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Nutrition Education in the Preschool Setting

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Nutrition Education
in the
Preschool Setting

Diana Barbeauld

University of Tennessee

Chancellor's Honor's Program

Running Head: PRESCHOOL NUTRITION

Nutrition Education Program in the Preschool Setting

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University of Tennessee, Knoxville

College of Nursing

Chancellor's Honors Program

Introduction

The prevalence of childhood obesity in the United States is becoming more and more obvious each day. From television news stories to government reports, it is clear that the epidemic of obesity is not ~~going~~ being resolved and cannot be ignored any longer. The long term consequences of obesity in childhood can be devastating to a child's future health and lifespan. This causes great concern for parents, healthcare providers, educators, and all who have an investment in the children of America's future.

The staff at My Village Child Development Center (My Village), in Knoxville, Tennessee has raised concerns regarding the nutrition education being provided at their facility as well as the overall nutritional health of their students. The center, which provides care for children ages six-weeks through 5th grade requested the aid of the University of Tennessee Knoxville College of Nursing in putting together a nutrition education program for their students. The purpose of the following research is to create a better understanding of the issue of childhood obesity, determine what is already being done in the child-care setting to combat this problem, develop an effective nutrition education plan for My Village, and design ways for the education and healthcare fields to address the issue.

Review of Literature

Obesity is a health problem that the United States has been dealing with for many years, and now it is beginning to affect America's children. It is currently estimated that 17% of America's children are overweight (Ogden, Carrol, Curtin, McDowell, Taback, & Flegal, 2006). Not only has this created health problems during childhood such as type 2 diabetes mellitus (a disease that historically has affected predominantly

overweight adults), but there are also many long term consequences of obesity in childhood such as hypertension, dyslipidemia, sleep apnea, and liver disease (Daniels, Arnett, & Eckel, 2005). These diseases alone can have a significant impact on future health care costs, not to mention the negative effect they have on these children's lifespan.

The factors that lead to obesity in childhood are multi fold. As with obesity in the general population, there is rarely one factor that contributes exclusively to obesity in children. Lack of exercise, under consumption of vegetables and fruits, and high fat diets all contribute to this problem. In order to combat this epidemic, many different measures of prevention must be developed. One area that is often underutilized is the school system. Children spend a great deal of time each day in the school setting. This is a perfect opportunity to teach good nutrition habits as well as the importance of exercise. However, by the time that a child reaches primary school age (6-12 years), many of his/her dietary habits have already been established. This means that nutrition education must begin while dietary habits are still being formed, during the toddler and preschool years (Horodynski & Stommel, 2005).

Fuller, Keller, Olson, and Plymale found that "nutrition choices that young children learn to make affect them throughout their lifetimes" (Fuller et al, 2005, p181). During the preschool years, children are in the developmental stage of initiative versus guilt. This means that preschool children are becoming more independent and making more choices about their environment. This is an opportune time to present different nutritious foods. Allowing the preschooler to try new foods provides them with a sense of initiative as well as healthy eating habits for the future (Fuller et. al, 2005).

Good inclusion of developmental info

No need to cite again here

Child care facilities for toddlers and preschoolers can play a significant role in developing healthy eating habits for children. Facilities that provide meals for their students should ensure that each child receiving the recommended daily amounts of fruits, vegetables, grains, protein, and dairy. The Child and Adult Care Food Program (CACFP) (which My Village participates in) provides meal pattern guidelines for facilities to use when preparing meals (Code of Federal Regulations, 2004). Child care facilities can also encourage healthy eating habits by making eating a positive experience for the preschooler. For instance, making meal time unhurried and encouraging positive social interaction during meal times encourages children to enjoy the experience of eating healthy foods. Having the child care provider eat the meals with the students is another way for facilities to promote healthy eating. Children often model the actions and attitudes of people that they admire and trust. The physical environment is also vital to the child associating healthy eating with a positive experience. The area should be clean, free from distractions, and appropriate for the child's size. Brightly colored posters encouraging healthy eating can also be used to reinforce nutrition concepts that the students have already learned (American Dietetic Association, 2005).

Child care facilities can also help parents become more involved in their child's nutritional health. Research has shown that although parents play a significant role in influencing the eating habits of their children, parents are rarely involved in the nutrition programs at their children's school (Padget & Briley, 2005). By posting the menus, the child care facility can keep parents informed of the nutrition that their child is receiving and may encourage them to continue these habits with their children outside of the facility (American Dietetic Association, 2005).

Good detail on multiple influences

The consequences of obesity in childhood are alarming, but child care facilities, especially those serving preschool age children, have a unique opportunity to combat the obesity epidemic. They can encourage children to make nutritious choices by providing them with a wide variety of healthy foods, making eating a positive experience for the children, and assisting parents to become more involved in their child's nutrition. By teaching healthy eating habits and educating their students about nutrition, educators can have a significant impact on the future health of a child.

Nice intro to your project

My Village Study

Purpose

The purpose of this study is to evaluate the eating habits of preschool age children at My Village Child Development Center, provide activities and instruction to the children regarding healthy food choices, and provide parents and teachers with information about encouraging healthy eating habits for their children and students.

Background

My Village Child Development Center is located in Knoxville, Tennessee. My Village is positioned at the edge of the empowerment zone, just inside the Knoxville city limits. Empowerment zones are areas that qualify for "special federal dollars to revitalize the community because of its level of poverty, unemployment rate, poor housing conditions, and low education levels" (Partnership for Neighborhood Improvement, 2004). Because of My Village's location, the primary users of the facility are low income families. The center is the only child care unit in South Knoxville that is open twelve hours a day (from 6:00 AM to 6:00 PM), fifty-two weeks per year (Hazlett, 2007).

Good Background

My Village is designed to provide care for children ages six weeks through 5th grade. During regular school hours (approximately 6:00 AM to 2:30 PM), My Village provides care for infants, age six weeks or older, through children in pre-kindergarten classrooms. After regular school hours (approximately 2:30 PM), the center provides after school care for children up to 5th grade. Every child at the facility during regular school hours ~~are~~^{is} provided with breakfast, lunch, and snacks which are supported by Tennessee's Child and Adult Care Food Program. Approximately 50-60% of the children at My Village are on child care certificates (Hazlett, 2007).

what are the implications of this info?

Sample

Two classrooms were used in this study. The first classroom consisted of thirteen children, five girls and eight boys, ages four to five years old. The second classroom consisted of eight children, four boys and four girls, ages three to four years old.

How chosen? why?

Methods

Students were observed and evaluated during their regularly scheduled lunch times. Each student was evaluated based on the percentage of each food group consumed during the meal (fruits, vegetables, grains, proteins, and dairy). Because My Village provides meals for every student, each child was presented with the same food options.

Each classroom also participated in two learning activities about nutrition. The four to five year old class was taught about the food guide pyramid and played a game that consisted of the class working together to pack a healthy lunch for a picnic. The food guide pyramid activity consisted of poster size representation of the American Department of Agriculture's Food Guide Pyramid. The children were presented with information about the nutrients found in each food group, how each food group helps to

make their bodies grow, and colorful cut-out examples of foods found in each food group (Appendix H). After the information was presented, each student was given a food cut-out and took turns placing the food in the correct position on the pyramid. The children then participated in an activity that involved packing a healthy lunch for a picnic. Colorful cut-outs of foods were presented to the students. Foods such as cola, milk, chips, apples, candy, and carrots were included in this activity. The students worked together to decide whether or not the food was healthy. If the food was healthy, the students placed the cut-out into the lunch bag. If it was not healthy, the cut-out was placed to the side.

The three to four year old class did not complete the food guide pyramid activity. Instead, this classroom tried six different fruits and vegetables. A chart was made with the children's names across the side and the different fruits and vegetables across the top (carrot, zucchini, bell peppers, kiwi, plum, and pear). The foods were presented one at a time. After a student tried the food, they reported whether or not they liked the taste. If they liked the new food, a happy face was placed in that spot on the chart. During this activity, the students were also given information about how each fruit and vegetable helped their bodies grow. A sheet was sent home to the students' parents describing which of these new foods they enjoyed and would like to have at home (Appendix A). After the tasting activity, this classroom also participated in the packing a healthy lunch activity.

The teachers of the classrooms also received a worksheet that they could use at a later date. The worksheet is in the format of a shopping list (Appendix B). Each child will talk with the teacher and decide what their favorite foods are from each of the food

Good ideas -
how did you decide on the activities?

groups. This worksheet will also be sent home to the parents upon completion. A packet of information was given to each of the child's parents at the end of the day (Appendix C). This packet included a letter detailing the purpose of the nutrition education program, information about the food groups, and quick, cost-friendly, healthy meal options for their families. *(info source?)* ↑

Each classroom was then re-evaluated one week after the teaching intervention using the same criteria from the first observation. *(Don't use one-sentence paragraphs)*

Results

The first lunch observation meal consisted of a hot dog with bun and ketchup, salad with ranch dressing, grapes, and milk. The students in the four to five year old class ate on average 55% of their meal. The average number of students in this classroom that ate some or all of the foods from each of the different food groups presented are as follows: fruit (grapes) 69%, vegetables (salad) 7%, grains (bun) 46%, protein (hot dog) 85%, and dairy (milk) 92%. They were allotted twenty minutes to eat lunch (11:15 AM until 11:35 AM). For a more detailed chart, see Appendix D.

Did you draw any conclusions re portion size?

The students in the three to four year old class ate on average 70% of their meal. The average number of students in this classroom that ate some or all of the foods from each of the different food groups presented are as follows: fruit (grapes) 100%, vegetable (salad) 50%, grains (bun) 75%, proteins (hot dog), 87%, and dairy (milk) 100%. They were allotted thirty minutes to eat lunch (11:30 AM until 12:00 PM). For a more detailed chart, see Appendix E.

The four to five year old class' lunch environment was much different than the second classroom. The number of students was much larger, but both classes had only

Look at possible impact on how well students ate!

one teacher in the classroom at the time. The students in the four to five year old class were separated into two groups, while the students in the three to four year old class all sat at one table. Also, the teacher from the three to four year old class sat at the table with her students and ate lunch at the same time (she also ate the same foods as the students). The four to five year old classroom was much louder during lunch time. The children consistently got out of their chairs, talked loudly to other students or the teacher, and knocked over cups of milk on two separate occasions.

impact on nutrition & learning?

Approximately 75% of the first classroom's students participated in the nutrition education activities. At the end of the presentation of the food guide pyramid, the students were able to accurately place the food cut-outs on the food guide pyramid poster. The students were also able to correctly identify the healthy food options during the "pack a healthy lunch" activity.

Good results

In the second... 100%

100% of the second classroom participated in the nutrition education activities. One student reported that she liked all of the foods that were presented. One student did not enjoy any of the foods. The majority of the students like three or four of the foods that they tried. This classroom was also able to accurately pack a healthy lunch during that activity.

Don't use a number (at beginning)



The second lunch observation was completed one week after the initial observation and teaching intervention. The foods provided during this lunch were roast beef with ketchup, bread roll, salad with ranch dressing, corn on the cob, and milk. There was no fruit provided during this meal.

The students in the four to five year old class were split into two groups on this day. One classroom had six children, and the other had seven. The students in this class

ate an average of 49% of their meal. The average number of students in this classroom that ate some or all of the foods from each of the different food groups presented were as follows: fruit (not applicable), vegetables (salad) 31%, vegetables (corn on the cob) 85%, grains (bread roll) 69%, protein (roast beef) 69%, and dairy (milk) 38%. The students were allotted forty-five minutes to eat their lunch (11:15 AM until 12:00 PM). For a more detailed chart, see Appendix F.

The students in the three to four year old class ate an average of 70% of their meal. The average number of students in this classroom that ate some or all of the foods from each of the different food groups presented are as follows: fruit (not applicable), vegetable (salad) 85%, vegetable (corn on the cob) 71%, grains (bread roll) 85%, protein (roast beef) 100%, and dairy (100%). The students were allotted thirty-five minutes to eat their lunch (11:25 AM until 12:00 PM). For a more detailed chart, see Appendix G.

Outcomes and Effectiveness of Interventions

Although the students responded well to the nutrition education and activities, there was no significant difference in the children's eating habits. ^{as a result of ?} The only area in which there was a large change in the data is the first classroom's vegetable consumption, which rose from 7% to between 69% and 85%. However, the students did remember some of the information that was given to them about each of the food groups. During the first classroom's lunch time, students explained that the milk they were drinking would help them have strong bones, and the vegetables would help their eyes. The students in the second classroom also remembered some of the teaching that was done the previous week. All of the students were able to identify the different food groups on their plate

and were also able to distinguish unhealthy and healthy foods that were discussed during lunch time.

There were some limitations in this study. First, the students were not individually identified when being evaluated during lunch. This means that the student numbers from the first observation day do not correlate with the student numbers from the second observation day; therefore it is impossible to see individual improvement after the intervention. Second, there were no interventions regarding the food choices that were presented to the children. The menus for the school had been established and could not be changed to accommodate this study. Third, due to the short time span, parents were not involved. While it is understood that parents play a significant role in the development of their child's dietary habits, the time span for this project and the resources available were not conducive to actively involving the parents.

but there was info to parents

Proposal

My Village is taking many of the correct steps to encourage and teach healthy eating habits in their students. They provide their students nutritious meals in a positive environment. The staff at My Village understands the role that they play in providing a healthy base for these children's future. However, there is plenty of room for improvement.

How was this evaluated?
Interventions?
for staff

One intervention that My Village can do is to provide consistent nutrition education throughout the year. Once a week, or even every day, healthy eating habits should be presented and discussed with the children. Another option would be to present the children with a new vegetable each month and provide it consistently throughout the month at meal times. Research has shown that new food should be presented between ten

and fifteen times before a child will accept it (American Dietetic Association, 2005).

Children also enjoy helping to prepare their foods. My Village might also try involving their students in the safe preparation of healthy foods to encourage the children to eat them.

My Village should also consider involving the parents in their nutrition program as well. This could involve something simple such as keeping them informed about what their child is learning or providing them with menus of what healthy foods their child is being served. They could also encourage parents to become more actively involved by hosting informational sessions about nutrition aimed at the parents. The packet provided to the parents will hopefully be a good resource for both the facility and the parents in this aspect.

Conclusion

While the epidemic of childhood obesity is a major concern for America, there are many solutions. Parents, health care providers, and educators must take an active interest in the nutrition and health of America's children. Facilities such as My Village are taking the right steps to improving the eating habits of their students and providing them with nutrition education that will last a lifetime. It is only through perseverance and dedication to the health of children that the obesity epidemic and all its negative consequences will be eliminated.

Good job on your entire project. Impressive interventions for a short time frame. Could easily develop this into a comprehensive approach for the center! Excellent use of resources. Awesome accomplishment in a short time frame!

Pictures of Interventions









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Dear Parents,

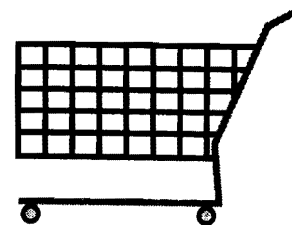
Today I tried lots of different healthy foods at school. My teacher is keeping a list of the foods that I liked on a chart in my classroom. Here are some of the ones that I really enjoyed.

Next time we go to the grocery store, maybe we can get some of these healthy foods to eat at home.

Love,

Shopping List

_____ (your name)



It is time to go grocery shopping, complete this shopping list of your favorite foods to eat. List your favorite foods from each of the food groups in the Food Guide Pyramid. Make sure to share this list with your parents, post on your fridge and happy shopping!

Date: _____

My Favorite Milk Group Foods:

My Favorite Meat Group Foods:

My Favorite Vegetable Group Foods:

My Favorite Fruit Group Foods:

My Favorite Grain Group Foods:

January 31, 2007

Dear Parents:

The University of Tennessee's Honors Program and the College of Nursing have sponsored us, Diana Barbeauld and Kathy Parker, in creating a nutrition program for preschool students. MY village has allowed us to spend some time doing nutritional activities with your children today. These activities included trying new fruits and vegetables such as plums and green peppers, as well as learning about the food guide pyramid.

The packet that follows this letter is just some of the nutritional information that we taught to your children today. The packet includes fun recipes using more nutritional ingredients.

Please enjoy and thank you for your time,

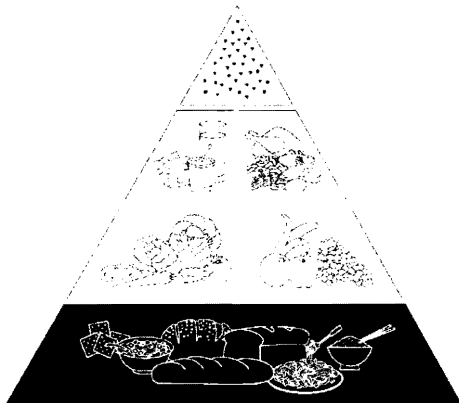
Diana Barbeauld

Kathy Parker

UT College of Nursing

If you would like to contact us, please e-mail us at:

kparker6@utk.edu or dbarbeal@utk.edu



Bread, Cereal, Rice & Pasta Group
6-11 servings per day

Foods in the Bread, Cereal, Rice & Pasta Group supply B vitamins, iron, fiber, and other nutrients including protein. Preferences for foods in this group often depend on cultural background. Consider likes and dislikes when possible.

One Serving equals:

- 1 slice of bread
- 1 tortilla
- 1 ounce ready-to-eat cereal
- 1/2 cup cooked cereal
- 1/2 cup cooked pasta
- 1/2 cup cooked rice

Dietary Fiber

Dietary fiber is the part of whole grains, vegetables, legumes, bran, nuts and seeds that humans cannot digest. It is found **ONLY** in plant foods.

Fiber is helpful in preventing and treating constipation. Fiber absorbs water, making stools softer and elimination easier. It may reduce the risk of developing certain types of cancer and heart disease.

Fiber is also beneficial to your health because most foods that are high in fiber are lower in fat.



**UMASS
EXTENSION**

These materials are funded in part by the United States Department of Agriculture Food Stamp Nutrition Education Program, Massachusetts Emergency Food Assistance Program and UMass Extension. UMass Extension offers equal opportunity in programs and employment.

01/00

Putting GRAINS in Your Food Guide Pyramid

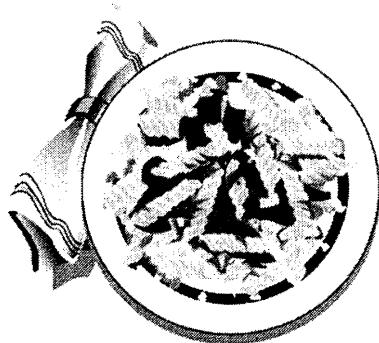
PASTA • RICE • CEREAL

Focus on Grains

Grains are a major source of energy and supply valuable vitamins and minerals with little or no fat.

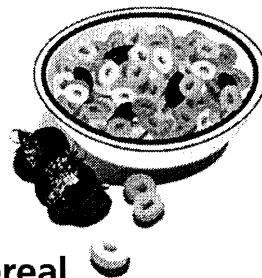
Pasta

- Pasta is a staple that combines well with many other foods. Pasta is low in fat, although some sauces aren't.
- Pasta can be used to stretch more expensive food items. For example, a small amount of ground beef or turkey goes further when mixed with spaghetti sauce and served over pasta than it would if you tried to make burgers from it.
- Pasta is also a good base for leftovers. Leftover vegetables and/or meats can be combined with dressing and pasta and served cold.



Rice

- Rice is a useful staple and easy to mix with other foods. Many different rice dishes can be made by using a variety of herbs, spices, and other ingredients.



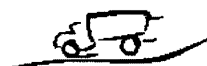
Cereal

- Cereals can be used in many ways besides serving with milk. Cereals make great toppings for casseroles, yogurt or canned fruit.
- Cold cereals make a great snack. You can create different tastes by mixing two or more different cereals together. Serve dry or with milk.
- Make your own trail mix by adding dried fruit and nuts to dry cereal.
- Top cold cereals with: fresh fruit, canned fruit, raisins, or yogurt.

MEFAP Foods available from the Bread, Cereal, Rice and Pasta Group:
Kellogg's Cereal Variety pack, Spaghetti and Long Grain Rice



The Food Bank of Western Massachusetts, Inc.
97 North Hatfield Road, PO Box 160
Hatfield, MA 01038
tel. 413•247•9738 fax 413• 247•9577



The Food Bank

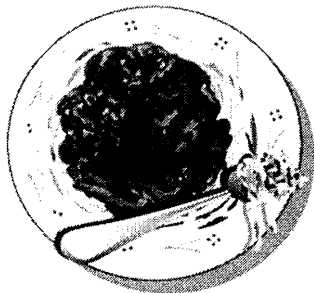
COOKING WITH GRAINS

Cooking Pasta:

Add any kind of pasta to a large pot of rapidly boiling water. You do not need to add salt or oil to the cooking water. Cooking time depends on the type of pasta; follow directions on the package. Be careful not to overcook. Overcooking makes pasta soft and unappetizing. Drain well before adding to sauce. Two ounces of dried pasta will make about 1 cup of cooked pasta. According to the Food Guide Pyramid, 1/2 cup of cooked pasta equals one serving.

Super Spaghetti "one dish meal" - Serves 4

- 1/2 pound lean ground beef or ground turkey
- 1 medium onion, chopped
- 1 green pepper, chopped or 1 cup chopped celery
- 2 garlic cloves, chopped
- 1 tsp. basil
- 1 tsp. oregano
- 3 1/2 cups tomato sauce
- 1/2 pound uncooked spaghetti



1. Brown meat in large fry pan. Drain.
2. Add onion and green pepper (or celery) and cook until soft (about 5 minutes).
3. Add tomato sauce, basil and oregano. Mix well.
4. Bring mixture to a boil, then add uncooked spaghetti.
5. Reduce heat to low, cover and cook about 15 to 20 minutes or until spaghetti is soft.

From: More Than a Cookbook,
St. Paul-Ramsey County Nutrition program

Tuna-Tomato Pasta - Serves 4

- 1 medium onion, peeled and chopped
- 2 tsp. vegetable oil
- 1 16 oz. can tomatoes
- 2 6.5 oz. can tuna, drained
- 1 Tbsp. oregano
- dash of pepper
- 4 cups of cooked pasta

1. Heat oil in medium-sized sauce pan.
2. Add onion and stir until slightly softened.
3. Add some juice from tomatoes, cover. Cook, stirring frequently until onions are soft.
4. Add tomatoes and stir to break up.
5. Add remaining ingredients, stir and cook for about 10 minutes to allow spices to blend.
6. Serve over cooked pasta.

Cooking Rice:

Stir one part rice and two parts rapidly boiling liquid (example: 1 cup rice stirred into 2 cups boiling water). Reduce heat and cover. Simmer for about 20 minutes or until liquid is absorbed and rice is tender. One cup of raw rice makes three cups of cooked rice. According to the Food Guide Pyramid, 1/2 cup of cooked rice equals one serving.

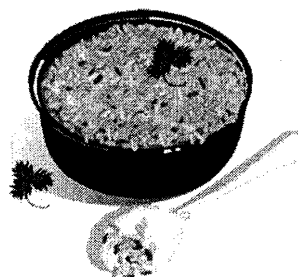
Stir-Fry Rice - Serves 4

- 2 tsp. vegetable oil
- 1/2 cup celery, sliced
- 1/4 cup onion, chopped
- 2 cups cooked cold rice
- 1 tsp. soy sauce or reduced sodium soy sauce
- 1/4 tsp. garlic powder
- Dash pepper

Add either of the following, if desired:

- 1 cup or more vegetables (such as peas, carrots, corn, etc.)
- 1/2 cup thinly sliced cooked meat, such as chicken, ham, pork or fish.

1. Heat oil in skillet.
2. Add celery and onion. Stir-fry until tender.
3. Add other vegetables (if desired). Continue to stir-fry, turning until tender.
4. Add rice, meat, if desired, and seasonings.
5. Stir-fry until rice is hot.



Cooking with Cereal:

- Some recipes call for crushed cereal. Crush by placing cereals in a plastic bag and smash between your hands until cereal is crumbly.
- Use crushed cereal as a coating for baked chicken or fish. Dip in milk first, then roll in crushed cereal crumbs.
- Add 1/4 to 1/2 cup crushed cereal to one pound of ground beef when making hamburgers, meatloaf or meatballs.



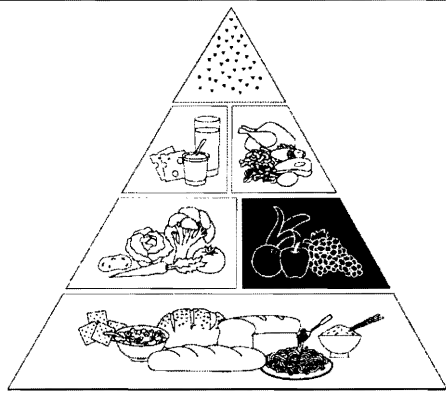
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The Food Bank



Fruit Group
2-4 Servings per day

Foods in this group contain many vitamins and minerals such as vitamins A and C. Fruits are low in calories and sodium, are naturally fat-free and provide fiber. Eating fruits can lower the risk of many cancers. Vegetables and fruits provide many of the same nutrients and health benefits.

One Serving equals:

- 3/4 cup fruit juice
- 1 medium piece of fruit
- 1/2 cup chopped, cooked, or canned fruit
- 1/4 cup of dried fruit

Vitamin C and Vitamin A

Good sources of fruit for vitamin C include; oranges, grapefruit, lemons, limes, strawberries, cantaloupe, papaya, melon, and pineapple.

Good sources of fruit for vitamin A include; cantaloupe, mango, papaya, and apricots.

Juice

When drinking juice choose those labeled 100% juice. Beverages labeled "juice blends," fruit "punches" or "drinks," and "juice cocktails" usually contain little fruit juice and are mostly water and sugar.



These materials are funded in part by the United States Department of Agriculture food stamp Education Program, Massachusetts Emergency Food Assistance Program and UMass Extension. UMass Extension offers equal opportunity in programs and employment.

Putting Fruits in Your Food Guide Pyramid

FRESH • LOCALLY GROWN • CANNED



Focus on Fruits

Fresh is best. Frozen is fine. Canned can be convenient.

5 A DAY

The "5 a Day For Better Health" program promotes a simple, positive message, to eat five or more servings of fruits and vegetables each day.

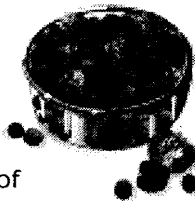
Five Points to Remember:

1. Eat five servings of fruits and vegetables a day!
2. Eat at least one vitamin A rich vegetable or fruit a day!
3. Eat at least one vitamin C rich vegetable or fruit a day!
4. Eat at least one high fiber vegetable or fruit, such as pears, apples, or raisins, a day!
5. Eat cabbage family (cruciferous) vegetables several times each week!

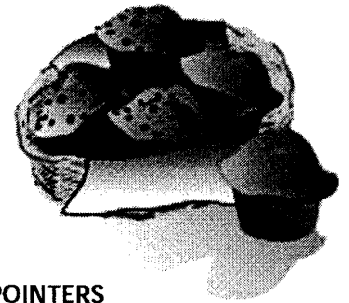
Tips to Reach

5 A DAY:

- Drink a glass of fruit juice
- Add fresh or canned fruit to cereal.
- Top pancakes, waffles, and French toast with fruit instead of syrup.



- Want something sweet? Eat a piece of fruit.
- Use fruits as a garnish on main dishes.
- Liven up a plain dessert with fruit.
- Add fruit to yogurt.
- Add chopped fruit or berries to muffins, cakes, or cookies.



FRUIT POINTERS

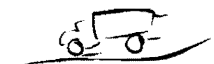
- Limited refrigeration? Most fresh fruit will keep for several days without refrigeration at cool temperatures.
- Whole fruits have more fiber than juice. When eating canned fruit choose fruit packed in its own juice instead of syrup if possible.

MEAP Foods available in the Fruit Group:

A variety of fresh, including Massachusetts locally grown, and canned fruit.



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The Food Bank

Cooking with Fruits

Pear or Apple Crisp – Serves 9

Fruit–

4 cups pears or apples, thinly sliced
1 Tbsp. fruit juice
2 Tbsp. sugar
1/2 tsp. cinnamon

Topping–

1/2 cup quick-cooking oatmeal

Apple Salad – Serves 4

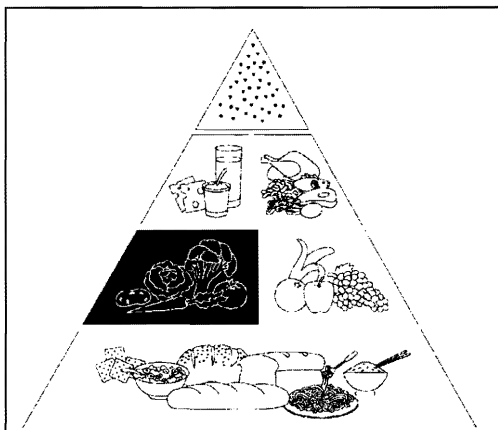
Salad–

2 large apples sliced
1 cup crushed pineapple
1/3 cup celery
2 Tbsp. raisins

Dressing–

3 Tbsp. low-fat yogurt





Vegetable Group
3-5 Servings per day

Foods in this group contain many vitamins and minerals such as vitamins A and C. Vegetables are low in calories and sodium, are naturally fat-free, and provide fiber. Vegetables and fruits provide many of the same nutrients and health benefits.

One Serving equals:

- 3/4 cup vegetable juice
- 1 cup raw leafy vegetables
- 1/2 cup cooked or raw other vegetables

Eating Vegetables to Prevent Cancer

All vegetables are good for you but some vegetables are important to eat because they may reduce the risk of developing some kinds of cancers. These include vegetables that are high in vitamin A and vegetables from the cabbage family.

Vegetables high in vitamin A include: deep yellow/orange vegetables, such as carrots, sweet potatoes, winter squash, and pumpkin, and dark green vegetables, such as spinach, collard and turnip greens, kale and broccoli.

The cabbage family include: cabbage, broccoli, bok choy, kale, rutabagas, turnips, cauliflower, kohlrabi, swiss chard, brussels sprouts, collards, mustard greens, and turnip greens.



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Putting VEGETABLES in Your Food Guide Pyramid

FRESH • LOCALLY GROWN • CANNED



Focus on Vegetables

Fresh is best. Frozen is fine. Canned can be convenient.

5 A DAY

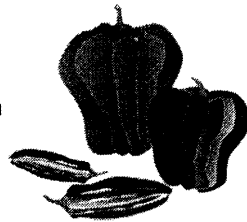
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5. Eat cabbage family (cruciferous) vegetables several times each week!

Tips to reach 5 A DAY:

- Have a salad or a soup that has vegetables.
- Add lettuce and tomatoes to sandwiches.
- Cut raw vegetables, such as carrots and peppers, and keep on hand for snacking.



- Add vegetables to main dishes such as broccoli, to pasta or casseroles.
- Pop a potato in the microwave for a snack.

VEGETABLE POINTERS

- Limited refrigeration? Potatoes, carrots, onions, and winter squash can be held at cool room temperatures for several days.
- Wash all vegetables before cooking
- Leave skin on if it can be eaten.
- When cooking fresh vegetables cook until crisp and crunchy, not soft and mushy, to keep their bright color and natural flavor. Steaming or microwaving does this best.
- Canned vegetables can be high in sodium and often lack fiber. Choose ones labeled "no salt added" or "low sodium".

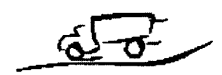


MEFAP Foods available in the Vegetable Group:

A variety of fresh, including Mass. locally grown, and canned vegetables.



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Cooking with Vegetables

Fresh Vegetable Plate

Use a variety of vegetables or just one. Be creative!

Wash and slice vegetables. Serve with dip or dressing.

Dressing

1 cup plain low fat yogurt
1/2 cup mayonnaise
1/4 cup onion, chopped fine
2Tbsp. soy sauce

1. Blend all ingredients and chill before serving

Chili Bean Dip

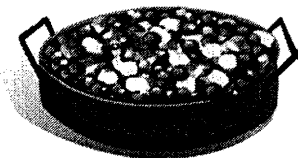
2 cups beans, cooked
1 Tbsp. vinegar
1 tsp. chili powder
2 tsp. onion, minced

1. Blend until smooth.

From: *The Market Basket*, MASS Farmer's Market Nutrition Program
Massachusetts WIC Program

Corn or Green Bean Medley - Serves 5

2 cups (16oz.) corn or green beans (canned or fresh)
1 large tomato, chopped
1 small onion, chopped (or 2 tsp dry minced onion)
1/4 cup chopped green pepper or celery
1/4 tsp. chili powder



1. Combine all ingredients together in a pan.
2. Cover and cook over low heat until heated through and vegetables are tender.

From: *Project STRENGTH*- a program of Harvesters- The Community Food Network

Steamed Fresh Vegetables* -

1. Place steamer insert in bottom of pan.
2. Add water in pan just to the insert bottom.
3. Add fresh vegetables. Cover and heat to boiling.
4. Heat until crispy tender.

* Any fresh vegetable can be steamed
For example: broccoli, cauliflower, carrots, beets, cabbage, zucchini, sweet potatoes, green beans, corn-on-the-cob etc.

From: *Project STRENGTH*- a program of Harvesters- The Community Food Network



Carrot Bread

1 1/2 cups flour
1 tsp. baking soda
1 1/2 tsp. cinnamon
2 eggs
3/4 cup sugar
1/2 cup oil
1 cup carrots, cooked and mashed



1. Preheat oven to 350 degrees.
2. Combine flour, baking soda and cinnamon in bowl.
3. Beat the eggs, and mix in sugar, oil, and carrots.
4. Gradually mix the flour mixture in with the carrot mixture.
5. Pour into a greased 9 X 5" loaf pan and bake for 55-60 minutes.

From: *The Market Basket*, MASS Farmer's Market Nutrition Program
Massachusetts WIC Program

Oven Fried Parmesan Potatoes - Serves 5

The addition of seasonings and cheese adds flavor and a golden color to these low-fat French fries.

4 medium potatoes (about 5 oz. each)
1 Tbsp. canola oil
1 Tbsp. grated Parmesan cheese
1/2 tsp. garlic powder
1/2 tsp. paprika
1/8 tsp. pepper
salt to taste (optional)

1. Preheat oven to 450 degrees.
2. Scrub potatoes, but don't peel.
3. Cut in wedges or strips.
4. Place potato slices in a plastic bag with the oil and shake to coat.
5. In a plastic bag, mix seasonings.
6. Add potatoes and shake to coat with seasonings
7. Arrange potatoes in a single layer on a baking sheet that has been sprayed with a non-stick cooking spray.
8. Bake for 30-35 minutes or until golden brown.

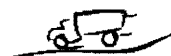
From: *The Market Basket*, MASS Farmer's Market Nutrition Program
Massachusetts WIC Program



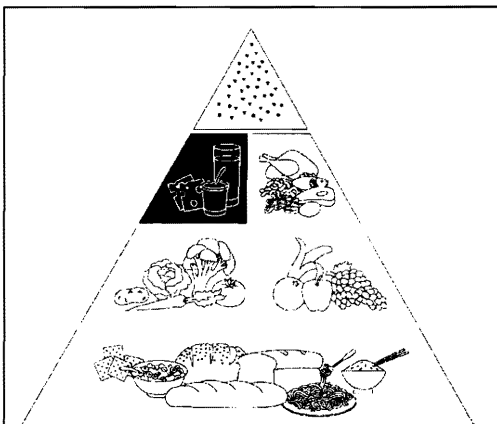
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Milk, Yogurt, & Cheese Group
2-3 Servings per day

Foods in this group are good sources of calcium, protein, and other nutrients. Fortified milk products also supply vitamins D and A.

One Serving equals:

- 1 cup of milk
- 1 cup plain yogurt
- 1 1/2 ounces of cheese

Calcium

Calcium helps build strong bones and teeth. Other foods high in calcium include; canned sardines and salmon with bones, tofu and some leafy green vegetables. Butter, sour cream, and cream cheese are not good sources of calcium. These foods are in the Fats, Oils, and Sweets Group.

Control fat, saturated fat & cholesterol

The fat and saturated fat content of dairy foods varies greatly, from almost none in skim milk products, to very high levels in processed cheese and ice cream. Unless extra calories are needed, use low-fat or skim milk and milk products. Children under the age of two should only have whole milk and whole milk products due to their need of fat for proper growth and development.



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Putting MILK PRODUCTS in Your Food Guide Pyramid

MILK • CHEESE • YOGURT

Nonfat Dry Milk

Nonfat dry milk is a healthy alternative to using regular milk. It can be added to many meals to help increase their nutritional quality.

How to use Nonfat Dry Milk:

- It may be used directly in many recipes by mixing with other dry ingredients.
- Prepared nonfat dry milk can be used in place of fluid milk as a beverage or in any recipe that calls for milk.
- Prepared nonfat dry milk can also be added to fluid milk to stretch your supply and reduce the total cost.

For Best Results in Mixing:

1. Put water in screw top jar.
2. Add dry milk.
3. Shake until solids are dissolved.
4. Refrigerate.

How to store:

- Store unopened nonfat dry milk in a cool, dry place.
- After opening, keep in a container with a tight fitting lid.
- After mixing with water, cover the milk and store in the refrigerator. Use within 3 to 5 days.

Cheese

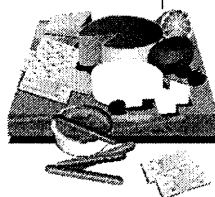
For added nutrition and food value, use cheese in planning snacks or meals:

- Serve alone or with crackers as a snack.
- Melt on toast as a quick breakfast treat.
- Add strips to a salad.
- Serve with fruit as a snack or dessert.
- Melt on cooked vegetables.
- Fill a pita pocket with salad and cheese

When you cook with cheese, use low temperatures to melt it. High temperatures or prolonged cooking can cause the cheese to become tough and stringy.

Lactose Intolerance

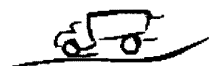
Some people get gas pains and diarrhea if they use milk or milk products. This condition is called "lactose intolerance". Some easy ways to manage lactose intolerance are to; drink small amounts of milk at a time, drink milk with other food, choose aged hard cheeses, try yogurt, and use lactose-free milk products.



MEFAP Foods available in the Dairy Group:
American cheese slices and powdered nonfat dry milk



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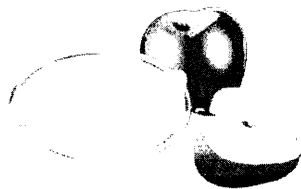
Cooking with Dairy Products

Apple Crumble - Serves 8

1/3 cup flour
1/2 cup nonfat dry milk powder
1/3 cup sugar
3 cups apples, sliced
1 tsp. cinnamon
1/4 tsp. nutmeg
3 Tbsp. butter or margarine

1. Preheat oven to 350 degrees.
2. In a bowl, mix flour, milk powder, sugar, cinnamon and nutmeg.
3. Blend in butter or margarine with a wooden spoon until mixture is crumbly.
4. Spread apples evenly in a 9 inch pie pan.
5. Bake for 25 minutes or until apples are tender.

From: UMass Cooperative Extension System
The Good Eating for Less Cookbook



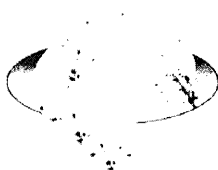
Roasted Vegetable & Cheese Quesadilla -

Serves 4-6

1 green pepper, chopped
1 onion, chopped
1 medium zucchini squash, chopped
Spices to taste, black pepper, ground cumin, and chili powder
8 slices of American cheese
8 6 inch flour tortillas
1 Tbsp. vegetable oil
Salsa to taste

1. Place vegetables on slightly oiled baking pan.
2. Sprinkle spices on vegetables.
3. Place in 450 degree oven for 20-25 minutes, turning once.
4. Make tortilla "sandwiches" by layering the salsa, vegetables, and cheese on the tortillas.
5. Heat a saute pan with 1 tsp. of oil until hot. Place tortilla "sandwiches" one at a time in pan. Lower the heat. When tortilla is brown, flip it over being careful not to splash the hot oil. Remove from pan when both sides are golden brown.
6. Cut into wedges and eat them warm.

From: Margaret Soussloff, Nutritionist



Open-Faced Submarine Sandwiches

6 servings

6 English Muffins, toasted
1 can (6-7 ounces) tuna, drained
1 cup lettuce, chopped
1/2 small onion, thinly sliced and separated into rings (optional)
1 medium tomato, thinly sliced
1/2 tsp. dried basil leaves (optional)
6 slices (1 ounce each) cheese

1. Layer tuna, lettuce, onion and tomato slices on toasted muffin halves.
2. Sprinkle with basil.
3. Top each sandwich with a cheese slice.
4. Broil until cheese is melted, about 5 minutes.

From: UMass Cooperative Extension System
The Good Eating for Less Cookbook

Banana Milkshake- Serves 4

Combine in blender for 1 minute:

1. 1 cup water
2. 1/2 cup nonfat dry milk
3. 2 ripe bananas
4. 2 Tbsp. peanut butter (optional)
5. 1 tsp. vanilla
6. 10-12 ice cubes



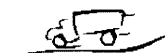
From: Nutra-Ed/Community Services League



7/00

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The Food Bank

Putting **PROTEIN** in Your Food Guide Pyramid



Meats, Poultry, Fish, Dry Beans, Eggs, & Nut Group

2-3 Servings per day

Foods in this group are good sources of protein, B vitamins, iron, and zinc.

One Serving Equals:

- 2-3 ounces of cooked meat, poultry, or fish
(3 ounces of meat is about the same size as a deck of cards)
- 1 ounce of meat equals:
 - 1 egg
 - 2 tbsp. of peanut butter
 - 1/3 cup of nuts
 - 1/2 cup of cooked dry beans or tofu

Proteins

Protein builds, repairs and maintains body tissues. It also supplies energy when carbohydrates and fats are in short supply.

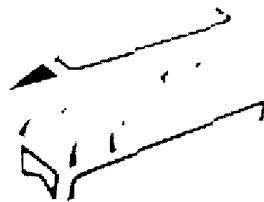
Control Saturated Fat & Cholesterol

Saturated fat is a kind of fat found mainly in foods from animals. Cholesterol is a fat like substance that is also found in foods from animal sources. Eating too much saturated fat and cholesterol raises blood cholesterol levels in many people. High blood cholesterol levels can increase the risk of heart disease. Your body needs some cholesterol for good health, but it makes enough by itself.



**UMASS
EXTENSION**

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cellent Tips:

- Eggs contain dietary cholesterol, but not a lot of fat.
- Egg yolk contains many vitamins and minerals along with some fat.
- Egg white does not contain any fat or dietary cholesterol and is high in protein.
- Serve eggs with other foods that are healthful such as whole wheat bread, vegetables, fruit and fruit juice.
- Always use refrigerated eggs.
- Do not use eggs with broken or cracked shells.
- For food safety reasons, fully cook eggs in recipes and dishes. Do not eat raw or partially cooked eggs.
- For poached or fried eggs, cook eggs until the whites are set and the yolks begin to thicken, not harden. Scramble eggs until the liquid is gone.

Separate - Don't Cross Contaminate:

Store raw meat, chicken, turkey, and seafood in a sealed, wrapped container in the refrigerator.

Keep raw meat, chicken, turkey, and seafood away from foods that will not be cooked and foods that are already cooked.

Never place cooked food on an unwashed plate or cutting board that previously held raw meat, chicken, turkey, or seafood.

Cook Food to Proper Temperatures:

Use a food thermometer to make sure meats, chicken, turkey, fish, and casseroles are cooked to a safe internal temperature.

Roasts & steaks: at least 145°F

Meat: at least 160°F

Whole chicken or turkey: 180°F

Fish: cook until it flakes easily with a fork.

MEFAP Foods Available in the Meats, Poultry, Fish, Dry Beans, Eggs & Nuts Group:

peanut butter, pink beans, kidney beans, tuna in water, ground beef, ground turkey, whole chicken, beef stew and beef ravioli

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The Food Bank

Cooking with Protein

Quick Chili

Serves four

- 1/2 lb. ground meat or turkey
 - 1/4 cup minced onions
 - 2 tsp. chili powder
 - 1/4 tsp. garlic powder
 - 1 can tomatoes (2 cups)
 - 2 cans kidney beans, drained (4 cups)
1. *Brown meat or turkey and onions in skillet.*
 2. *Add spices and mix.*
 3. *Stir in tomatoes and kidney beans.*
 4. *Bring mixture to a boil, reduce heat and simmer for 10-15 minutes.*

Nutra -Ed
Community
Service
League

French Toast

Serves two

- 4 slices bread
- 2 eggs
- 1/4 cup low fat milk
- 1/4 tsp. vanilla (optional)
- dash cinnamon (optional)

1. *Beat eggs.*
2. *Add milk, vanilla and cinnamon.*
3. *Dip each side of bread in the mixture.*
4. *Brown bread slices on greased skillet at medium heat.*
5. *Serve with toppings such as applesauce, syrups, or confectionery sugar.*

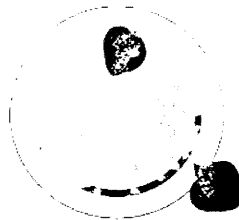
Digesting BEANS

Beans and Gas



For some people, eating beans can cause gas. To help relieve this problem, try one of these tips:

1. When you cook dry beans:
 - Soak beans overnight; then replace water before cooking.
 - Cook beans with a stalk of celery. Place celery so that part of the stalk sticks out of the beans.
 - Cook fresh, peeled ginger root with the beans.
2. When you use canned beans, drain and rinse thoroughly before using.
3. Try "Beano". This brand-name product has been effective for some people. Follow the directions.
4. Try taking a walk to assist digestion.



Bean & Pasta Salad

Serves four

- 8 oz. Rotini noodles or pasta
 - 1/2 cup chopped green onion
 - 1 can (15 oz.) kidney beans, drained
 - 1 1/2 cups broccoli pieces
 - 1 tbsp. grated Parmesan cheese
 - 6 tbsp. low-fat Italian dressing
 - 1 tomato, chopped
1. *Cook noodles, drain and cool.*
 2. *In a large bowl, mix noodles, kidney beans, broccoli and cheese.*
 3. *Toss with the dressing.*
 4. *Chill until serving.*
 5. *Before serving, toss with the tomato.*

Adapted
from
*Quick and
Healthy,
Vol. II*
by Brenda
Ponichtera, R.D.

Tuna Melt

Serves four

- 2 cans tuna packed in water, drained
- 1 cup shredded cheese
- 1/4 small green pepper, diced
- 1/2 stalk celery, diced
- 1/4 small onion, diced
- 1/4 cup mayonnaise
- 1 tbsp. mustard
- 4 slices bread
- 1 tbsp. relish

1. *Combine and mix ingredients in a bowl, except cheese and bread.*
2. *Spread tuna mixture on each slice of bread.*
3. *Place cheese on top and bake in oven at 350° F until golden brown.*

Project STRENGTH - The Community Food Network.

Super Pastry Planning Manual



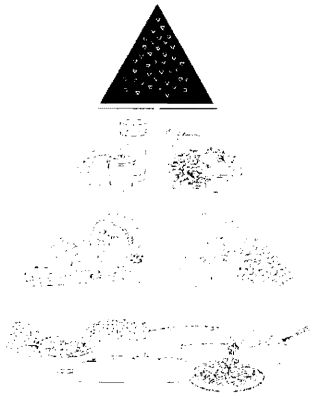
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The Food Bank



Fats, Oils and Sweets Group
Use Sparingly

Foods in this group give us calories but few nutrients our bodies need. They are often snacks, desserts and foods we add to flavor other foods such as butter, salad dressing, and mayonnaise. Sugars and fats can enhance a meal, but it's important not to consume too much. Choose nutrient dense sweets as pumpkin bread, banana bread, apple crisp and puddings.

Fats & Oils

Butter, margarine, cream, coffee creamer, sour cream, mayonnaise, salad dressing, gravy, cooking oils, and bacon.

Sweets

Cookies, candy, cakes, pies, jams, sugars, honey, syrup, pastries, and doughnuts.

Chips/Snack Foods

Potato, corn or tortilla chips, some crackers, cheese curls, some microwave popcorn, and other snack food items.

Alcohol & other Beverages

Alcohol beverages, soft drinks, fruit punches and drinks, coffee and tea.

Condiments

Catsup, mustard, pickles, soy sauce and other bottled sauces.



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Reducing Fats, Oils, and Sweets in Your Food Guide Pyramid

Control the Fat, Saturated Fat & Cholesterol

Fat in food gives you a lot of calories and very few nutrients. Too much fat in our diets is linked to heart disease, cancer, hypertension and obesity.

It is a good idea to limit the amount of fat, saturated fat and cholesterol you eat. A product that says 'cholesterol-free' can still be high in fat. Look for nutrition information on the label.

Certain fats such as omega fats and monounsaturated fats are actually good for us and can help decrease the risk of heart disease. Nuts and seeds contain these healthy fats in high quantities. Nuts, seeds, olive oil and avocados make a healthy snack and are also good in salads, casseroles and stir-fry dishes.

Cholesterol is a fat-like substance that is found in foods from animal sources, such as meat, poultry, fish, egg yolks, milk, and milk products. It is **not** found in fruits, vegetables, breads and cereals, all seeds or dry beans and peas.



Your body needs some cholesterol for good health, but it makes enough by itself. The food you eat can also affect how much cholesterol is in your blood.

Saturated fat is a kind of fat found in foods from animals such as meat, milk and dairy products, as well as many bakery products. Eating too much saturated fat and cholesterol raises blood cholesterol levels in most people. High blood cholesterol levels can increase the risk of heart disease.

Foods that are high in added sugar such as candies, soft drinks, and cakes are high in calories and low in nutrients. Eating a lot of high sugar foods may contribute to tooth decay, heart disease, and weight gain.

MEFAP Foods available from Fats, Oils, and Sweets Groups:
butter and jam

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Cooking with Low Fat

Bread Pudding

1. Preheat oven to 350° F and grease a 9x9x2 inch baking pan
2. In a bowl combine eggs, salt, sugar, vanilla, and cinnamon
3. Add milk slowly, stirring constantly
4. Place bread into the casserole dish or baking pan and sprinkle fruit over top.
5. Pour egg/milk mixture over the bread and fruit.
6. Bake at 350° F for 45-50 minutes or until a knife inserted in the center comes out clean.
7. Serve hot or refrigerated and serve cold. Top with syrup or sauce, if desired.

Ingredients

- 1/3 cup sugar
- 2 eggs, beaten
- 1/4 tsp. salt
- 1/2 tsp. vanilla
- 1/4 tsp. cinnamon
- 2 cups low fat milk
- 1/2 cup raisins, chopped prunes, or other dried fruit (or trail mix)
- Bread slices

A tasty way to use day old bread

How to Lower Fat and Sugar in Recipes

- Replace the fat in a recipe for baked goods with applesauce, yogurt or prune/fruit puree.
- Reduce sugar by 1/2 of what is called for in the recipe.
- Use skim milk or low fat milk in place of whole milk.
- Instead of frying, try baking, simmering, poaching, roasting, grilling, broiling, or boiling.
- Use a non-stick skillet to brown meats, pancakes, and french toast.
- Use a non-stick baking sheet without fat to oven brown foods such as breaded chicken, potatoes, eggplant, and baked items.

Fast and Flexible Low cost Recipes for a Family or Fifty
Purdue University Cooperative Extension Service 1996

Shopping Tips

1. Read food labels, they tell you a lot about what is inside a package or can. Sugars are listed in the ingredient label and on nutrition facts label.
2. Try to avoid foods high in white sugar, brown sugar, honey, molasses, corn syrup, and other syrups.
3. Buy cereals which are not already sweetened with sugar.
4. Buy fresh or canned fruits

Peanut Butter Cupcakes

1. Preheat oven to 375° F and grease a 12 cup muffin tin.
2. In a small bowl, mix together all topping ingredients until crumbly. Set aside.
3. In a bowl, stir together flour, baking powder, salt and cinnamon.
4. In another bowl, beat together peanut butter, butter or margarine and brown sugar until light and fluffy.
5. Add egg and beat well. Add flour mixture and milk alternatively, mixing well after each addition.
6. Spoon batter into muffin tin, filling each cup 1/2 full.
7. Sprinkle each with some of the topping mixture and bake at 375° F for 20-25 minutes or until a toothpick inserted into the center of a cupcake comes out clean. Cool completely and serve.

Ingredients

Topping

- 3 tbsp. brown sugar
- 3 tbsp. all-purpose flour
- 2 tbsp. peanut butter
- 1 tbsp. butter or margarine

Cupcakes:

- 1 cup all-purpose flour
- 1 tsp. baking powder
- 1/4 tsp. salt
- 1/4 tsp. ground cinnamon
- 1/4 cup peanut butter
- 3 tbsp. butter or margarine
- 3/4 cup brown sugar
- 1 egg
- 1/2 cup reconstituted nonfat dry milk or fluid low fat milk



1/02

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The Food Bank

FOOD LABELS GIVE US IMPORTANT INFORMATION



The list of nutrients covers the ones most important to your health

Look at the serving size. It will be the same for similar foods. The amount of calories and nutrients listed on the package is based on the serving size. So, if you eat twice that amount you will get twice the calories and nutrients.

Use the % Daily Values to compare products.

In general, try to choose foods with:

Higher % Daily Values for vitamins A and C, and minerals (calcium and iron).

Higher % Daily Values for fiber.

Lower % Daily Value for total fat, saturated fat and cholesterol.

Lower % Daily Value for sodium.

Macaroni and Cheese

Nutrition Facts

Serving Size 1 cup (228g)

Servings Per Container 2

Amount Per Serving

Calories 250 **Calories from Fat 110**

% Daily Value*

Total Fat 12g **18%**

Saturated Fat 3g **15%**

Cholesterol 30mg **10%**

Sodium 470mg **20%**

Total Carbohydrate 31g **10%**

Dietary Fiber 0g **0%**

Sugars 5g

Protein 5g

Vitamin A **4%**

Vitamin C **2%**

Calcium **20%**

Iron **4%**

*Percent Daily Values are based on a 2,000 calorie diet. Your Daily Values may be higher or lower depending on your calorie needs:

		Calories	2,000	2,500
Total Fat	Less than		65g	80g
Sat Fat	Less than		20g	25g
Cholesterol	Less than		300mg	300mg
Sodium	Less than		2,400mg	2,400mg
Total Carbohydrate			300g	375g
Dietary Fiber			25g	30g

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②

① Limit these ② Get enough of these

Observation Form for Nutrition Program Development

Evaluator Name: Diana Barbeauld

Classroom age range: 4-5 years Classroom size: 13

Date: 1/31/07

Number of Lunches Brought from Home: 0

Number of Lunches Prepared at Center: 13

Amount of Time Allotted for Lunch: 20 minutes (11:15-11:35)

Meal Served: Hotdog with bun, salad with ranch dressing, grapes, and milk

	% of Fruits	% Vegetables	% Grains	% Protein	% Dairy	Total % Eaten
#1	100	75	50	100	90	83
#2	100	0	100	100	100	80
#3	100	0	0	0	50	30
#4	100	0	0	100	95	59
#5	100	0	50	50	100	60
#6	95	0	100	100	90	77
#7	0	0	0	100	100	40
#8	0	0	0	0	0	0
#9	100	0	60	60	100	64
#10	90	0	0	100	100	58
#11	0	0	100	100	100	60
#12	0	0	0	100	100	40
#13	100	0	0	100	100	60
% of Students that ate some or all of food	69	7	46	85	92	

Observation Form for Nutrition Program Development

Evaluator Name: Diana Barbeauld

Classroom age range: 3-4 years Classroom size: 8

Date: 1/31/07

Number of Lunches Brought from Home: 0

Number of Lunches Prepared at Center: 8

Amount of Time Allotted for Lunch: 30 minutes (11:30-12:00)

Meal Served: Hot dog with bun, salad with ranch dressing, grapes, and milk

	% of Fruits	% Vegetables	% Grains	% Protein	% Dairy	Total % Eaten
Student #1	100	0	90	100	100	78
Student #2	25	0	0	90	100	43
Student #3	75	0	100	100	100	75
Student #4	100	100	75	100	50	85
Student #5	100	0	0	0	100	40
Student #6	100	100	100	100	100	100
Student #7	100	50	100	100	100	90
Student #8	100	10	10	10	100	46
% of Students that ate some or all of food	100	50	75	87	100	

Observation Form for Nutrition Program Development

Evaluator Name: Diana Barbeauld

Classroom age range: 4-5 years Classroom size: 13

Date: 2/7/07

Number of Lunches Brought from Home: 0

Number of Lunches Prepared at Center: 13

Amount of Time Allotted for Lunch: 45 minutes (11:15-12:00)

Meal Served: Roast beef with ketchup, salad with ranch dressing, corn on the cob, bread roll, and milk

	% of Fruits*	% Vegetables**	% Grains	% Protein	% Dairy	Total % Eaten
#1	n/a	100/0	100	100	100	80
#2	n/a	100/100	50	50	0	60
#3	n/a	50/0	100	0	0	30
#4	n/a	100/0	50	50	0	40
#5	n/a	100/100	0	50	100	70
#6	n/a	50/0	100	25	100	55
#7	n/a	50/0	0	25	100	35
#8	n/a	50/25	0	0	0	15
#9	n/a	100/0	100	0	0	40
#10	n/a	0/0	100	100	0	40
#11	n/a	50/0	0	100	100	50
#12	n/a	0/0	100	100	100	60
#13	n/a	100/100	100	0	0	60
% of Students that ate some or all of food	n/a	85/31	69	69	38	

*No fruits were served during this meal

** Two vegetables were served: corn on the cob/salad with ranch dressing

Observation Form for Nutrition Program Development

Evaluator Name: Diana Barbeauld

Classroom age range: 3-4 years Classroom size: 7

Date: 2/7/07

Number of Lunches Brought from Home: 0

Number of Lunches Prepared at Center: 7

Amount of Time Allotted for Lunch: 35 minutes (11:25-12:00)

Meal Served: Roast Beef with ketchup, salad with ranch dressing, corn on the cob, bread roll, and milk

	% of Fruits*	% Vegetables**	% Grains	% Protein	% Dairy	Total % Eaten
#1	n/a	0/100	50	100	100	70
#2	n/a	30/50	100	80	100	72
#3	n/a	100/0	100	100	100	80
#4	n/a	100/75	0	100	30	61
#5	n/a	0/100	50	20	100	54
#6	n/a	100/75	100	50	100	85
#7	n/a	100/50	50	50	75	65
% of Students that ate some or all of food	n/a	71/85	85	100	100	

*No fruits were served during this meal

** Two vegetables were served: corn on the cob/salad with ranch dressing

All the Food Groups

Grains: Grains are made up of things called carbohydrates. They give us the energy we need to hop, skip, run, and play all day. They also help our stomachs to digest our food better so that our body can use all the energy.

Some examples of grains are bread, pasta, rice, cereals, and crackers.

Vegetables: Vegetables have lots of vitamins that help our body stay healthy. All the vitamins are named for a different letter. Vitamin A helps our eyes to stay healthy so that we can see well and even helps us see in the dark. Vitamin C helps our body fight off diseases and helps us when we are sick; it helps our body heal cuts and bruises.

Some examples of vegetables are peas, carrots, green beans, lettuce, mushrooms, celery, and broccoli.

Fruits: Fruits have a lot of the same vitamins that vegetables have. Fruits also help our bodies to fight infection and diseases. They also help our stomachs digest our food so that our bodies can use all the energy, like carbohydrates do.

Some examples of fruits are apples, bananas, pears, grapes, oranges, kiwi, strawberries, blueberries, watermelon, and cantaloupe.

Dairy: Dairy foods help our body to stay strong. Calcium is something that is found in dairy foods and also in our bones and teeth. Did you know that you have over 200 bones in your body and that you will someday have 32 permanent teeth? It takes a lot of calcium to keep all those bones and teeth strong. Dairy foods also help our body to stop bleeding if we get cut and keep our muscles working also.

Some examples of dairy foods are milk, cheese, and yogurt.

Meat: Meats are made up of little things called protein. Protein helps our muscles to grow big and strong. Did you know that you have over 50 muscles in your body? Meat also has a nutrient called iron. Iron helps to bring oxygen all over our body, helps prevent you from getting sick, and keeps you from feeling tired. Some of the foods in the meat group aren't really meat, but they have lots of protein in them.

Some examples of these foods are chicken, hamburgers, steak, fish, eggs, beans, pork, and even peanut butter.

Other foods: The other foods that do not fit into one of the 5 food groups have lots of sugar and fat in them. Even though they sometimes taste very good, they are not as good for our bodies as healthy foods. But, if you make sure it eat from the other five food groups each day, it is ok to have a few foods from this group too.

Some foods in this group are cakes, cookies, candy, soft drinks, and chips.