

Eating Kid Healthy and Exercising

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Overview

Children are neither eating right nor are they exercising. Various diseases are affecting them at an early age. This unit is created to provide educators with the necessary tools to make children aware of various diseases that are caused by an improper diet and an unhealthy lifestyle. The students will learn about the causes and symptoms of various diseases. They will know that foods are good for them and will keep their bodies healthy. The students will learn how to use a food pyramid and utilize it to create healthy meal plans. They will have hands on experience choosing and eating healthy foods. They will learn how to maintain a healthy lifestyle through exercise. Students will engage in a vigorous exercise program. The students will create a vocabulary list of words and definitions that will be included in this unit. The students will develop smart eating habits. They will have a better understanding of diseases related to childhood obesity. They will be able to prevent occurrence of these diseases in their lives and the lives of others. They will also have opportunities to teach their family members to stay healthy. The students will understand the Body Mass Index. The students will work on home assignments with their parents to have parents aware of the importance of a healthy diet and lifestyle. Students will be able to shop for healthy foods on field trips to specialty grocery stores and to see the options they have for healthy living. They will learn a variety of exercises they can do at home in a safe environment.

Rationale

Obesity has dramatically increased worldwide during the last half century. The prevalence obesity-related diseases such as hypertension and type 2-diabetes are at rising rates comparable to that of obesity.

The Center for Disease Control and Prevention defines the term overweight as a childhood body mass index (BMI) greater than 95th percentile, which is an indicator of excessive weight for height. (4) This is a measure indicating obesity in children and adults. (Obesity in Childhood and Adolescence Vol. 1) A BMI value of 25 to 30 defines overweight or pre obese stature. The BMI index increases significantly at the age of one, decreases at the ages 6-7, then increases again after age 7. BMI value 30-35 is considered moderately obese, BMI value 35-40 is severely obese and BMI value over 40 is morbidly obese.

A new prescription for childhood obesity shows how parents can use antioxidants and phytonutrients for weight loss and reduction of fat. Also how to have kids eat foods that are rich in antioxidants to give them energy. This is to not place children on diets but just let them eat foods they will enjoy.(Billy C. Johnson 2008)

Parents should be concerned about their child's weight. They should be concerned if their weight is well above their normal weight for their age. Parents should periodically have doctors calculate body mass index making sure it is in the normal range.

Prevention

Prevention of obesity begins in early life of children. Children should establish healthy eating and active behavior.

Evidence supports that the following actions help children to do this:

1. limit consumption of sugar-sweetened beverages
2. encourage consumption of diets with recommended quantities of fruits and vegetables, the current recommendations from the US Department of Agriculture (USDA) with serving sizes varying with age.
3. limit television and other screen time (the American Academy of Pediatrics recommends no television viewing before 2 years of age and therefore no more than 2 hours of television viewing per day), by allowing a maximum of 2 hours of screen time per day and removing televisions and other screens from the children's primary sleeping area (although a relationship between obesity and screen time other than television viewing, such as computer games, has not been established, limitation of all screen time other than television viewing may promote more calorie expenditure)
4. eat breakfast daily
5. limit eating out at restaurants, particularly fast food restaurants (frequent patronage of fast food restaurants may be a risk factor for obesity in children, and families should also limit meals at other kinds of restaurants that serve large portions of energy-dense foods)

6. encourage family meals where parents and children eat together (family meals are associated with a higher-quality diet and with lower obesity prevalence, as well as with other psychosocial benefits) and
7. limit portion size (the USDA provides recommendations about portions, which may differ from serving sizes on nutrition labels, and a product package may not contain 1 serving) Journal of the American Academy of Pediatrics, Vol.120 Supplement December 2007, pp.S164-S192

Children should eat a calcium rich diet. They should eat a diet high in fiber. Children should eat a diet with balanced macronutrients (energy from fat, carbohydrates, and protein in proportion for their age and as recommended by Dietary Reference Intakes. Also, mothers should be encouraged to breast feed to 6 months of age and maintain breast feeding after introducing solid food starting at 12 months of age, in accordance with the recommendations of the American Academy of Pediatrics. Children should engage in vigorous physical activity for at least 60 minutes everyday and limit their consumption of energy-dense foods. (Journal of the American Academy of Pediatrics, Vol. 120 Supplement December 2007, pp.s164-S192)

Their BMI should be tracked by measuring height and weight periodically. There should be information, feedback, intervention, counseling, and guidance on obesity prevention given to children, their parents and other caregivers. These preventive services will act as role models for healthful eating and exercise and be advocates for childhood obesity prevention in both schools and communities (Institute of Medicine, 2005).

Children should find the correct balance between the food and physical activity - being active for 60-90 minutes a day for sustaining weight loss, being active for 60 minutes everyday for weight maintenance and, in both cases, limiting fats, sugars, and salt. Children should understand that "good fat" sources come from fish, nuts, and vegetable oils, but that they should limit fats from margarine, butter, shortening and lard. They should check Nutrition Facts Labels in order not to consume too much trans fat, saturated fats or sodium and food labels will also help them in choosing foods and drinks low in sugar. Good nutrition is the bedrock of good health. To have healthy eating habits for kids:

- have regular family meals that involve no television, but interact with the children instead
- have children going food shopping and preparing meals
- provide a choice of beverages like milk, bottled water, herbal tea, or various natural fruit juices
- let children choose healthy entrees for meals

When a child reaches ages 7-10 years old, their diet should reflect the new food guide pyramid for each adult in order to maintain healthy eating habits.

Children should eat yogurt, dark green vegetables (collard greens, spinach, turnip greens, and kale), milk, cheese, sesame seeds, pudding, tofu, canned, boneless salmon, sardines, cottage cheese, bok choy, supplements, especially calcium for strong bones, and less soda. Some practical suggestions for kids to stay slim are a variety of healthy snacks like whole wheat cereals, different breads, fresh fruits and fat free yogurt. Also eating "junk food" cooked at home such as lean hamburgers with whole wheat rolls and plenty of salad, chips made at home using a

light cooking spray and cooked in the oven, pizza made with low fat toppings, fizzy drinks made using one third fruit juice with two thirds fizzy water, ice pops made using plastic molds and fruit juice without sugar, and making home made trail mix. Do not fuss at kids when they eat junk food, just talk about it and just teach children about healthy eating.

Studies have shown that children who were obese at childhood, and remained obese as an adult, became obese at early childhood. A study called FeLLongitudinal showed that if at age 5 you were obese, then it was likely you would be an obese adult. This is the age when prevention measures can begin to decrease the chances of children becoming obese. School programs would also decrease children's chances of being obese by promoting Student activities and resources. Examples of school activities that can help include making a map of the school playground and hallways, having daily stretch exercises using televisions that are located in the classrooms, using pedometers, having race events for students vs. teachers, providing nutritious snacks to children and training for teachers on physical activities and healthy snacks. Schools having workout equipment for the teachers also helps by getting the teachers exercising (Kansas State Dept of Education, 2004: Greg Kalina, Coordinator of the Goddard School District Nutrition Program, personal communication).

A program called ACTIVATE, a program to help families have a healthy lifestyle and prevent obesity, was developed by the American Academy of Family Physicians, American College of Sports Medicine, American Dietetic Association (ADA), International Food Information Council International Life Science Institute Center for Health Promotion, and National Recreation and Parks Association. (31) The website Kidnetic.com, which is a kid based website, is able to find out how children felt about exercises, staying healthy, and food. This is a tool that parents need to use as a way to address the obesity problem and as a way to help encourage children to stay healthy.

Skipping breakfast is a problem. I have seen students in my own class who are hungry by 10:00 am and begin to eat their lunch. Late night snacks are not good. Children should be finished eating by 7:00 pm. This may be why children are skipping breakfast. Children are staying up late and snacking a lot at night, possibly due to mothers working late at night. Children whose Mothers who do not work at night usually eat a good breakfast (Crepinsek & Burstein). Girls who are obese are usually skipping breakfast more than boys (Rampersaud). One way to prevent obesity is to have children eat a breakfast of high fiber cereal and low fat milk regularly. Children over two years old can also have six fluid ounces of fruit juice with no sugar or fruit at breakfast. Children have other choices to eat like grain toast, bagels with peanut butter, fruit, nut and fruit mixture, and dried fruit.

Obese children have limited treatment options because of their lifestyle. Some children face some type of radical solution that could be successful in their adult life. There are several tests that can be given to try and prevent obesity.

Tests are given to find out about eating disorders. One test is the Eating Disorder Inventory. This test is administered to students ages 11 and older to assess the psychological characteristics common with eating disorders (Garner, Olmsted, and Polivy). Another test, The Children's Eating

Attitude Test (CHEAT) a children's version of EAT (Garner and Garfinkel), a questionnaire evaluating thoughts, symptoms, attitudes, and behaviors of eating disorders (Maloney, McGuire and Daniels).

Healthy Foods and Eating Patterns

Poor nutrition is found in children in low economic areas where healthy foods are not introduced to them at home. Most children don't have enough education on healthy eating and exercise. They see commercials for junk foods, fast foods, and new video games. School meals are not nutritious and classroom parties have lots of junk food. Also do children have any knowledge of the importance of nutrients, minerals, and vitamins that are required for a well balanced diet? Poor food choices for breakfast are chips, soda, cookies or cake.

Parents, teachers and caregivers can encourage healthy habits by buying and serving more fruits and vegetables and letting your child choose them. Also by offering healthy snacks more often at snack time. Children can eat fast food less often and choose healthier options such as salads with low fat dressing or small sandwiches without cheese or mayonnaise. Parents can plan healthy meals together. Portion sizes can be controlled at family dinner time by filling each plate with proper portion instead of putting out serving bowls or platters and letting children help themselves. Also by discouraging fast foods and keeping sweetened beverages and high calorie snack foods out of the house. Have parents be the food role model at home by maintaining healthy eating habits (<http://www.health.gov/dietary/guidelines/dga>)

Dietary modification is important especially for children who are already overweight. Some suggestions are to limit specific food that are high in saturated fat and high in sugar in order to try and eliminate some calories from the diet. Limit the use of sweetened beverages that have added sugar such as soft drinks and fruit juices. Eat meals together with the family. Teach children how to read food labels and make healthy eating choices. Have children reduce meals that are eaten outside of the home. Parents can replace high calorie snacks with a nutritious low calorie snack by using fruits and vegetables.

An alternative dietary intervention called "traffic light" or "stoplight" is used for weight management and has good outcomes. The "stop light" diet is an eating plan for elementary students. The foods are grouped into green foods, yellow foods, and red foods. Green foods are low calorie, high fiber and may be consumed in unlimited quantities. Yellow foods should be limited in their daily intake. These foods provide reduced nutrient density per calorie. Red foods are high in fat and simple sugars. The foods should be eaten only periodically (Childhood and Adolescent Overweight The Health Professional's Guide to Identification, Treatment, and Prevention by Mary Catherine Mullen).

We should consume at least five portions of fruits and vegetables per day, except potatoes. These foods have been shown to be protective against childhood overweight and associated health problems (Lin and Morrison).

Some simple basic ideas for sound nutrition are to know what is in the food you eat, read labels, check ingredients in the food, follow safety rules and base diet on simple fresh foods with

about one-quarter of carbohydrate provided from foods that provide carbohydrates from whole grain and the rest from fruits and vegetables. Prepare most of your own foods and limit eating out to special occasions. Eat when you are hungry and stop when you are full. Realistically eat foods that are healthy and enjoyable. Short term actions that supports overweight children include teaching children about experiencing healthy eating that is satisfying and nourishing, hence allowing children to achieve and maintain their healthy weight (Handbook of Pediatric and Adolescent Obesity Treatment)

Physical Activity for Children

Children should have at least 60 minutes of activity each day. Children now have less physical education available in schools, and so children have less opportunities to learn and use motor skills (running, jumping, and skipping) that are involved in most activities. Hence opportunities to be successful in sports and enjoy them are limited. This could result in less overall activity which could, in turn, promote weight gain and less success in sports. This could continue into adult life. Health benefits that are gained by daily physical activity could reduce body weight and other chronic diseases. Also, current recommendations are for children to have 60 minutes of moderate to vigorous activity every day (Biddle).

Schools should expand physical activities in school using sports program clubs, programs, and lessons for all children. Some examples could be socialized recess where children can participate in jump rope, ball games, relay races, sports and dancing. They could do a different activity each day. Schools should promote activities such as a bicycle club, track team, ice hockey club, and a walking club.

There has been a decline in both schools and in homes in terms of the amount of physical activity provided for children. Schools cannot solve the problem of obesity by themselves. However, there should be more regular physical activity in schools because the percentage of the day is spent in schools. It is estimated that only 6.8 percent of elementary students have daily physical education classes for a year. A poll of parents of children aged 9 to 13 years old showed that 61.5 percent of children that age were not in any organized physical activities after school and that 22.6 percent did not participate in anynon- organized physical activity after school. This shows what is happening both in and out of school.

Teaching students to maintain lifelong habits of physical activity like aerobics and strength training, along with walking and dancing, could help students. The American Heart Association reported on the status of physical education in the United States and Washington, D.C. in the areas of:

- time requirements
- exemptions waivers, and subtraction
- class size
- standard assessment and program accountability
- physical education, teacher certification
- national board certification in physical education
- whether there is a state physical education
- whether the state requires collection of body mass index (BMI) data.(American Heart Association)

Comment [J1]: Not sure if this is necessary as it doesn't explain anything or lead to anything

Consequences of Obesity

Obesity leads to higher medical costs when borne by third parties (the government) like Medicaid and Medicare.

The leading diseases or health problems associated with obesity in childhood are the following;

Carbohydrate intolerance

Coronary heart disease

Diabetes

Mellitus

Hyperlipidemia

Increases total cholesterol and triglycerides, low heat tolerance

Sleep apnea

Osteoarthritis respiratory infections

Elevated blood pressure

Gall bladder disease

Colon cancer

Atherosclerosis

Colorectal cancer

Respiratory disease

Orthopedic problems

Dental problems Also the psychosocial costs related to depression, poor self-esteem, suicide, and poor body image. There are also factors to consider for obese adolescents including low self-esteem, peer pressure and poor peer relations.

Objectives

Students will understand what obesity is and why it is important to have an action plan. Students will learn the various food choices and how to utilize them when preparing a meal. Students will be aware of food labels, be able to understand the terminology of the information and how to use it when making healthy food choices. Students will experience the preparation of healthy foods that can be used as snacks. Students will understand that portions are important when eating a meal. Students will effectively use a food pyramid and understand its purpose.

This unit will be used in class to enable students who are disadvantaged the opportunity to go and see various places that grow and sell healthy foods. The students will work with their parents, exposing them to various ways of preparing healthy menus, and engage in various exercises and activities in a fun way. They will be able to work together and understand healthy food choices and exercising. The students will learn vocabulary related to the topic for better understanding. The students will learn about the various diseases related to obesity. The students will learn about various dances and activities they can do after school.

Strategies

Students will be required to write a daily log. The log will consist of the foods the student consumed during that day so they can see what they are eating and is this healthy for them to eat. They will write anything important that they learn and explain how will they utilize it in their

life. Students will recognize the food pyramid and foods listed from each group. They will plan a well balanced meal for a week including snacks and exercise. The students will learn what a serving size is. They will construct a meal using drawings on a paper plate. The students will be able to recognize various fruits and vegetables along with healthy snacks. The students will construct a vocabulary journal of words used in this unit. Students will have weekly Kid/Parent assignments to do together and this will inform the parents about the unit. Students will write to various managers of produce stores requesting a visit and tour of their facilities to be exposed to the healthy food choices available there. They will also correspond with nurse practitioners, fitness instructor, pediatricians, health practitioners and exercise instructors to share information on specific topics. Students will learn and perform various exercises and dances. They will learn a routine and perform them for their peers. The students will locate advertisements for foods and have an open discussion about them. Students will be assessed periodically on the information taught in the unit. They will do research on a topic chosen by the student and present and oral and written presentation to their peers.

Classroom Activities

Lesson One: Introducing the Food Pyramid

Objectives

The students will:

- Understand and discuss new vocabulary and definitions
- Understand and correctly use the food pyramid
- Design a healthy meal using the food pyramid
- Name food items belonging in each food group
- Read various books on meal planning
- Design a portion plate using food pictures
- Write a story about the lesson

Content

PA Standards

Literacy

- 1.1 E Learning to Read Independently
- 1.13F Reading, Analyzing, and Interpreting Literature
- 1.6A Speaking and Listening
- 1.8B Research

Health

- 1.2 B Healthful Living
- 10.13 Concepts of Health

Mathematics

- 2.1 Numbers Number systems and Number Relationship

Materials

Paper Plates, food magazine pictures, glue, and scissors for food portion plate, food pyramid chart

Activities

Read the books titled *Berenstain Bears* and *Too Much Junk Food*. Show pictures to students and discuss them. Ask student what the author's purpose is. Review the vocabulary words and definitions with them and have students write vocabulary words in their journal book. Introduce the Food pyramid to the students. Introduce each food group and associated serving sizes. Give out food cards and have students place the foods on the pyramid. Play game called Thumbs Up-Thumbs Down where the students have to identify the healthy foods and beverages. Have students do a student survey on favorite foods and beverages and have them construct a bar graph on the results from the survey. Discuss the results. Homework is Kid/Parent Assignment which involves the student and parent. The assignment is to make a three day menu for breakfast, A.M. snack, lunch, P.M. snack, dinner, and evening snack. They will prepare one day of meals and write what they experienced. Students will cut food portion pictures of food and glue them on paper plates. Students will have an open discussion on their plates. Students will do an oral evaluation on this lesson.

Lesson Two: Let's Dance

Objectives

Students will:

- Develop a dance and exercise vocabulary
- Respond to dance or exercise directions
- Learn physical activities for daily use
- Learn why it is important to exercise
- Write a persuasive piece about why it important to exercise

Content

PA Standards

- 101.3 Concepts of Health
- 1.4.5C Types of Writing

Materials:

The materials for these lessons are: "Yoga for Kids" DVD for children to experience, "Go Chicken Fat Go" CD for children to do a short exercise warm up activity to before exercising, "Electric Slide, Cha-Cha Slide, Mississippi Shuffle" CD for 'Let's Dance' time, relay race equipment such as balls, cones, hockey sticks and stop watches, Kids Sports DVD for activities that students can participation in either after school, or in school, DVD player, television, "Tae Bo" DVD, healthy snacks and drinks, journals for vocabulary, writing journals and a bowling alley (if possible).

Activity

Day 1

Introduce students to “Go Chicken Fat Go” CD. Play the activity twice so the students can become familiar with the routine. Have the students do the routine. Ask students how they felt and list ways they would benefit from the work out. Then present the “Tao Bo” DVD and have the students follow the routine for beginners. Then have a discussion, along with a healthy beverage, about their workout. Kid/ Parent Assignment: Have student and parent try the workout for 3 days and have them write about their experience with their parent to share with the class.

Day 2

Introduce students to “Kid Yoga” DVD. Introduce the word Yoga to the students and have them define the word. Have them to write in their vocabulary journal new words and definitions. Have the students learn the Yoga moves and ask for feedback. Kid/Parent Assignment: Have students write a paragraph on their Yoga experience and have them create questions to be answered by the teacher. They will show some moves they learned in class to their parent.

Days 3, 4, and 5

The students will learn a variety of line dances. The students will learn the “Electric Slide”. This is an easy dance they can do at recess, gym, party, or just for fun. The next dance is the “Cha-Cha Slide” which is another social dance without a partner. Then they will learn the “Mississippi Slide”. They will be given a survey as to their favorite dance and why. Kid/Parent Assignment is students will teach parents these dances and write a paragraph on their experience. They will ask their parent what their favorite dance was.

Lesson Three: A-Z Vegetables, Fruits and Healthy Snacks and Beverages

This is a 21 week lesson that can be used throughout the year.

Objectives

Students will;

- Students will become familiar with various vegetables, fruits, healthy snacks, and beverages
- Students will learn background information on the food item
- They will construct a notebook on food items
- Student will have weekly quizzes and projects
- Students will have a craft project to do after weekly lesson and formulate a craft notebook.
- Students will go on field trips

PA Standards

Literacy

- 1.1E Learning to Read Independently

Health

- 10.2.3 Concepts of Health
- 10.2.3 Healthful Living

Agriculture

- 4.4.4.Agriculture and Society

Materials

Various vegetables, fruits, healthy snacks, and beverages, blender, knife, hand sanitizer, napkins, nutritional worksheets on foods including nutritional value, ways to prepare food or beverages and why this food or beverage is important to eat or drink. Also, vocabulary and journal notebooks, , art supplies such as markers, glue sticks crayons, wooden art sticks, colored paper, scissors, seeds writing paper for field trips, chart paper, food articles, recipes, an insulated bag to keep food items cool and fresh and color pictures of food and beverage items.

Activity

Each week the students choose an alphabet letter and teacher chooses a corresponding food or beverage item. The teacher gives a verbal clue to students to see if they can guess the item. When the correct response is given the teacher exposes the item. The students sample the item and give oral comments. The teacher gives a history of the food item or beverage, ways to prepare it, its nutritional value, and the health benefits of the item. The students will do an art activity or project with the food item and beverage. Once a month students will compile a letter to visit a produce store or farm, invite a health practitioner, nurse, doctor or exercise trainer to come in so that they can ask them questions and learn about being healthy.

PA Standards

Literacy

- 1.1 E Learning to Read Independently
- 1.13F Reading, Analyzing, and Interpreting Literature
- 1.6A Speaking and Listening
- 1.8B Research

Health

- 1.2 B Healthful Living
- 10.13 Concepts of Health

Mathematics

- 2.1 Numbers Number systems and Number Relationship

Content

PA Standards

- 101.3 Concepts of Health
- 1.4.5C Types of Writing

Literacy

- 1.1E Learning to Read Independently

Health

- 10.2.3 Concepts of Health
- 10.2.3 Healthful Living

Agriculture

- 4.4.4.Agriculture and Society

Annotated Bibliography for Teachers

Baranowski, T., Baranowski, J., Cullen, K.W, Honess-Morreale, L., Islam,N., and Marsh, T., de Moor, C. "Squire's Quest Dietary Outcome Evaluation of a Multimedia Game.", *American Journal of Preventive Med.* 24 pgs: 52-61

This study uses games to show children how they can take care of their bodies and maintain good health.

Baranowski et al., 2003; Cullen et al, 2005 Big Red Frog 2006 Body Mechanics: Putting a Little Superhero in All of Us [On line] Available <<<http://www.bodymechanics.com>>> [accessed July 27, 2006]

This article shows ways children can still play games and be healthy. The children can make recipes that they can eat and share with their parents and caregivers.

Barlow, Sarah, E., *Expert Committee Recommendations Regarding the Prevention, Assessment, and Treatment of Child and Adolescent Overweight and Obesity Summary Report*, Journal of the American Academy of Pediatrics Vol. 120 Supplement, December 2007, pp. S164-S192

The article reviews the treatment of obesity in children. It talks about early treatment of obesity and providing information for parents, caregivers and the community.

Center for Disease Control and Prevention's Guidelines for school and community Programs to Promote Lifelong Physical Activity, 1977

This gives ways for children to stay healthy and control their diet through school meals, physical education classes and community events to keep parents aware of the issues of childhood obesity.

Dehghan, M., Akhtar, Danesh, N., and Merchant 2005 *Childhood obesity, prevalence, and prevention*, Nutrition Journal, 4, 24-31

This article suggests that foods that are not nutritional be given a tax to discourage consumer from purchasing the foods.

Fitzgerald, Hiram, E., Mousouli, V., Davies, H., Dele, eds. *Obesity in Childhood and Adolescence*. Vol. 1 Praeger Perspectives, London 2008

This book gives good information about the obesity problems and how to prevent them. They say that children have lots of sedentary time watching television and playing video games. They also state that Chinese food is high in fat, sugar, and sodium, but people think it is healthier than McDonalds. Also that children drink more soft drinks than milk, compared to twenty years

ago. Diseases of adults are now occurring in children like sleep apnea, type 2-diabetes and metabolic syndrome.

Fitzgerald, Hiram E, Mousouli, Vasiliki, Davies, H Del, and Fitzgerald, Hiram, E, *Obesity in Childhood and Adolescence Vol.2, Praeger Perspectives, London, 2008*

Children who have behavior problems are obese. Some problems of obesity are children not eating breakfast and food insufficiency. Children are targets of online advertisements. Parents should be role models for their children. One way is to turn off the television and talk to your child.

Jago, R. Baranowski, T., Watson, K., Baranowski, J.L., Nicklas, T. and Zakeri, T.F. 2004 *Relationships Between Maternal and Child Cardiovascular Risk Factors*. Archives of Pediatric and Adolescent Medicine 158,1125-1131

This article talks about the preventive ways parents can prevent any cardio risks occurring in children and ways the mother can control it.

Kaplan, Jeffrey, P., Liverman, Cathryn, T., Kraak, Vivica, I., Wisham, Shannon, L., eds. *Progress in Preventing Childhood Obesity*. National Academics Press, Washington, D.C. 2007

This book shares great information on preventing obesity in children. It states that restaurants should show calories in entrees, provide fruit options for desserts without sugar, decrease salt in foods and package foods in smaller portions. Blue Cross Blue Shield in Massachusetts started a youth wellness program which gives children information and activities to help prevent obesity. It also suggests that school menus should change to fresh and dried fruits and fresh vegetables.

Kaplan, Jeffrey, P., Liverman, Cathryn, T., and Kraak, Vivica, I., eds. *Preventing Childhood Obesity Health in the Balance*. National Academy Press, Washington, D.C. 2005

This book shares information about school meals. It states that school meals should be healthy. Health costs are rising because of obesity and disease. It also gives information about portions children should eat. It says that WIC programs have healthful food choices so children can have healthy weight. This book gives great insight for prevention of childhood obesity.

Krasnegor, Norman, A., Grave, Gilman, D., and Kretchmer, Norman., *Childhood Obesity A Biobehavioral Perspective*. The Telford Press, New Jersey 1988

This book addresses the genetic factors that are related to childhood obesity. There are studies that show what happens when parents get involved with their obese child and what they should do.

LeBow, Michael, D., Phd., *Child Obesity A New Frontier of Behavior Therapy*. Springer Publishing Company, Inc. New York 1984

This book answers the question why a child becomes fat. It has information to give you a better understanding on working with children who are obese. They talk about therapy for obese as a solution, along with other solutions for obese children.

Miller, Jennifer., Rosenbloom, Arlan., and Silverstein, Janet. *Childhood Obesity The Journal of Clinical Endocrinology*. 2004

This article is about BMI (body mass index). It states what is a normal BMI is and what to do if a child has a high BMI and how to control it.

O'Donohue, William, T., Moore, Brie., and A., Scott, Barbara, J., eds *Handbook of Pediatric and Adolescent Obesity Treatment*. Taylor and Francis Group. LLC New York 2008

This book talks about the dietary fat in diets that could be a risk for children. They discuss diseases that children can suffer from due to their weight. It explains why it is important for children to participate in organized activities after school.

Parizkova, Jana, Hills, Andrew. *Childhood Obesity Prevention and Treatment* .CRC Press. Florida. 2001

The book emphasis activities for obese children in order that they can out grow it. This book has studies about the educational component that effect obese children. This book compares obese children around the world.

Annotated Bibliography for Children

West, Linda, T., *Too Much*. Little Britches Children Book. 2008

This book is written about today's children and eating a healthy diet. This book is written in rhyme.

Johnson, Susan., Mellin, Laurel. *Just for Kids*, Balboa Publishing Co. 2002

A prevention book that has good ideas about childhood obesity, written for kids.

Nix, Kimberly. *Simple Solutions to help fight Childhood Obesity* .Asta Publishing. 2008

Simple Solutions to help fight childhood obesity.

Hardouin, Benny, *Cumulus the Puffy Cloud*. Benny Hardouin. 1998

A story about dealing with childhood obesity.

Owens, Peter. *Teens Health and Obesity Survey Major Issues and Trends*. Mason Crest Publishers 2005

The book is written so that teens can understand what obesity is and how to deal with weight problems

Olsen, Judith, K., *I Can Hardly Wait*, Outskirt press 2006

A book about a boy who thinks that being overweight is not a problem

Forde, Catherine. *Fat Boy Swims*. Laurel Leaf Publishers, 2006

He's the largest boy in town. He trades his skill to get swimming lessons.

Berenstain, Stan, Jan, *The Berenstain Bears and Too Much Junk Food*, Random House Books For Young Readers, 1985

This book is about how a family saves two obese cubs.

Websites for Children

www.pecentral.org/websites/kidsites.html

www.kidshealth.org

www.peclogit.org/logit.asp

www.getactivestayactive.com

<http://kids.niehs.nih.gov/weight.htm>

<http://www.grandmashealthykids.club.com>