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OBJECTIVES:
By the time you have finished Part One, you will be able to:

- Define “food sovereignty”
- Explain why food sovereignty is important to the Oglala
- List ways that people can work toward food sovereignty

VOCABULARY
Sovereignty
Government
Traditional
Chemicals
Fertilize
Nutrition
Preservatives

FOOD SOVEREIGNTY
Food sovereignty is an important topic for the Oglala oyate. But some people do not know what it is. Food sovereignty --

- Is defined by people in their home
- Those people control where their food comes from
- Those people get the benefits from the food they grow
- The food fits with the local culture
- The food is safe and healthy, and everyone has enough
- The food can be grown without hurting the water or earth

Food sovereignty is a basic right of all people. If people don’t control where their food comes from, they can have lots of problems.

WHY IS FOOD SOVEREIGNTY IMPORTANT?

When people don’t control their food, they are not sovereign. Food is a basic need for everyone in the family. When people buy their food from far-away companies, they send money out of their home town. That money could be used to help local people instead. On the Pine Ridge Reservation, most food (95%) now comes from government or from companies owned by non-Indians. It is not healthy food that fits with Oglala history or culture. Traditional foods -- such as hunting, fishing, and plant gathering – are not common anymore.

The people who live here do not get to decide what the stores sell. We also do not get to decide what government supplies. There is not enough food. We only get to choose between bad choices. The reservation and the families who live here are not really sovereign.
Most of the food that is sold here is not healthy to eat. There are few fresh fruits and vegetables. The food has too much fat, sugar, and salt. It is grown on large farms that rely on chemicals to fertilize the ground, kill weeds, and kill insect pests. This pollutes the earth and the water. And when food is not grown locally – when it has to travel long distances – it is treated with chemicals to keep it looking fresh. This means it is not as healthy as local food.

Many people who grow food on large farms are often paid low wages to work long hours. These farmworkers are kept poor, exposed to farm chemicals, and made sick. The people who process food, especially meat, work in bad conditions, too.

So, the food people get from companies and the government does not help either the people who grow it or the people who eat it. Everybody loses except the companies that make money from selling the food.

**HOW COULD WE WORK TOWARD FOOD SOVEREIGNTY?**

You will be learning how to work toward food sovereignty in more detail as you study. But here are a few ideas about how we can be more food sovereign:

- Grow more food locally and without the use of chemicals, including traditional foods
- Handle the food we raise so that it is full of nutrition and safe to eat
- Process more food locally and use less salt, sugar, and preservatives
- Learn to preserve food for family and local use
- Make sure everyone has enough healthy food for their entire family

**FOR MORE INFORMATION:**

PART ONE: FOOD SOVEREIGNTY

Mark each thing that is part of food sovereignty with an “X”.

_____ Growing food near where it is eaten
_____ Using chemicals to kill bugs on crops
_____ Eating traditional foods
_____ The people who eat the food control where it comes from
_____ Buying food from a gas station store
_____ Getting food from the government
_____ People get healthy food

What are three things we can do to get food sovereignty on the Pine Ridge Reservation?

_________________________________________________________________________

_________________________________________________________________________

ACTIVITY

Create a Vision Board Illustrating What Food Sovereignty Means to You

What is a vision board?

A vision board is a tool that is used to remind yourself of the meaning of something special, goal setting, dream vacations, but in this case, we will use it to illustrate what food sovereignty means to you and how it will look.

Materials Needed:
• Scissors • Glue • Markers/Pens • Poster Board • Old Magazines and Pictures

Directions: Start by brainstorming what food sovereignty means to you and your family, or what food sovereignty will look like in your home. What are some of the actions you and your family can do to achieve food sovereignty? What are some of the traditional foods that you can eat, freeze, or preserve? Will your vision board include a garden? Feel free to refer to the reading to help you better understand.

Once you have an idea of that food sovereignty means to you and your family, start by looking for pictures and words that will help you better visualize what you have brainstormed. Then you can cut and paste these ideas on to your vision board. Feel free to be creative and use words to create phrases or word, these vision boards are to help you understand what food sovereignty means to you.

PART TWO: HISTORY OF OGLALA FOODS

OBJECTIVES:
By the time you have finished Part Two, you will be able to:

• Describe the food that Oglalas ate before Europeans arrived
• Explain what people ate when they moved to reservations
• Tell how the Oglala lost food sovereignty

VOCABULARY
Great Plains
Ceremonies
Relationship
Raspberries
Tinpsila (Wild Turnips)
Canpa (Chokecherries)
Chemical preservatives
European
Exchange
Commodities

FOODS IN THE EARLY 1800s

Until the mid-1800s, the Oglala diet centered around Pte Oyate, the Buffalo People. Millions of buffalo lived on the Great Plains. There were strict rules about hunting them. These rules made sure that everyone got enough food. They made sure that there were enough buffalo for the future. Every part of the animal was used. The meat was dried and stored for the winter and ceremonies. The Oglala have a deep relationship to the buffalo that is still present.

People also used plants in many ways. Some plants were used to make tea or for ceremonies, such as sage, rose hips, red clover, mint, and cedar. People ate roots, berries, and other parts of plants. This included tinpsila (wild turnips), cactus berries, canpa (chokecherries), and raspberries. Most of these plants still grow on the Pine Ridge Reservation or in the Black Hills. Some people still gather them and use them.

People saved food for the future by drying it or by storing it below the ground. For example, they dried buffalo meat and berries. This worked well, as it is dry in this area. They also dug holes and put food below the ground, where it is cool. This preserves some foods. People could hide food below ground and then come back to get it later. People did not use any of the chemical preservatives that are in food today.

This was a healthy, local diet. It was nutritious. It was produced by the Oglala for the Oglala. People dried and stored their own food. People shared food and were seldom hungry. They got everything they needed from the earth. During this time, Lakota people had food sovereignty.

FOODS AS A WEAPON

This changed when Europeans arrived in Lakota lands. Europeans brought new foods like sugar, wheat, and coffee. They brought new meat, like cattle and lamb. The Oglala diet began to change.

The United States used food as a weapon against the Oglala. The United States wanted Lakota land, but the Lakota fought to keep their land. So, the United States had a plan to make the Lakota give up. Leaders of the U.S. decided to kill off the buffalo to starve the Lakota. The U.S. thought that this would make the Lakota move onto reservations, sell the Black Hills, and give up their other land. This was called the “Sell or Starve” policy.

European immigrants killed millions of buffalo, until there were almost no buffalo left.
Lakota people had a harder time finding enough to eat. The “Sell or Starve” policy worked. The Oglala moved to the Pine Ridge Reservation, and the U.S. stole the rest of their land.

**FOODS ON THE RESERVATION**

People thought there would be food on the reservation, because the U.S. signed a treaty saying they would give food to the Lakota. Once people got to the reservation, there were problems. First, the U.S. wanted the Oglala to become farmers. But the land on the reservation was not good for farming. Second, there was not enough food for everyone. A lot of people were hungry. Third, the food the U.S. gave the people was not healthy. It was too high in fat and salt and too low in nutrition.

Men did continue to hunt the animals that were on and near the reservation when they could. Women gathered some plant foods. A few people began to raise cattle. But people mainly ate government food. Elders talked about the U.S. food. They said that each person got beef, flour, and other basic foods. But the cattle were skinny and did not provide much meat.

The elders said that people had never seen wheat flour. There was no one to teach them how to use it. So women often threw it away and used the sack it came in to make clothes. After awhile, they learned to make fried bread, and this is how frybread became popular. But when frybread is made with white flour, it has little nutrition and a lot of fat. So it was – and is – not very healthy.

The U.S. also gave people sweet foods. The elders knew this was not healthy. But there were no buffalo to hunt, and people had to eat what the U.S. gave them. They were often hungry. They got sick from lack of food. This is still a problem today.

As a result of U.S. policy, the Oglala lost food sovereignty. For over a hundred years, the Oglala have had little control over their food. The federal government supplies commodities. It is easier for people to take commodities than to gather traditional foods. There is often not enough food. And it is not healthy food. People get too much salt, fat, and sugar. They do not get enough fresh fruits, vegetables, and other healthy food.

These are the problems that this information will help you solve.

**FOR MORE INFORMATION:**


PART TWO: HISTORY OF OGLALA FOODS

Put an X in the space before each of these foods that Oglalas ate before Europeans arrived on their land.

_____ Raspberries
_____ Buffalo
_____ Flour
_____ Mint
_____ Cactus berries
_____ Coffee
_____ Candy
_____ Beef
_____ Wild turnips
_____ Red clover

What was one of the food problems that people faced when they got to the reservation?

________________________________________

________________________________________

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ACTIVITY

Garden Scavenger Hunt

Please visit the link to print out the garden scavenger hunt packet and activity

OBJECTIVES:

By the time you have finished Part Three, you will be able to:

• Explain where people in Thunder Valley get their food
• Describe why this is not good for food sovereignty
• List things that people do that help food sovereignty

VOCABULARY

Food desert
Thunder Valley Community Development Corporation
Convenience Store
Processed
Charity
Researchers

WHERE PEOPLE GET THEIR FOOD

Today, our area is called a “food desert.” That means there is not enough food, enough affordable food, or enough healthy food for people who live here.

Thunder Valley Community Development Corporation did a study in 2014 to find out more about this. The study said that most people in Thunder Valley got most of their food from three places:

• Grocery store on the reservation
• Convenience store on the reservation (like Common Cents)
• Grocery store off the reservation

This is a problem for food sovereignty for two reasons. First, this food comes from off the reservation, which means that reservation businesses and people do not make money. This food is grown and processed far away. Second, a large amount of food is bought in convenience stores. Convenience store food has lots of fat, sugar, and salt. This means people are not getting healthy food. And again, the food is grown and processed far away.

Most people in the study also got food from the SNAP program (food stamps) and from commodities. This food is also not grown or processed on the reservation. Commodities come from the United States government and are controlled by the U.S. government. So this does not help food sovereignty.

About half the people sometimes ate in restaurants, but people did not eat there often. About half the people also got food from:

• Convenience store off the reservation
• Food bank or other charity program
• Community feeds (funerals, ceremonies, etc.)
• School meals
• People who sell food from their cars

Only two of these involve food that is locally grown or processed. Community feeds sometimes include buffalo, beef, or other local food. People who sell food from their cars process the food and make money locally. But the other three types of food are from far away. Food that is not local is usually also not healthy. It is grown using chemicals that hurt the water and the earth.

So most of the food that people on the Pine Ridge Reservation eat does not help food sovereignty.

About one-third of people on the reservation do things that help food sovereignty. These include hunting, gathering plants, and growing gardens. These are important sources of food for only a few families. But the people who know how to do these things can teach other people how to do them, so this is important.

**PAYING FOR FOOD**

The survey asked how much money people spent on food using cash, SNAP, and WIC (Women, Infants and Children program). The average was $103 per month per person. This is really low and shows why people use commodities, charities, and school meals to survive.

Families that hunt, fish, gather plant foods, and raise gardens are also making good choices to survive. These things help food sovereignty. They need to be more common.

The study said that about half of the money people spend on food is spent off the reservation. Most of this money by far is spent in Rapid City. If this money was spent on the reservation, it would help support businesses and people here. It could buy food from local farmers and gardeners. It could buy food grown without chemicals. Most homes include children, who are more likely to be hurt by farm chemicals. So this is important.

Some people think healthy foods are expensive. But this is not true. Researchers looked at food that was ready to eat. They found out that grains, fruits, vegetables, and dairy foods are less expensive than foods that are high in fat, sugar, and salt. Grains include wheat, rice, and corn. Fruits include berries, apples, and grapes. Vegetables include beans, squash, and potatoes. Dairy foods include milk, yogurt, and cheese. Foods that are high in fat, sugar, and/or salt include chips, canned food, pop, bacon, cake, and candy.

Some people think they are saving money by shopping in a big store off the reservation. But when gas, the cost of a car or truck, and car upkeep are included, this is not true. When all these things are included, it actually costs about $86 to travel to and from Rapid City one time.

The study asked people about their family's food. This showed that 59 of the 100 families in the study did not have enough of the foods they wanted to eat. This included seven families that often did not have enough to eat. This is not surprising. But it makes the need for food sovereignty urgent. People need enough good food to stay healthy. Local control of food helps with this. It also helps local businesses. And it helps the earth and the water.

**FOR MORE INFORMATION:**

Thunder Valley Community Development Corporation: www.thundervalley.org
### PART THREE: THUNDER VALLEY FOODS TODAY

Put a check mark by each activity that helps food sovereignty:

- [ ] Hunting
- [ ]Buying food in Rapid City
- [ ] Buying food at Common Cents
- [ ] Buying food from people who sell food from their cars
- [ ] Gardening
- [ ] Commodities
- [ ] Gathering plants
- [ ] Fishing
- [ ] SNAP

### ACTIVITY

**Nutrition Dictionary Worksheet**

Write down the vocabulary words from the reading and then write down one fact that you have learned about that word.

<table>
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<th>Vocabulary Word</th>
<th>Healthy Fun Fact</th>
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**FOOD SOVEREIGNTY CURRICULUM**
OBJECTIVES:

By the time you have finished Part Four, you will be able to:

• Explain how food is related to health
• Discuss ways to get exercise
• Tie healthy food to food sovereignty

VOCABULARY

Wellness
Obesity
Diabetes
Stroke
Dietitian
Organic

FOOD AND HEALTH

Poor eating habits can cause many problems. These include diabetes, some types of cancer, heart problems, obesity, infant death, and a shorter life. People who eat poorly also have lower quality of life. The lack of healthy foods on the Pine Ridge Reservation creates real problems.

As talked about earlier, there are good reasons that many people on the Pine Ridge Reservation have poor eating habits. We will talk about why this is important and what to do about it. Healthy people are an important part of food sovereignty.

Many people on the Pine Ridge Reservation have prediabetes or diabetes. This means the body does not absorb food properly to use it as energy. This is partly a result of eating too much and eating lots of sugar. Studies say that three-quarters of Indians in South Dakota are overweight. The foods at convenience stores are often high in sugar. Healthy foods for people with diabetes include fruits, vegetables, whole grains (like 100% whole wheat bread or brown rice), and low-fat dairy products.

Diabetes is also related to heart problems and strokes. High-fat foods hurt a person’s heart. These include beef, sausage, bacon, and hot dogs. Foods that are low in fat again include fruits and vegetables. Other healthy foods are nuts, fish, beans, and buffalo. Buffalo meat is lower in fat than beef.

People can improve their health by eating good foods. To do this, people who are overweight or have diabetes or heart problems should see a dietitian or health worker who can teach them how to eat the right amount of the right foods – and get healthier.

EXERCISE

Exercise is also important to health and wellness. It is important to people of all ages. Exercise helps people keep their weight down. This can help prevent diabetes and many other problems. Exercise helps people feel better mentally. It helps prevent heart problems and some kinds of cancer. And it makes things you do around the house easier, like carrying a bag of dog food or picking up toys.

Adults should be active at least 2-1/2 hours per week. Children should move at least 60 minutes every day. You don’t have to have fancy equipment or a lot of money to exercise. Here are some ideas:

• Walking – stay safely off the road, walk on sidewalks, use school tracks, or use the Thunder Valley CDC walking trail.
• Running – same as walking.
• Dancing – builds heart health and keeps weight down.
• Weights – from $8 up at discount stores.
• Basketball – use public courts or play at a home hoop.
• Exercise bands – use in a variety of ways. $10 at a discount store.

• Horseback riding – all-around good exercise.

• Skateboarding – good for exercise and helps balance.

• Gym/recreation center activities – start new activities, if there are none where you live.

• Do exercises around home or at work, like - doing pushups on a sturdy table, bed, or chair
  - doing jumping jacks
  - jogging in place during TV commercials, or
  - playing tag with your kids.

  Don’t start by doing hard exercise. Start slowly and then increase your level of exercise. If you are older or have arthritis, diabetes, or heart disease, talk to your doctor before starting exercise.

HEALTH AND FOOD SOVEREIGNTY

Remember that food sovereignty means everyone has enough healthy food. And it means that people control the food they eat.

Before 1850, Oglala people had food sovereignty. They raised and controlled their food. They ate healthy food, like buffalo, fruits, and vegetables.

Today, eating healthy foods involves many people. It involves the people who are doing the eating. But it also involves the people who grow food, process food, and sell food. If the people who control growing, processing, and selling do not make healthy food, it is hard to stay healthy. If Lakota people can control growing, processing, and selling, we can have healthier food. Healthy eating also means eating traditional foods.

Right now, it is hard to eat healthy on the Pine Ridge Reservation. One solution is for people to buy locally-grown food from local businesses. People can also grow gardens and raise chickens and other animals. If people learn how to preserve food for future eating, it means year-around healthy food. And if they raise the food without chemicals (organic), then the food is even healthier.

All these things help food sovereignty.

FOR MORE INFORMATION:

South Dakota State University Extension. www.iGrow.org


Centers for Disease Control. Physical Activity and Health. www.cdc.gov/physicalactivity/basics/pa-health/
WORKSHEET

PART FOUR: FOOD, HEALTH, AND WELLNESS

What are three ways to get exercise on the Reservation?

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

Name four foods that people should eat to stay healthy –

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

ACTIVITY

Create a Weekly Exercise Calendar
Directions: Take some time to plan some physical activities for you and your family. Use the template provided to help you. Be sure to write down in each box the day of the month and what the physical activity will be doing and for how long. You may also break the minimum 60 minutes of physical activities into smaller increments. For example, you may break down 60 minutes of activities into a half hour in the morning and a half hour in the afternoon. Be creative.

Month: _____________ Year: _____________

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THUNDER VALLEY CDC
OBJECTIVES:
By the time you have finished Part Five, you will be able to:

• Describe the Healthy Plate nutrition method
• Know what foods are included in each section of the Healthy Plate
• Tell how the Healthy Plate method fits with traditional Oglala foods
• Explain healthy eating for infants

VOCABULARY
Healthy Plate method
Equivalent
High fructose corn syrup
Tablespoon
Poultry
Lactose
Calcium
Protein
Fortified
Pureed
Teaspoon

FOOD TYPES AND THE HEALTHY PLATE METHOD

There are five types of healthy foods, as you can see from the Healthy Plate picture. The Healthy Plate shows how much of each group of food a person should eat each day to be healthy. As the picture shows, half of the foods we eat each day should be fruits and vegetables.

You may not eat this way today, but it is important to take steps toward healthy eating. Start by moving to low-fat or fat-free milk or yogurt. Or start by replacing pop with 100% fruit juice or water. Or start by adding one serving of fruit to each meal. Start now to make small changes, and soon you will be eating a healthy mix of foods. If you go to choosemyplate.gov, you can find out exactly what amounts of what types of foods to eat for your age, gender, size, and goals. For this example, we use the information for a 36-year-old woman.

PROTEIN GROUP

An average 36-year-old woman who is not overweight and who gets a little exercise should eat about 5 ounce equivalents of protein per day. Some examples of one ounce of protein equivalent are:
• 1 tablespoon of peanut butter

• 1/2 ounce of nuts or seeds. Get nuts and seeds without salt.

• 1 egg

• 1/4 cup of cooked dry beans or peas

• 1 ounce of lean meat, poultry, or fish. Poultry includes any type of bird meat (chicken, duck, turkey, etc.). Take the skin off chicken and avoid frying to keep fat level down.

• 1 egg

**DAIRY GROUP**

People should eat dairy products every day. Pick low-fat or fat-free options. An average 36-year-old woman should have about 3 cups of dairy products per day. One cup of dairy counts as 1 cup of milk or yogurt. It also counts as 2 ounces of processed cheese (two small slices of cheese) or 1-1/2 ounces of natural cheese. Ice cream and pudding also have milk in them, but watch out for too much sugar and fat. Foods from this group help grow strong bones and healthy teeth.

Some people cannot digest cow's milk, because it has lactose. This includes many native people. Yogurt is easier to digest than some other milk products. Lactose-free milk, soy milk or enriched rice milk are other choices. If you cannot have cow's milk, be sure to talk to your health care person about getting enough calcium and vitamin D.

**VEGETABLES GROUP**

Foods in the vegetables group include carrots, lettuce, green beans, broccoli, and corn. Vegetables and fruit keep people healthy in many ways. They have lots of vitamins and fiber. They help you heal when you get hurt.

It is important to eat food from the vegetable group at most meals. An average 36-year-old woman should eat 2-1/2 cups of vegetables each day. One cup of vegetables means:

• 1 cup 100% vegetable juice

• 2 cups raw, leafy salad greens

• 1 cup raw or cooked vegetables

**FRUIT GROUP**

An average 36-year-old woman should eat 1-1/2 cups of food from the fruit group each day. The fruit group include apples, pears, melon, bananas, grapes, and berries. One serving of fruit means:

• 1 cup raw or cooked fruit

• 1 cup 100% fruit juice (read the label)

• 1/2 cup dried fruit (raisins, apricots, prunes, craisins)

**GRAINS GROUP**

People should eat grains at most meals. Anything made from wheat, rice, oats, cornmeal, or another cereal grain is part of the grains group. This includes things like spaghetti noodles, breakfast cereals, tortillas, crackers, and oatmeal. An average 36-year-old woman should eat about 6 ounce equivalents of grain each day. One ounce equivalent means:
• 1 slice of bread, 1 waffle, or 1 pancake
• 1/2 of a bagel, hamburger or hot dog bun, or English muffin
• 1/2 cup cooked rice, noodles, or cereal
• 1 ounce of ready-to-eat cereal (avoid sugary cereals)

The best foods are whole grain, which means they include all of the grain. So “100% whole wheat bread” (not just “wheat” bread) is healthier than white bread. Brown rice is healthier than white rice or fried rice. Whole grain waffles are better than white flour waffles. And so forth. Read food labels and look for “whole grain.”

It is hard to find some of these healthy foods on the Reservation. They can be found in some stores in nearby towns. Shop around and look for “health” or “natural” foods. These are at some grocery stores and at natural food stores.

LESS HEALTHY FOODS

Here are some things that have a lot of sugar, fat, or salt. They should be avoided or only eaten in small amounts:

• Pop
• Other drinks that are not 100% fruit juice or that contain high fructose corn syrup (read the label or ask)
• Candy
• Frybread
• Chips
• Cookies, cakes, and pastries
• Deep-fried foods, like French fries, most fried chicken, and chicken strips

Instead of frying foods, which adds fat and calories, use cooking methods like grilling, broiling, baking, and steaming.

THE HEALTHY PLATE AND TRADITIONAL OGLALA FOODS

Traditional Oglala foods included a lot of meat, fish, fruits, and vegetables. People drank water and tea. These are all healthy foods. People ate many different foods, which is healthy. Food came directly from Unci Maka, Grandmother Earth. There were no chemicals on the food. The traditional Lakota way to eat was a healthy way to eat.

Before the 1800s, Lakota people did not drink cow’s milk. People got protein and calcium from other foods, such as buffalo meat, nuts, and birds’ eggs. They did not have sugar, so they ate berries and maple syrup that were naturally sweet. They did not have wheat. They ate whole grains and made flour from corn, wild buckwheat, amaranth (pigweed), and tinsila. Many of these foods are still on the reservation or in the Black Hills.

NUTRITION FOR PREGNANT WOMEN

Pregnant women have special food needs. Women should eat healthy foods before they become pregnant. These include dark green leafy vegetables (like spinach), dry beans, meats, oily fish (such as salmon), iron-fortified cereals, and citrus fruits (oranges, grapefruit). They need to see a health care person as soon as they know they are pregnant and ask for food information.

Pregnant women need to eat varied foods and to follow the Healthy Plate method. This means a lot of fruits, vegetables, low-fat dairy, lean meat and other protein, and fish. They should drink plenty of water and avoid alcohol, raw milk, and uncooked egg. Do not take any drugs -- even drugs you get from a doctor or a store -- unless you have talked to
your health care person. Keep salt, fat, and caffeine to a minimum.

**NUTRITION FOR INFANTS**

Until your baby is at least four months old, they should have only breast milk or formula – no solid foods. Most babies should have only breast milk or formula until they are 6 months old. Mix formula using the directions. Do not add extra water. A baby should not have cow’s milk until they are 1 year old.

Babies may have solid foods starting at 4 months only if they:

• Can hold their head up and sit in a high-chair
• Have gained weight to be twice their birth weight or at least 13 pounds
• Can close their mouth around a spoon and move food to the back of the mouth
• Can move tongue back and forth
• Push food out of their mouth less often

Babies this age can eat pureed vegetables, fruit, or meat and semi-liquid iron-fortified cereal. Add new foods one at a time and wait a few days to see if baby has any bad reaction. Feed babies a little bit of food several times a day (one teaspoon to one tablespoon), rather than a lot at once.

Once babies are 8 months old and can chew and pick up food, they can add soft cheese and cottage cheese. They can also eat mashed vegetables and fruits, and small bits of other food, like:

• Meat and fish
• Cooked beans
• O-shaped cereal
• Scrambled eggs
• Cooked potato
• Teething crackers.

At this point, you should start to apply the Healthy Plate method as you feed babies. Look at choosemyplate.gov to get information for your child’s needs. Get locally-produced food when possible.

**FOR MORE INFORMATION:**

United States Department of Agriculture.
http://www.choosemyplate.gov

Colorado State University, Eating Well for a Healthy Pregnancy.
http://extension.colostate.edu/topic-areas/nutrition-food-safety-health/eating-well-for-a-healthy-pregnancy-9-388/

http://www.babycenter.com/0_age-by-age-guide-to-feeding-your-baby_1400680.bc
## PART FIVE: BETTER HEALTH THROUGH NUTRITION

### EXPLORING FOOD GROUPS

Identify the Food Groups found in each of the Combination Foods

<table>
<thead>
<tr>
<th>Combination Food</th>
<th>Grains Group</th>
<th>Milk Group</th>
<th>Vegetable Group</th>
<th>Fruit Group</th>
<th>Meat Group</th>
<th>Other Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lettuce Salad w/Dressing</td>
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<tr>
<td>Bean Burrito</td>
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<tr>
<td>Ham-Cheese Sandwich</td>
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<tr>
<td>Potato Salad</td>
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<tr>
<td>Sausage Pizza</td>
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<tr>
<td>Cheese Burger</td>
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<td></td>
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<tr>
<td>Peanut Butter &amp; Jelly Sandwich</td>
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<tr>
<td>Macaroni &amp; Cheese</td>
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<td></td>
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<tr>
<td>Chicken Noodle Soup</td>
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</tr>
</tbody>
</table>

### ACTIVITY

Interactive Online My Plate Tutorial

For this activity, we will be completing an online interactive activity which will show you how to have a well-balanced meal using the USDA My Plate tool. Please follow the link and complete the activity.

http://www.nourishinteractive.com/nutrition-tools-healthy-family/parents-interactive-my-plate
OBJECTIVES:

By the time you have finished Part Six, you will be able to:

• Write a grocery list for a healthy diet
• Explain how to handle food so that people don’t get sick

VOCABULARY

Contaminated
Parasites
Virus
Bacteria
Food poisoning
Food thermometer

GROCERY SHOPPING

Preparing healthy food for your family begins with grocery shopping. Planning meals ahead of time and making a grocery list help you stay within your budget. When you use the Healthy Plate method, some good basic foods to buy are:

• 100% whole wheat bread
• Skinless chicken or turkey breasts (can be ground and used instead of hamburger for many dishes)
• Reduced-salt (sodium) lunch meat
• Salmon, trout, or your favorite seafood
• Brown rice
• Whole-grain or whole wheat noodles and crackers
• Whole-grain or multi-grain cereals
• Eggs
• Black or kidney beans; lentils; split peas
• Fresh or canned tomatoes (get low-salt, if canned)
• Mustard, ketchup, fresh or canned peppers for flavorings – and add other spices
• Fresh, frozen, dried, or canned fruits (if canned, get low-sugar and avoid high fructose corn syrup)
• Fresh, frozen, or canned vegetables (get low-salt, if canned)
• Skim or low-fat milk and yogurt (get low-sugar or plain yogurt)
• Low-fat cheese or string cheese
• Unsalted nuts and seeds
• 100% fruit juice

Organic fruits and vegetables are hard to find in stores on the reservation. Often, you can grow these important foods yourself (see FOOD SOVEREIGNTY INITIATIVE).
below). When you buy them from someone else, ask if the foods were grown with or without chemicals. Choose foods grown without chemicals. Fruits and vegetables that are usually grown with fewer chemicals are avocados, pineapples, cabbage, sweet corn, asparagus, onions, kiwi fruits, grapefruit, cauliflower, cantaloupe, and sweet potatoes.

SAFE FOOD HANDLING

If you have good food, but don’t handle it safely, people will get sick. Food will cause sickness if it’s been contaminated with parasites, viruses, or bacteria. Even a tiny bit of contamination that you cannot see or smell can cause food poisoning. Infants, children, pregnant women, and elders are most likely to get sick from food contamination.

Food safety rules for grocery shopping include:

• Don’t buy damaged containers or packages, even if they seem like a bargain
• If a food needs to be refrigerated, be sure you can get it home quickly, or carry a cooler
• Keep meat away from other foods, in case they leak

At home, be sure your refrigerator keeps food between 35 and 40 degrees. Keep it clean. Be sure frozen foods are always frozen solid. If they get soft, throw them out. Thaw food in the refrigerator or the microwave, not on the counter.

Don’t taste food to see if it is still good! You might get sick. And often you can’t taste whether food is good. If in doubt, throw it out.

PREPARING FOOD SAFELY

Four major things are important to preparing food safely.

First, wash your hands. Wash for at least 20 seconds (hum “Happy Birthday” twice to make 20 seconds). Use soap. Be sure to scrub the backs of hands, under fingernails, and between fingers. Rinse under running water. Dry using a clean towel or air dry.

To keep food safe, wash your hands before, during, and after preparing food. Wash before eating. Wash your hands after:

• Caring for someone who is sick
• Changing diapers
• Using the toilet
• Handling uncooked eggs
• Handling raw meat, poultry, seafood, or their juices
• Touching garbage
• Touching an animal or animal waste
• Blowing your nose, coughing, or sneezing

• Treating a cut or wound (Don’t let people who are sick or have infected cuts serve food)

It is important to wash all surfaces and utensils after each use. Wash cutting boards, dishes, utensils, and counter tops with hot soapy water after preparing each food item and before you go on to the next food item. Wash cloth towels in hot water. Wash fruits and vegetables, but do not wash meat, poultry, or eggs.

Second, use refrigerated food within a couple days. Soup, stew, egg or tuna salad, opened lunch meat, and most leftovers are only safe for 3 to 5 days. Hamburger, other ground meats, chicken, and turkey are safe in the refrigerator for only one or two days. This is another reason to plan before you go grocery shopping -- so you can eat food before it goes bad.

Third, keep raw meat and meat juices separated from all other foods. Earlier, we talked about cleaning between each food item. This is critical for raw meats and meat juices. If you use a cloth or paper towel, don’t use it to clean up meat or meat juice and then on something else. A common mistake is putting cooked meat back on a plate that held raw meat. This is dangerous.

Fourth, keep hot foods hot and cold foods cold. Cooked foods – and especially meat and poultry – need to be cooked completely to be safe. A food thermometer is a good way to be sure. Bacteria that can make you sick will actually grow better as food cools down. So keep hot food hot. Put cold foods back in the refrigerator as soon as you serve them. At potlucks, use a slow cooker or an ice cooler to keep food the right temperature. Even then, limit the time between cooking, eating, and refrigerating to two hours – or to only one hour in hot weather.

FOR MORE INFORMATION:


PART SIX: HEALTHY FOOD PREPARATION

Put a check mark in front of each item that should be on your grocery list:

_____ Fresh, dried, or canned fruit  _____ Small snack cakes

_____ Lunch meat  _____ Salmon or other fish

_____ Juice boxes  _____ String cheese

_____ Whole grain cereal  _____ Potatoes

_____ Corn chips  _____ Diet pop

List four times you should wash your hands for safe food handling:

__________________________________________________________________________

__________________________________________________________________________

__________________________________________________________________________

__________________________________________________________________________

How long can ground meat be left in the refrigerator safely before it is eaten?

__________________________________________________________________________

ACTIVITY

Ants on a Log

What You Will Need:

• Celery Sticks (look for precut to save time)
• Peanut Butter* (You may also use almond butter or cashew butter)
• Raisins*
• Spoon

*For those with nut allergies the peanut butter may be substituted with cheese. Raisins may also be substituted with bacon bits to compliment the cheese and for a nut free and savory snack

Directions: Before you begin, make sure your hands are washed. Next, be sure to wash the celery and pat dry using a paper towel. Using your spoon, spread the peanut butter into the celery so the raisins, this will stop the raisins from falling off. Then place the raisins onto the peanut butter to create your healthy and delicious snack.

PART SEVEN: MODERN OPTIONS FOR LOCAL AND TRADITIONAL FOODS

OBJECTIVES:
By the time you have finished Part Seven, you will be able to:

• Describe some of the local traditional foods that are available.

• Explain some ways to support food sovereignty in the community.

VOCABULARY
There are many plant names in this section.
Bounty
Ceremonies
Farmer’s Market

GATHERING TRADITIONAL FOODS
Many foods that people ate before the late 1800s are still here today. As talked about earlier, some families hunt or fish. There are also many plants. All you have to know is where to look and how to gather and process the plants. In Thunder Valley, we are lucky to have two kinds of places that plants grow – on the plains and along the creek. This means that there are many different types of plants to eat. Many other plants grow on our treaty lands in the Black Hills. So, we have a rich bounty of traditional foods.

Before you hunt or fish, be sure you know the tribal government’s or state government’s rules. Some animals and fish can only be taken at certain times of the year or in a certain way. Ask the person who controls the land if it is okay to hunt or fish there. Be sure you know how to handle weapons, traps, and fishhooks safely.

Before you gather plant foods, be sure they have not been sprayed with chemicals. Ask the person who controls the land if it is okay to gather plants. Be sure that you leave some of each kind of plant. If you take all the plants of a certain kind or pull plants up by their roots, there will be no plants to eat in the future.

Hunting, fishing, and gathering are traditional Lakota activities. They help food sovereignty. The food fits our culture and is grown and processed locally. Food is harvested by Oglala for Oglala. The food is grown without chemicals. It is healthy. For these reasons, it is good to learn how to harvest local foods.

PLANT FOODS
You will probably recognize some traditional plant foods. For example, most of the Wihuta Hu (Cattail) can be eaten. The pollen can be added to flour to make it more nutritious. The young shoots can be eaten raw or cooked. The roots can be dried and ground into flour. Wihuta Hu can be found in wet areas.
Wahcazizi (Sunflowers) are also common. Their oil can be used as a moisturizer. The seeds of wild sunflowers can be eaten, but are much smaller than the ones you find in the store.

Another important food is Canpa (Chokecherries). Chokecherries grow on small trees along creeks. They are harvested when they turn black in Canpasapa Wi, or “the Month when Chokecherries are Black” (July). They are used for tea and jelly, made into wojapi, and mixed with dried meat to make wasna. Canpa can preserved by drying. Canpa is used in ceremonies, too.

Many types of fruit are found in our area. These include:

- Takanheca Hu (Raspberries)
- Mastincapute (Buffalo Berries)
- Kanta (Plums)
- Wazusteca (Strawberries)
- Canwiyapeha iyuwí (Grapes)
- Unkceda Bdaska (Cactus berries)
- Aunyeyapi Tahpiyogin (Sandcherry)

Other traditional foods in the area are:

- Unzinintka Hu (Rose hips)
- Tokada Tapezuta Hu Bdoka (Clover)
- Pezutapepe (Yucca)
- Wape Soka (Purslane)
- Wihuta Hu Iyececa (Plantain or White Man’s Foot)

Many herbs are also found. These are good for health care and as tea. Some of these are Caniyuwe Wahpe Onapohye (Hops), Hehaka Tapezuta (Wild Bergamot), Peji Hota (Sage), and Canicahpehu (Stinging Nettles). Cansuska (Box Elder Maple) is used for syrup.

There are also wild foods that are not traditional foods, because they came from other places. For example, you can eat every part of Wahcazi (Dandelion). The flowers make tea. The roots are good in stews. Roasted roots are a coffee substitute. The young leaves make a healthy salad.

These are just a few examples. There are many more traditional foods. Thunder Valley CDC can help you find out more about finding plant foods. Or you may have a relative or friend who can teach you about this. It is best to have someone help you identify a plant before you gather it, as some plants are not healthy to eat.
LOCAL FOODS

Locally-grown and processed foods help food sovereignty. In addition to traditional foods, this includes:

- Eating and processing food from your own garden.
- Getting or buying food from someone else’s garden.
- Buying food from people who process the food, like vendors who sell food from their cars.
- Buying from local food businesses, like Tanka bars.
- Choosing food from local vendors at powwows and other events. Be sure to use the Healthy Plate method when you choose foods.
- Getting meat from local ranchers.
- Raising your own animals, such as chickens, bees, lambs, and cattle. Ask someone who already raises that animal for information on caring for the animal.
- Using cattle or sheep manure from local animals on your garden, rather than buying it in a store.
- Working with others to grow, process, or make food for the community. For example, people can work together to preserve food for people who don’t have enough food.
- Starting a Farmer’s Market to connect people who grow food with people who want to buy fresh, healthy, local food.

These are some important ways to support local control of local food. If people do these things, it keeps people’s money in our area, rather than sending it far away. This helps our families have a better income. It also makes people healthier. And it can increase the amount of food that is available to families in Thunder Valley and in your community. If all our families followed these ideas, we would only need a small amount of food from convenience stores, SNAP, and commodities. We would have much more food sovereignty.

FOR MORE INFORMATION:


What are some traditional foods you have eaten?

If you were going to harvest traditional foods, which foods would you start with?

What are three ways you can encourage locally-grown and processed foods?

**ACTIVITY**

Traditional Food Preparation

**Wojapi**

Note: This recipe calls for one can of blueberries but feel free to substitute that with fresh berries from the local farmers market. Or you can even use ones that you picked yourself such as chokecherries.

Ingredients:

- 1 can of blueberries
- 3 cans of water
- 3/4 cup of flour
- 1 cup of sugar (sugar can be substituted with honey for a healthier wojapi)

Directions:

In a medium sauce pan, combine the blueberries, water, and sugar and bring to a boil over medium heat. Once the mixture is boiling slowly as the flour to make a gravy like mixture. Remove from heat when the mixture reaches a desired consistency.
PART EIGHT: GROWING HEALTHY FOODS

OBJECTIVES:
By the time you have finished Part Eight, you will be able to:

• Explain the basics of growing an organic vegetable garden.

• Understand some of the problems that gardeners in our area face and how to solve them.

VOCABULARY
Cooperative Extension Service
Tiller
Mulch
Tomato cage
Diatomaceous earth
Investment
Harvesting

LEARNING ABOUT GARDENING
There are many ways to learn about gardening. Thunder Valley CDC has information and experience in growing food. So does the Cooperative Extension Service. Other groups help with gardening or greenhouses on the reservation. You may know someone who has a garden. There is lots of information online and in books.

It is important to get information before you start, so you can be successful. There are challenges to gardening on the Pine Ridge Reservation. When you look for information, you want information from places that are like our area. Do not expect to grow the same plants they grow in Florida! Do not expect to garden without watering the plants. Look for information that is about Lakota Territory.

This section assumes that you want to garden without using chemicals – organic gardening. This is easy to do. But you have to be committed to your garden. You cannot just plant seeds and hope for the best. A healthy garden needs care.

CHOOSING A GARDEN SPACE
When you choose a garden space, pick a spot that is mostly flat and not at the top of a hill. You will need a place that is close to the house or a well, so you can water. Pick a place that gets plenty of sun. If possible, pick a place that is a bit out of the wind.

Start with a small garden – about 15 or 20 feet by 10 feet. It is best to dig up your garden the Fall before you want to plant. For a small garden, you can do this with a shovel, if you are in good physical shape. For anything larger, it is much easier to use a tiller. Several groups on the reservation can till your garden for you.
Then add lots of mulch and some manure and till it in. This is really important for a healthy garden, as the soil on the reservation isn’t too good. The easiest mulch is fallen leaves. You can find them locally. Or you can take plastic bags when you go into town and get leaves there. Keep seeds out of your mulch. Otherwise, you will have lots of weeds in your garden. Get dried, old sheep or cattle manure from a local rancher. Be sure it is fully dry. Till it in with the mulch. It is also best to do this in the Fall, so the mulch and manure will have time to break down into the soil.

It takes a couple years to get really healthy soil. Keep adding mulch and manure every Fall, and you will have lots of healthy food.

**PLANTING**

In our area, you can start planning some foods in early May. Get seeds from a farm store or a program that supplies garden seeds. Plant a variety of food. Some of the best foods to grow are tomatoes, beans, corn, zucchini, and potatoes.

Plant each type of seed as it says on the package. Do not crowd plants. Crowded plants will not be as healthy or produce as much food. For example, bean seeds can be planted 3” apart in rows. But once they are growing, you need to pull up plants to leave each plant at least 6” apart. Plant parts of seed potatoes 6” underground and a foot apart. You must use seed potatoes, which you can buy at stores that have garden supplies. Most store potatoes are treated so they will not sprout.

Corn grows in rows, with 12” between each plant in the row and at least 12” between rows. Rather than growing corn in single long rows, grow it in short rows that are in bunches. So, make a square patch of corn, rather than single rows of corn.

Tomatoes, peppers, broccoli, melon, and cauliflower need to be started indoors. Ask around to find greenhouses on the reservation. People there can help you start plants at home or in the greenhouse. Greenhouses off the reservation also sell young plants.

Tomatoes must be planted at least 4’ apart in all directions. They should be caged using round cages that can be bought at garden stores. If you do not use cages, the tomatoes will fall on the ground and rot before you can harvest them. Tomatoes resist pests. They are a basic, healthy food that is expensive in stores. There is nothing like the taste of a tomato picked right from the plant! Start small, with only 2 or 3 plants, until you know how many tomatoes your family can eat.

**KEEPING THE GARDEN HEALTHY**

To keep your organic garden healthy, you need to know about four things: fences, pests, water, and weeding. Where we live,
you need to fence your garden. Otherwise, rabbits, deer, cattle, and horses will get your garden. Dogs can also be a problem. By the time you know you have a problem, you have lost your garden. Fencing is the most expensive part of gardening, but it lasts for years. When you think about all the money you’ll save by growing your own food, it is worth it.

The simplest garden fence is plastic windbreak fencing held together with wire. But it is a bit hard to keep closed. It may not stop cattle or horses. And it doesn’t keep rabbits out. Neither does regular chicken wire. Baby rabbits can sneak through regular chicken wire. So you need rabbit fence – it is chicken wire with very small spaces at the bottom. If deer are a problem, you’ll need to double-fence your garden. Put two rows of fence about 3 feet apart. Use solid wooden or metal posts. Put them close enough together to help keep the fence strong.

The second thing to know about is bug pests. There are a lot of problem bugs in our area. You need to check your garden almost every day to watch for bug pests. Look at the Cooperative Extension Service website or contact them to identify problem bugs in our area.

The Extension Service can also help you deal with the bugs. Tell them that you avoid using chemicals. The vast majority of problem bugs can be dealt with by spraying the plants with a mixture of red pepper, water, and a little dish soap. Let the mixture sit overnight. Strain the pepper out (cheesecloth works well). Put it in a spray bottle. Be sure to spray both the tops and the bottoms of leaves.

There are two bugs in our area that this will not work for: grasshoppers and Colorado potato beetles. You can buy diatomaceous earth at a garden store and put it on the vegetables. This helps some. But for potato beetles, the best solution is picking the adult beetles and the young bugs off the potatoes every single day. If you miss a day, you will probably miss your potatoes. The bugs are easy to see and remove, and kids like to help. Throw them into a coffee can full of water. Check the Cooperative Extension Service’s website for photos. Do not kill ladybugs, as they help your garden.

The third thing to know about is watering. Your garden needs about 1” of water per week throughout the summer. It needs a bit more when it is super hot and windy. This is about 4 times as much water as it would get just from rain. So, you need to water when it doesn’t rain. For a small garden, you can do this with a hose. You need to really soak the ground to get 1” of water. But for a larger garden, it’s much easier to use a sprinkler. If you can, choose one that will cover your whole garden. Turn it on for an hour to give your garden about 1” of water. It helps the garden the most when you water in the evening.

The fourth thing to know about is weeding. Most new gardens go to waste because people do not keep them weeded. Don’t be one of those people. Keep your garden weeded. This is critical to pest control and getting a
good harvest. Weeding means you will get the most out of your investment of time and money. Pull weeds as soon as they are large enough to grasp. If you pull some weeds every couple days, you will have a healthy, weed-free garden.

This is a lot of information. The first year you grow a garden, it will seem like a lot. But once you harvest your food and see how much good food you get for a low cost, it is all worth it.

HARVESTING FOOD

This is the best part of growing a garden – harvesting the food and eating it. When your garden starts to produce food in June, you need to check it nearly every day. Then you will get food when it is at its best. Some vegetables, like zucchini, go from too small to too large in a day or two.

Read the seed packages or check online to tell when each type of vegetable is ripe. For example, tomatoes need to be fully red, but not soft. They need to be picked every couple days when they start producing. Green beans need to be picked every three days, before the seeds inside get big. Be sure to put the vegetables in plastic bags and refrigerate them right away. Potatoes are usually dug up at the end of the season, after it is cool outside. You can also dig them one plant (one meal) at a time, starting in July.

This gives you the general information you need to have your own garden. But to do well, you will need more information. Use the available resources, and you can have a beautiful garden next year.

FOR MORE INFORMATION:

SDSU Cooperative Extension Service.
http://igrow.org/gardens/

Pine Ridge Tribal Extension Office, 7958 Lakota Prairie Drive, P.O. Box 656, Kyle, SD 57752 | 605.455.1299

Mother Earth News. Choose the Best Garden Fence.

PART EIGHT: GROWING HEALTHY FOODS

What are some things to look at when you decide where to put your vegetable garden?

The four things you need to know about to keep your organic vegetable garden healthy are:

The best part of growing a garden is

ACTIVITY

Designing Your Dream Garden

Now that you have an idea of how a garden works and what kinds of factors go into a successful garden, let’s design your own garden! Remember that some plants will need space to grow outwards and others will grow straight up into the air. Also, another factor to remember in designing a garden will be the size and location. You don’t want something that is too small or too big. Be creative with this activity. Use old magazines and newspapers.

Materials:
- Poster Board
- Construction paper
- Markers/pencils/pens
- Scissors
- Glue
- Old Magazines

Directions:
First thing you will need to do is figure out how big your garden will be. You will want something that will be manageable for you and your family. A reasonable size garden for example can sometimes be 15ft x 30ft, which will give you 450ft². You will also need to think about what kind of fence you will want and how much. You can start by sketching out where you will have your garden boundaries and the location of vegetables such as your corn, tomatoes, cucumbers, squash, etc.
PART NINE: PRESERVING HEALTHY FOODS

OBJECTIVES:
By the time you have finished Part Nine, you will be able to:
• Describe four ways to preserve food for future use.
• Find the information you need to preserve healthy foods.

VOCABULARY
Dehydrating
Cheesecloth
Boiling-water canning
Discoloration
Root cellar
Ventilated
Cubic foot
 Blanch
Husk

PRESERVING FOODS

What if you grow your own healthy, organic foods or get them from somewhere else – and have too much for your family to eat quickly? Of course, you can share them with someone. But how can you save the food for later? You can preserve the food in several ways.

Preserving food is a great way to have healthy, inexpensive food through the whole year. It also increases food sovereignty. When you process and preserve your own food, you keep local food local. You control your food supply. And you have enough healthy food for your family.

There are three things to keep in mind. First, preserve the food when it is very fresh. Do not let it sit in the fridge for a few days. Second, keep everything very clean, so your preserved foods are healthy. Third, it is a good idea to ask someone for help the first time you use a new way to preserve food. Thunder Valley CDC can direct you to people with the right information. The Cooperative Extension Service can help. Or you can ask around to find someone in your community who preserves food.

DRYING FOOD

Drying food is a traditional Lakota way to preserve food. This is also called dehydrating food. Drying food is inexpensive. It can be done by setting slices of fruit, meat, or slightly cooked vegetables on a home-made screen. This can be made from a wooden or metal frame with cheesecloth stretched across it. The screen can be laid in the sun, but you need to watch for rain and keep flies and animals away. It is easier to dry the food at a very low temperature in the oven. Before you start, get directions on preparing the food and setting the oven.

If you are going to dry a lot of food, an electric food dehydrator is worth the money.
These can be found in larger farm stores or online. Pick one that is round. This helps dry food evenly.

Herbs can often be dried by hanging them upside down in a dry, well-ventilated place. Tie string tightly around the bottom of the plant. Check the plants every few days to see if they are fully dry. Drying is a good way to preserve zucchini, too.

When food has dried, place it in plastic bags or glass jars. Seal them well to keep moisture out. If the food is dried properly, it can be put in a cupboard or on a shelf. Some people put dried food in a freezer. When food is dried, it takes up less space than when it is frozen or canned. To use dried food, put it in soups or stews. Or it can be re-hydrated in water. Kids love slices of dried fruit, and they are a healthy, sweet snack.

**CANNING FOOD**

To can food, it is placed in jars and boiled to seal the jars and drive out bacteria. Canning food is more expensive up front and more complex than drying food. But it is a good way to preserve large amounts of food. We will only talk about boiling-water canning here. (The other type is pressure canning.) Boiling-water canning is good for fruits, tomatoes, pickled vegetables, jellies, and salsa. It is not safe for other vegetables or meats.

When you can food, everything must be very clean. Each kind of food is treated differently. Fruit or tomatoes need to be sliced. Fruit needs to be treated so it doesn’t turn brown. Some people take the skin off. Put the food in jars that are made just for canning.

Once the food is in the jar, fill the jar with liquid. Put on a special lid. Close it tightly. Then put the jars in a large pot called
a boiling-water canner. Fill the canner most of the way with water. Boil the water. Water needs to be boiled for different times to can different foods safely. When you’re done boiling the jars, remove them from the canner and cool them. Be sure the lids are tight (ask someone to show you this step). Then store the jars on shelves.

You will need canning jars, lids, and a boiling-water canner. It also helps to have a tool to lift the jars out of the canner when the food is done boiling. You can buy canning jars and lids at some grocery stores or at discount stores. You can find a canner at some discount stores or at a larger farm store.

You will need detailed, step-by-step directions to can food safely. This can be found online, but it is a good idea to have someone walk you through the process. Keeping everything clean is important. So is boiling jars for the right amount of time.

Once canning jars are sealed, they will last for a couple years. When you open a canning jar to eat the food, you should hear a “pop.” If you do not, throw the food away. If there is any sign of discoloration or mold, throw the food away.

Canning is a good way to store a lot of food. Do not put full jars where they might freeze. Be sure to save the jars to use again. If you are careful, jars will last for many years.

UNDERGROUND STORAGE

In traditional times, Oglala people dug holes to store food underground. A few people still have root cellars. These are underground rooms for food storage.

Most people today don’t have root cellars. But some do have basements. They can store some foods there. These include potatoes, carrots, beets, onions, and winter squash. These vegetables will stay good through the winter in proper underground storage. Some apples keep well this way, too.

A good storage space is cool – just above freezing, or 32 to 40 degrees. It is also dark, well-ventilated, and moist. This can be just a cool basement corner. It can be a space under the basement stairs that is closed off from the rest of the basement. Or it can be a small room that is built into a basement corner using a couple pieces of plywood. Be sure to have vents so air can move through the storage space. If you want to actually bury food, get information on how to do it in our area from someone who has done this or from the Cooperative Extension Service.

Before you store food underground, cool it. Do not bring food in from a hot garden and immediately store it. Knock off extra dirt, but do not wash the food. Store the food in burlap bags (cheap at farm stores), Styrofoam ice chests without lids, or another open bin that is rust-proof.
It is very important to check your stored food often. Look for food that is soft, sprouting, or moldy. This food is not healthy. It can ruin the other food. And it can smell really bad. This food should be removed and thrown away.

Underground storage is quick, easy, and cheap. Only a few foods can be kept this way, and it is easiest when you have a basement. But this is a good way to keep some important, healthy foods for future use.

FREEZING FOOD

Freezing many foods is easier than canning. Frozen food keeps its nutrition. Freezing is a good way to keep healthy food over the winter. The hard part is affording the freezer. A 10 cubic food freezer costs $200 to $300 new. This is big enough to keep food from a small garden. A 15 cubic foot freezer costs $400 to $500 new. This freezer would be big enough to include food from a larger garden or for a larger family.

If you make the investment and buy a freezer, it will last for a long time – about 20 years. And you will have healthy, inexpensive food all year. Foods that freeze well include berries, peas, corn, green beans, cauliflower, and broccoli.

Use plastic food storage bags, not sandwich or other plastic bags. Different foods need to be prepared different ways before freezing. Wash berries and take off any stems or leaves. Then put them in a plastic food storage bag. Squeeze out the air and seal the bag well. It’s that simple.

Vegetables need to be washed. Remove peas from the pod and cut up other vegetables. Then blanch the vegetables. This means cook them about halfway. A microwave works well for this. After the vegetables are blanched, they must be cooled quickly in ice water. Then they can go into plastic freezer storage bags. Corn needs to be husked, then cooked, then cut off the cob. Then it can be frozen.

Check with someone who has done it or with the Cooperative Extension Service to find out how to prepare and blanch each type of vegetable.
PRESERVING FOOD IS FOOD SOVEREIGNTY

Most families that preserve food from their garden use more than one way to preserve food. They might keep potatoes and winter squash underground, dry zucchini and strawberries, can tomatoes and pickles, and freeze green beans and corn. It depends on what you want to try. You can learn one way to preserve food this year, and another way next year, and so on.

If everyone in Thunder Valley raised or gathered and preserved their own food, we would have lots of inexpensive, healthy food. Our food would fit our culture. We would only buy a few things at convenience stores or far-away stores. More of our money would stay local and help local families. We would not have chemicals in our food. People of all ages would be healthier. We would have much more food sovereignty.

FOR MORE INFORMATION:
SDSU Cooperative Extension Service. http://igrow.org/ (Enter the type of food storage in the Search box.)
PART NINE: PRESERVING HEALTHY FOODS

What are three things that apply to all four ways to preserve food?

________________________________________________________________________

________________________________________________________________________

Which way of preserving food would you like to try? Why did you pick this method?

________________________________________________________________________

________________________________________________________________________

Name two ways that preserving food helps food sovereignty:

________________________________________________________________________

________________________________________________________________________

ACTIVITY

Cold Preservation Activity

Gather some of your favorite vegetables to preserve for a later time. You can even buy some fresh produce from a farmers market or you can use some produce from your garden. Follow the link below to access the vegetable freezing guide. This is one of the simplest and quickest ways of preserving foods.


Materials You Will Need:

• Freezer Bags
• Markets (be sure to write the date you put everything into the freezer bag on the bags)
• Knives
• Cutting Boards

Be sure to follow further directions in the freezer guide
PART TEN: FOOD SOVEREIGNTY PROJECTS

OBJECTIVES:
By the time you have finished Part Ten, you will be able to:

• Describe the food sovereignty projects at Thunder Valley Community Development Corporation
• Explain why these projects are important to people on the Pine Ridge Reservation

VOCABULARY
Youth Leadership Development Program
Opportunity
Greenhouse
Coalition
Sustainable
Policy
Environment

THUNDER VALLEY FOOD SOVEREIGNTY PROJECTS

The Thunder Valley Community Development Corporation has three food sovereignty projects. The goals of these projects are:

• Improved food access on the Pine Ridge Indian Reservation
• Increased food system sovereignty
• Improved nutrition and public health
• Decreased economic burdens on low-income families and increased economic opportunities.

The projects help create jobs, train people to produce their own food, and create a healthier community. People are encouraged to join in and be part of these projects.

COMMUNITY GARDEN

The first project is a community garden. Thunder Valley CDC started a community garden in 2012. The garden is now one-third of an acre of organic vegetables. The Youth Leadership Development Program and Thunder Valley CDC staff plant, weed, and harvest the food. Young people are important to this project. They learn how to grow their own fresh, local, healthy food. People can stop by and ask questions about growing a garden.

The garden produces a lot of food, including corn, tomatoes, beans, squash, and sunflowers. The food from the garden is given to people in the community.

SMALL DEMONSTRATION FARM

The second food sovereignty project is the Small Demonstration Farm. The farm helps expand the local food system and increase local, healthy foods. It already includes chickens, which are good for eggs and for meat. There are also bees for honey.
These are hands-on learning opportunities.

In the future, the farm will add a greenhouse. The greenhouse will be a place to plant seeds and start young plants. The young plants can then be put in the garden to finish growing. This means that plants that take a longer time to grow can be planted on the Reservation, where there is a short growing time. This includes tomatoes, peppers, and melons. Some greenhouses can grow food all year around.

**LAKOTA FOOD SOVEREIGNTY COALITION**

The third project is the Lakota Food Sovereignty Coalition. This is a way for people who are active in all types of food issues to work together. People who grow, process, sell, and eat food are all part of the project. So are government offices that are involved with food.

The goals of the Coalition are to:

- Strengthen food sovereignty on the Pine Ridge Reservation through the design and creation of a local food system.
- Assist the Oglala Lakota tribal government with food policies.
- Provide the local community with information on a local food system.

The Coalition works to provide delicious, nutritious, local foods that improve the quality of life, income, and environment.
PART TEN: FOOD SOVEREIGNTY PROJECTS

After reading this study guide, how would you define food sovereignty?

Which of the Thunder Valley CDC’s food projects would you most like to be part of?

Why did you pick this project?

ACTIVITY

Designing Food Sovereignty Community Projects Through Vision Boards

Now that we have completed all the parts to this curriculum you should have a good understanding of what food sovereignty is and what food sovereignty will look like in your home and community. For this last activity, we will be brainstorming what projects you can do in your community to achieve food sovereignty. This can include community gardens, poultry houses, community farms, etc. Be creative with this activity as there are no wrong answers.

Directions

As we did in the first activity, we will be creating visions boards for this last activity. Once you have an idea of a Food Sovereignty project for your community, start by looking for pictures and words that will help you better visualize what you have brainstormed. Then you can cute and past these ideas on to you vision board. Feel free to be creative and use words to create phrases, these vision boards are for you to help you understand what food sovereignty means to you.

Materials:
• Scissors • Glue • Markers/Pens • Poster Board • Old Magazines and Newspapers
FOR MORE INFORMATION:
Thunder Valley Community Development Corporation – www.thundervalley.org

RESOURCES
American Diabetes Association.
www.diabetes.org

Baby Center.
Age-by-age Guide to Feeding Your Baby.
http://www.babycenter.com/0_age-by-age-guide-to-feeding-your-baby_1400680.bc


Centers for Disease Control.
Physical Activity and Health.
www.cdc.gov/physicalactivity/basics/pa-health/

Colorado State University Extension.
Serving Children Safe Foods.

Colorado State University.
Eating Well for a Healthy Pregnancy.
http://extension.colostate.edu/topic-areas/nutrition-food-safety-health/eating-well-for-a-healthy-pregnancy-9-388/


Mother Earth News.
Choose the Best Garden Fence.


http://pickyourown.org/dryingfoods.htm

Pine Ridge Tribal Extension Office, 7958 Lakota Prairie Drive, P.O. Box 656, Kyle, SD 57752 | 605.455.1299

Rodale’s Organic Life.
How to Build a Root Cellar.
http://www.rodalesorganiclife.com/home/how-build-root-cellar

SDSU Cooperative Extension Service.
http://igrow.org/ (Enter the type of food storage in the Search box.)

SDSU Cooperative Extension Service.
http://igrow.org/gardens/


Thunder Valley Community Development Corporation. www.thundervalley.org

United States Department of Agriculture.
http://www.choosemyplate.gov

WebMD. Family Grocery Shopping Tips.

Yuzicapi, Elder Lorraine.
Dakota and Lakota Traditional Food and Tea.