



Live
Long,
Live
Strong

A Diabetes Prevention Picture
Book for Children and Parents

***Zhii waapinang (Diabetes): A disease that causes high blood sugar.
Over time, the high blood sugar damages the heart, eyes, kidneys and nerves.***

The term Diabetes in this book refers to Type 2 Diabetes Mellitus, a mostly preventable disease caused, in part, by lifestyle choices. In contrast, Type 1 Diabetes Mellitus usually affects young children and is not a preventable illness. Type 2 Diabetes is epidemic in the U.S., whereas Type 1 Diabetes is much less common.

This book was funded by

The Turtle Mountain Band of Chippewa Indians
Honoring Our Health Diabetes Prevention Coalition
Turtle Mountain Community College
Belcourt, North Dakota 58316
(701) 477-7862

Miigwech, Thank You! Families photographed for this book have donated their images in order to promote *mino ayaawin* (health) among the Turtle Mountain Chippewa people. *This book was produced on a volunteer basis and is not to be sold for profit.*

Archival photos were gathered by Les LaFountain and Rita Erdrich.
Ojibwe language additions were provided by Cecelia Myerion, Turtle Mountain Chippewa Native American Language Instructor, TMCC

This book was produced by
Angela Erdrich, MD and Sandeep D. Patel, MD, MPH,
Indian Health Service Pediatricians. Copyright Dr. Angela Erdrich.
Email: angie_sandeep@yahoo.com
Photography by Dr. Erdrich, unless otherwise specified.
Cover photo: Jenna Henry

All persons photographed are tribal members or descendents.



Extra Credit:

Can you find a tricky mistake in the painting of the lone *giiwose inini* (hunter) on page one? See inside back cover for the answer.

***Bimadizin giinwaaz bimadizin izhi zhoongizi win
(Live Long, Live Strong), Turtle Mountain.***

You have the power to prevent diabetes!



Paintings by Albert Ferris

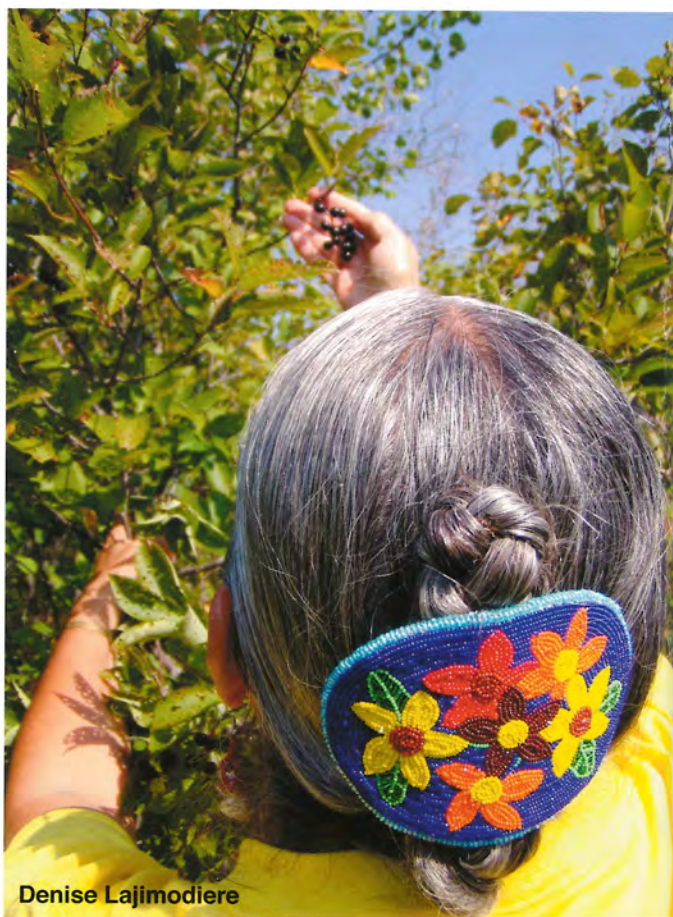


Many years ago, Turtle Mountain Chippewa people hunted and gathered their own *wiisiniwin* (food). Hunting buffalo and wild game was *gitchi anokiiwin* (very hard work)!

Our people survived by gathering *anooj gitiganen* (wild plants): *aniibiiminan* (juneberries), wild *odeminan* (strawberries), plums, prairie turnips, *puckons* (nuts), high bush cranberries, medicinal herbs and more.



Puckons



Denise Lajimodiere



High Bush Cranberries



Chokecherries

During a sad time in history, the *mashkode bizhike* (buffalo, prairie cow) were slaughtered and became scarce. Our people entered into treaties that brought us to *Mikinock Wajiw*



(Turtle Mountain). We settled on the *Ish Konigan* (Reservation or left over land), but continued to hunt and gather. We grew large vegetable gardens to feed *dina we maganag* (our relatives) and for income.





Cecelia Martin

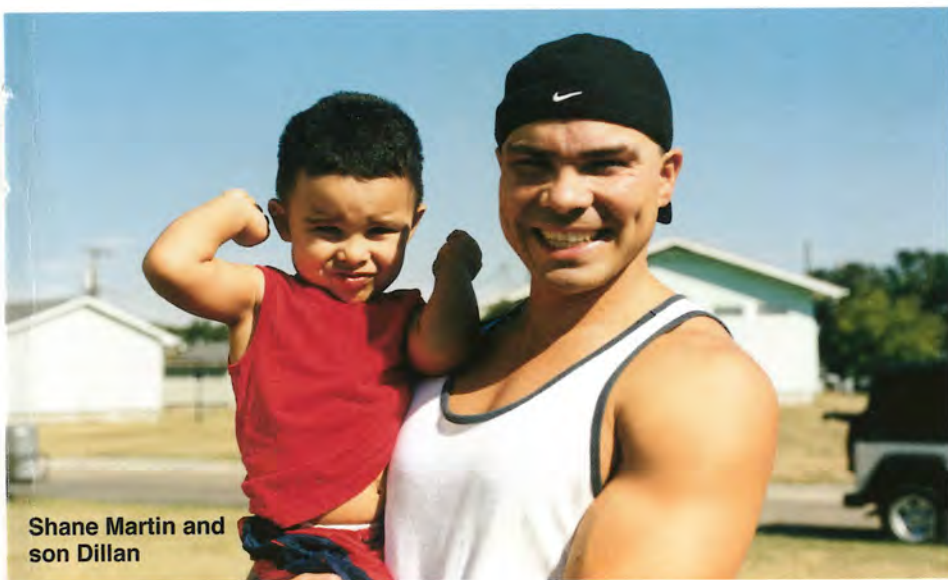
Many elders remember the hard work of plowing fields, hoeing, chopping and hauling wood, planting, harvesting and canning food for the winter. When our people ate natural foods and were more active, we stayed free of modern diseases that hurt our bodies, like Type 2 Diabetes and heart disease.

Turtle Mountain Chippewa people have survived because of our ability to adapt. As our traditional foods became scarce, we adapted to foods that were more available: *zhii wii taa gan nii goo koosh* (salt pork), potatoes and other staple foods. What to do with commodity flour and lard? Make fry bread! In the stores, processed foods became more common, while fresh fruits and vegetables became more expensive. Over time, our taste buds and our minds adapted to processed foods, as well as a less active lifestyle. But, our bodies did not adapt well. Today, our people suffer from high rates of Type 2 Diabetes, heart disease and high blood pressure. These diseases are related to nutrition and lifestyle.



Fry Bread

The good news is that prevention for one of these diseases is prevention for all! Prevention starts early in childhood with healthy food, exercise and keeping a healthy weight.



Shane Martin and son Dillan

One way to stay healthy is to grow a garden. The Turtle Mountain Reservation soil is rich, black and excellent for growing vegetables. This *Kookum*



Janice Schlenvogl



Skye Azure

(grandma) grows carrots so her grandkids can eat them right out of the garden!

These students helped plant and harvest a community garden. Gardening is exercise which also helps prevent Type 2 Diabetes.



Lexi Jandreau



Heidi Johnson's 5th grade boys, Turtle Mountain Community School

Photo courtesy of Pam Kaminski



In late *Omakakii Giizis* (Frog moon, May), our people can go “hunting” for wild morel mushrooms, which grow in the wooded banks near local sloughs.

*Note to children and parents: only eat mushrooms that have been identified by an experienced mushroom hunter. Morels are easily identified; other mushrooms must be identified by a book or guide.



If we plant a garden in May, the first vegetables will be ready to pick in *Waabigwann Giizis* (Flowers bloom moon, June): radishes, onions, lettuce, spinach and green onions. Growing a garden can be lots of fun and the fresh veggies taste better than store bought produce.



Evan Trottier



Riley Poitra

While waiting for vegetables to grow, our people can pick buckets of wild juneberries, grown by mother nature all across the Turtle Mountain Reservation.

Abundant chokecherries are great for jelly, syrup and juice. This family has picked wild berries on their tribal land for generations.



These boys are picking berries from their grandmother's backyard. Evan Trottier and Nazhani Wilkie



Sandra Poitra



In late *Miin Giizis* (Berry moon, July), a garden will really be in bloom. Extra veggies can be canned to save a taste of *niibing* (summer) for the *bii boong* (wintertime).

If you have grown too many vegetables, good for you!





Nenaa' ikiizhikok (Healing Sky Woman)

In *Mashkiki Giizis*
(Medicine moon,
August) and *Waate*
Bagaa Giizis
(Changing leaves
moon, September),
you will probably
have lots and lots
of vegetables! One
zucchini plant can
easily produce thirty
zucchini squash.

Can you name the
vegetables on this
page?

Answers: Beets,
tomatoes, cucumbers,
onions, eggplants,
green beans, hot yellow
peppers, zucchini!

The last harvest
before the frost
(September
or October)
yields tomatoes,
potatoes, cabbage,
carrots, rutabagas,
pumpkins and
squash.

You can grow
fruit! Apple and
plum *mitigoo*
(trees) grow in the
Turtle Mountains
and are ready
for harvest in the
dag waaging (fall/
autumn). This baby
can't get enough
of grandpa's
homegrown
apples.



Heidi Johnson's 5th grade girls, Turtle Mountain Community School



Saheli Patel



Danny Jerome



Let's compare apples and oranges...to junk food.

Fruits and vegetables make a very healthy snack compared to packaged *bakwazhiganasag* (cookies) and chips.

Parents can teach their children to compare calories and nutrition.

A 99 cent bag of corn chips contains as many calories as 9 medium apples or 10 oranges or 21 servings of carrots! Plus, fruits and veggies provide vitamins, fiber and nutrients that keep us healthy and prevent disease.

For more interesting calorie comparisons, see Dr. Howard Shapiro's books, including Dr. Shapiro's Picture Perfect Weight Loss.



Elizabeth Nadeau

January Prices



July Prices



Fruits and vegetables can be expensive at the store. However, when they are in season, they taste better and cost less. Some fruits are only available for a few weeks during the year, like Rainer cherries in July.



Photo by John Douglas

Madison Nadeau

Colorful fruits and veggies are good medicine. Eating the rainbow is really healthy for the body! Try to eat at least three different colors per day. Here are some examples of foods from the rainbow:



Blue/Purple: Eggplant



Blue/Purple: Blueberries



White: Cauliflower



White: Bananas



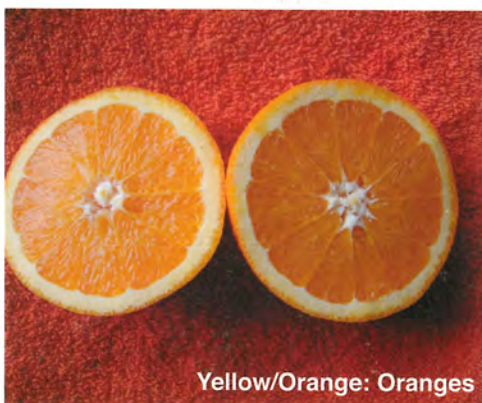
Green: Beans



Green: Cabbage



Red: Strawberries



Yellow/Orange: Oranges



Yellow/Orange: Apricots



Red: Tomatoes



White Noodles



Foods Made of White Flour

If It's White, It Ain't Right!

Processed white foods pose a predicament because they are readily available and less expensive, but they are not healthy! These foods contain simple sugars that are

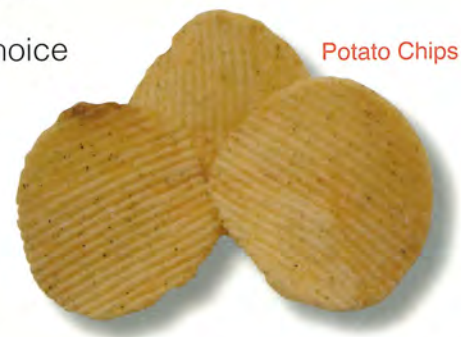
rapidly digested and absorbed. Over time, this immediate absorption can lead to Type 2 Diabetes. Eating white rice and white bread is like drinking sugar water. Complex sugars like whole grain bread products are a better choice than white foods.



White Rice



White Sugar



Potato Chips



Avinash Patel



Minnesota Ojibwe hand-harvested wild rice (whole food)



Brown rice (whole food)



White rice (processed food)

Wild and brown rice are healthier than white rice, which has been polished until it looks white.

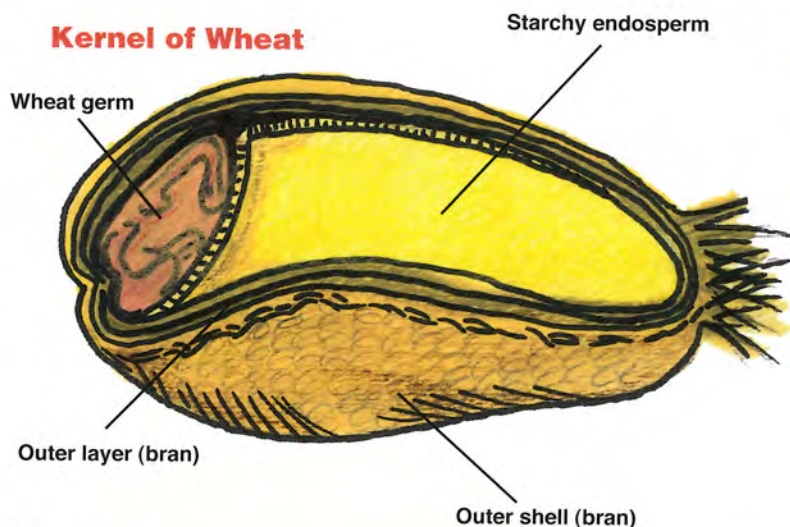
So, what can I eat that's not white?

Whole foods. Bread, crackers, noodles and cereal that are called "whole grain" contain just that - the entire grain. For instance, whole grain flour is ground to include the inner starch, the germ and the outer shell (bran). "Multigrain" products usually contain wheat and other whole grains like oats, rice, rye, barley, and millet.

In contrast, white flour has been sifted and sifted until the only thing that is left is the inner starch (endosperm).

Similarly, *manomen* (wild rice) and brown rice are "whole" because they still contain the good fiber and nutrients of the outer coating of the grain of rice.

Kernel of Wheat



The number one place to think about Type 2 Diabetes prevention and good health is at the grocery store.

You can find whole grain bread and noodles at local grocery stores. Can you name the food in the grocery store that costs the least and is also the healthiest? See answer below.

You can look for foods with heart-healthy “good fats:” monounsaturated fats (canola, olive oils) and omega-3 essential fatty acids (fish, walnuts, flax). You can walk past the foods with “bad fats:” cholesterol, saturated fats and trans fats.

At the grocery store, you can fill most of your cart with nature's best whole foods: fruits and vegetables. Remember to eat the skin when possible, to get healthy pigments and fiber.



**I can't believe
I ate the whole rainbow!**

Hema Patel

Answers:
Dried beans!
10¢ a serving
and up to 13
grams of fiber.

What makes fruits and vegetables so healthy?



Scientists have proven what grandmothers have known for centuries: plant foods protect the body and fight illness.

Specifically, scientists have discovered a class of compounds called phytonutrients which are found only in plant foods including fruits, vegetables, legumes, seeds, grains and nuts. Think of them as “Fight – O – Nutrients” because they really fight disease. Pow!



The anti-oxidant and anti-inflammatory effects of phytonutrients protect the body from *ode waapinang* (heart disease), stroke, Type 2 Diabetes and even cancer.

Diabetes beware, you are no match for the mighty power of Fight – O – Nutrients!

Did you eat your phytonutrients today? Here is a phyto-rich recipe that can be made at home or in the classroom. Note the type of phytonutrient in parentheses.

Fight-O-Nutrient Soup

(The Soup formerly known as Vegetable Soup)

Bring to a boil:

- 10 cups of water
- 4 bouillon cubes
- 3 cups V8 juice (contains antioxidants, flavonoids)
- Knorr Vegetable Soup Mix
- 1 diced onion (allicin, flavonoids for heart disease prevention)
- 3 cloves crushed garlic (allicin)
- 2 diced sweet potatoes (beta carotene)
- 1 diced white potato
- 1 diced parsnip (monoterpene)
- 2 cups diced carrots (beta carotene)
- 3 cups diced celery (monoterpene)
- 1 can diced tomatoes (lycopene)
- 2 cans great northern beans (high fiber legumes contain isoflavones)
- Spices to taste: celery salt, pepper, basil and parsley



Toward the end, add softer ingredients:

- 2-3 cups finely chopped cauliflower (sulforaphane)
- 1-2 cups frozen peas (anthocyanam)

Just before serving:

- Sprinkle each bowl with shredded taco cheese
- Optional: steamed broccoli on top (indoles, carotenoids, sterols)

One half cup of soup = one vegetable serving

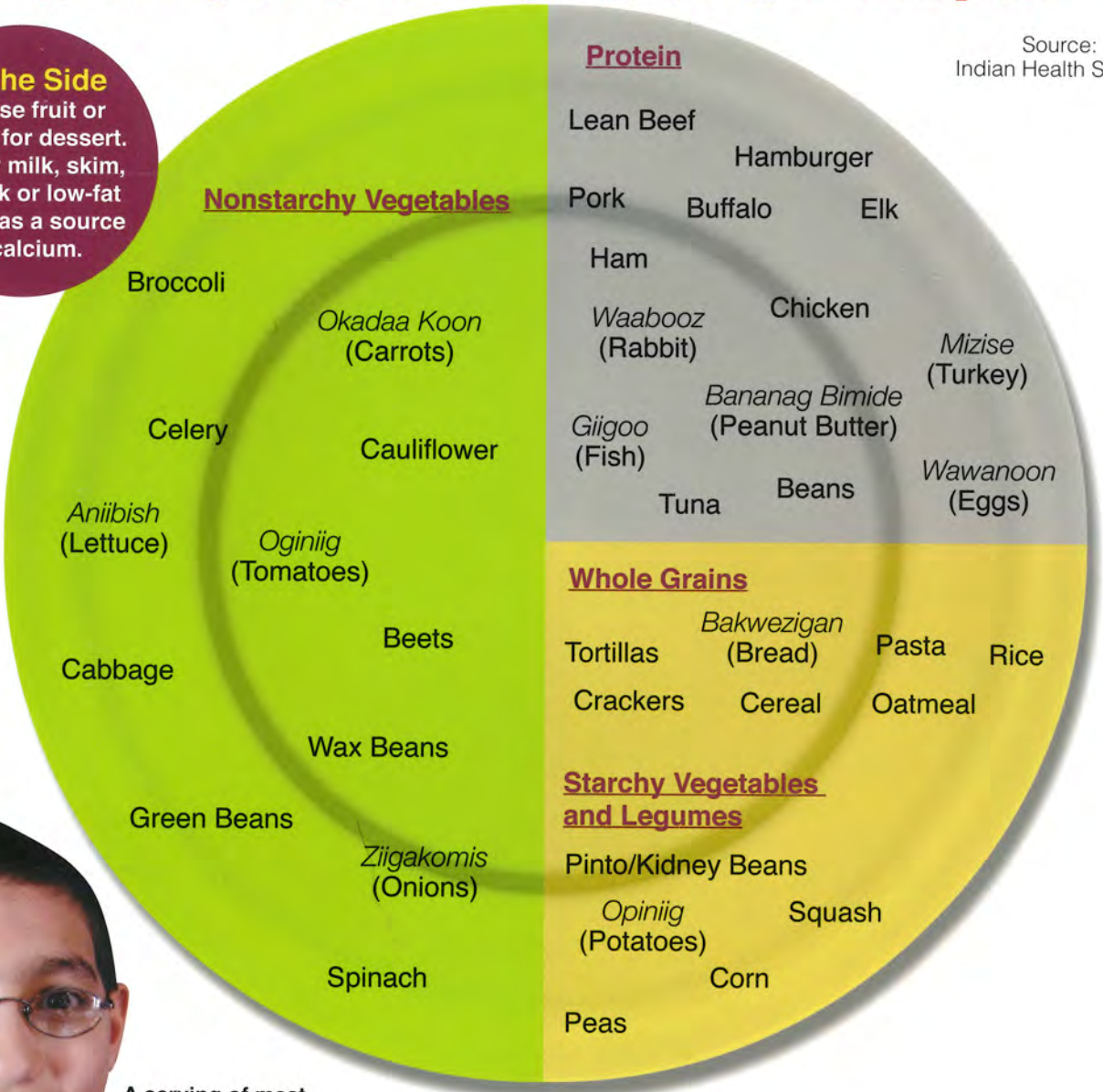


Did you know that half of your plate should be filled with vegetables? Traditional Native foods are low fat, nutritious and whole. When possible, eat the healthy foods your ancestors ate.

Restoring the Balance: The Native American Plate

Source:
Indian Health Service

On the Side
Choose fruit or berries for dessert. Try soy milk, skim, 1% milk or low-fat yogurt as a source of calcium.



A serving of meat is about the size of a deck of cards.

Portion Awareness:

A serving of noodles is the size of a tennis ball.

A serving of meat is the size of a deck of cards.

Follow the fiber!

Most high fiber foods contain both soluble and insoluble fiber, both of which are helpful. Notably, soluble fiber (especially oatbran) has become popular because it lowers “bad cholesterol.” Insoluble fiber (wheat bran and others) is known to decrease colon cancer risk.

If you don't know how to pick healthy foods, just go to the grocery store and follow the fiber! A high fiber food has 3 or more grams of fiber per serving. Eating the recommended 25-35 grams of fiber per day will lower the risk of heart disease, Type 2 Diabetes, cancer and stroke. If you eat high fiber foods, you automatically eat healthy foods.

Notable high fiber foods: fruits, vegetables, whole grain products, bran cereals, nuts, beans, and even popcorn (hold the butter, air-popped is best).

Don't be afraid to try something new! This girl surprised her mother by asking for a second helping of brussel sprouts.



Hema Patel





Evan Trottier



Christin Trottier

How smart are these young people?

So smart! They chose *nibi* (water) to quench their thirst. Water is the fuel of life and a cleanser of the body. Pop, kool-aid, sports drinks and flavored milk contain too much sugar. Sugar overloads the body and can lead to tooth decay, weight gain (obesity) and a sick body.



Clayton St. Claire

Your health care provider recommends 5-9 servings of fruits and vegetables daily.

What is a serving?

- 1 cup raw, leafy vegetables
- 1 medium-sized fruit (tennis ball size)
- $\frac{3}{4}$ cup (6oz) of 100 percent fruit or vegetable juice
- $\frac{1}{2}$ cup fresh, frozen or canned fruit (in 100 percent juice) or vegetables
- $\frac{1}{2}$ cup peas or beans – cooked, dry, frozen, or canned
- $\frac{1}{4}$ cup dried fruit

What does NOT count?

- Fruit flavoring in foods
- Fruit “beverages,” “punch,” “cocktails” and “drinks” (often contain only 5-10% fruit juice)
- Deep fried breaded vegetables
- French fries
- Potato chips
- Fruit chews

5-9 servings of fruits and vegetables per day will significantly reduce risk of Type 2 Diabetes, cancer, heart disease and stroke. This effect is most likely due to antioxidant effect of phytonutrients.

Children love fresh fruits and veggies! But, if they are offered the constant choice of cookies and chips, they will start to eat only these foods. Parents can offer healthy choices and limit “treats” to special occasions.



This Is A Lucky Food Day!

Eat like this and you will live long, live strong and be less likely to get sick. Can you identify 11 fruit and veggie servings in this day? Please see the inside back cover for detailed nutrition information. These foods show a 2000 Kcal diet rich in whole grains, fruits and vegetables and with enough calcium for growing bones.

2,000 Calorie Day



Breakfast: cereal, skim milk, banana, apple



Lunch: sandwich, pear, carrots, water



Snack: berries, crackers, yogurt, veggie juice



Dinner: spaghetti, salad, grapes, skim milk

5,000 Calorie Day



Breakfast: muffin, fruit flavored drink



*Note: photos inspired by Dr. Shapiro's Picture Perfect Weight Loss

Lunch: cookie, pizza, zhii waaboo (pop)



Snack: corn chips, oatmeal creme pie, fruit chews



Dinner: bacon cheeseburger, chocolate shake, fries

This Is A Yucky Food Day!

Eating like this makes people sick and puts them at risk for Type 2 Diabetes, heart disease and some types of cancer. These meals are high in calories (over 5,000 for the day!) but low in nutrition. In fact, if you try to count the fruit and veggie servings, you will only find a little pizza sauce (1/2 veggie serving) and a little banana puree in the muffin (1/2 fruit serving). *Manajiitoon giyyaw* (Be nice to your body). Get lucky, not yucky!

Parents and Grandparents, Beware.

Some *abinoojias* (children) have managed to convince you that they will only eat certain things, like hot dogs, chips, *opiniig* (french fries), *zhii waaboo* (pop) and pizza. Do you know any children like this?

Remember that the adult is the boss. The adult decides what a child eats. Parents can also ask grandparents to help by not offering too many treats (or vice versa). Grandparents and parents, can work together to promote the health of future generations!



Malachi Jerome



Saheli Patel



Jeff Baker, daughter and grandson



Bobbi Lynn Frederick



Eric LaRocque and nephews

Exercise, eat healthy
foods and stay away from
tobacco and drugs to get
the most out of life!



Katelyn Lawler



Jeanette Decoteau



Halle Williams



Rita Gourneau Erdrich

A Final Message for Families

There are three main risk factors for Type 2 Diabetes: family history (genetics), obesity, and sedentary lifestyle. We can't choose our family history, but some things we can control. We can:

1. Eat natural foods: fruits, vegetables, whole grains, legumes, nuts
2. Exercise 30 minutes 5 times a week
3. Maintain a healthy weight
4. Drink water and skim or 1% milk (rather than sugary drinks like pop, juice, kool-aid, sports drinks and higher fat milk, like 2% and whole)
5. Eat a high fiber diet (25-35 grams of fiber per day)
6. Avoid packaged foods with unhealthy ingredients (especially trans fats and high fructose corn syrup)
7. Follow suggested portion sizes on food labels

The first steps in Type 2 Diabetes Prevention for the next generation are:

1. Maintain a healthy weight and eat right during pregnancy. Babies born weighing <2,500 or >4,000 grams are at increased risk for Type 2 Diabetes.
2. Start babies out with the nature's best baby food: breastmilk. Numerous studies have shown that breastfeeding lowers Type 2 Diabetes risk for both mom and baby. Breastfeeding helps mom lose her pregnancy weight. *Nonaa wasoo* (Breast feed)!



Amber DeLong



Chase Jerome-Davis and mother Cherona Jerome.

Nutrition Information for meals shown on pages 24-25

MENU ITEM	Calories	Carbs (g)	Fiber (g)	Protein (g)	Fat: Total/Sat/Trans (g)	Calcium (mg)	% Iron	Servings
Cheerios	110	21	2	3	2/0/0	40	30	
Banana	110	29	4	1	0	0	2	1 Fruit
Apple	80	22	5	0	0	20	2	1 Fruit
Skim Milk	135	19.5	0	12	0	450	0	
Chicken Sandwich with Cheese/Lettuce/Tomatoes On Whole Grain Bread	332	23.5	5	31.5	11/6/0	410	19	1 Veggie
Carrots	70	16	4	2	0	40	0	1 Veggie
Pears	65	17	2	0	0	10	0.5	1 Fruit
V8 100% Vegetable Juice	30	7	1	1	0	20	2	1 Veggie
Whole Grain Crackers	120	20	3	3	4/0.5/0	0	8	
Blueberries	100	27	3	1	1/0/0	0	2	1 Fruit
Non-Fat Yogurt	60	11	0	5	0	200	0	
Barilla Brand Whole Grain Spaghetti With Turkey Meatballs	457	56	8	27.5	12.5/2.5/0	70	28.5	1 Veggie
Salad	87	18.5	3.5	2	0	20	1	2 Veggie
Grapes	90	24	1	1	1/0/0	20	2	1 Fruit
Skim milk	90	13	0	8	0	300	0	
TOTAL	1936	324.5	41.5	98	31.5/9/0	1600	97	11

MENU ITEM	Calories	Carbs (g)	Fiber (g)	Protein (g)	Fat: Total/Sat./Trans. (g)	Calcium (mg)	% Iron	Servings
Sunny D (5% Juice)	300	75	0	0	0	0	0	0
Banana Muffin	750	72	4	9	48/10/1	60	16	1/2 Fruit
Pizza	680	72	2	28	32/12/1	320	30	1/2 Veggie
Mountain Dew	275	77.5	0	0	0	0	0	0
Cookie	452	60	0	8	24/8/6	0	4	0
Fritos	720	67.5	4.5	9	45/7/0	90	0	0
Oatmeal Cream Pie	310	49	1	2	12/3.5/0.5	0	6	0
Fruit Chews	100	22	0	0	1/0.5/0	0	0	0
Bacon Dbl Cheeseburger	610	31	2	41	36/18/0	250	25	0
Med. Fries	380	56	4	4	15/3/3	4.5	6	0
Med. Choc. Shake	760	129	2	2	20/13/1	60	10	0
TOTAL	5337	711	19.5	103	233/75/12.5	784.5	97	1

Nutrition information on this page was gathered by Tracy Forsberg, Dietetics Graduate, University of North Dakota.

Answer to Quiz: The hunter on page 1 has two left mittens.



You Are What You Eat, Turtle Mountain!