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Fighting health issues through nutrition education for mentally disabled adults

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Kristin Bean
LS 400
March 2, 2009
Capstone Project Proposal

Introduction

As of data collected in 2004, about one in every seventeen people in United States suffers from a serious mental illness (National Institute of Mental Health [NIMH], 2009). For those with mental disabilities, it is not uncommon for obesity and malnourishment to occur in adulthood due to the findings from recent studies on the subject. According to Vee Prasher and Matthew Janicki (2002), those with mental disabilities have a high risk of becoming obese and overweight because of their ability to make their own choices about food without the adequate knowledge on healthy nutritional habits. This often results in poor health and a rise in related health problems. Being an adult, regardless of the presence of a disability, a mentally disabled person is able to eat whatever they please because of the independence that comes with being an adult. If a disabled adult is to make healthy choices concerning eating habits and health, then he/she must be equipped with the knowledge to make informed decisions.

This project will address the need for nutritional education for mentally disabled adults through a curriculum constructed for adults with disabilities programs that will focus on nutritional information and guidelines. The curriculum will cover nutritional guidelines by the United States Department of Agriculture, tips on better eating habits, how to replace junk foods in one's diet with healthy foods, and information and tips that can be applied to one's everyday life, such as how to choose meals at a restaurant and what to buy at the grocery store. The project will work towards the goal of educating adults with disabilities on taking control of their diet and making healthy choices concerning their nutrition. I will satisfy these goals by creating a curriculum that will result in awareness on nutrition and guidance on what to do with the knowledge acquired.

Personal Connections

After being diagnosed in 2006 with an autoimmune disorder, Celiac Disease, I have become increasingly aware of how nutrition plays an important role in one's health. I had to relearn what foods are acceptable for me to eat and what are harmful to my health. During this time, I also became employed by the Castro Valley Unified School District to work with adults with disabilities. I had already worked as a Special Olympics coach and was somewhat familiar with the territory. For the summer I was a teacher's assistant working alongside adults with a variety of mental disabilities. I found myself learning new things about a population that I had been very unaware of until that summer. I realized that adults with disabilities are very special and need the kind of education that is sensitive to their needs and learning styles while assisting them with their adult life. Through the Adults with Disabilities Program at the Castro Valley Adult School I was able to assist in courses such as sewing, cooking, current studies, and more. From life studies and skills to traditional education subjects, the students in the program had the opportunity to receive an education that was created specifically for their needs, benefiting them in more than one way. From a mixture of my personal health issues and my experience working alongside adults with disabilities, I have come to realize how important it is to be aware of how nutrition affects health and what steps can be taken to have a healthy diet.

Nature of the Problem

The lack of a nutritional education at the adult education level for adults with disabilities affects all of the students with mental disabilities. All of the students are over 21 years of age and are capable of making their own decisions on what food to consume, whether it is healthy or unhealthy. In my interview with Mindy Christopolous, a special education teacher at the Castro Valley Adult School, she stated that many of the students she works with have other health issues like diabetes, and despite the need to follow a healthy diet they do not because they are unaware of the connection between food and health (personal communication, March 6, 2009). There is such a need for nutritional education because most of the mentally disabled at the Castro Valley Adult School, and worldwide, have no idea about what is in the food they eat, what are ingredients that are unhealthy, how to make healthy food choices, and what foods they should stay away from due to medical issues. There are so few programs in schools that teach adults with disabilities the tools they need to have healthy nutritional habits.

Nutritional education needs to not only be taught to mainstream and special education students in the primary and secondary grade levels, but should also be taught through programs for adults with disabilities. Many of the adults in the Adults with Disabilities Program at the Castro Valley Adult School have had little to no education on nutrition and are in dire need of knowledge on this subject. Like many other programs for adults with disabilities, the Castro Valley Adult School does not address the nutritional needs of the students. Rebecca Anderson and Robert Fox (1988) state that the purpose of health education programs for the developmentally disabled is to encourage self-care and independence so that mentally disabled adults can learn to be responsible for their health and take part in healthy nutritional habits. Anderson (1993) clearly describes the importance for teaching mentally disabled adults nutritional information is so that they may be equipped with the information needed to make positive, healthy choices. She states that there should be “continued efforts to promote health and wellness issues which are important for this population. Fitness, nutrition...are all important elements of the health process for all individuals. Programs designed to meet the unique needs of the DD [developmentally disabled] should be addressed by many disciplines including health education” (1993, p. 106). The problem is not being addressed in many adult schools countrywide, and year after year more students with disabilities are continuing to be malnourished and overweight due to poor nutritional habits.

Importance

There are no current programs at the Castro Valley Adult School, or in the Castro Valley School District, which address the nutritional needs for adults with disabilities. Guidance is sometimes offered to mentally disabled students during earlier education, but when these students reach high school and adult education, there is a lack of programs which teach about nutrition. Many of the adults with disabilities at the Castro Valley Adult School are much older and have never received any education on nutrition so they are not aware of the nutritional guidelines provided by the United States Department of Agriculture. Those living independently do not know which foods to buy and make that are healthy for them, and often only eat the foods that are cheap and easily accessible like fast food meals, chips, and desserts. In the larger community, with the increase of health problems that are linked to obesity and nutritional habits, it is essential that adults with disabilities are educated on what nutrition is, how to choose healthy foods, and what affects a healthy lifestyle can have on their well-being.

Literature Review

According to the research I have done thus far, I have found little to nothing of what is currently being done to address the nutritional needs of adults with disabilities through educational programs. Although presently there are more studies being conducted and more literature on the subject, programs have yet to be implemented on a community and countrywide level. There is still a problem of obesity and related health problems with adults with disabilities and many continue to be uneducated on nutritional information. At the Castro Valley Adult School they have begun to introduce the idea of the Food Pyramid briefly to a small portion of their students, as well as provide hands on experience with various foods in a cooking class. Recently, the soda machines on the campus were removed because many of the students were becoming dependent on the drinks being sold, and it was causing a problem for those with diabetes and other medical conditions. The Castro Valley Adult School now offers healthier drink choices on campus, and encourages its students to drink water.

As of late, there has been little attention given to educating adults with disabilities about healthy habits and nutrition. There is a great need for education on nutrition, especially due to the alarming rate of obesity and related health issues among people with developmental disabilities. According to Haverkamp et al. (2004), those with mental disabilities have a greater risk of having health issues like cardiovascular disease and diabetes due to an increase in obesity rates. Obesity in adults with disabilities can be a result of certain medications, mobility issues, disorders like Down's syndrome, and the lack of nutritional education (Anderson & Fox, 1998). It can often be difficult for any person to follow the nutritional guidelines and have a healthy diet, and it is even more difficult for an independent and legal adult who has mental disabilities to eat healthy. Less restrictive environments, such as group homes, living with family members, and independently living, allow a mentally disabled adult to make his/her own decisions concerning his/her health. Prasher and Janicki state, "Residents of community homes will have more choice about food and sleep than residents of institutions. Individuals with a mild degree of intellectual disability are as able as the rest of us to eat junk food, smoke tobacco, drink alcohol, and take no exercise. Individuals who are more dependent on the support of others may be unable to take these risks with their health" (2008, p. 3). As adults with disabilities are gaining more life skills and have access to a variety of information through educational programs, it is important to give them the knowledge they need to lead a healthy and nutrition conscious life.

Project Description

With the help of my community partner, I plan on creating a curriculum that will educate adults with disabilities on the importance of taking care of their health through a balanced diet, and how that idea can be implemented easily into their everyday lives. Currently at the Castro Valley Adult School, the teachers try to guide their students to have a healthy diet with a cooking class, offering nutritious snacks often during special events, and talking openly with students about their food and drink choices during breaks and lunch. My contribution will be unique because rather than having the teachers be the ones to choose healthy food, I will work with the students to teach them how to make healthy choices on their own. I will give the students tools to use even after my sessions with them are over. By giving the students the information, they can be in control of what food they consume on a daily basis. As of now, only when the teachers bring in healthy food do the students eat it; so by creating a curriculum that teaches nutrition in a fun and easy way, the students will be able to better understand the importance of a healthy diet.

Project Details

The Castro Valley Adult School is located in Castro Valley, California and serves a diverse community of adult learners. I will specifically be working with the adults with disabilities population in conjunction with the Adults with Disabilities Program. Working closely with Judy Gestring, the Castro Valley Adult School Assistant Director and Head Coordinator of the Adults with Disabilities Program, and Vicki Cross and Mindy Christopolous who are both special education teachers employed by the Castro Valley Adult School, I will conduct my project. Judy Gestring has given me her permission for working with the Adults with Disabilities Program and will be directing me to any resources I might need for my project. Mindy Christopolous has offered to let me use my curriculum during her life skills class to conduct my project with their students. Because the students are adults, I do not need any consent for the teaching, distribution of materials, or documentation of my project. The Castro Valley Adult School continually strives to educate its diverse students of all backgrounds in a way that will enhance their lives and leave them with a sense of well being. I hope that through my project, I will be able to educate the students further on how to have a healthy diet and to find the plan that works best for each individual.

For the success of my project, I will need a few materials that can be obtained from my personal purchases as well as donations from the school. To create my curriculum, I will need to use a software program such as Microsoft Word, Adobe Photoshop, and Adobe Illustrator. In order to create and distribute my curriculum, I will need a computer to do my work on and a printer to make multiple copies. Because many adults with disabilities need visuals to understand what is being taught, I will use colored paper, markers, magazines, pictures, and crayons to make the worksheets, handouts, and visual aids for use during my sessions with the students. I will collect menus from local restaurants and will use videos that can be borrowed from the Castro Valley Library. In addition, I will be using various food items for display and activities that can be obtained ahead of time from my house or from the school's kitchen.

With this project I am creating a way to teach adults with disabilities the importance of nutrition and how to implement their knowledge on the topic in their everyday lives. I will be creating a curriculum that can be used in classrooms, and other institutions, to educate students on nutrition and what having a healthy diet means for them.

Throughout the semester, I expect that my project might change a little depending on the response I get from the students and the direction they help steer it towards depending on their needs. The deliverables that I will hand in at the end of the semester are as follows:

- A curriculum on what nutrition is, how to have a healthy diet, guidelines provided by the United States Department of Agriculture, and helpful tips and guidelines. This curriculum is intended for the use of teachers to use with adults with disabilities in adult education programs. The curriculum will use activities and lecture components to teach about nutrition, healthy eating habits, and the affects of a healthy diet. It will have activities like role playing and fun quizzes as a part of the content, as well as visual aids, handouts, and worksheets. As a part of the curriculum, there will be discussions with the students, as well as video clips and class projects. It will have options for small and large group work and will take a more hands on approach on the topic than lecture style.
- Handouts providing guidelines and information on nutrition, including the Food Pyramid and healthy meal choices at home and at restaurants.

- Worksheets to practice implementing the information from the curriculum in activities and to assess how the students are progressing in their knowledge of nutrition.

Timeline

3/13/09

- Program Curriculum Outline Completed

3/20/09

- Create Lesson Plan for Day 1 & 2
- Complete Worksheets, Activities, and Giant Food Pyramid
- Create Visual Aids and Handouts

3/27/09

- Create Lesson Plan for Day 3
- Complete Worksheets, and Activities
- Visual Aids and Handouts Created
- Program Curriculum Draft Completed

4/3/09

- Program Curriculum Completed- Ready for Classroom

4/10/09

- Program with Curriculum Implemented in the Classroom
- Food Pyramid Handout Given to Students

4/17/09

- Program with Curriculum Implemented in the Classroom
- Healthy Meal Plan Created in Class with Students

4/24/09

- Program with Curriculum Implemented in the Classroom
- Healthy Restaurant Options Plan Created in Class with Students
- Program Completed with Students

5/1/09

- Project Evaluation
- Submit Deliverables

To know that my project is successful, I will evaluate the students' understanding of the topics taught in my lesson plans through quizzes, discussions, activities, and completed worksheets. If the students have grasped an idea of the guidelines of the Food Pyramid and can provide me with healthy eating choices at restaurants and at home, I will deem my project a success.

Conclusion

With all the programs and education on nutrition, it is unfortunate that those who need it the most are often not informed of the importance and positive effects of healthy eating habits. Adults with disabilities have a range of backgrounds and many never received an education until they were adults due the fairly recent start of adult education programs for the mentally disabled. This means that a huge portion of the people in adults with disabilities programs have never been formally educated on the importance of nutrition and therefore are becoming overweight and developing other health related issues. It is becoming a bigger problem as these adults are living

longer lives and yet are suffering medical conditions that could have been prevented by proper nutrition. Having been around adults with disabilities when I worked as a Special Olympics assistant coach, I realize that they are eager to learn new things, have the capacity to understand concepts concerning nutrition, and are willing to alter their lifestyle to lead a more healthy life. Visiting the Castro Valley Adult School, I was able to see firsthand the need for nutritional education for the mentally disabled students. I am prepared to create a program that will work towards educating adults with disabilities students to make healthy choices according to the information they learn on nutrition. I will give them useful guidelines and information that they can apply realistically to their everyday lives.

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Appendix

Interview with Mindy Christopolous

1. Do you feel there is a need for nutritional education for adults with disabilities?

Yes, there is a huge need for nutritional education because so many of the students are overweight and obese and they have a hard time keeping themselves from eating unhealthy food because they don't have the knowledge. Above any other need we have at this school specifically, it is for nutritional education for our students. I catch them all the time eating food that they shouldn't be eating, and I have to tell them that they have to eat something else because they are unaware of what they are putting into their bodies.

2. Why is there no education on nutrition here?

There is currently no course or program on nutrition because many think that the students won't be able to comprehend the information. The students have trouble concentrating and understanding complex things, but they aren't stupid. They are capable of learning what the basics of nutrition are. It's all about how you approach the subject with them, by making it meaningful to their lives. When I came to the school, they weren't taught a single thing about nutrition. At least in my cooking and life skills classes, I go over the food pyramid with them, but there is still so much more that needs to be covered about nutrition.

3. What is currently being done?

I go over the food pyramid with the students in my classes and the teachers here try to remind students what they can and cannot eat at snack and lunch. When we have big events at the school we make sure to buy as healthy snacks as possible, but most of the students don't know that we are doing this and the reasons behind it. We also took the soda machines out because the students were getting hooked on soda, and it became a problem. Other than that, we are not currently teaching the students any information on nutrition.

4. How many students are overweight here?

Many of the adults with disabilities here are overweight, and it is becoming more of a problem year after year. If I had to say, I would say most have a weight problem and because of that many of them also have other health issues.

5. Why are they overweight?

There are many reasons why the students are overweight. Some are on medications whose side effects cause weight gain. Others don't eat healthy foods and only eat what is cheap and convenient, like fast food and chips. Many of them have a combination of bad eating habits and a lack of exercise. I see the kinds of food they bring for snack and lunch and it is things like cookies, pizza, chips, fried foods, and candy. There is no balance in most of their diets.

5. Do most of them bring their lunches? If so, do many of them pack their own lunches?

Most of the students bring their lunches, because we have a limited supply of lunches we have to give students during lunch. A handful of them make their own lunches, and they are just

throwing in whatever they can find. You can point out the ones whose family member or caregiver packs their lunches, because at least there's some fruit and vegetables in those.

6. What are the living situations for the students? How are the meals prepared at home?

We have a lot of students who live with family members or in group homes. The students like to cook a lot and many remake at home the meals we cook in class. Those who live in group homes don't really have a say in what they eat, but at least most of the caregivers try to make healthy meals. Those that live with family members, or on their own, buy cheap things that turn out to be unhealthy and of little nutritional value.

7. Does nutritional education need to be taught a certain way to adult special education students?

Adults with disabilities don't want to feel attacked, like you as the teacher are lecturing them on their abilities, skills, and habits. If you come to them throwing information at them like they are stupid, they will shut down. If you are honest and give them true situations that they can apply to their lives, they will understand. Because they have trouble with their memories, I try to keep things current. If you were to ask them what they had for dinner last night, most wouldn't have a clue. If you ask them what they just had for snack, they would be more able to tell you. Their attention spans are short as well, and it's important to keep things lively in the classroom.

8. How would you go about teaching nutrition?

I would do 30 minute sessions at a time, then a break, and then return to the subject. They are capable of understanding things, even things like what a starch is, what a carbohydrate is, and so on. It just needs to be repeated over and over and over again, and it must apply to their lives. Use props, visual aids, and activities to keep them involved. Don't do anything too difficult or they won't understand, so just start out slow and see how it goes and then you can go from there. Just make sure that you are starting at the basics and working your way up. Give them useful information about nutrition that they can actually use.

Kristin Bean

LS 400 Senior Capstone

Dr. Waltz

April 29, 2009

Final Reflection

I thought I was prepared for implementing my nutrition curriculum in the classroom, but nothing could have prepared me for my experiences teaching mentally disabled adults. Working with Special Olympics in high school gave me an idea of what to expect, but I had no idea that I would be touched the way I was and be inspired by the students I worked with. From the moment I stepped into the classroom, I was greeted by enthusiastic faces and ready minds. Every student in the classroom was tuned into my lessons and not a single one was opposed to the activities we did in class; I worked with the perfect set of pupils. Some had a general knowledge of nutrition while others were learning about grains and milk products for the first time. It was truly a joy working with that specific group of mentally disabled adults, and I will carry the experiences I had with them through my teaching career.

The implementation of my curriculum was successful, and it proved to be a learning experience for not only the students but for me as well. Many of the students were at all different learning levels and after my first session I decided to make some changes to the curriculum. Although all of the students were able to write their names and the day's date on the top of each paper, I realized that fill-in-the-blank worksheets were not an effective way of teaching nutrition. I then created, and borrowed, some worksheets that were at a level that the majority of students would be able to complete and understand. Most of the new worksheets involved circling: circling the food represented in the given food group, circling the pictures of food to make a

meal, and circling the picture that contains the least amount of fat. All the students understood my discussions and what to do for each worksheet, but because they had more difficulty performing the tasks I had previously asked them to do, circling worksheets seemed to work much better. In addition to changes I made in handouts, I also revised the presentation of my curriculum.

My first day with them, I started out with a lecture on the Food Pyramid and healthy nutrition habits. In the middle of my lecture, I made a last minute choice that ended up being the biggest discovery of the entire project. I went from lecture format to discussion and it proved to be much more interactive for the students. I had them describe for me what they knew about the Food Pyramid, what kinds of foods they enjoy to eat, and so on. This not only helped me assess their current knowledge of nutrition, but I was also able keep everyone's attention. I continued this format for the two sessions following, and it worked so well. After my change students were much more involved in the lessons and were proud to state what they already knew and what they had just learned. Many of the students held out their lunch for the entire class to see and described each item in detail, like where on the Food Pyramid it came from and why it is healthy or unhealthy to eat. As a class we would go back and forth on describing the items we saw in each section of the Food Pyramid, how to make meals that are healthy, what to order at restaurants, and so on. I thoroughly enjoyed my discussions with the students, hearing about their usual habits and reasoning behind their food choices. I truly believe that the most effective part of my curriculum was connecting everything to situations they could relate to.

During my discussions with the students, I never wanted them to get the impression that anyone is perfect and that I expect them to never make mistakes. We all enjoy treats every so often and it was important for me to equip the students with information that would help them

make more informed decisions on what they are putting into their bodies. When we were circling the food items to make meals, many of the students commented on the several pictures I had of dessert items. Many of them shouted “cookie” happily, while others shook their heads and said “that’s not good”. I took this opportunity to make an impromptu lesson on eating desserts in moderation. I saw an opportunity to connect the curriculum to their lives and I facilitated a discussion after realizing the specific need to address the “dessert” topic. Having a cookie with lunch or eating a bowl of ice cream after dinner is not going to do major damage, I told the students, but understanding why snack foods and desserts can be harmful to our bodies is important. We discussed eating desserts in moderation and picking healthier desserts over others. This topic became a huge discussion in class and I could see that my lesson was impacting their lives in that moment. When it was time for them to go to lunch, many came up to me and told me that they were going to have a cookie with lunch but were not going to have dessert after dinner since they had already had their dessert that day. I was so proud to see that I had already made a difference in their lives, and I then knew that the true impact was being done through connecting the lesson to real life.

In looking over the completed worksheets and reflecting on each session with the students, I knew that the success of my project could mostly be measured through their responses and involvement during class. It was the feedback I got from the students that helped me understand that my curriculum was a success. When I would hold up items of food and ask the students to tell me which food group it came from, why it is healthy to eat, and what food can be made from it in a meal, students were quick to give me correct and thoughtful answers. As a class we went from just discussing the things we have for each meal, to creating our own ideas for meals like chicken with green beans, a baked potato, toast, and a glass of milk. Variety is

essential, and the students seemed to understand the concept. When we pretended that we were ordering at a fast food restaurant, the students helped me decide what to order for the class. We compared fatty to healthier food items on the menu, and were able to come up with nutritional meal ideas. The amount of enthusiasm I received also helped me measure my success. Each session all the students were excited for the lessons and were ready to participate in any activity we did. I saw them eager to learn and to apply the new information to everyday situations. It was important for me to see on paper that they grasped the concepts and lessons, but it was more essential for me to hear their understanding through discussions. Every student was able to be a part of the discussions, while not every student was able to complete the worksheets according to the directions. I knew that through the interaction between me and the students, the students were bound to remember more and perhaps even take it out into the courtyard during breaks and lunch, therefore spreading the nutrition education beyond the classroom.

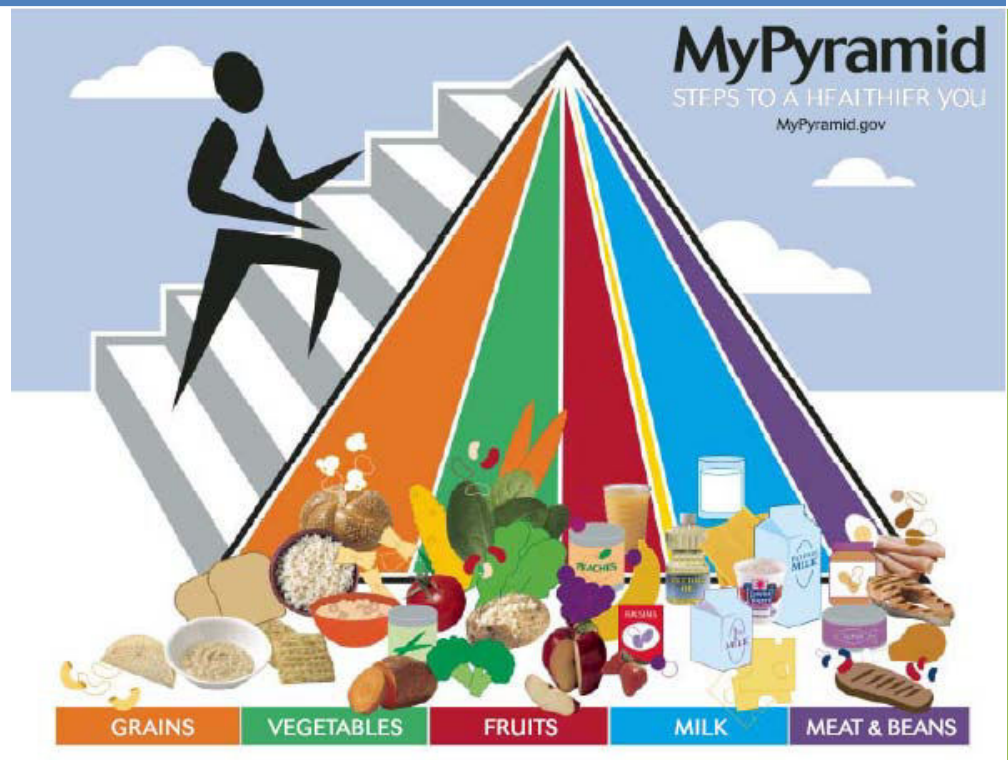
With the current budget cuts affecting schools across the United States, I continue to hope that nutrition education can still move forward in adults with disabilities programs. It is of the utmost importance that nutrition be addressed for the mentally disabled. It needs to become a core content in the classroom because of the impact that it can make on that specific population. I believe with the curriculum I have created, teachers are more likely to implement it in the classroom because I have devised it in a way that truly reaches the students. I have done the hard work of finding what the students connect with best because I made that the priority of my curriculum. In the future I would enjoy going to other adult schools with mentally disabled students and implement my curriculum even further. I would keep the same discussion format and perhaps even expand the curriculum to include a cooking and grocery shopping lesson. I think all of the lessons I taught were helpful and informative, and the worksheets were tailored to

having the most amount of students participate. I believe too often the topic of nutrition is not addressed in adults with disabilities programs, and it would be a pleasure to me for other teachers to take my curriculum and use it in their classrooms. I would encourage other teachers tackling nutrition education with mentally disabled adults to interact with their students, use a variety of visual aids, and make the lessons enjoyable through fun activities and discussions. The students especially enjoy telling stories and relating the lessons to their lives, so it is important for teachers to let them make the connections and in a way teach to the class. In creating and implementing the curriculum, I think I not only helped influence a specific population to make healthier choices, but I also came to reflect on my career as a future teacher and my nutritional habits.

Designing a curriculum that addressed the need for nutritional education while including students of many different disabilities and abilities proved to be very insightful in many ways. As a future teacher, I will be creating curriculum for my students and doing this for the first time was a real eye opener. The amount of work I put into the curriculum was something I did not expect. I also came to realize that curriculums continually call for revisions as the needs of the students became more pronounced. Being flexible allowed me to allow the discussions to go in directions I had not planned for, and I think it allowed for a better learning experience for the students. In a way, they directed the discussions and made the lessons more applicable to their lives. I think it is important for teachers to understand that teaching lessons is not about just reading from handbooks, but instead about immersing yourself in the content and becoming familiar with it. I had not known many of the things in my lessons before I began the project, and I became overwhelmed with the idea of teaching students things that were not well-known to me. I studied madly and learned as much information on nutrition I could so that I could be more

flexible and knowledgeable as a teacher. By doing so, I was better able to facilitate discussions with the students and contribute to the lessons by speaking with expertise rather than reading directly from a book. Having learned and mastered my knowledge of nutrition class discussions were able to get off track without me feeling unprepared. I was able to be a better educator by learning the information first and then teaching the students. All in all, my experience teaching adults with mental disabilities helped me become more patient, understanding, sensitive to the needs of the students, and pleased with my choice to become a future teacher.

Six Week Nutrition Course Curriculum



Kristin Bean

LS 400 Senior Capstone

Dr. Scott Waltz

May 5, 2009

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Lesson 1: Learning the Basics of Nutrition

Lesson Objective

Students Will:

- Learn that food is divided up into food groups and each food group is assigned a specific color.
- Begin to identify the different foods that are in each section of the Food Pyramid.
- Learn the importance of a balanced diet with the help of the Food Pyramid.
- Understand the different parts of the Food Pyramid and why it is important to learn and follow.

Materials:

- Folders
- A Large Food Pyramid Poster

Worksheets/Handouts

- *The Food Pyramid* Handout
- *Eat Smart with MyPyramid for Kids* worksheet

Getting Started:

Begin the lesson by hanging up a large Food Pyramid that the entire class can see. Ask the students to describe what they see on the Food Pyramid, such as its colors, food items, sections, and so on. Then have the students analyze what their descriptions mean and what commonalities they see. This is a great way for the teacher to see where the students are in their understanding of the Food Pyramid, to help guide the rest of the lesson depending on the students' needs.

Activity 1: Getting to Know the Food Pyramid

1. Begin the discussion by showing the students that the Food Pyramid is divided into six different groups: grains, fruits, vegetables, oils, milk, and meat and beans. Show the students that the different sizes of the sections signify how much should be eaten, such as the larger sections should be eaten more than the smaller sections.
2. Take out food items one by one and have students label them according to which food group they belong to. Examples of this:
 - a loaf of bread for the grain group
 - a bell pepper for the vegetable group
 - a banana for the fruit group
 - vegetable oil for the oil group
 - cheese for the milk group
 - peanut butter for the meat and beans group
3. Have the students name healthy choices and unhealthy choices from each food group. An example of this is a cake and slice or whole wheat bread for the grains section.
4. Be sure to give the students a copy of *The Food Pyramid* handout, which will be used at the end of this lesson, as well as throughout the rest of the six week course. *The Food*

Pyramid, along with any other worksheets and handouts will be stored in the students' folders which will be collected at the end of each lesson.

Activity 2: What is Nutrition?

1. Discuss with the students why nutrition is essential for a healthy life. The foods we eat shape how active we are and how good we feel each day. Explain that by eating unhealthy, diseases and other health problems can occur. By putting healthy things in our bodies, we are able to live longer, feel better, and be more active and comfortable in daily activities.
2. Tell the students that good nutrition paired with daily exercise can help them be more fit and ready to enjoy activities.
3. By eating a balanced diet rich in fruits and vegetables, the immune system can fight off invaders that cause colds and the flu.
4. Explain that eating healthy helps our body work better from the inside out.

Activity 3: Identifying Foods in Various Food Groups

1. Hand out an *Eat Smart with MyPyramid for Kids* worksheet to each student. Read the directions out loud and have the students circle the food items they think belong in each food group according to the lecture and discussion.
2. Make sure to go around to each table and make sure the students are on track.
3. This activity works best when done as a class. You can go over each food group on the worksheet and discuss with the students why a food item belongs or does not belong in that particular food group.
4. Once each student has completed the worksheet, go over it as a class and answer any questions the students might have about what was discussed today. Collect all the worksheets and put them in each student's individual folder.

Lesson 2: Grains & Food Labels

Lesson Objective:

Students Will:

- Understand more in depth what a grain is and why it is important to eat.
- Identify the different kinds of grains.
- Learn about whole grains and identify them on food labels.
- Learn about how much grain should be eaten daily.
- Understand common language used on food labels, and what to look for on those labels.

Materials:

- Different grain food items
- Non-grain food items
- Measuring cups and other items to measure daily servings with
- Boxed and canned foods

- Large Food Label
- Pre-cut pictures of grain food items
- Coloring utensils
- Glue
- *How Much Do You Eat* Poster
- *Label Language* posters

Worksheets/Handouts

- *Is it a Grain* worksheet
- *My Food Pyramid Book*
- *The Food Pyramid* Handout

Getting Started:

1. Begin the lesson by introducing the students to what a grain is. Explain that a grain is any food made from oats, cornmeal, barley, wheat, rice, etc. Use examples when explaining this like pasta, bread, muffins, etc. so the students can get a better understanding of the concept of grains.
2. Some basic ideas to be covered in the lecture:
 - Grains are divided into two groups: whole grains and refined grains. Be sure to explain the difference between the two.
 - Whole grains: contain the entire grain kernel, meaning the bran, germ, and endosperm have not been removed.
 - Examples: whole wheat flour, oatmeal, brown rice
 - Refined grains: go through a milling process which takes out the bran and germ making it not as nutrient packed as whole grains.
 - Examples: white flour, white bread, white rice
 - Explain that grains contain complex carbohydrates which are an important source of energy, allowing us to do the things we enjoy everyday. (MyPyramid.gov, 2009c).
3. Write out nutrient information for grains on the white board so the students can see it. Begin discussing the benefits of eating grains according to the nutrients found in grains. Remind students that the grain group is the largest of the food groups, which means it is especially important to eat foods in the grain group.

Activity 2: A Serving of Grain

1. For this activity, the number of servings of grains per day and what constitutes a serving will be discussed with the students.
2. Hold up the *How Much do You Eat* poster for all the students to see. Ask them to describe what they see under the grain group. Have them make guesses about how much a food serving is for the grain group.
3. Follow up this discussion with a demonstration at the front of the class with food items and items for measurement. Explain that a person needs 6 to 11 servings of grains each day and hold up each of the following:
 - 1 slice of bread

- ½ cup of cooked rice, cooked cereal, or pasta
 - 1 cup of ready to eat cold cereal
 - 1 flat tortilla (MyPyramid.gov, 2009c).
4. Have students name some meals or snacks that have more than one serving of grain, such as a peanut butter sandwich (2 servings with 2 slices of bread). Make sure to tell the students the importance of mixing up food choices from all the groups and not having the same food items to count as all the servings.

Activity 3: Is it a grain?

1. Place different food items on the table, varying between grains and non-grains.
2. When you point to each item individually, ask students to shout out whether the food item is a grain or not. If the item is not a grain, have the students explain why it is not a grain and which food group it belongs to.
3. As a follow up to this activity, hand out the *Is it a Grain* worksheet for students to complete. Once finished, go over the answers together as a class.

Activity 4: Reading Food Labels

1. Hang up *Label Language* posters on the wall in order, as well as the large Food Label. Have students describe what they see on the food label, and what words they recognized.
2. Begin the discussion by going over the vocabulary on the food label, such as calories, total fat, etc. Use the color coding on the *Label Language* posters and food label to connect the vocabulary with its location on the food label.
3. Discuss with the students why each section/word on the food label has importance and what it does for the body.
4. Explain the importance of reading food labels and how to use the labels to maintain a healthy well-balanced diet.

Activity 5: My Food Pyramid Book

1. Pass out the *My Food Pyramid Book* to each student and have them start on the pages 3-5. The students can either choose to draw and color food items for each page or glue pre-cut pictures of food items. Collect their books and put them in their folders when they are done.

Lesson 3: Fruits & Vegetables

Lesson Objective:

Students Will:

- Understand more in depth what fruits and vegetables are and the value they have in our everyday diets.
- Identify the different kinds of fruits and vegetables.
- Learn about importance of fruits and vegetables in a well-balanced diet.
- Learn about fruits and vegetables serving sizes.

Materials:

- Different fruits and vegetables
- Food items other than fruits and vegetables
- Measuring cups and other items to measure daily servings with
- *How Much do You Eat* Poster
- Pre-cut pictures of fruits and vegetables
- Coloring utensils
- Glue

Worksheets/Handouts

- *Fruits and Vegetables I Have Eaten* worksheet
- *My Food Pyramid Book*
- *The Food Pyramid* Handout

Getting Started:

1. Begin this lesson by introducing to the students what fruits and vegetables are. Explain the differences between fruits and vegetables and what makes them important to eat daily. Use examples of items from both groups so that students gain a better understanding of what fruits and vegetables are.
2. Some basic ideas to be covered in the lecture:
 - Any vegetable or 100% vegetable juice counts as an item from the vegetable food group.
 - Vegetables come in various shapes, sizes, and preparations. They can be raw, cooked, fresh, frozen, canned, or dried. Vegetables can also be intact or mashed up or cut up. Use the example that a potato can be eaten whole like a baked potato, be cut up into squares, or be mashed into mashed potatoes. The point is, no matter how the shape of the potato is changed, it is still a vegetable. Also discuss with the class the health benefits of vegetables.
 - There are five subgroups for the vegetable group:
 - Dark green vegetables
 - Broccoli
 - Dark green leafy lettuce
 - Spinach
 - Orange vegetables
 - Squash
 - Carrots
 - Pumpkin
 - Sweet potatoes
 - Dry beans and peas
 - Black beans
 - Tofu
 - Pinto beans
 - Split peas
 - Starchy vegetables

- Corn
 - Green peas
 - Lima beans
 - Potatoes
- Other vegetables
 - Cucumbers
 - Asparagus
 - Zucchini
 - Tomatoes
 - Onions
 - Mushrooms
 - Green or red bell peppers (MyPyramid.gov, 2009d).
- Explain that any fruit as well as 100% fruit juice also counts as a part of the fruit food group. As with the vegetables, fruits can be fresh, canned, frozen, or dried. No matter how the fruits are cut-up, left intact, or blended they are still considered fruits. Explain the health benefits of fruits.
- Use examples of fruits under common categories:
 - Berries
 - Strawberries
 - Blueberries
 - Cherries
 - Melons
 - Cantaloupe
 - Honeydew
 - Watermelon
 - Mixed Fruits
 - Fruit cocktail
 - Nectarines
 - Oranges
 - Peaches
 - Pineapple
 - Plums
 - Raisins
 - Pears
 - Other Fruit
 - Apples
 - Apricots
 - Avocado
 - Bananas
 - Grapefruit
 - Grapes
 - Kiwi
 - Lemons
 - Lime
 - Mangoes (MyPyramid.gov, 2009b).

3. End the discussion by passing out the *Fruits and Vegetables I Have Eaten* worksheet to each student. Once everyone has completed the worksheet, go over it as a class and see what fruits and vegetables the students like to eat the most and which ones they have not eaten but want to try. Remember to collect this worksheet and put it in their folders at the end of the lesson.

Activity 1: A Serving of Fruits and Vegetables

1. For this activity, the number of servings of fruits and vegetables per day and what constitutes a serving will be discussed with the students.
2. Hold up the *How Much do You Eat* poster for all the students to see. Ask them to describe what they see under the vegetable group and the fruit group. Have them make guesses about how much a food serving is for the each of the two groups.
3. Follow up this discussion with a demonstration at the front of the class with food items and tools for measurement. Explain that a person needs 3 to 5 servings of vegetables each day and hold up each of the following:
 - 1 cup of raw leafy vegetables
 - ½ cup of other vegetables, cooked or raw
 - ¾ cup of vegetable juice (MyPyramid.gov, 2009d).

It is also advised, explain to the class, that a person have 2 to 4 servings of fruit each day.

To demonstrate this, hold up each of the following:

- One medium apple, orange, or banana
 - ½ cup of chopped, cooked, or canned fruit
 - ¾ cup of fruit juice (MyPyramid.gov, 2009b).
4. Have students name some meals or snacks that have more than one serving of fruit and more than one serving of vegetables, such as a fruit salad with bananas, apples, and strawberries and a meal of chicken, a baked potato, and a bowl of spinach.

Activity 2: Is it a fruit? Is it a vegetable?

1. Place different food items on the table, varying between fruits and vegetables and other food items.
2. When you point to each item individually, ask students to shout out whether the food item is a fruit, a vegetable, or not. If the item is not a fruit or a vegetable, have the students explain why it is not a grain and which food group it belongs to.

Activity 3: My Food Pyramid Book

1. Pass out the *My Food Pyramid Book* to each student and have them work on pages 6-11. The students can either choose to draw and color food items for each page or glue pre-cut pictures of food items.
2. Make sure the students do not jump ahead to the other pages as they will be done at other lessons.
3. Collect their books and put them in their folders when they are done.

Lesson 4: Oils & Milk & What to Eat at Home

Lesson Objective:Students Will:

- Understand more in depth what oil and milk are and why they are important to eat.
- Identify the different kinds of oils and dairy products.
- Learn about importance of oils and milk products in a well-balanced diet.
- Learn about oil and milk serving sizes.
- Learn about meals and snacks that are healthy to prepare for meals at home and at school.

Materials:

- Different oil and milk food items
- Non-oil and non-milk food items
- Measuring cups and other items to measure daily servings with
- *How Much do You Eat* Poster
- *Food for a Day* Poster
- Pre-cut pictures of oil and milk food items
- Coloring Utensils
- Glue

Worksheets/Handouts

- *Pairing Food to Make a Meal* worksheet
- *My Food Pyramid Book*
- *The Food Pyramid* Handout

Getting Started:

1. Begin this lesson by introducing to the students what oil and milk products are. Explain the differences between oil and milk products and what makes them important to eat daily. Use examples of items from both groups so that students gain a better understanding of what oil and milk products are.
2. Some of the basic information that should be covered in the lecture component is:
 - The oil group can be divided into three categories: liquid at room temperature, flavorings, and foods naturally high in oils:
 - Liquid at Room Temperature
 - Canola oil
 - Corn oil
 - Cottonseed oil
 - Sunflower oil
 - Flavorings
 - Walnut oil
 - Sesame Oil
 - Foods Naturally High in Oils
 - Nuts
 - Olives
 - Some fish
 - Avocados (MyPyramid.gov, 2009a).

- In the milk group the food items can be fluid and they can also be an ingredient in a food, like yogurt. The items that have retained their calcium content are considered a part of the milk group while the foods with milk products contained in them that have little to no calcium are not. Examples of these types of food items are cream cheese, cream, and butter. It is recommended that the items you choose from the milk group be fat free or low fat.
 - The milk food group can be divided into four different categories: milk, milk-based desserts, cheese, and yogurt. Items under each category are:
 - Milk
 - Fat free (skim) milk
 - Low fat (1%) milk
 - Reduced fat (2%) milk
 - Whole milk
 - Flavored milks: chocolate and strawberry
 - Lactose reduced milks
 - Lactose free milks
 - Milk-based Desserts
 - Puddings made with milk
 - Ice milk
 - Frozen yogurt
 - Ice cream
 - Cheese
 - Hard natural cheeses: cheddar, swiss, parmesan, and mozzarella
 - Soft cheeses: ricotta and cottage cheese
 - Processed cheeses: American
 - Yogurt
 - Fat free
 - Low fat
 - Reduced fat
 - Whole milk yogurt (MyPyramid.gov, 2009f).
3. Discuss the importance for eating oil and milk:
- Oil:
 - Source of Vitamin E
 - Oils are a major source of polyunsaturated and monounsaturated fats which are essential for health. They are the “essential fatty acids”. (MyPyramid.gov, 2009a).
 - Milk:
 - Calcium builds bones and teeth, and it maintains bone mass.
 - Potassium helps maintain blood pressure.
 - Vitamin D helps maintain proper levels of calcium and phosphorus.
 - Low fat or fat free milk products have little to no solid fat. (MyPyramid.gov, 2009f).

Activity 1: A Serving of Oil and Milk

1. For this activity, the number of servings of oil and milk per day will be discussed with the students.
2. Hold up the *How Much do You Eat* poster for all the students to see. Ask them to describe what they see under the oil group and the milk group. Have them make guesses about how much a food serving is for the each of the two groups.
3. Follow up this discussion with a demonstration at the front of the class with food items and tools for measurement. Explain that a person should consume oil sparingly each day and hold up examples of too little, too much, and a good amount of oil:
 - No oil at all
 - 2 cups of oil
 - 2 tablespoons of oil (MyPyramid.gov, 2009a).

It is also advised, explain to the class, that a person have 2 to 3 servings of milk each day. To demonstrate this, hold up each of the following:

- 1 cup of milk
 - 1 ½ ounce natural cheese
 - 1 cup of yogurt (MyPyramid.gov, 2009f).
4. Have students name some meals or snacks that have one serving of oil and more than one serving of milk, such as a tablespoon of olive oil over salad and a bowl of cereal and a yogurt for breakfast.

Activity 2: Is it oil? Is it a milk product?

1. Place different food items on the table, varying between oil and milk products and other food items.
2. When you point to each item individually, ask students to shout out whether the food item is an oil, a milk product, or not. If the item is not an oil or milk product, have the students explain why it is not a grain and which food group it belongs to.

Activity 3: My Food Pyramid Book

4. Pass out the *My Food Pyramid Book* to each student and have them work on pages 12-17. The students can either choose to draw and color food items for each page or glue pre-cut pictures of food items. Collect their books and put them in their folders when they are done.

Activity 4: Preparing Meals at Home

1. The importance of a well-balanced diet has been discussed during each lesson with the students. Although the students have yet to learn in depth about the meat and beans food group, the students by now should have an understanding of what it means to have a healthy diet, the importance of proper nutrition, and what foods belong in each food group, along with how much of should be eaten from each food group.
2. Discuss with the class what their typical meals are at home and how that can be improved to look more like the complete healthy meals discussed in class.
3. Hang up the *Food for a Day* Poster for all the students to see and have them analyze and discuss what they see on the poster. Are the meals healthy and complete? What food groups are being used for each of the meals?

4. Handout the *Pairing food to Make a Meal* worksheet to each student. For this activity, the students will create a meal plan for a typical day using the knowledge they have about nutrition.
5. Explain that each student will need to circle the foods under each category to make a complete meal that is healthy and well-balanced with as much variety from the different groups as possible.
6. When the students are finished with the activity, go over it as a class and discuss the different meal options on the worksheet. Collect the worksheet and put it in their folders.
7. The assignment can be adapted and be done as a class rather than individually. Some students work better doing the worksheet as a class discussion, sharing their ideas on what makes a nutritious meal.
8. Remember to collect all worksheets done in class and put them in the students' individual folders.

Lesson 5: Meat & Beans & Eating at Restaurants

Lesson Objective:

Students Will:

- Understand more in depth what meat and beans are and why they are important to eat.
- Identify the different kinds of meat and beans.
- Learn about importance of meat and beans products in a well-balanced diet and the benefits of eating from this food group.
- Learn about meat and beans serving sizes.
- Learn about meals and food options that are the healthiest at local restaurants.
- Learn how to use nutritional information to decide what foods to eat and what foods not to eat while at a restaurant.

Materials:

- Different meat and beans food items
- Food items other than meat and beans
- Measuring cups and other items to measure daily servings with
- *How Much do You Eat* Poster
- Pre-cut pictures of oil and milk food items
- Coloring utensils
- Glue
- Local restaurant menus or make your own menu

Worksheets/Handouts

- *Fat in Meat and Beans* worksheet
- *My Food Pyramid Book*
- *The Food Pyramid* Handout

Getting Started:

1. Begin this lesson by introducing to the students what meat and beans are. Explain the makes meat and beans important in our daily diets and the benefits of this food group. Use examples of items from the meat and beans food group so that students gain a better understanding of what oil and milk products are.
2. Some of the basic ideas that should be covered in the lecture component are:
 - The meat and beans food group is composed of items such as meat, poultry, fish, dry beans or peas, eggs, nuts, and seeds.
 - The Food Pyramid recommends that the meat and poultry items from this group be lean or low fat.
 - Fish, nuts, and seeds also contain healthy oils so these food items are preferred over the other items in the meat and beans food group.
 - The meat and beans food group is divided into six categories: meats, poultry, eggs, dry beans and peas, nuts and seeds, and fish:
 - Meats
 - Lean cuts of: beef, ham, lamb, pork, and veal
 - Game meats: bison, rabbit, and venison
 - Lean ground meats: beef, pork, and lamb
 - Lean lunch meats: liver and giblets
 - Poultry
 - Chicken
 - Duck
 - Goose
 - Turkey
 - Ground chicken and turkey
 - Eggs
 - Chicken eggs
 - Duck eggs
 - Dry Beans and peas
 - Black beans
 - Pinto beans
 - Split peas
 - Tofu
 - Lima beans
 - Lentils
 - Chickpeas
 - Bean burgers: garden and veggie burgers
 - Nuts and Seeds
 - Almonds
 - Cashews
 - Mixed nuts
 - Peanuts
 - Peanut butter
 - Sunflower seeds
 - Pecans

- Walnuts
- Fish
 - Finfish: Catfish, halibut, salmon, sea bass, swordfish, and trout
 - Shellfish: clams, crab, lobster, mussels, octopus, oysters, and shrimp
 - Canned fish: anchovies, clams, tuna, and sardines
- 3. Discuss the benefits of eating from the meat and beans food group:
 - Supply many nutrients: protein, B vitamins, Vitamin E, Iron, Zinc, and magnesium.
 - The proteins found in the meat and beans group are building blocks for many parts of our body including: muscles, cartilage, skin, blood, enzymes, hormones, and vitamins.
 - B Vitamins help release energy in the body, help support the nervous system, and provide assistance in the development of red blood cells. They also help build essential tissues in our bodies.
 - Vitamin E is an antioxidant.
 - Iron carries oxygen in the blood.
 - Magnesium helps build bones and releases energy from muscles.
 - Zinc allows the immune system to function properly.
 - Some fish have omega-3 fatty acids which lower the risk of cardiovascular disease.
 - Some nuts have essential fatty acids, while others are good sources of Vitamin E.
- 4. Discuss the health implications with the meat and beans group:
 - A few items in the meat and beans group are high in saturated fat which can affect cholesterol levels in the blood. This can increase the risk for coronary heart disease.
 - Foods to limit:
 - Fatty cuts of beef, pork, and lamb
 - Regular ground beef (75% to 85% lean)
 - Regular sausages
 - Hot dogs
 - Bacon
 - Some lunch meats: regular bologna and salami
 - Some poultry: duck
 - Egg yolks
 - Organ meats: liver and giblets (MyPyramid.gov, 2009e).
- 5. Tell the students that they should choose lean meat, fish, and dry beans because of their low fat content. Removing skin from poultry and taking off any visible fat on meat helps reduce the fat content in meat products. It is important to limit the amount of fried food intake due to unnecessary fat in these foods.

Activity 1: A Serving of Meat and Beans

1. For this activity, the number of servings recommended each day for the meat and beans food group will be discussed.

2. Hold up the *How Much do You Eat* poster for all the students to see. Ask them to describe what they see under the meat and beans group. Have them make guesses about how much a food serving is for the group.
5. Follow up this discussion with a demonstration at the front of the class with food items and tools for measurement. It is recommended that a person have 2 to 3 servings of meat and beans each day. To demonstrate this, hold up each of the following:
 - One egg
 - 2 tablespoons of peanut butter
 - ½ cup of cooked dry beans
 - 1/3 cup of nuts (MyPyramid.gov, 2009e).
6. Have students name some meals or snacks that have one serving of meat and beans such as a peanut butter sandwich, grilled salmon, or a handful of nuts.

Activity 2: Is it From the Meat and Beans Food Group?

1. Place different food items on the table, varying between meat and beans products and other food items.
2. When you point to each item individually, ask students to shout out whether the food item is from the meat and beans food group or not. If the item is not from the meat and beans group, have the students explain why it is not a grain and which food group it belongs to.

Activity 3: Fats in Meat and Beans

1. Handout the *Fat in Meat and Beans* worksheet to each student.
2. Read the directions out loud and explain the expectations for the activity.
3. For the two categories of meat and beans (low in fat and high in fat) state out loud the different food choices in each category. Explain to the students why the foods in each category are either low in fat or high in fat. Have the students explain how the high in fat foods can be altered to be low in fat.
4. For students who have a difficult time understanding low in fat and high in fat, explain that low in fat means that it is healthy for them, while high in fat means it is unhealthy for them to eat.
5. Either complete the worksheet as a class or have the students work on it individually depending on their skill level.
6. Once the students complete the worksheet, have a class discussion about it, collect it, and put it in their folders.

Activity 3: My Food Pyramid Book

1. Pass out the *My Food Pyramid Book* to each student and have them work on pages 18-20. The students can either choose to draw and color food items for each page or glue pre-cut pictures of food items. Collect their books and put them in their folders when they are done.

Activity 4: Analyzing Food Options at Restaurants

1. Discuss with the class what their typical meals at local restaurants are. Write all of their responses on the board.

2. Have the students analyze whether the food options are healthy or not healthy according to the food pyramid. Ask them the nutritional value of each food option.
3. Hand out each a local menu to each table and hold up an enlarged menu from the same restaurant.
4. Tell the students that as a class they are going to pretend they are at a restaurant ordering food. The objective of the activity is to have them pick out healthy food choices for a complete meal. As a class go down the list of menu options and have them give the food items a thumbs up or a thumbs down. Once every food item has been discussed, tell the students to pick the food items they want to order, and their reasons why.
5. Repeat this several times with several different local menus from fast food restaurants and sit down restaurants.
6. Have the students take turns telling the class what their favorite restaurant is and what they plan on having there on their next visit to comply with the nutritional guidelines of the Food Pyramid.

Lesson 6: Reviewing the Food Pyramid & the Importance of Nutrition

Lesson Objective:

Students Will:

- Fully understand the different parts of the food pyramid
- Identify a variety of foods from each of the food groups
- Explain the importance of nutrition and having a healthy well-balanced diet
- Have the ability to name the benefits of the foods from each food group and how that affects the body
- Be able to read food labels, analyze what the information means, and decide whether an item is a healthy option
- Have a better understanding of what foods to eat at home and how to combine foods from more than one food group to create a healthy meal
- Know to use nutritional information to decide what foods to eat and what foods not to eat while at a restaurant

Materials:

- *Name That Food* template for the white board
- Food items on squares for bingo
- Stickers
- Pre-cut pictures of food group items
- Coloring utensils
- Glue

Worksheets/Handouts

- *My Nutritious Food Picks* worksheet

- *My Food Pyramid Book*
- *Food Pyramid Bingo Card*
- *The Food Pyramid Handout*

Getting Started:

1. During the last lesson of the six week nutrition course, the students will review what they have learned throughout the course about the importance of nutrition, the guidelines of the Food Pyramid, healthy meal options at home and at restaurants, and how to read food labels.
2. The students will answer pop questions about the Food Pyramid like:
 - What food group has whole grains and refined grains?
 - What group does a pumpkin belong in?
 - What is healthier to eat at a fast food restaurant: a hamburger or chicken nuggets?
 - Name one serving from the milk group.
3. Answer and remaining questions the students have about the topics covered in the six weeks course.

Activity 1: My Nutritious Food Picks

1. Handout the *My Nutritious Food Picks* worksheet to each student.
2. Read the directions out loud to the class and give students the option of either drawing their favorite food or writing the name of their favorite food in each box for each group.
3. When everyone has completed the assignment, let students share what some of their favorite foods are from each food group.
4. Collect the worksheets and put them in each student's folders.

Activity 2: Name That Food

1. Draw the *Name That food* template on the white board, and fill in as a class a food item that goes in each box.
2. During the activity, let students share what some of their favorite foods are from each food group, and discuss the other food items that can go in the box as well. Ask the students why they picked the foods they did to go in each box, and other alternatives for each box.
3. Use this time for a discussion with the students about everything they have learned, and encourage them to not get discouraged if they have junk food or sweets every so once in a while, since we are all human.

Activity 3: My Food Pyramid Book Wrap Up

1. For this activity, the students have completed the entire book except for the second page which is a blank food pyramid.
2. Students will color in each food group and draw a picture of the foods found in each group.
3. When the students have completed the entire book, collect the books and put them in their folders.

Activity 4: Food Pyramid Bingo

1. This activity is purely for fun purposes. After six lessons of learning about nutrition and The Food Pyramid, it is important for the students to leave with a smile on their faces and a fun activity to help them remember healthy foods.
2. Pass out a *Food Pyramid Bingo* card to each student.
3. Shuffle the cut outs of food items in a bowl and then begin the game by calling out a food item. State the food group it is from and what the food item is.
4. When a student has the particular food item on their Bingo card, instruct them to color it in.
5. When a student has a row of colored in spaces they will need to shout “Bingo!” When a student gets a bingo they will need to state out loud the food items in the row and what food groups they belong in. When they have successfully done so, they will receive a sticker as a prize.
6. Continue this until at least 5 people have gotten a bingo.
7. Pass out stickers to everyone at the end of the game and collect the Bingo cards and put them in their folders.

Wrap Up:

1. Pass out the folders to each student.
2. They can track their progress throughout the six week course by their improvements on worksheets and class projects.

References

MyPyramid.gov. (2009a). *What are “oils”?* Retrieved April 2, 2009, from

<http://mypyramid.gov/pyramid/oils.html>

MyPyramid.gov. (2009b). *What foods are in the fruit group?* Retrieved April 2, 2009, from

<http://mypyramid.gov/pyramid/fruits.html>

MyPyramid.gov. (2009c). *What foods are in the grain group?* Retrieved April 2, 2009, from

<http://mypyramid.gov/pyramid/grains.html>

MyPyramid.gov. (2009d). *What foods are in the vegetable group?* Retrieved April 2, 2009, from

<http://mypyramid.gov/pyramid/vegetables.html>

MyPyramid.gov. (2009e). *What foods are included in the meat, poultry, fish, dry beans, eggs, and nuts (meat & beans) group?* Retrieved April 2, 2009, from

<http://mypyramid.gov/pyramid/meat.html>

MyPyramid.gov. (2009f). *What foods are included in the milk, yogurt, and cheese (milk) group?*

Retrieved April 2, 2009, from <http://mypyramid.gov/pyramid/milk.html>

Additional Helpful Resources, Handouts, and Worksheets

Lesson 1: Learning the Basics of Nutrition

- “The Food Pyramid” Handout

<http://mypyramid.gov/downloads/MiniPoster.pdf>

- “Eat Smart with MyPyramid for Kids” Worksheet

http://teamnutrition.usda.gov/resources/mpk1_lesson2.pdf

- “Make Your Own Classroom Food Pyramid Out of Butcher Paper” Guide

<http://www.hawthorne.k12.ca.us/ourpages/nutnet/Documents/Grains/>

- A Two Sided Food Pyramid Poster

http://teamnutrition.usda.gov/Resources/mpk_poster.pdf

http://teamnutrition.usda.gov/Resources/mpk_poster2.pdf

Lesson 2: Grains & Food Labels

- “How Much do You Eat?” Poster

<http://teamnutrition.usda.gov/Resources/howmuch.pdf>

- “My Food Pyramid” Book

<http://www.hawthorne.k12.ca.us/ourpages/nutnet/Documents/>

- “Label Language” Poster Information

http://kidshealth.org/parent/nutrition_fit/nutrition/food_labels.html

- Color Coded Label Template for Large Label Poster

<http://www.health.gov/DietaryGuidelines/dga2005/toolkit/Worksheets/foodlabel.htm>

- “Is it a Grain” Images

<http://office.microsoft.com/en-us/clipart/default.aspx>

- “Read It Before You Eat It” PDF Guide

http://teamnutrition.usda.gov/Resources/Nibbles/Nibbles_Sharing_Session_4.pdf

- “Read It Before You Eat It” Poster

http://teamnutrition.usda.gov/Resources/read_it.pdf

Lesson 3: Fruits and Vegetables

- “Fruits and Vegetables I Have Eaten” Images

<http://www.coloring.ws/fruit.htm>

- “Vary on Veggies and Focus on Fruits” PDF Guide and “Steps to a Healthier You” Worksheet

http://teamnutrition.usda.gov/Resources/mpk2_lesson3.pdf

Lesson 4: Oils and Milk and Learning About What to Eat at Home

- “Food For a Day” Poster

<http://teamnutrition.usda.gov/Resources/foodforday.pdf>

- “Pairing Food to Make a Meal” Images

http://teamnutrition.usda.gov/resources/mpk1_lesson2.pdf

- “Menu Magic for Children” PDF Guide

http://teamnutrition.usda.gov/Resources/menu_magic.pdf

Lesson 5: Meat and Beans and What to Eat at Home

- “Fat in Meat and Beans” Images

<http://office.microsoft.com/en-us/clipart/>

- “Fat in Meat and Beans” Worksheet Adapted From

http://teamnutrition.usda.gov/resources/mpk3_lesson2.pdf

- “Eating Out and Eating In” PDF Guide and “Where’s the Fat” Worksheet

http://teamnutrition.usda.gov/Resources/mpk3_lesson2.pdf

Lesson 6: Reviewing the Food Pyramid

- “Food Model Bingo”

http://www.nutritionexplorations.org/pdf/educators/food-models/bingo_card.pdf

- “Name That Food” Worksheet

<http://www.nutritionexplorations.org/pdf/educators/five-foods/namefood.pdf>

- “My Nutritious Food Picks” Worksheet

<http://www.nutritionexplorations.org/pdf/educators/pyramid-cafe/page11.pdf>

- “My Pyramid” Worksheet

http://teamnutrition.usda.gov/Resources/mpk_worksheet.pdf

- “Food Math” Worksheet

http://teamnutrition.usda.gov/Resources/mpk2_lesson2.pdf

- “Connecting School Meals and Classroom Learning” PDF Guide

http://www.nutritionexplorations.org/pdf/educators/bridges/BTW.G5-6_wc.final.pdf

- A Blank Food Pyramid Coloring Worksheet

http://teamnutrition.usda.gov/resources/mpk_coloring.pdf

To Learn More About Nutrition and the Food Pyramid:

<http://teamnutrition.usda.gov/Resources/nibbles.html>

<http://teamnutrition.usda.gov/library.html>

http://teamnutrition.usda.gov/Resources/ne_sources.pdf

http://www.hawthorne.k12.ca.us/apps/news/show_news.jsp?REC_ID=38816&id=13

<http://www.mypyramid.gov/downloads/resource/MyPyramidBrochurebyIFIC.pdf>

http://www.cspinet.org/nutritionpolicy/nutrition_policy.html#1

http://www.teach-nology.com/teachers/lesson_plans/health/nutrition/

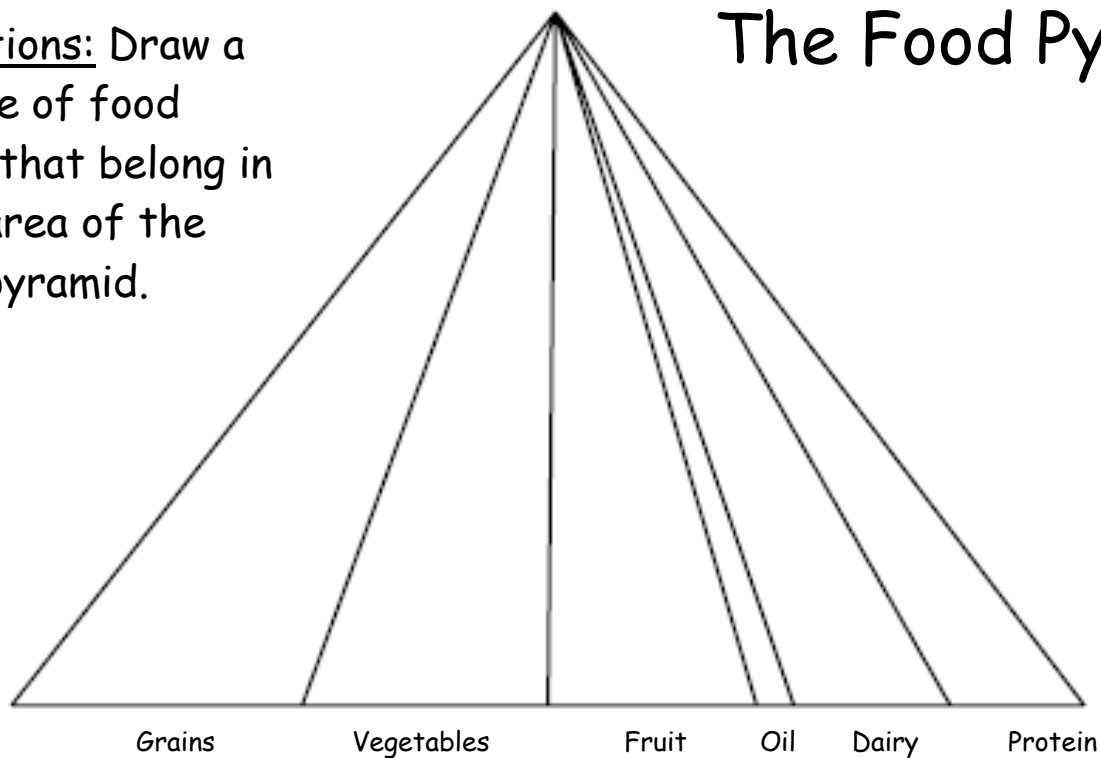
My Food Pyramid Book



By:

Directions: Draw a picture of food items that belong in each area of the food pyramid.

The Food Pyramid



Some GRAINS look like this...

Other GRAINS look like this...

My favorite GRAINS look like this...

Some VEGETABLES look like this...

Other VEGETABLES look like this...

My favorite VEGETABLES look like this...

Some FRUITS look like this...

Other FRUITS look like this...

My favorite FRUITS look like this...

Some healthy OILS come from these types of plants...

Other health OILS come from these types of fish...

My favorite food to eat that has healthy OILS is...

Some DAIRY foods look like this...

Other DAIRY foods look like this...

My favorite DAIRY food looks like this...

Some MEAT and BEAN foods look like this...

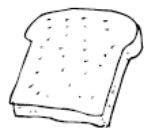
Other MEAT and BEAN foods look like this...

My favorite MEAT and BEAN foods look like this...

Name: _____

Eat Smart with *MyPyramid for Kids*

Draw a **circle** around the foods that are in the **Grain Group**.



Slice of bread



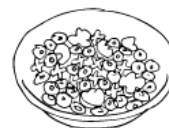
Baked potato



Popcorn



Pasta (bowtie)

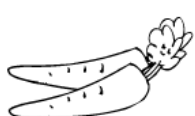


Cereal



Candy bar

Draw a **rectangle** around the foods that are in the **Vegetable Group**.



Carrots



Spinach



Grapes



Pasta (macaroni)



Broccoli



Swiss cheese

Draw a **square** around the foods that are in the **Fruit Group**.



Corn



Orange juice



Apple



Banana



Strawberries



Muffin

Draw a **triangle** around the foods that are in the **Milk Group**.



1% Milk



Yogurt



Egg



American cheese



Cookies



Orange juice

Draw an **oval** around the foods that are in the **Meat and Beans Group**.



Peanut butter



Egg



Beans



Chicken



Pork chop



Fish



How Much Do YOU Eat?

Use these everyday items to estimate the amount you eat.



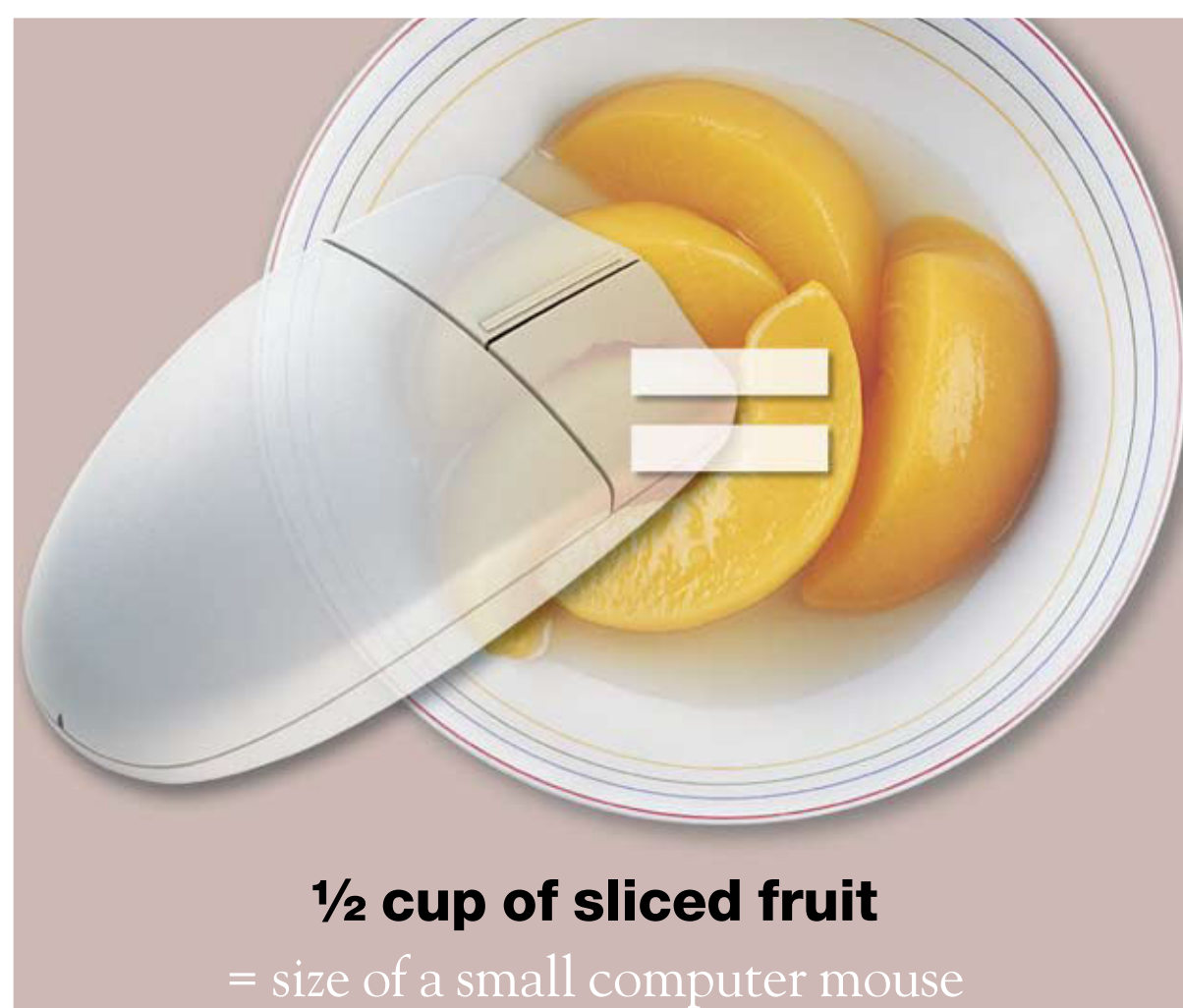
Amounts of foods
For 2,000 calories



**½ cup
of fruit juice**
= size of a 4 oz
juice box



1 small apple = 1 cup
= size of a baseball



½ cup of sliced fruit
= size of a small computer mouse

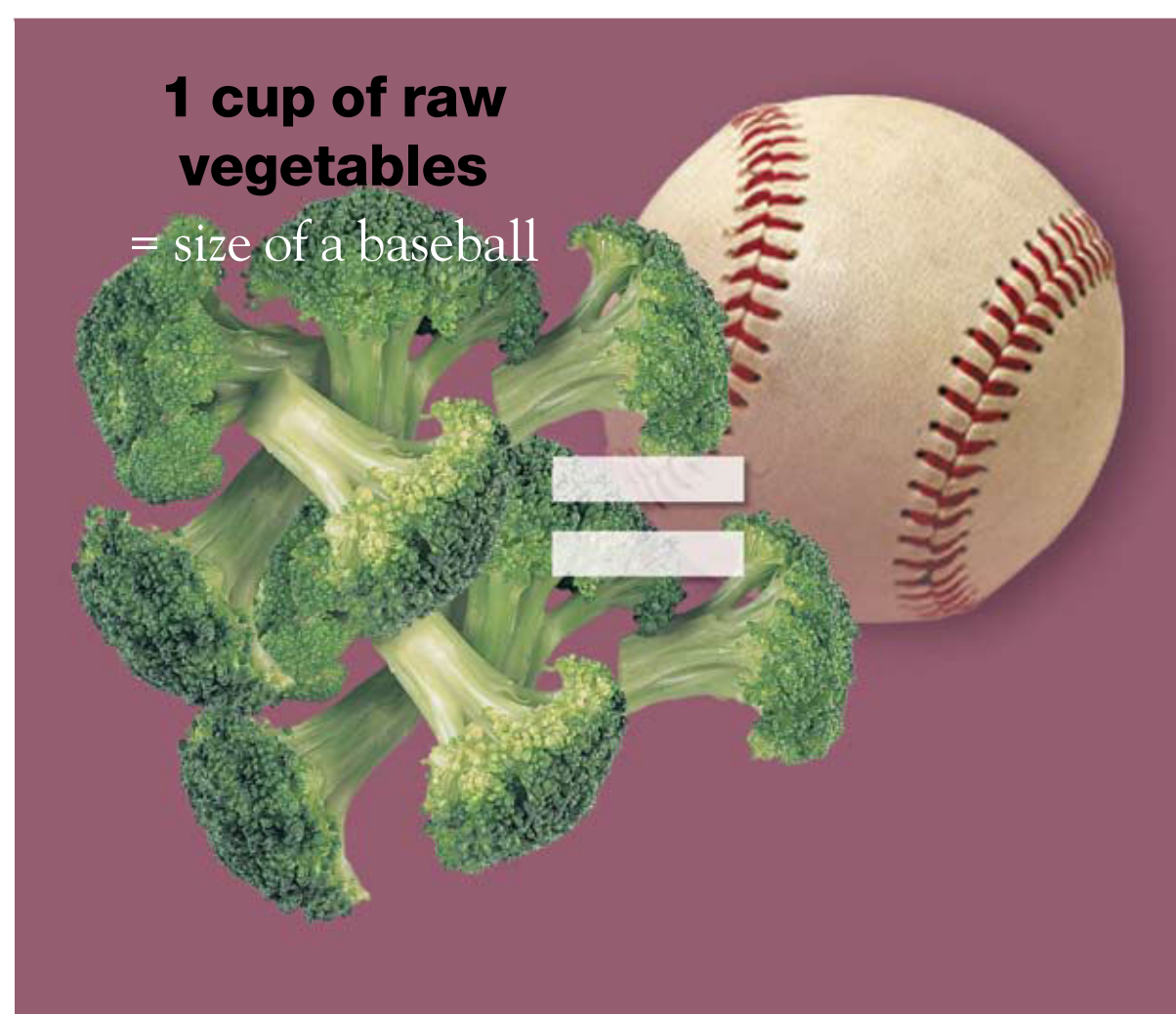
**2
cups**
**Fruit
Group**



½ cup of carrots or other vegetables
= size of a small computer mouse



**10 medium fries
counts as ½ cup**
= size of a deck of cards



**1 cup of raw
vegetables**
= size of a baseball

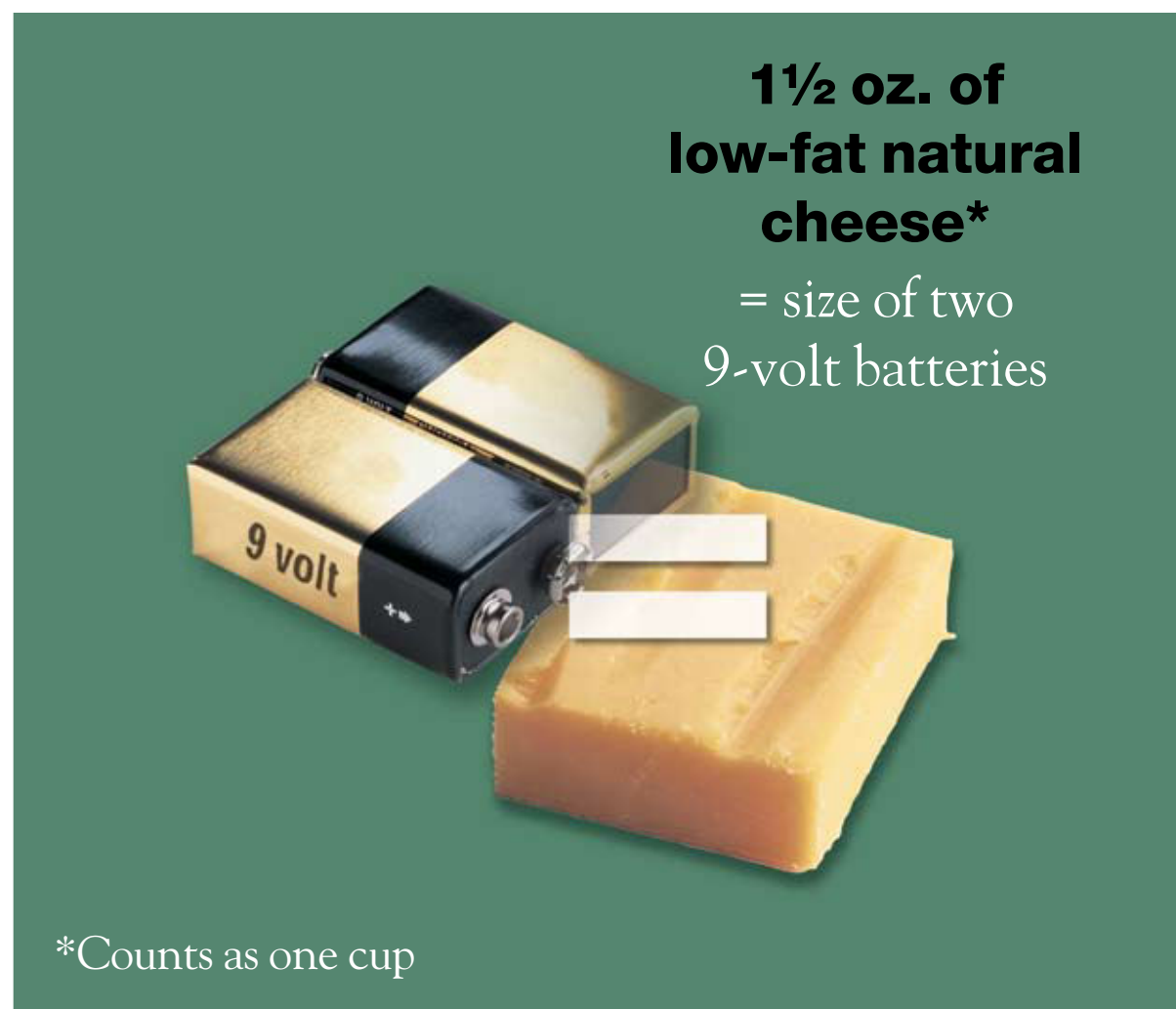
**2½
cups**
**Vegetable
Group**



1 cup of milk
= an 8 oz
carton of milk



**1 cup
of yogurt**
= size of a baseball



**1½ oz. of
low-fat natural
cheese***
= size of two
9-volt batteries

*Counts as one cup

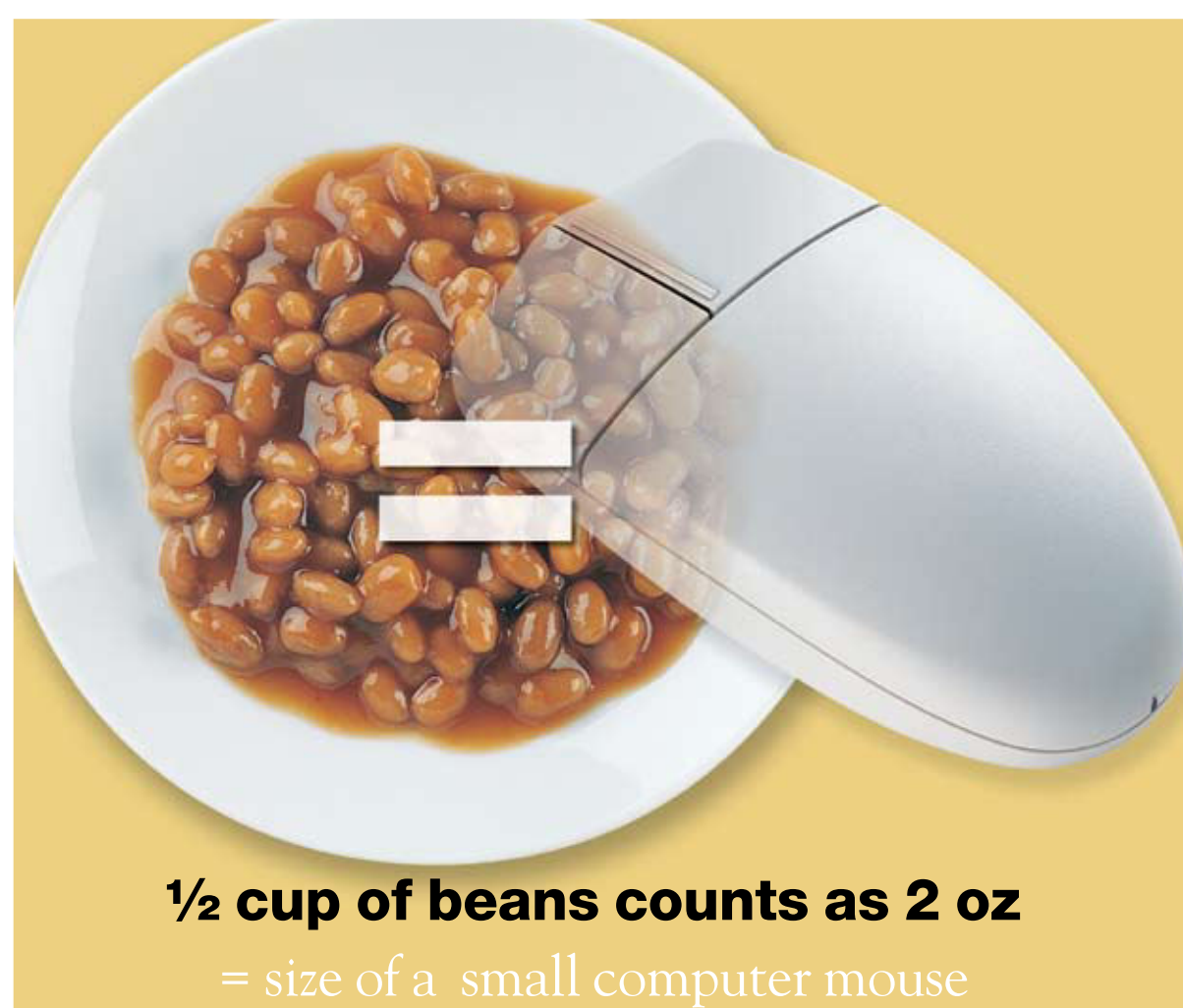
**3
cups
or equivalent**
**Milk
Group**



**2-3 oz. of meat,
poultry or fish**
= size of a deck
of cards



**1 tablespoon of
peanut butter
counts as 1 oz**
= size of one 9-volt
battery

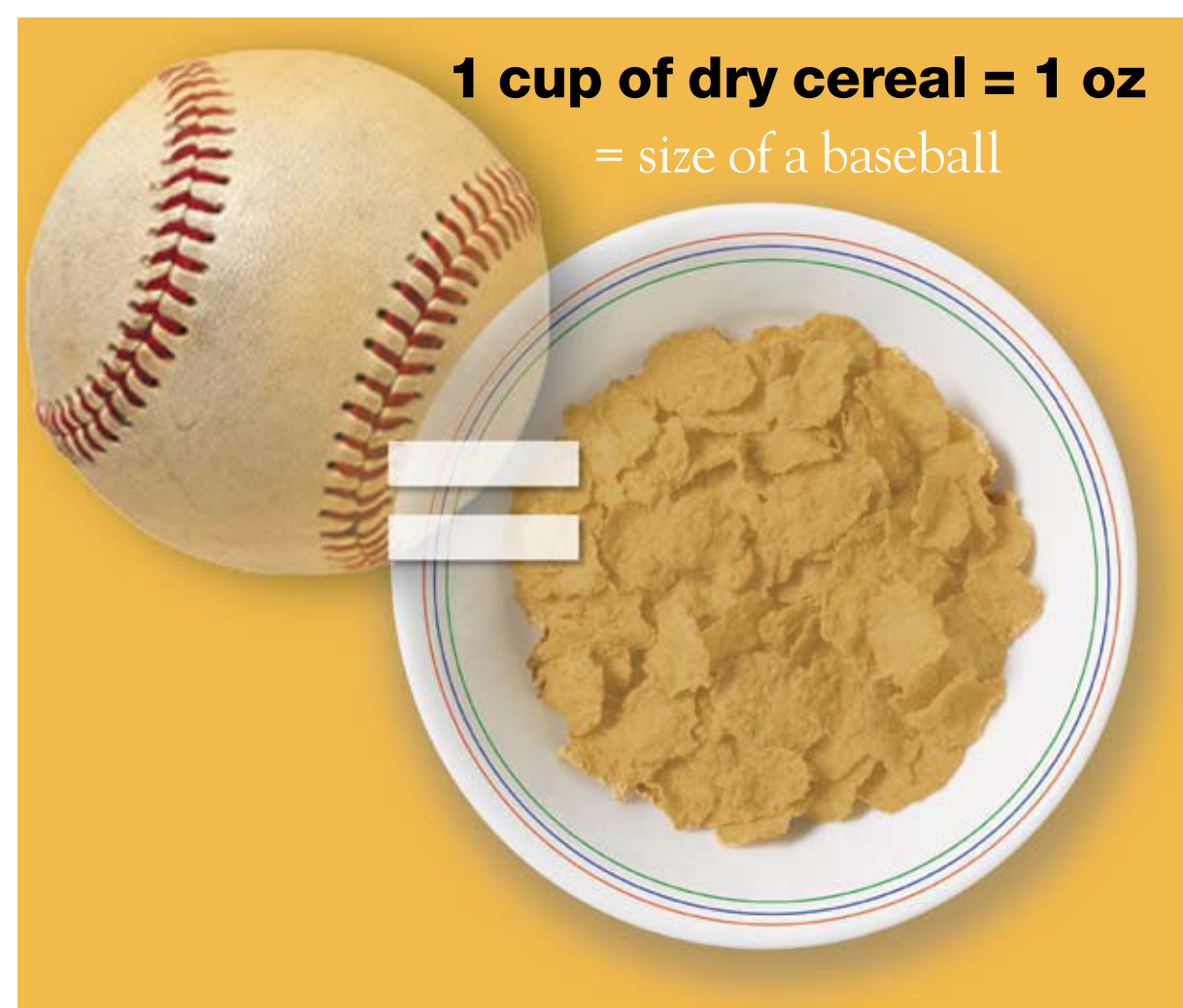


½ cup of beans counts as 2 oz
= size of a small computer mouse

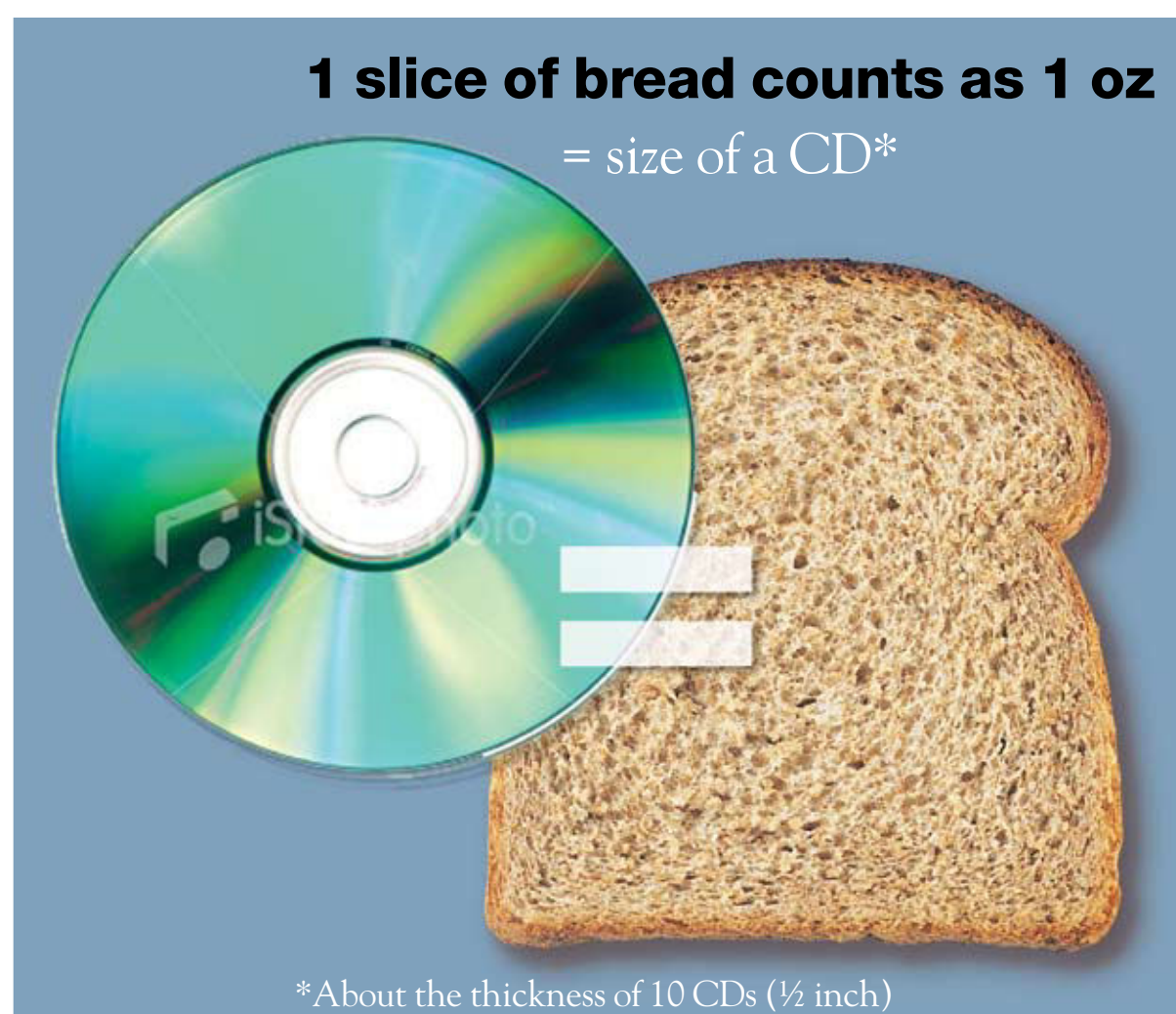
**5½
ounces
or equivalent**
**Meat &
Beans
Group**



½ cup of cooked pasta = 1 oz
= size of a small computer mouse



1 cup of dry cereal = 1 oz
= size of a baseball



1 slice of bread counts as 1 oz
= size of a CD*

*About the thickness of 10 CDs (½ inch)

**6
ounces
or equivalent**
**Grains
Group**

Label Language

Reduced Fat: has 25% less fat than regular brand

Light: has 50% less fat than same regular product

Low Fat: has less than 3 grams of fat per serving

The Food Label

Serving Size/Servings Per Container: Serving size is based on the amount of the product people usually eat. If you eat twice the amount of the serving size, you will need to double the nutrition information. The number of servings tells you how many serving sizes are in the entire package.

Calories: It is a unit of energy and it measures how much energy a food provides to the body.

Calories From Fat: The total number of calories in each serving that come from fat.

Percent Daily Values: Tells how much of a certain nutrient a person will get from eating one serving of the product. Determines whether a food is high or low in certain nutrients, should be between 10% and 19%. If the nutrient has a value of 5% or less it is low, and if it has a value of 20% or more it is high.

Total Fat: How much fat is in a single serving of the product, and it is measured in grams. Should have 30% of daily calorie intake come from fat.

Saturated Fat and Trans Fat: Are considered bad

fats because they raise cholesterol. Saturated fats should account for less than 10% of calories consumed each day. The amount of trans fat should be as low as possible.

Unsaturated Fat: They do not raise cholesterol levels, and most fats should come from here.

Cholesterol: Is important in producing vitamin D, some hormones, and the building of other important substances in the body. Do not want the level of cholesterol in blood too high.

Sodium: Small amounts are necessary, but too much can cause high blood pressure.

Total Carbohydrate: Comes from dietary fibers, sugars, and other carbohydrates. They are the most abundant source of calories. Up to 60% of total calories should come from carbohydrates.

Dietary Fiber: Has no calories and a high-fiber diet helps with digestion and cholesterol levels.

Sugars: Found in most foods, but simple sugars found in fruits are more healthy than sugars found in snack foods, candy, and soda.

Protein: How much protein is in a single serving of a food, and it is measured in grams. Muscles, skin, and the immune system are made up of protein. 10% to 20% of calories consumed each day should be from protein.

Vitamin A: It is important for good eyesight and helps maintain healthy skin. It can be found in orange vegetables and dark green, leafy vegetables.

Vitamin C: Helps build and maintain connective tissues, heal wounds, and fight infections. It is found in citrus fruits, other fruits, and some vegetables.

Calcium: Builds healthy bones and teeth. It is found in milk and other dairy products.

Iron: Helps the body produce new, healthy red blood cells. Red blood cells carry oxygen which is why it's important to get enough iron. Iron can be found in meat, as well as cereals, tofu, dried beans, and dark green, leafy vegetables.

What To Look For on a Food Label

- Have a diet low in total fat, saturated fat, trans fat, and cholesterol. Limit total fat intake to no more than 30% of total calories per day.
- Remember to look at serving size information. One package can be more than one serving size.
- Limit foods with added sugar.
- Look for the amount of sodium in the foods you eat.
- Choose healthy snacks rather than potato chips and cheese puffs which are high in calories, fat, and sodium, and low in fiber, vitamins, and minerals.

- A low fat food might be low in fat but could be high in sugar. Many low fat foods have nearly as many calories as their full fat versions. Also check the labels of low carb versions which might be high in fat and calories.
- Eat a variety of foods, like lean meats and fish, whole grain products, low fat dairy, vegetables, and fruits, in order to get a wide variety of nutrients.

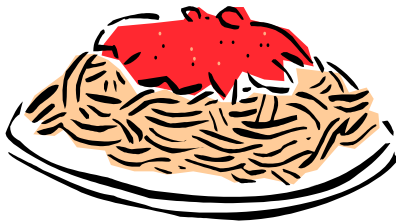
Name: _____

Is it a Grain?

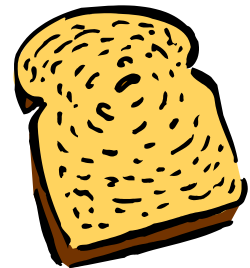
Directions: Circle the food items that belong in the Grain food group.

If a food item is not a grain, draw a square around it in the color food group it belongs to. Example: a carrot belongs in the vegetable (green) group.

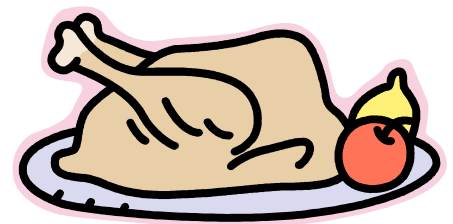
1.



2.



3.



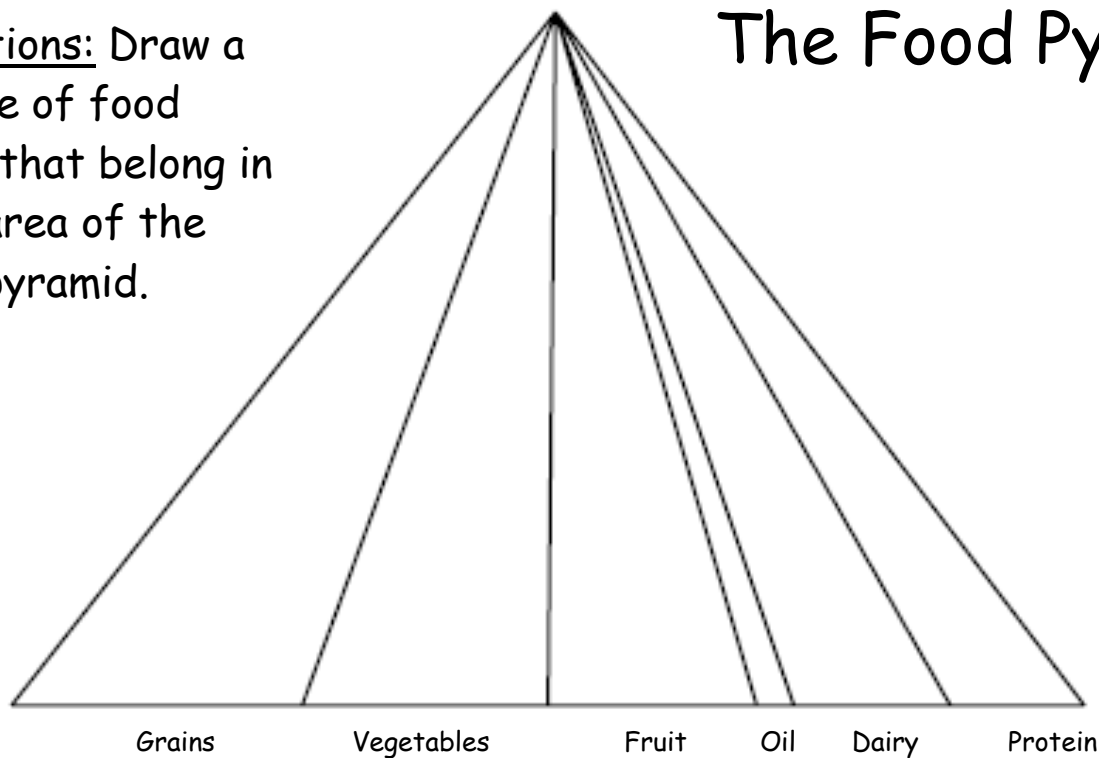
My Food Pyramid Book



By:

Directions: Draw a picture of food items that belong in each area of the food pyramid.

The Food Pyramid



Some GRAINS look like this...

Other GRAINS look like this...

My favorite GRAINS look like this...

Some VEGETABLES look like this...

Other VEGETABLES look like this...

My favorite VEGETABLES look like this...

Some FRUITS look like this...

Other FRUITS look like this...

My favorite FRUITS look like this...

Some healthy OILS come from these types of plants...

Other health OILS come from these types of fish...

My favorite food to eat that has healthy OILS is...

Some DAIRY foods look like this...

Other DAIRY foods look like this...

My favorite DAIRY food looks like this...

Some MEAT and BEAN foods look like this...

Other MEAT and BEAN foods look like this...

My favorite MEAT and BEAN foods look like this...

Name _____

The Fruits and Vegetables I Have Eaten

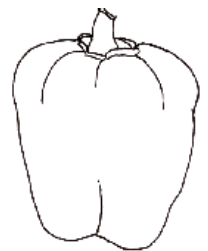
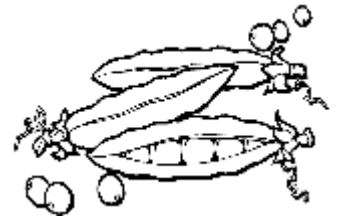
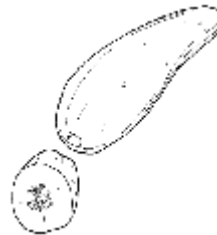
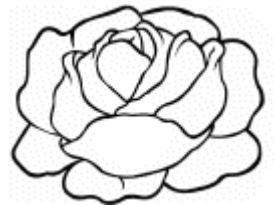
Fruits

Circle the fruits you have eaten.



Vegetables

Circle the vegetables you have eaten.



Food for a Day

Putting it All Together



morning...

mid-day...

evening...

Drink 8-10 cups of water each day.
Choose water or other calorie-free beverages.

www.nutrition.gov

Amounts and types of food based on a total of 2,000 calories

• Young children and
• Inactive women need
less food than shown
• Teen boys and
• Many men need
more food than shown
Go to MyPyramid.gov
to find out what you need.

2 Cups



FRUIT GROUP

2 1/2 Cups



VEGETABLE GROUP

3 Cups
OR EQUIVALENT



MILK GROUP

5 1/2 Ounces
OR EQUIVALENT



MEAT AND BEANS GROUP

6 Ounces
OR EQUIVALENT



GRAINS GROUP



© 2005 USDA

Name _____

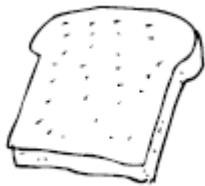
Pairing Food to Make a Meal

Directions: Circle the food items to make a meal.

Breakfast:



Lunch:



Dinner:



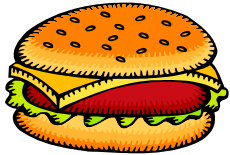
Snack:



Name _____

Fats in Meat and Beans

Less Fat 😊



Hamburger



Beef Soft Taco

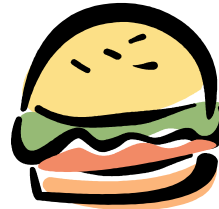


Bean Burrito



Crispy Taco

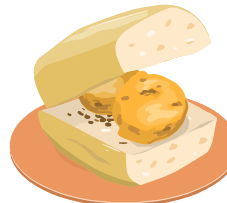
More Fat ☹️



Fish Filet



Chicken Fingers



Chicken Nuggets



Double Cheeseburger

Directions: Circle the food with less fat.

1.



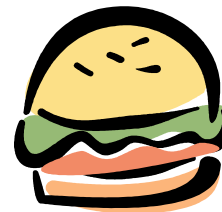
or



2.



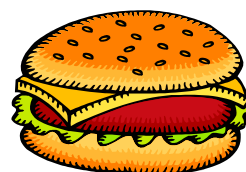
or



3.



or



Adapted From: Team Nutrition. (n.d.). *Eating out and eating in: Go lean with protein*. Retrieved April 2, 2009, from

http://teamnutrition.usda.gov/resources/mpk3_lesson2.pdf

All Images From: Office.Microsoft.com - Clip Art Search: "fast food", 2009.

NAME THAT FOOD



Ready-to-eat

Good for
a snack

Yellow

Served cold

Starts
with "C"

MILK
Group



MEAT
Group



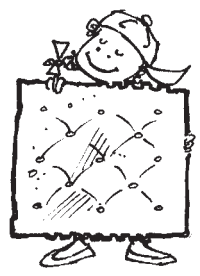
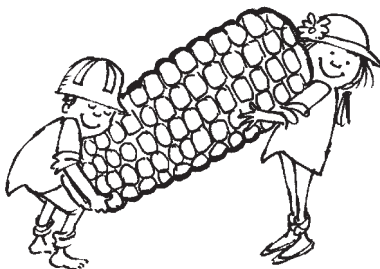
VEGETABLE
Group



FRUIT
Group



GRAIN
Group




My Nutritious Food Picks

For each food group write the names of three foods
you put in the “I like this food a lot” box on page 10.

My Favorite MEAT GROUP Foods			
My Favorite VEGETABLE GROUP Foods			
My Favorite FRUIT GROUP Foods			
My Favorite GRAIN GROUP Foods			

Food Model Bingo

MILK	MEAT	VEGETABLE	FRUIT	GRAIN
COMBINATION	“OTHER”	MILK	MEAT	VEGETABLE
FRUIT	GRAIN		COMBINATION	“OTHER”
MILK	MEAT	VEGETABLE	FRUIT	GRAIN
COMBINATION	“OTHER”	MILK	MEAT	VEGETABLE