

Healthy Minds/Bouncy Bodies

*By Linda E. Grice
Oliver High School*

Overview

The Child Development/Childcare class is an elective course that teaches high school students to work with children from ages six weeks through four years. At the end of the first year of the class students are prepared for entry level positions in daycares, nursery schools, etc. The student chooses to take the course for two years. Upon completion the student will have attained enough education and hours to become an assistant teacher. Therefore the goal for all lessons must be to equip the student to work with children, staff, parents and the community. Along with each theory class there is a lab class that is attended by children. The lab is a licensed day care. Each theory class must include the student learning standards of the Pittsburgh Board of Education.

One of the goals of the childcare teacher is to provide nutritious snacks, active and quiet physical activities, model and teach good health practices and aids to daily living skills which include hand washing, using tissue and discarding soiled ones, toileting procedures, care of teeth, and education about food.

The areas of development which the students study are physical, intellectual, emotional and social. I refer to them as PIES. Dr. Comer of Yale University refers to the developmental areas as Developmental Pathways. Healthy minds bouncy bodies concentrates on the physical area of development which deals with the rate of growth and development of the child's body, the ability to use his body in space, health, nutrition, and exercise.

The students will explain the terms nutrition, nutritious, and nutrient. They will discover the experience of eating different types of foods. Create an environment for a healthy eater and define food allergy, allergen and food intolerance. They will plan menus by using the food pyramid and proper serving sizes. Finally they will plan and implement age appropriate activities in the area of nutrition and muscle development.

Rationale

The title of the Pittsburgh Teacher's Institute seminar, Healthy Minds/Healthy Bodies fascinated me. I thought I could learn a lot and use it for my benefit and that of my family. This was my first reaction to the title of the PTI seminar. After giving it some thought, I realized, "what a boon!" I could learn something to make my health better, my family's health better and in turn teach it to my

students. It is difficult to engage the students in rigorous class work because during first period every one is so very hungry and during second period students want to fall asleep. Since more is caught than taught, the student teachers might model proper health behavior in front of the children who are their responsibility in the day care lab. With subjects such as food pyramids and other nutritional guidelines, weight loss programs, food safety and food chemistry this new information might be the ticket to boost interest in class.

I was listening to a broadcast on the news in which the speaker informed the listeners that the food pyramid might be a thing of the past, since people misunderstand that at the bottom of the triangle are the foods that one eats the most and as one goes higher in the pyramid the serving amounts decrease. It is important for them to know how to read the pyramid and understand that there are many types of food pyramids. If the USDA pyramid does not work, then maybe another type will. Serving sizes and amounts of the foods are important to know so that snacks can be served correctly to children. There is always the question of what snacks are good and healthy for the children. So much is being said about low carbohydrates that it has become a buzz word and many students talk about “low carbs” but do not know what that means. I look around my classroom and note that there are many students who are overweight, sluggish, and cannot keep up with me when we walk together in the hallway. For lunch a bag of corn chips and a soda are enough to sustain them for the rest of the day. By eighth period they are either lying around or so noisy that we want earplugs. I believe a lot of this behavior revolves around nutrition.

Raising the awareness of the students will change their knowledge about how children should eat. If children can be trained at an early age to appreciate certain foods and activities that relate to good health, they will grow up with the ability to become a healthier teenagers and adults. They will also have the ability to make decisions about what knowledge will help them feel physically fit and healthy.

Many factors are involved with the issue of healthy children. First of all, a safe environment is necessary for the proper development of the welfare of the child. The surroundings should be peaceful, as free as possible of pollutants, with harmony in the home, and tender loving care from the family, and regular health check ups and joyful living. Second, a sense of belonging is important. Parents, siblings, and the community should enjoy the child’s presence. The child should feel that he/she is a valuable person within the group of humans in which he/she lives, plays, learns and socializes. A positive attitude should be established so the child has freedom to accept the differences of self and others. A positive developing self esteem must be an ongoing process in the child’s life. Third, a balance of rest and relaxation with appropriate amounts of stress are needed. An adequate diet and exercise is the catalyst for a healthy well rounded bouncy child.

In other developmental areas proper nutrition is a vehicle for success. Intellectual development deals with acquiring retaining, processing, creating, generalizing and using information and the ability to use language. The goal for the teacher is to present age appropriate information and tools so the child will be successful and become a lifelong learner. If the child is not healthy this can not be achieved. The emotional development deals with feelings about self and others; the ability to identify, regulate and manage feelings; and the confidence necessary to become a good citizen. The goal for the teacher is to provide a safe caring atmosphere for children to tryout, deal with new feelings, channel and direct their feelings in order to meet the challenges of society. We had a three year old who would start to bite other children, have temper tantrums, and kick teachers or do very negative acting out behaviors. These behaviors were not manifested everyday but when they did, it was always around the same time. This was a pattern. We noticed though on the days that he ate a snack, no negative behavior occurred. We finally came to the conclusion that his behavior was related to food. If he did not eat a snack, he could not wait until the designated time to eat his lunch because he was hungry. So we gave him a little snack to tide him over until the official lunch time for all of the children. If the child is not healthy how can he achieve control of his emotions?

Social development deals with the ability to get along with others, appropriate manners, following the rules, respect the right of others, working and playing in groups, and form my friendships. The teacher's goal is to have a mixture of children from different socio-economic, ethnic, and cultural backgrounds to plan and implement a variety of cultural activities, make and consistently enforce rules. Rules are crucial since following rules develops character, keeps children safe, aids in learning, gives an understanding of consequences and increases the ability to think of the good of others. An unhealthy child is unable to perform these tasks. Therefore childcare workers need to learn and practice skills to promote good health for themselves and the children.

Background Information

The Journal of the American Dietetic Association found that children ages 1 to 2 get nearly 30 percent more calories than they need and more than 60 percent of twelve month olds have sweets at least once a day. How can we raise healthy children when we are starting our children off at a food deficit? The March, 2004 Parent's Magazine states that lifelong food preferences are set during the first three years of life. It is important to start children off in a healthy manner. This can be done by serving different types of foods Alan Hirsch, M.D. states "The more flavors, smells and textures baby experiences, the wider foods she'll accept later in childhood..." Since soda is empty calories, sweet beverages should be

eliminated. In order to quench thirst children should be given water. It is never too early for children to start appreciating the taste and benefits of the no calorie, non sugary liquid. More than half the weight of one's body is water. It makes up the basis for our blood. It is needed for our lymphatic system to get rid of waste in the body, regulate body temperature, lubricate our bodies, and keeps our skin clear and elastic. "Drinking eight-eight ounce glasses of water a day can burn of almost 35,000 calories a year or about ten pounds." Selene Yeager—*Prevention Magazine, August 2004 page 43*. Therefore it is so essential to replace this nutrient daily in our children. Parent's adviser Connie Dickman says "Children need to learn that food is for fuel rather than to satisfy emotions or relieve boredom." As a result food should not be used as a punisher or a reward. We must eat in order to live so meals and snacks should be planned keeping that thought in mind. Since many parents or caregivers do not know an adequate serving size for children, Dickman says "a good rule of thumb is one tablespoon of each food for every year of age." This rule even relates to caregiver's time-out rule, one minute for every year of age.

The Pennsylvania Core Body of Knowledge For Early Childhood and School-Age Caregivers is a career development task force established in 1999. It is an alliance for early childhood professional preparation. The organization is coalition of early childhood faculty members from two and four year institutions that in combination with information from the New York State Early Childhood Education Core Body of Knowledge Framework provided the basis for the Pennsylvania Core Body of Knowledge. It provides identifying knowledge and skills that are needed by professionals in the field of childcare. So that caregivers will be provided with a means of what they know and are able to do when caring for children; planning their career development; creating a record of their accomplishments; focusing on professional career development. This organization believes that play provides the opportunity for children to grow and learn. Childhood programs promote and sustain complex play by preparing and equipping the environment, providing time for play, and facilitating adult-child interactions. As they play children practice skills and construct knowledge. Some of the objectives of the organization are that children explore the world around them; and develop sensory, perceptual, and cognitive understanding; skills through play. Children develop both small muscle and large muscle coordination through play; children develop communication skills and the ability to think and solve problems; and increase creativity as they role play and use their imagination to find solutions to problems. None of these goals could be met without the proper health of the children in our charge. Therefore, it is imperative for the students to understand and use the food pyramid to plan nutrition activities and to prepare food for the children to eat. In earlier days people who were interested in nutrition would use what was known as the Basic Four which consisted of dairy, meat, breads and cereals and fruits and vegetables. In 1992 the Basic Four was

dropped by the USDA and the food pyramid was adopted. This was to give more latitude to people of different ethnic backgrounds and change the way people looked at what foods should be eaten more than others and how to select from a wider range of options. The shape of the pyramid allows one to visualize those foods.

There are a variety of pyramids. They are as follows: The Food Guide Pyramid from the Department of Agriculture; The Asian Food Pyramid; The Latin American Pyramid; The Mediterranean Pyramid; The Mayo Clinic Healthy Weight Pyramid and The Vegetarian Diet. "The differences in the pyramids reflect personal preference dietary patterns, food availability and cultural patterns" so states the Mayo Clinic Food and Nutrition Center. Serving sizes vary in the pyramids from measuring cup size to choices such as every meal, daily or optional. It is important when studying the pyramid to understand that the pyramid is made for the person and not the person for the pyramid. It is a tool for good health that should adapt to a person's tastes and preferences. For example a child's snack can be sliced apples with peanut butter, or couscous with raisins and nuts. Caregivers should want the children to have a wide variety of tastes for food that is healthy to insure bouncy bodies.

Since peanut butter was mentioned for a snack selection, it's necessary to mention food allergies. One cannot leave the study of foods without considering those who might be allergic to certain food items. According to the Pennsylvania Core Body of Knowledge, health records should be maintained and accurately record information about a child's health to plan and implement individually appropriate care. Such records include documentation of special health and nutritional needs and management plans for conditions such as allergies, asthma, or other physical development, or behavioral conditions that require more care than usual for the typically developing child. According to the Food Allergy and Anaphylaxis Network a food allergy is an "immune system response to a food that the body mistakenly believes is harmful. Once the immune system decides that a particular food is harmful, it creates specific antibodies to it. The next time the individual eats that food, the immune system releases massive amounts of chemicals, including histamine, in order to protect the body. These chemicals trigger a cascade of allergic symptoms." Milk, egg, peanuts, tree nuts, fish, shellfish, soy and wheat are some of the common food allergens. Since snacks and lunch are provided in many daycare plans caregivers should have a little knowledge about these foods. There are many hidden allergens in food such as pastas and processed foods. Caregivers must read food labels and children's health records before giving foods to children.

According to the Pennsylvania Core Body of Knowledge infectious diseases are controlled by following current recommendations about structuring the

environment and following practices that reduce the spread of disease. It is important that the students demonstrate and carry out safe procedures from hazards. Children must be protected from infectious diseases through curbing the transmission of communicable diseases. Since caregivers of toddlers change diapers frequently, a brief study of Hepatitis A can eliminate the spread of this liver disease in the care giving environment. To prevent the spread of this disease, caregivers should wash their hands after using the toilet and before fixing or eating food. Also plastic gloves must be used if one must touch other people's stool and wash their hands afterwards. The New York Health Department has suggested that certain occupational groups such as food service workers, health care workers, child care workers or sewerage workers have not shown an increased risk for hepatitis A but may consider vaccination if they wish to reduce the risk or are in an area of outbreak.

There are many infectious diseases so it is vital for the students to study the common diseases that might be prevalent in daycare. Some familiar contagious diseases are: chickenpox, conjunctivitis, shigellosis, fifth disease, head and body lice, impetigo, ringworm, scabies, thrush and a few others. An outbreak of some of these diseases can cause the health department to close daycares. There are so many other issues that help children to develop into healthy bouncy individuals; these are just the few.

Strategies

I saw one of my co-workers who was off work for six weeks in the grocery store. She informed me that she had the surgery to reduce the space for food intake. Her grandson was with her. I wondered then what values will her grandson receive about eating, being healthy and being active. The Surgeon General stated that in 1999, 13 percent of children aged 6 to 11 years and 14 percent of adolescents aged 12 to 19 years in the United States were overweight. This prevalence has nearly tripled for adolescents in the past two decades. This statement and my observation of children concern me greatly because too many children are overweight and unhealthy. If we can start early enough to shape eating habits before unhealthy habits are rooted, maybe we can start to change this downward spiral. After relaying this story to my students I plan to involve them in a little quiz about food which will consist of ten questions. Some examples of the questions are: What is the most important none food nutrient we need every day? Are donuts and milk a nutritious snack for children? Does a bacon, egg, lettuce and tomato sandwich meets the daily meat requirement for an individual? Such questions this should spark a discussion about food and hook the students into the study of Healthy Minds/Bouncy Bodies. We will cover nutrients, food pyramids, food allergies, communicable diseases, healthy eating environment, how a healthy child looks, and activities for children.

Class activities

The lessons below will include the following standards:

Communications: All students respond orally and in writing to information and ideas gained by reading narrative and informational texts and use the information and ideas to make decisions and solve problems. This will be done by reading the books and articles containing the information on nutrition for the lessons.

All students read and use a variety of methods to make sense of various kinds of complex texts.

Family and Consumer Sciences: All students demonstrate their knowledge of basic child health and child care skills. This will be accomplished by planning, and implementing activities that are developmentally appropriate for the children and studying the different health and nutritional information for children.

Career Education and Work: All students assess how changes in society, technology, government and the economy affect individuals and their careers and require them to continue learning. Since the students are working in an Applied Technology class for employment, they will be performing the duties of a caregiver in a healthy environment.

Wellness and Fitness: All students recognize and demonstrate the ability to apply various dietary guidelines to meet nutritional needs at various stages of life.

All students will demonstrate their knowledge of the benefits associated with physical fitness, good personal health habits, including health promotion and disease prevention. The students will plan and implement large muscle activities. The student will model and practice good hygiene for themselves and with the children.

LESSONS

Lesson 1

The students will explain the terms nutrition, nutritious, and nutrient. The students will be divided into three groups in order to explain the definitions of the terms given. The students will find the definition of each word. They are to give examples of each definition. For example after the word nutrient is found and there is group discussion of the word in order to clarify the meaning, then some examples of nutrients will be presented to the class and the foods in which these nutrients can be found. After each definition is presented, the class will discuss other vitamins and minerals, the foods in which the nutrients are found, benefits to the body, and the importance for the growth of the child.

Lesson 2

Adolescents seem to get involved with food jags and refuse to taste other foods not familiar to them. As a result it is important for them to experience different foods. The students will taste a variety of foods and discuss the benefits of the foods. Each day a variety of foods from a specific food group should be tasted and discussed, for example fruits. A tasting card should be made up listing the different types of fruit to be sampled (keep in mind foods that children will eat that can be used as a snack food). A few suggestions such as ugly fruit, kiwi, quam-quats, fresh pineapple (demonstrate proper cutting), quince, dates, figs, different varieties of apples and pears, and star fruit can be used. This should be done for vegetables, breads and cereals. The meat group should involve meat alternatives as well as non-flesh protein foods. The dairy group should include foods that are unique also, such as goat milk, frozen soy confection, rice milk etc.

Lesson 3 Create an environment for a healthy eater

We will brainstorm what type of tips caregivers should practice in order to build healthy bouncy children. Some things that should be mentioned are: demonstrate healthy eating habits by sitting and eating the nutritionally prepared snacks and lunch; make sure there are plenty of active outdoor and indoor activities; allow the children to help prepare foods and set the table; go on field trips to the grocery store and let the children choose healthy foods and prepare them; make sure conversation is pleasant; have child size utensils and seating; serve water when the child is thirsty; limit processed ready to eat snacks; try new foods more than once or twice; keep adult comments about food dislikes to a minimum; and allow the children to help with clean-up.

Lesson 4

Sometimes in the day care setting there will be children who are allergic to many types of foods. The students will define food allergy, allergen and food intolerance. The students will read selected articles on food allergies and

children. The common food allergens are milk, eggs, peanuts, tree nuts (walnut, cashew, etc.), fish, shellfish, soy and wheat. The students will discuss why it is important to be aware of this information? How do we find out if a child is allergic? What to do in case of a reaction? The students will discover hidden sources of food allergens. The school nurse should be invited in as a resource person.

Lesson 5 –Food pyramid/serving size

Jodie Shield says that early diets strongly influence children, whose food preferences are generally shaped between ages 2 and 3. Therefore the childcare students must be able to transfer knowledge to activities for toddlers and preschoolers. In order to do this the students will define a pyramid so that they understand that the base of the pyramid is a foundation and thus more of that particular food is to be eaten. After that we will view other types of food pyramids and compare them. Then the students will break into groups and choose which pyramid the group will use and the class will vote on the pyramid which will be studied. Students will discover the importance of vitamins, minerals, proteins, water and other foods when discussing the types of foods located in the pyramid. This will be done by lecture, discussion and video. Finally each group will design a poster to use in the classroom that is child friendly. The posters will be displayed at the child's level to illustrate nutrition which hopefully will lead to lifelong good eating habit.

Lesson 6

It is necessary for caregivers to plan and serve nutritious foods during the course of the day. The students will plan a week's menu for the children. After a discussion of taste, variety, texture, color of food, serving sizes, cost, and eating schedule (breakfast, morning snack, lunch, and afternoon snack depending on the type of day care service required), the students will make nutritious snacks for the daycare.

Lesson 7

Caregivers should be able to identify a healthy child. In groups the students will make a poster of what a healthy child or an unhealthy child looks like. Some things to look for are face—flushed, dry skin, pale, cool; eyes—red, watery, crusty, glassy, bright; nose—runny, red, crusty, clean; skin—rash, bumps, sore spots, clear; pain—ear, head, chest, stomach, joint, throat, none; activity level—sleepy, sluggish, whining, lethargic, energetic; appetite—change in eating, prefer liquids, picks at food, eat little, and hungry at mealtime with healthy appetite. Using the above terms find pictures to represent the words to help with the poster. A discussion about the child's behavior should also take place.

Lesson 8

Students will read articles on communicable diseases and their effect on children. A list of diseases that are common in the daycare setting will be made. The student will choose a disease read about it and report back to the class the following information: what is the disease; how is it spread; what are the symptoms; what is the incubation period and the control measures. The student must have three references.

Lesson 9

In order for the child to strengthen, tone, and control their muscles, physical exercise is needed in any good daycare. Using activity books for toddlers and preschoolers, the students will plan and implement large and small muscle activities.

Annotated Bibliography

5 A Day. 24 Sept. 2003. Nutrition & Physical Activity.

<http://www.cec.gov/nccdphp/dnpa/5ADay/recipes/index.htm>.

Food pyramids and activities to do with students

"A Kid Pleasin' Recipe." National Pork Producers Council: American Academy of Pediatrics, 1999.

Activities to do with children

Communicable Disease Fact Sheet. New York Department of Health. 5 May 2004

<http://www.health.state.ny.us/nysdoh/...>.

Lists facts about common communicable diseases

Dietz, M.D., PH.D., William H., and Loraine Stern, M.D.. Guide to Your Child's Nutrition. New York: Villard Books, 1999.

This book gives parents all the information and strategies they need to meet the dietary needs of children from birth through adolescence.

Diet for a Small Planet. New York: Ballantine Books, 1982.

features: simple rules for a healthy diet, food combinations that make protein-rich meals without meat, recipes

Fast Food Nation. New York: Perennial, 2002.

This book has unsettling truths about the alliance between fast foods and Hollywood to the changes in food production, popular culture and real estate.

Food and Nutrition Information Center. May 2001. National Agricultural Library/USDA. 21 May 2004

<http://www.nal.usda.gov/fnic/service/learnpub.htm>.

Food Pyramid: The shape of a healthy diet. MayoClinic.com. 6 Aug. 2004

<http://www.mayoclinic.com/invoke.cfm?objectid=357FAABB-312F-414A-A8D6401C15E>.

Food Pyramids. Harvard School of Public Health. 6 June 2004

<http://www.hsph.harvard.edu/nutritionsource/pyramids.html>.

Guide to Your Child's Allergies and Asthma. New York: Villard, 2000.

A vital guide for parents whose children suffer from allergies and asthma.

Healthy Children, Healthy Choices. 13 Nov. 2003. National Center for Chronic Disease Prevention and Health Promotion. 6 June 2004

<<http://www.cdc.gov/nccdphp/dnpa/tips/healthy-children.htm>>.

Ideas for parents to help children make healthy life choices.

Home Page. 2004. Geerber Products Company. 6 June 2004

<<http://www.eatright.org/Public/NutritionInformation/92-11797.cfm>>.

Tips for feeding infants and toddlers under two years

Hepatitis. 21 May 2004 <<http://encarta.msn.com/encyclopedia-761558249/Hepatitis.html#p11>>.

Gives background about hepatitis

Milk, Eggs and Peanuts: Food Allergies in Children. 1 Oct. 1997. American Family Physician. 21 May 2004

<<http://www.aafp.org/afp/971001ap/anderson.html>>.

This article informs the reader of different types of food allergies.

Nutrition Education: Let the Games Begin! Jan. 2003. Nutrition Spotlight.

<<http://www.oznet.ksu.edu/humannutrition/spotlight>>.

Information on the importance of games in the classroom and games to play Pennsylvania. Allegheny County Health Department.

Guide to Infectious Diseases for Schools and Day Care Centers. Nov. 1993.

Information concerning infectious diseases

Pennsylvania. Pennsylvania Pathways Professional Development for Child Caregivers.

Pennsylvania Core Body of Knowledge. N.p.: Pennsylvania Pathways, 2002.

Resources to train child care givers in different developmental areas

Preschool program reduces antisocial behavior. 3 Nov. 2000. Health central. 21 May 2004

<<http://www.healthcentral.com/news/newsfulltext.cfm/ID=43875&src=nl>>.

Article concerning activities that will help to eliminate anti social behavior

"Raise A Healthy Eater." Parents Mar. 2004: 153-155.

Advice to parents about making nutrition a joyful experience

Recipes for Good Health and A Healthy Living Lifestyle For A Busy Family.

2003. <<http://www.topebooksgalaxy.com/health.html>>.

Food pyramids

Supermarket Guru. 15 Nov. 2003.

<<http://www.supermarketguru.com/page.cfm/4291>>.

Study of poor eating habits in infants and toddlers

Study: Toddlers eat too much junk food.

<<http://www.cnn.com/2003/HEALTH/diet.fitness/10/25/toddler.junkfood.ap/>>.

Suggestions for instilling good eating habits in children

The Canadian Food 'Rainbow'. 1 Oct. 2003. Health Canada's office of Nutrition. 6 June 2004 <<http://www.udoerasmus.com/pyramid/pyr-canadian.htm>>.

Food pyramids

The Food Allergy & Anaphylaxis Network. 29 June 2004

<<http://www.foodallergy.org/allergens.html>>.

Reading on Allergies and food allergens

"The Truth about Sugar." Parents June 2004: 141.

Sugar is not the culprit that it is alleged to be

Viral Hepatitis A. National Center for Infectious Diseases. 21 May 2004

<<http://www.cdc.gov/ncidod/diseases/hepatitis/a/fact.htm>>.

Contagious diseases

What I need to know about Hepatitis A. National Digestive Diseases Information Clearinghouse (NDDIC). 21 May 2004

<<http://digestive.niddk.nih.gov/ddiseases/pubs/hepa-ez/indes.htm>>.

Facts about Hepatitis

Why Drinking Water Is the Way to Go. Kidshealth. 25 May 2004

<<http://www.kidshealth.org/kid/stay-healthy/food/water.html>>.

Information and fun ideas about water for children