart disease.



12. I've gotten so heavy, I'm embarrassed to be in public.




13. I eat fast food often.




14. I would like to have more energy.



SCORING:

Count the total number of  moccasins circled on the front page = _____

Count the total number of  frying pans circled on the front page = _____

- If the number of frying pans is greater than 8, you'll do best starting with a program that focuses on eating less food.
- If the number of moccasins is greater than 8, increasing physical activity may work better for you.
- If your answers are divided between the moccasins and the frying pans, try a balanced program of smaller portions with less fat and sugar and more physical activity.

Weight loss is a slow process. We have to eat 3500 calories less or use 3500 calories in body movement to loss one pound. Therefore, do not plan to loss more than 1 to 2 pounds each week. Weight loss is a balance between energy in (food) and energy out (body movement of use from physical activity or work).

RESOURCES

- www.eatright.org/supertracker
- www.fitday.com
- contact the dietitian employed at the local hospital, clinic or public health unit for medical nutrition therapy (MNT)
- UTTC Extension – ask for the dietitian for individualized weight loss counseling (2015 – FREE)

