

Making Healthy Food Choices

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Parents want to do what is best for their child. Parents protect children from unintentional injuries by strapping their children into car seats, fitting them with bike helmets, storing poisons out of reach, installing safety locks on drawers and locking up their guns. Parents also protect children from infectious diseases such as measles, mumps and rubella by immunizing their children. The “how to” of protecting children from unintentional injuries and infectious diseases is clear to parents and the benefits are valued. Parents value the benefits of serving children healthy food but the “how to” is often less clear.

This module will give parents information on “how to” select healthy food to improve health and prevent excess weight gain. First, the module will reinforce to parents why serving healthy foods to children is important. This will be followed by an explanation of selecting healthy food based on the 2005 Dietary Guidelines for Americans and MyPyramid. There will be shopping tips, including information on reading the food label and advice about using sales, coupons and unit prices to stretch food dollars. Parents will be given information on planning meals by making a shopping list, purchasing in bulk and menu planning. Lastly, a review of how to select healthy food will be provided.

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Providing healthy food to preschoolers during the formative years is important in helping them establish healthy food preferences, habits and portion control. Good nutrition also results in healthy growth and prevents children from excessive weight gain.

It seems simple enough to set children up for a lifetime of good health by introducing preschoolers to a variety of nutritious foods, providing meals on a regular schedule and eating meals together. However, parents are flooded with nutrition messages every day through marketing at the grocery store, in the newspaper, in magazines and on television. These nutrition messages are often conflicting, sometimes complicated and difficult to translate into useful information. The material in this section is designed to provide accurate, useful information that parents can use to make healthy food choices for preschoolers.

Healthy Weight

It is important to understand the health risks associated with children being overweight. Overweight and at-risk-for-overweight children have an increased risk of high blood pressure, high cholesterol, joint disorders, Type 2 diabetes, psychosocial disorders, social discrimination and becoming obese as an adult. These diseases in adults can increase the risk for early death, heart disease, diabetes, arthritis, gallbladder disease and certain types of cancer.¹ (Figure 5a). Healthy eating can reduce the risk of children becoming overweight.

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FIGURE 5a: Health Risks of Overweight Children

Overweight children are at increased risk for:

- High blood pressure
- High cholesterol
- Joint disorders
- Type 2 diabetes
- Psychosocial disorders
- Social discrimination
- Adult obesity

For more information on childhood overweight see module one. The remaining material in this module will focus on helping children develop healthy eating habits in their preschool years.

HOW WE CAN HELP YOUR FAMILY

Head Start Performance Standards require that grantee and delegate agencies address nutrition elements in their programs. The information in this module will help agencies comply with Performance Standard 1304.23 (d), which states that, “Parent education activities must include opportunities to assist families with food preparation and nutritional skills.” It will also facilitate compliance with Performance Standards 1304.40 (f)(3)(i)&(ii), which require that “Grantee and delegate agencies must ensure that the nutrition education program includes, at a minimum: (i) Nutrition education in the selection and preparation of foods to meet family needs and in the management of food budgets; and (ii) Parent discussions with program staff about the nutritional status of their child.”

Dietary Guidelines

The nutrition recommendations in the 2005 Dietary Guidelines for Americans are co-published by the U.S. Department of Health and Human Services and the U.S. Department of Agriculture (USDA). The Dietary Guidelines provide science-based nutrition recommendations for the general American public age 2 years and older. To make the Dietary Guidelines easier to understand, the USDA designed MyPyramid (Figure 5b).



FIGURE 5b
USDA MyPyramid

Although the Dietary Guidelines and MyPyramid make national nutrition recommendations, other organizations make specific disease prevention recommendations. For example the American Heart Association has a dietary recommendation that adults eat two servings of fish a week to prevent heart disease.² The Produce for Better Health Foundation recommends a variety of colorful fruits and vegetables every day.³



2005 DIETARY GUIDELINES FOR AMERICANS
healthierus.gov/dietaryguidelines
MyPyramid.com

The American Academy of Pediatrics recommends delaying the introduction of 100% percent juice until at least 6 months of age and limiting to no more than 4–6 ounces of 100 percent juice each day served from a cup.⁴ Additional dietary recommendation will be shared while introducing MyPyramid.

MyPyramid sorts similar foods into six food groups and provides advice about selecting foods. The six MyPyramid food groups are: (1) Grains; (2) Milk; (3) Meat and Beans; (4) Oils (5) Vegetables; and (6) Fruit. These categories will be explained in the next sections.



Eat Whole Grains

MyPyramid recommends preschool aged children eat 3–5 ounce equivalents of grain each day.



MyPyramid grains group foods are pilot bread, rice, bread, pasta, oatmeal, breakfast cereals and tortillas. In general, one slice of bread, one cup of ready-to-eat cereal, or ½ cup of cooked rice, cooked pasta, or cooked cereal can be considered as one-ounce equivalent from the grains group (Figure 5c).

FIGURE 5c: Grain Servings Sizes

1 ounce of grain equivalent =	
1 slice	whole grain bread
1 cup	ready-to-eat cereal
½ cup	cooked rice
½ cup	cooked pasta
½ cup	cooked cereal

The Dietary Guidelines state that at least half of all the grains eaten should be whole grains. Whole grains are high in nutrition and fiber. Eating foods rich in fiber as part of a healthy diet reduces the risk of heart disease, may reduce constipation and may help with weight management. Fiber rich whole grains help provide a feeling of fullness with fewer calories. Selecting whole grains foods can be accomplished by reading labels and ingredient lists.

WHOLE VS. REFINED

Grains are divided into two subgroups, whole grains and refined grains. Whole grains contain the entire grain kernel; the bran, germ and endosperm. Examples include whole wheat flour, bulgur (cracked wheat), oatmeal, whole cornmeal and brown rice. Refined grains have been milled, a process that removes the bran and germ. This is done to give grains a finer texture and improve their shelf life, but it also removes dietary fiber, iron and many B vitamins. Some examples of refined grain products are white flour, degermed cornmeal, white bread and white rice.

Eat Lean Meat and More Beans

The foods in the MyPyramid Meat and Bean food group are together because they supply similar nutrients such as protein and B-vitamins. Foods include poultry, game birds, game meat, beef, pork, lamb and veal as well as eggs, beans, peas and nuts. Turkey, chicken and game birds, such as ptarmigan and duck, are a good source of protein. Game meat, such as moose, caribou and deer are a good source of lean protein that preschoolers enjoy. Fish and sea mammals are also part of the Meat and Bean food group.

the nutrition that non-processed meats offer. Examples of these meats are: chicken nuggets, bologna, corn dogs, frankfurters, hot dogs and many luncheon meats.

Meat and poultry should be prepared using low fat methods such as trimming all visible fat and removing skin. Cook meat and poultry by broiling, poaching, roasting, stewing, steaming, stir frying, or using the crock pot.

The MyPyramid Meat and Bean food group includes fish and sea mammals. Salmon, halibut, whitefish, herring and all locally caught fish are all low in fat, great sources of heart healthy fatty acids and high in nutrition. Sea mammals, such as sea lion, whale and seal are rich in nutrients and are healthy food choices in Alaska. Fish is an important part of a healthy diet for everyone, including young children.

Many parents have heard about high mercury levels in fish and are cautious about serving it to their children. The state of Alaska will soon publish up-to-date consumption guidelines for young children and women of childbearing age. These guidelines offer suggestions specific to each type and size of fish. Good news! All five species of Alaska wild salmon have very low mercury levels.

Parents will be able to access the new guidelines on the State of Alaska, Division of Public Health web site or by calling 907-269-8000.

ALASKA FISH CONSUMPTION GUIDELINES
www.cfsan.fda.gov/~dms/foodlab.html

THE NUTRITION FACTS LABEL: WHAT DOES IT MEAN TO ME AND MY KIDS?
www.cfsan.fda.gov/~dms/foodlab.html

Consumers must read labels when selecting whole grain products. Color is not an indication of a whole grain food. Bread can be brown because of molasses or other added ingredients. Also, foods marketed as multi-grain, stone-ground, 100 percent wheat, cracked wheat, seven-grain, or bran may not be whole grain. Reading the ingredient list on the package is the only way to know if a food is whole grain.



To eat whole grain foods, select cereals, breads and pasta products that list brown rice, bulgur, graham flour, oatmeal, whole-grain corn, whole oats, whole rye, whole wheat, or wild rice as one of the first three ingredients. The ingredients are listed in the order of quantity. If a whole grain ingredient is listed first, second or even third, it is most likely a whole grain food. The Nutrition Facts label can help too. Foods with a higher percent Daily Value for fiber are more likely whole grains foods (Figure 5d).

In restaurants, eat whole grains by asking for brown rice instead of steamed rice, whole grain pizza crust instead of white, or whole grain toast instead of sourdough. Some restaurants may not have whole grains currently available but will begin to offer whole grains if enough customers make the request.



FIGURE 5d: Nutrition Facts Showing Percent Daily Value of Fiber

The Dietary Guidelines recommend selecting meat and poultry that are lean, low fat, or fat free. Many common meats are high in fat, salt and lack

CEREAL FLAKES

Nutrition Facts	
Serving Size 3/4 Cup (27g)	
Servings Per Container 10	
Amount Per Serving	
Calories 100	Calories from Fat 5
% Daily Value*	
Total Fat .5g	
Saturated Fat 0g	0
Trans Fat 0g	
Cholesterol 0mg	0
Sodium 190mg	10%
Total Carbohydrate 22g	12%
Dietary Fiber 5g	20%
Sugars 5g	
Protein 3g	
Vitamin A 6%	Vitamin C 0%
Calcium 0%	Iron 2%
*Percent Daily Values are based on a 2,000 calorie diet.	



It is important that children get enough calcium everyday to build bone strength or density to prevent bone disease such as osteoporosis. Osteoporosis results in brittle bones that break easily. It usually afflicts older adults but may be prevented by adequate calcium intake during the growing years.

To ensure adequate calcium intake, the Dietary Reference Intake (DRI) for 1–3 year olds is 500 milligrams of calcium a day and is 800 milligrams of calcium a day for 4–8 year olds.⁷ This amount translates into 2–3 servings of calcium rich dairy each day plus a variety of other calcium rich foods. The calcium RDI for adults is higher. One cup low-fat milk has about 300 milligrams of calcium, eight ounces of low fat yogurt has about 275 milligrams and three ounces of canned salmon has 180 milligrams.

Beans, peas and nuts are good source of low-fat and affordable protein. Examples of beans and peas are black beans, black-eyed peas, garbanzo beans, kidney beans, lentils, mature lima beans, navy beans, pinto beans, soy beans, split peas, tofu, white beans and peanut butter. Peanuts are not truly a nut and are actually more closely related to beans than nuts.

Nuts and nut butters made from almonds, walnuts, macadamia, pecans and hazelnuts are also in the Meat and Bean food group.



BEANS: VEGGIE OR MEAT

Many Women Infant and Children (WIC) food packages or coupons allow the purchase of dried beans. Beans provide a great low fat, high fiber, delicious and nutritious meal when made into soups, salads and casseroles, or when served as a side dish. Cooking with dried beans takes planning as they cook fastest after being soaked in water for eight or more hours. Beans put to soak in the morning before the school day starts will be ready to cook for a healthy dinner.

GOT CALCIUM?

All fluid milk products and foods made from milk that retain their calcium content are part of the group, while foods made from milk that have little to no calcium, such as cream cheese, cream and butter, are not. Whole and 2% milk are among the biggest contributors of saturated fat to Americans' diets. Therefore, experts recommend serving non-fat (skim) or low-fat (1%) milk to children after the age of 2.

Lactose intolerance is the inability to digest significant amounts of lactose, the major sugar found in milk. Lactose intolerance is caused by a shortage of the enzyme lactase, which is produced by the cells that line the small intestine. Lactase breaks down milk sugar into two simpler forms of sugar called glucose and galactose, which are then absorbed into the bloodstream.

People who do not have enough lactase to digest the amount of lactose they consume may feel very uncomfortable when they digest milk products. Common symptoms, which range from mild to severe, include nausea, cramps, bloating, gas and diarrhea. Symptoms begin about 30 minutes to 2 hours after eating or drinking foods containing lactose. The severity of symptoms depends on many factors, including the amount of lactose a person can tolerate and a person's age, ethnicity and digestion rate.



Dry beans and peas fall into both the MyPyramid Vegetables food group and the Meat and Beans food groups. Generally, individuals who regularly eat meat, poultry and fish would count dry beans and peas as vegetables. Individuals who seldom eat meat, poultry, or fish (vegetarians) would count some of the dry beans and peas they eat as a meat.

Low Fat Dairy after Two



Fluid milk, yogurt, cheese and cottage cheese are in the milk food group because they provide similar nutrients. Select fat free or low fat milk and dairy foods for your child after age two. Low fat milk is also called 1%. Fat free milk is called non fat or skim. Reduced fat milk is 2% milk and is not low fat.

Milk and dairy foods provide calcium for strong bones and teeth, protein to build muscles and vitamins A and D for healthy growth. MyPyramid recommends preschool aged children eat 2–3 servings of low-fat dairy each day plus eat a variety of other calcium rich foods. The best sources of calcium are dairy products such as low fat milk, cheese, yogurt and cottage cheese. Reconstituted milk from powdered milk is available in non-fat and low-fat varieties and is nutritionally equal to fluid milk. Dark green leafy vegetables, canned salmon and small fish with edible bones are also good calcium sources.



In Alaska, good calcium sources also include all canned salmon, leather chiton, ribbon seaweed, beach asparagus, kelp with herring eggs,⁵ blackfish, needlefish, bone marrow, fish head soup, smelt, tom cod and whitefish liver.⁶



Some children are unable to drink cow's milk because of lactose intolerance. These children cannot digest the sugar found in milk and foods made with milk. Lactose intolerance should be diagnosed by a health-care provider because its symptoms can be confused with those of other illnesses. Children with lactose intolerance need to eat other calcium rich foods everyday to get the calcium needed for good health.

LACKING LACTOSE

If your child has been diagnosed with lactose intolerance by a health-care provider, offer calcium-rich foods such as lactose-free milk, calcium-fortified soy milk, canned salmon with bones, sardines, collard greens, turnip greens, broccoli and tofu. Some people with lactose intolerance can eat cheese and yogurt because these foods have less lactose. Yogurt, for example, has all of milk's nutrients, but less lactose.



Lactose intolerance can be hard to diagnose based on symptoms alone. People sometimes think they suffer from lactose intolerance because they have the symptoms associated with the disorder, not knowing other conditions such as irritable bowel syndrome can cause similar symptoms. A doctor can use tests to diagnose lactose intolerance.

Some causes of lactose intolerance are well-known. Primary lactase deficiency is a condition that develops over time. After about age 2 the body begins to produce less lactase, though most people will not notice symptoms until they are much older. Researchers have identified a genetic link for primary lactose intolerance. Secondary lactase deficiency occurs when injury to the small intestine or certain digestive diseases reduce the amount of lactase a person produces. These diseases include celiac disease, inflammatory bowel disease and Crohn's disease.

Oils

The familiar food term, oils, is used to describe one MyPyramid food group. Those oils are part of other foods such as peanut butter, sunflower seeds, nuts, olives, most Alaska fish, avocados, salad dressing, vegetable cooking oils and products made with vegetable oils such as mayonnaise. If nuts are served, they should be chopped or ground because of the choking hazard associated with whole nuts.



In addition to MyPyramid and 5-A-Day recommendations, the Produce for Better Health Foundation recently introduced messages around eating “the color way.” These messages encourage eating a variety of colorful fruits and vegetables. In March of 2007, the CDC launched a new fruit and vegetables campaign. Its message encourages people to eat more fruits and vegetables every day.



The bottom line of all these messages is that fruits and vegetables are good for children and adults. Fruits and vegetables help prevent disease, maintain a healthy weight, support a healthy digestive system and provided the nutrients necessary for children to grow healthy and strong. It is clear the scientific community agrees that more matters when eating fruits and vegetables.

MyPyramid recommends preschool aged children eat 1–1½ cups (2–3 servings) of vegetables every day. In general, 1 cup of raw or cooked vegetables or 1 cup of raw leafy greens can be considered 1 cup or 2 servings from the vegetable group.



Preschoolers can easily get 1½ cups (3 servings) of vegetables in a day by eating a ½ ear of steamed corn for lunch, munching on ½ cup carrots and celery sticks as an after school snack and eating moose stew made with vegetables or ½ cup mashed sweet potato for dinner (Figure 5e).

All vegetables, dried beans and peas are a member of the vegetable food group. Vegetables may be canned, frozen or fresh served raw or cooked, dried and may be whole, cut-up, or mashed. Essentially all vegetables are very low in fat and calories. Cook vegetables by steaming, sautéing, roasting, baking, or adding directly to stews, casseroles and tomato sauces.

Active Play

The picture of the person climbing the stairs on the side of the MyPyramid is meant to encourage activity every day. For children activity is active play. To find out more about activities for preschool children, please see the physical activity modules in this training manual.



Eat More Colorful Fruits and Veggies

Learning about fruits and vegetables can be confusing for consumers because of the many existing fruit and vegetable messages. Often fruits and vegetables are grouped together. However, MyPyramid has them in two different food groups. The 1992 Food Pyramid and the Centers for Disease Control and Prevention (CDC) recommend “servings” of fruits and vegetables whereas MyPyramid recommends “cups” of fruit and vegetables. The national 5-A-Day campaign initially recommended five servings of fruits and vegetables each day. Later, the campaign began recommending five–nine servings of fruits and vegetables each day.

FIGURE 5e: Example of Three Servings of Vegetables

Preschooler Eats Three Vegetables Servings Each Day!

½ ear steamed corn for lunch

½ cup carrots and celery sticks as an after school snack

Moose stew made with vegetables for dinner

MYPYRAMID FOR CHILDREN
mypyramid.gov/kids/

MyPyramid organizes vegetables into five subgroups based on their nutrient content. Produce for Better Health organizes vegetables and fruits into five groups by color. Color is an indicator of nutrient content. Both categorizations are scientifically sound but cause consumers to hear several messages about vegetables. However, all health professionals believe that it's important to eat fruits and vegetables.

FIGURE 5f: Example of Three Servings of Fruit

Fruit has its own MyPyramid food group. All canned, frozen, dried, or fresh fruit served raw or cooked are members of the Fruit food group. MyPyramid recommends preschoolers eat 1–1½ cups (2–3 servings) of fruit a day. All fruits are very low in fat and calories.

Alaska parents can help children eat more fruit by serving fresh, canned and frozen fruit to their children as a snack. Parents can easily add dried, fresh, or canned fruit to breakfast cereals or make peanut butter sandwiches with bananas, raisins, or dried blueberries instead of jam. Parents should purchase canned fruit in water or its own juice instead of heavy syrup. Children eating dried fruit should always brush their teeth afterwards to prevent cavities.

A preschooler can easily eat the recommended amount of fruit each day. He would be served ¼ cup dried raisins (counts as ½ cup) added to oatmeal, ½ cup fruit cocktail canned in water for lunch and ½ a banana (counts as ½ cup) for a snack after school (Figure 5f).



MyPyramid mostly addresses foods by food groups. However, some nutrition recommendations can be applied to all foods. For example, the recommendation to choose foods low in fat applies to all foods. The next section will supplement the nutrition information from MyPyramid by presenting additional recommendations for good health.



Eating fruits and vegetables is a great way for children to get the nutrients they need to be healthy and grow strong. Research has shown that high fruit and vegetable intake decreases the risk of many diseases including heart disease, cancer, diabetes and obesity. Fruits and vegetables are generally rich in vitamins and minerals and they pack fewer calories per bite than other foods. Fruits and vegetables help individuals maintain healthy weights because when they are eaten, other higher calorie foods are not. Children who eat fruits and vegetables are likely to continue eating them for a lifetime.

Preschooler Eats Three Fruit Servings Each Day!

- ¼ cup dried raisins (counts as ½ cup) added to oatmeal
- ½ cup fruit cocktail canned in water for lunch
- ½ banana (counts as ½ cup) for snack after school

In a survey of parents, more than ninety percent knew the correct amount of fruit and vegetables recommended for youngsters. Ninety-three percent of these parents agreed that eating plenty of fruits and vegetables and maintaining a healthy weight are important.⁸

The same parent survey found that despite parent knowledge and belief fewer than 5 percent of preschoolers ate the recommended three servings of vegetables every day. Children with low vegetable intake were at slightly increased risk of the being overweight.⁸

Another study showed that up to 23 percent of 7- to 24-month-olds did not eat any fruit in a given day.⁹

The Feeding Infants and Toddlers Study (FITS) found that parents reported french fries as the most commonly consumed vegetable of children 15–18 months old.⁹



However, french fries, potato chips, Tater Tots and hash browns do not count as a vegetable serving. Potatoes can only be considered a vegetable if little fat or sodium is added when cooking. Providing children with a variety of colorful fruits and vegetables every single day is important to ensure proper growth and protection from disease.



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However, fruits and vegetables are not created equal. Various colors provide different nutrients. By serving a rainbow of fruits and vegetables throughout the week, children can eat their colors every day to keep them healthy and fit. Remember, canned, frozen and fresh all count toward eating your colors.

Serve children blue- and purple-colored fruits and vegetables such as blueberries, blackberries, huckleberries, purple cabbage, blackberries, purple grapes, plums, raisins, eggplant and purple fleshed potatoes for good health.

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Serve children dark green colored fruits and vegetables such as kelp with her-ring eggs, beach aspara-gus, black seaweed, young fireweed leaves, willow leaves, green apples, broccoli, avocados, green grapes, honeydew, kiwifruit, limes, green pears, artichokes, brussels sprouts, green beans, green cabbage, celery, cucumbers, leafy greens, lettuce, green onion, peas, green peppers, snow peas, sugar snap peas, spin-ach and zucchini for good health.

TURNING YOUR PLATE INTO A PALETTE

5aday.org/html/colorway/colorway_home.php
5aday.gov/benefits/index.html#

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Serve children white-colored fruits and vegetables such as bananas, pears, cauliflower, mushrooms, potatoes, turnips and white corn for good health.

Serve children yellow and orange-colored fruits and vegetables such as salm-on berries, oranges, carrots, yellow apples, apricots, cantaloupe, grape-fruit, lemon, mangoes, nectarines, peaches, pineapples, butternut squash, yellow and orange pep-pers, yellow potatoes, pumpkin, sweet corn and sweet potatoes for good health.

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Serve children red- and pink-colored fruits and vegetables such as high-bush cranberries, raspberries, grapefruit, red potatoes, red apples, cherries, red grapes, red pears, strawberries, watermelon, beets, red peppers, radishes, red onions, red potatoes, rhubarb and tomatoes for good health.

BLUE, GREEN, WHITE,
YELLOW AND RED

Sweetened Foods and Beverages

The Dietary Guidelines say to choose and prepare food and beverages with little added sugar. Sweetened fruit drinks such as soda pop, sports drinks or fruit punches are full of added sugar. A single 12-ounce can of soda provides the equivalent of 10 sugar cubes. There are many sweetened beverages on the market that claim to have health benefits such as hydration or energy. These products are also full of sugar. A 20-ounce energy beverage provides more than 20 sugar cubes (Figure 5g).

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Boosting the level of blue and purple fruits and vegetables in a low-fat diet may help maintain a lower risk of some cancers, improve urinary tract health, increase memory function and encourage healthy aging. Blue/purple fruits and vegetables contain varying amounts of some health-promoting phytochemicals (plant chemicals) called anthocyanins and phenolics, currently being studied for their antioxidant and anti-aging benefits.

Adding green fruits and vegetables to a low-fat diet may help maintain a lower risk of some cancers, maintain vision health and grow strong bones and teeth. Green fruits and vegetables contain varying amounts of potent phytochemicals called lutein and indoles, which interest researchers because of their potential antioxidant, health-promoting benefits.

Working white fruits and vegetables into a low-fat diet helps maintain heart health, maintain cholesterol levels that are already healthy and reduce the risk of some cancers. White, tan and brown fruits and vegetables contain varying amounts of phytochemicals, including alicin, which is of interest to scientists.

Make yellow and orange fruits and vegetables a part of a low-fat diet to help maintain heart health, vision health, promote a healthy immune system and reduce the risk of some cancers. Orange and yellow fruits and vegetables contain varying amounts of antioxidants such as vitamin C as well as carotenoids and bioflavonoids, two classes of phytochemicals that scientists are studying for their health-promoting potential.

Be sure to include red in your low-fat diet to help maintain heart health, memory function, reduce the risk of some cancers and promote urinary tract health. The specific phytochemicals in the red group that are being studied for their health-promoting properties include lycopene and anthocyanins.

Consumption of sugar-sweetened beverages, particularly carbonated soft drinks, may be a contributor to the epidemic of overweight and obesity. These sugar-sweetened beverages are high in added sugar content, do not provide a feeling of fullness and are usually consumed without thinking about the amount of calories. Only low-fat milk, water, or 4–6 ounces a day of 100 percent fruit juice should be served to preschoolers.

PREVENTING WEIGHT GAIN



FIGURE 5g: 19 Sugar Cubes in a 20 Ounce Soda

For children age 6 months to 6 years, the American Academy of Pediatrics recommends that consumption of 100 percent juice be limited to 4–6 ounces ($\frac{1}{2}$ – $\frac{3}{4}$ cup) per day.⁴ Fruit juice offers no nutritional advantage over whole fruit. Whole canned, frozen, or fresh fruit are a better choice than juice because they have fiber and more nutrients. Whole fruit is low in calories, takes time to eat and helps provide the feeling of fullness. Juice is concentrated fruit that becomes high in sugar and does not provide a feeling of fullness. Serve children low-fat milk or water when they are thirsty and no more than 4–6 ounces of 100 percent juice a day. Any juice product with less than 100 percent juice should not be served at all.



Experts recommend limiting the intake of food and beverages sweetened with sugar. High sugar foods such as candy, chocolate bars, cakes, pies, ice cream, chocolate milk and pre-sweetened cereals such as frosted pops or sugared flakes should only be eaten every so often. Sweetened foods provide few nutrients, are generally high in fat, provide extra calories, may contribute to weight gain and can cause cavities in young children.

Sweetened Foods and Beverages

Many high-sugar foods are easy to identify because they taste sweet. However, sugar is often an ingredient added to many foods. To avoid additional sugar, one must read the ingredient list. Ingredients are listed in order of predominance by weight, that is, the ingredient that weighs the most is listed first and the ingredient that weighs the least is listed last. Sugar has many names, such as high fructose corn syrup, corn syrup, brown sugar, invert sugar, corn sweetener, lactose, maltose, dextrose, malt syrup, fructose, molasses, fruit juice concentrates, glucose, sucrose, honey and syrup (Figure 5h).



Often several names for sugar are listed. For example, the second ingredient is sugar, the fourth ingredient is corn syrup and the sixth ingredient is brown sugar syrup. If these sugars were added together, there might be more sugar than the first ingredient in a product (Figure 5i).

FIGURE 5i: Hidden Sugar in an Ingredient List

Ingredients: Whole grain wheat, **sugar**, salt, **corn syrup**, canola and/or rice bran oil, **brown sugar syrup**, trisodium phosphate, natural flavor.

Ban Trans Fats

Trans fat was created by food manufacturers to make processed foods such as chips, crackers, cookies, chocolate and most snack foods. The use of trans fat is common in the frying oil of restaurants for cooking french fries, fried chicken and other fried menu items. Trans fats increase the risk of heart disease, stroke and may increase the risk of diabetes, cancer and other chronic diseases. The Dietary Guidelines recommend keeping trans fat intake as low as possible.



FIGURE 5h: Sneaky Names for Sugar

High fructose corn syrup	Corn sweetener	Malt syrup	Glucose
Corn syrup	Lactose	Fructose	Sucrose
Brown sugar	Maltose	Molasses	Honey
Invert sugar	Dextrose	Fruit juice concentrates	Syrup

Scientists tried to determine if the intake of sugar-sweetened beverages causes weight gain. Thirty publications (15 cross-sectional, 10 prospective and five experimental) were reviewed. Although the authors noted that more research is needed, they also stated that the public should be discouraged from the consumption of sugary drinks in order to prevent weight gain.¹¹

Since January 2006, the amount of trans fat in a product must be listed on the Nutrition Facts label.

Parents can read the Nutrition Facts to avoid feeding their children foods made with trans fat (Figure 5j). Parents can also avoid ordering fried food from restaurants to stay away from trans fat.

WHY BAN TRANS FAT?

FIGURE 5j: Label showing Trans Fat

Nutrition Facts	
Serving Size 1 Cup (228g)	
Servings Per Container 2	
Amount Per Serving	
Calories 260	Calories from Fat 120
% Daily Value*	
Total Fat 13g	20%
Saturated Fat 5g	25%
Trans Fat 2g	
Cholesterol 0mg	10%
Sodium 660mg	28%
Total Carbohydrate 31g	10%
Dietary Fiber 0g	0%
Sugars 5g	
Protein 5g	

A HISTORY LESSON

Just because a food is trans fat-free does not mean it is a healthy food choice.

Trans fat-free potato chips have the same amount of calories, overall fat and do not provide more nutrition than potato chips with trans fat. For example, two trans fat free cookies provide 160 calories, 14 grams of sugar, 60 calories from fat and have sugar listed as the first and fifth ingredients (Figure

LABELING TRANS FAT

www.fda.gov/fdac/features/2003/503_fats.html

FIGURE 5l: MyPyramid-based Shopping List

Grains: Whole grain cold cereal, whole wheat pasta noodles, whole grain bread

Milk: Non fat milk and yogurt, cheddar cheese

Meat & Beans: chicken breast, eggs, dried white beans

Vegetables: Canned Tomatoes, frozen broccoli

Fruit: Fresh apples or oranges, bananas, pears canned in water

For example, a family may write whole grain

breakfast cereal on the list. When selecting the cereal at the grocery store, the shopper would check to see if any cereals are on sale, compare unit prices, check ingredients and read the nutrition facts label. The shopper would purchase the cereal at the best price, with little sugar added, made with whole grains and higher in fiber.

Since most people purchase the same items every shopping trip, creating a master shopping list or keeping shopping lists and just adding items as needed will help save time planning and at the grocery store.

5k). So although these cookies have no trans fat, they are not healthy choices because they are high in fat, high in calories, high in sugar and low in nutrients.

FIGURE 5k: Ingredient List of Trans Fat Free Cookies

Ingredients: sugar, enriched flour, high olei, canola oil and/or palm oil and/or canola oil, cocoa (processed with alkali), high fructose corn syrup, baking soda, cornstarch, salt, soy lecithin (emulsifier), vanillin-an artificial flavor, chocolate.

Smart Shopping

Purchasing healthy foods that cost less is smart shopping. Planning for healthy meals and snacks helps parents serve healthier food, save money and save time spent preparing meals. The first steps in shopping are to make a menu plan and write a shopping list.

The MyPyramid nutrition recommendations can be used to make shopping lists and to help select food. A healthy shopping list will have foods from all food groups, which include grains, low fat milk, meat, beans and canned, frozen and fresh fruits and vegetables (Figure 5l). The shopping list does not have to be specific because some of the food decisions can be made at the store based on cost and label reading.

In the mid 1980's, the predominant fat sources in processed foods in the United States were animal fats, principally beef tallow and lard. When health professionals learned that highly-saturated animal fats were best avoided, the industry started making animal-fat free chips, crackers, cookies, frostings and spreads by using tropical oils. In the late 1980s and into the early 1990s, products on every supermarket shelf proclaimed in bold letters "no animal fats" but contained highly saturated tropical plant fats, which were soon determined to be unhealthy.

At that point, the food industry invented a new kind of fat and the result was "trans" fat. Trans fat was ushered in by food packages proclaiming "no tropical oils!" Trans fat refers to the shape of fatty acid molecules that contain a double bond between adjacent carbons. When the branches of a molecule on either side of that double bond stick out in the same direction, it is called a 'cis' fat; when they stick out in opposite directions, it is called a 'trans' fat. Cis fats predominate in nature. An industrial process called hydrogenization produces predominantly trans fat not found commonly in nature. Thus, "partially hydrogenated oil" on an ingredient list indicates the presence of trans fat.

The science is strong implicating trans fat in raising the risk of serious chronic disease. Trans fat has been shown to raise blood markers of inflammation, adversely affect blood lipid levels and damage the lining of blood vessels. Population studies suggest a strong link between trans fat intake and the risk of heart disease, diabetes and cancer. ¹²

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Shoppers can prevent purchase of non-healthy

foods by sticking to the list, not shopping when hungry and shopping without their children. Stores intentionally put many unhealthy foods that children like, such as candy and products with prizes, where kids can see and reach them.

There are many ways to save money when food shopping. Shopping smart means using discount coupons, comparing price tags, purchasing items with the lowest per unit price, selecting store brand food items and buying in bulk. Shopping smart also means buying foods that provide the best nutrition. Purchasing healthy food that costs less is smart shopping!

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For example, the generic brand of shredded wheat is significantly less expensive than the name brand shredded wheat and likely is very similar in ingredients, taste and nutrition. The generic brands are generally the least expensive choices.

Discount coupons can save money if the coupons do not result in the purchase of food items not needed. When cutting coupons only cut out what would be bought normally.

Another way to save money is to buy foods sold in bulk. The food sold in bulk bins is generally less expensive because little to no money was spent to market or package the item.

Comparing per-unit prices can help shoppers save money. The unit prices on the store shelves show the price per ounce, pound, quart, or other amount. Unit prices let you compare brands and sizes to get the best buy (Figure 5m). The unit price is especially helpful when comparing different sized containers.

Since the two 100% Orange Juice are the same except for the size of the container, the less expensive per unit choice would be the 96 ounce 100% Orange Juice.



Many villages and people in the state of Alaska do not have access to a grocery store or a fully stocked grocery store. People in these regions may consider placing large food orders several times a year.

Placing large food orders takes planning, consideration and a substantial outlay of money. Money will be saved in the long run, but purchasing several hundred dollars of food at once is difficult for most families. One way to save money on large food orders is to place the order with other families. Items that can only be purchased by the case can be shared among families and costs for shipping can be split. Placing large orders, especially with other families, takes a great deal of organization and planning, however each family involved will save money and have healthier food choices in the house.

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FIGURE 5m: Buy More, Save More

100% Orange Juice (96 oz.)

UNIT PRICE \$1³³ PER QUART	YOU PAY \$3⁹⁹
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100% Orange Juice (64 oz.)

UNIT PRICE \$1⁴⁸ PER QUART	YOU PAY \$2⁹⁶
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Nutrition Distilled

The recommendations for selecting good healthy foods for preschool aged children also apply to older children and adults. Making good food choices requires quite a bit of information about nutrition. For example, health professionals cannot just say “eat more whole grains” without explaining what whole grains are, why one should eat more whole grains and how to determine if a food is made from whole grains. Therefore, one nutrition recommendations requires a lot of additional information. The information presented has been distilled into the following summary.



- ☑ Choose whole grain food products most of the time.
 - ☑ Serve whole grain rice, bread, pasta and cereals. 
 - ☑ Look for whole grain ingredients listed on the Nutrition Facts label.
 - ☑ Choose foods with a Daily Value for fiber at 5% or more listed on the Nutrition Facts label.
- ☑ Serve lean cuts of meat.
 - ☑ Select fish from Alaskan waters more often.
 - ☑ Choose poultry more often. 
 - ☑ Prepare meat by baking, broiling, or poaching rather than by frying.
 - ☑ Limit the amount of high fat meats, such as bacon, sausage, or bologna, served.
 - ☑ Eat beans more often.
 - ☑ Limit the amount of fried or pre-fried meats or fish served.
- ☑ After the age of two, serve low-fat and non-fat milk. 
 - ☑ Serve other calcium rich foods each day.
- ☑ Provide a variety of colorful fruits and vegetables each day. 
 - ☑ Include fruits and vegetables at every meal and for snacks.
 - ☑ Eat blue, purple, green, white, yellow, orange and red colored fruits and vegetables.
- ☑ Avoid high sugar foods. 
 - ☑ Serve no more than 4-6 ounces of 100% juice each day.
 - ☑ Limit consumption of sugar, including soda pop, sports drinks, candy, sweetened cereals and baked products.
 - ☑ Avoid foods with sugar listed as one of the top three ingredients. 
- ☑ Ban the *Trans Fat*.
 - ☑ Select foods without trans fat listed on the Nutrition Facts label.
 - ☑ Avoid ordering fried food at restaurants.
 - ☑ Remember, foods marketed as trans fat free are not necessarily low in fat, sugar or healthy.
- ☑ Shop Smart. 
 - ☑ Make a menu for the week and a shopping list.
 - ☑ Clip out coupons for foods.
 - ☑ Compare unit prices.

For a parent activity, use the hand-out titled “How Much Sugar is in my Food and Drink?” found in the handout section of this manual. 

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