Diet, Media Representation, and Public Health Policy (rewrite)

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**Nutrition**

Public health nutrition is a sub-field that encompasses many aspects of nutrition including food borne illness, starvation, marasmus (overall protein-energy deficiency), kwashiorkor (relative protein-energy deficiency, or malnutrition from the lack of a specific micro-nutrients (e.g. calcium, iron, folic acid)) (12). Although these problems are devastatingly common in some Third World countries, in America the more dominant nutrition problems are those over that involve either under nutrition (anorexia) or over nutrition (obesity).

America’s nutrition problems have developed due to the public’s tendencies to push to one of the two extremes of an eating pattern which is to either eat too much or too little. As a result not knowing how to get the proper vitamins and cannot find a middle ground between the two extremes. Many Americans do not realize the health implications that over or under eating can cause for a person and for that reason many people tend to ignore most of the warnings that are given to them about not having a proper diet. This leads to many people having severe problems when they are older such as heart disease, diabetes, and high blood pressure for those suffering from obesity, and fatigue, mal-nutrition, and emotional problems for those suffering from anorexia (17, 20). Moreover, there are so many different food products on the market and consumers tend to go for taste when choosing food rather than the health content and that also has lead to a major increase in nutrition related problems.

Additionally, exercise is another aspect of a person’s well being that must be done properly and done correctly. Exercising is a good way to help keep one’s body in shape and help prevent many of the risks and problems that may arise due to lack of inactivity and over-eating. Though exercising should be a good way to take care of one’s body many people do not understand the proper ways of working out and as a result sometime causing more harm to their body than good. The problems occur by either over exerting their bodies in intense workouts or misusing the equipment and as result injuring themselves (21). Therefore, it is important for people to realize that even though exercising is a good way to keep in shape, there are proper ways to do the activities and be healthy and safe.

The goal of this chapter is to examine how obesity and anorexia have played a role in poor nutrition in the US and how people can learn how to have a proper diet, be healthy, and keep in shape.
Obesity

With more than half of adult Americans currently overweight or obese it is no surprise that the Surgeon General and other public health experts are calling American obesity an epidemic. Poor diet is one of the contributing factors in five out of the ten top killers in America: coronary heart disease, stroke, diabetes, cancer, and liver cirrhosis. That translates into 30% of all deaths in the United States (12) and is only second to mortality rate in the US, the first being smoking (4). The recent data that has been studied, it has been discovered that in the past decade alone obesity rates have doubled in the country, thus leading to more health-related illnesses. For example, in the United States in 1991 the percent of people obese from 18-40 was 18.4%. In 2001, the percent obese in the same age group was 34.5% (22). It is self-evident that a nutritious diet is an essential aspect of good health.

Moreover, it is important to know that obesity has been increasing in rates over the past few decades and it does not seem to be slowing down, and “The United States now has the highest obesity rate of any industrialized nation in the world” (4). This seems to indicate that though the US is a prospering nation in the world, the citizens of the US do not have the knowledge of learning how to take care of themselves. Over one half of adults in the country and one quarter of children are either overweight or obese. A previous study has also shown that premature deaths have also been linked to those who are overweight or obese (4). This is a very serious concern and the way these trends are going the problem does not seem like it will be getting better any time soon.

One of the biggest problems that contribute to the rise in obesity is the fact that people are consuming more but not being more active. As a result all the food that they are eating is not being converted to energy and is instead being turned into fat. Moreover, “the growth of the fast-food industry has made an abundance of high-fat, inexpensive meals widely available” (4). Fast food causes people to not eat a proper diet and instead consume large amounts of fat and calories (4).

In addition there are many health problems that are associated with those who are obese and many people do not realize that they are at risk of having these illnesses. One of the health related problems that may be associated with obesity is hypoglycemia. When people feel dizzy or fatigued it may be caused by a drop in their blood sugar level and may not even realize it. Hypoglycemia occurs in individuals who do not exercise and consume large quantities of meats, fats, and sugar (17).

High blood pressure, hypertension, is another health problem that arises due to obesity. It has been noted that the majority of hospital visits that occur in the United States are related to high blood pressure. The causes of hypertension include a diet that is high in salt, fats, and cholesterol, and if high blood pressure is not treated properly than other problems may arise such as heart attacks and strokes (17).
Diabetes is another example of an illness that is more susceptible when individuals have a poor diet. If a person has diabetes he or she becomes more susceptible to other serious diseases which could one’s life at risk. Due to many of the serious consequence that diabetes has it is the 8th leading cause of death in the United States. Diabetes occurs when an individual’s blood sugar level is too high and need insulin to maintain a balanced level of blood sugar in the body (17). A low-fat diet is the best to avoid getting diabetes or to control it if a person already has it.

**Anorexia**

Recent studies show that among all adolescent girls between the ages of ten and twenty, one out of every one hundred girls, or one percent, suffers from anorexia (19). Many times these girls are starving themselves to the point of death. About ten percent of the girls who are affected with anorexia die as a result of it (23). Anorexia occurs as a result of a person’s obsession with losing weight and a fixation about losing weight and weight gain. Some signs and symptoms of anorexia are dramatic weight loss, obsession with calories, skipping meals, and weakness (20).

Some causes that have been noted about anorexia include social and cultures influences on young female adolescents. When living in a culture where in the media being thin is extremely important, it affects the minds of young girls and how they look at themselves. Women wanted to some how achieve this unrealistic look of being extremely thin (18). If the girls are not as thin as the women on TV, they assume that they are overweight and need to become as thin as them. This leads to a downward spiral of women losing self-esteem and become sick by trying to over-exercise and eat nothing.

Moreover, with people who are showing signs of anorexia there are also serious health risks that are involved with having anorexia. Some of these health risks include the loss of the menstrual period in women. Since women are not eating properly or not eating at all, the dramatic weight-loss has dramatic effect on hormones. As a result, hormone levels drop thus leading to a loss of menstrual cycle, growth development, and even the possibility of pregnancy problems, such as miscarriages (20).

Also, another problem that can arise due to anorexia is changing of the skin color. If a proper diet is not being consumed then one’s skin starts turning yellow and is very brittle. In addition the skin gets easily bruised and a person gets cold very easily. Moreover, there are also changes in a person’s brain chemistry when suffering from anorexia. A person becomes very irritable, can’t think straight, and goes through emotional and behavioral changes as a result of the lack of eating (20).

**Recent Diet fads in the US**

The public is clearly very interested in issues of nutrition and diet. On the National Institute of Health website “nutrition”, “diabetes”, “obesity”, and “diet and weight” were some of the top most commonly searched terms (7). Recently there has been an explosion in books and publications explaining why Americans are overweight,
not to mention the surge in fad diets. These books are selling well in bookstores and there are a plethora of websites describing lose weight fast schemes. On the one hand there are diets that promote high protein (high fat), and low carbohydrate diets (the Atkins diet and the Zone are well known examples). On the other hand there are the more traditional high carbohydrate/low fat diets (like the Ornish, and the Pritikin diets). Then there are soup diets, cabbage diets, grapefruit juice diet, and anything else one could imagine. All of these may be effective in the short run because individuals tend to eat less when food choices are very restricted and routines are drastically changed. However, some of these diets can be damaging to the body. Freedom of speech protection covers many of these publications, so even if the information is not all correct it can be presented to the public. Recognizing and evaluating these popular trends is important for the public’s health.

The Atkins diet was created by Dr. Robert C. Atkins as a way for people to lose weight and be healthier on a high-protein and fat low-carbohydrates diet. People follow this diet in hopes of losing weight and becoming healthier, but the people do not always know exactly how to follow the diet. As a result they do not eat properly and become sick. There is an initial weight loss that people do experience, however, it is believed to be because of water loss and after a while people regain the weight back and also noted fatigue among health problems that people experienced (24). For more information on the Atkins diet go to: [http://www.webmd.com/content/pages/7/3220_136.htm](http://www.webmd.com/content/pages/7/3220_136.htm).

The South Beach diet is another fad diet that raised a stir in the country. This diet was developed by a doctor from Florida, and the main component of this diet is the understanding of only eating the right carbohydrates and fats. Though this diet seems simple enough to follow, it can be hard to maintain this diet especially for people who do not really know or understand the many restrictions a diet has (25). More information about the South Beach diet can be found at: [http://www.southbeach-diet-plan.com/](http://www.southbeach-diet-plan.com/).

Jenny Craig and WeightWatchers have been commercialized and in the media for many years. These programs incorporate the lives of individuals in helping people lose weight and staying healthy. These programs are advertised as a life change rather than a diet. For many people who are in need of a life change to help save their life, these programs are very beneficial. The programs advertise using before and after pictures as well as help from various celebrities, most recent are Kirstie Alley for Jenny Craig and Jenny McCarthy for WeightWatchers, as a way of showing that these programs are for everyone regardless of social status. The programs encompass exercise programs as well as eating plans so people have a well-rounded experience and routine that they will be able to maintain after they reach their goal weight. For more information about Jenny Craig and WeightWatchers go to: [http://www.jennycraig.com/](http://www.jennycraig.com/) and [http://www.weightwatchers.com/index.aspx](http://www.weightwatchers.com/index.aspx).

With so many different diets and programs that are available how are people to know and choose which one of these work and how they work? Also, it is difficult for people to understand how to follow these diets and keep up with all the restrictions as well with their daily routine. More often then not people start following a diet and once
they start losing weight or see the results they want, they start becoming relaxed on their dieting and soon after they regain all the weight they already lost, if not more (26).

Media Influence

Mass media, like television, newspapers, internet and radio, can be a powerful tool for public health education. Unfortunately, most of the organizations and individuals that are working towards public health do not own television stations or newspapers companies. Television spots are very expensive to air and to create, and therefore a rarity in public health education. Sometimes media outlets like radio and television stations offer no-cost, or low-cost time slots for public service announcements; however, these times slots are seldom during high-viewing (high-profit) times. Regardless, it seems futile to air a public health message after a dozen well-produced commercials for snack food, fast food, or soft drinks.

The internet is a different story. With the recent technology explosion, almost anyone can set up a website for a minimal (if any) cost. Although computers are quickly becoming ubiquitous, internet access is still not as available as radios and televisions. Furthermore, there remains a generation gap. While younger age groups may have access to computers at a rate of almost 80%, adults, and older adults, do not. More and more, public health information is online, but even on the internet health information does not approach the user like commercials do on television.

Just because a public health care organization does not make commercials does not negate the possibility for a presence in the media. First of all, public health professionals can seek out journalists and reporters in an attempt to get particular areas of interest some coverage. By putting thought into how the health topic could be presented (e.g. who can be interviewed? who is affected? what is the 'human element'?) helps the journalist move the story forward and therefore increases the chances that particular story will make it to the public. The opposite is also true; journalists often approach public health professionals to get expert advice, particularly during epidemics or after a medical breakthrough. This coverage can have a sensational flavor that leads the public to believe there are wonder drugs. As far as diet is concerned, the public is given the impression that one special addition to the diet can make all the difference (e.g. broccoli, red wine, herbal supplements, etc).

Advertising and the media have become so influential to the public on how they view dieting and body image that it has started to become a concern for the public. Every year, companies that produce and sell food spend tens of billions of dollars advertising their products. Many markets, like snack foods, cereal, candy, and soda, are saturated so the only direction left for the market is to encourage people to eat more. With so much money being concentrated in marketing ‘junk’ foods, these commercials represent the primary nutrition advice the public is exposed to.

On the other side of the spectrum, celebrities are constantly in the eye of the public and being judged by all. As a result of all this scrutiny, celebrities feel the need to
maintain a certain type of body image and to make sure the public has nothing to critique about their body. Thus many celebrities take their dieting and exercising to extremes and sometime even to the point of illness and health related problems. The advertising has become not only a concern for people who are watching the media, but also for the people who are in the eyes of the media. The public wants to imitate celebrities’ looks and fashions so they try all the crazy diet fads around to try to be just like them. As a result there are times when some people go too far and in the end hurt themselves and take their bodies to limits.

In a recent interview, Hilary Duff talked to press about her recent weight loss and the pressure she feels about being thin. In the latest published on CNN.com and told to People Magazine, Duff told interviewers that being in the media and being under the public eye made her see herself differently (27). Though she claims to have never had a problem with her weight she feels that being under the scrutiny of the media has pressured her to look a certain way.

In 2006, a model, 22-year-old Luisel Ramos, reportedly died of heart failure after stepping off a runway after finishing a show during Fashion Week in Montevideo. After this incident Madrid posted a “ban” on skinny models at its fashion week and had a criteria of body weight that the models must meet in order to be allowed to walk on the runway at the fashion show (28). After Madrid established this ban, many of the top model cities in Europe were debating on whether or not they should adopt a similar ban in order to prevent any more illnesses and deaths among the model community, however, no other city has made a final decision yet on the weigh restrictions.

Proper Diet and Nutrition

Every five years, the federal government, through the United States Department of Agriculture and the Department of Health and Human Services, publishes a Food Pyramid and corresponding Dietary Guidelines. This publication is seen as the standard nutritional advice. In fact, the majority of nutrition experts may disagree with how the Food Pyramid gives advice, but the Pyramid has been widely appropriated and so any deliberation is hard to hear.

A study in 1997 by the American Dietetic Association found that 67% of Americans have heard of the Food Pyramid (3). Since the Food Pyramid has been sanctioned and produced by the federal government, the public sees this dietary advice as legitimate and trustworthy. Unlike nutrition labels and Recommended Daily Allowances (RDAs), the Food Pyramid is not required on packages, however, many products have utilized a Pyramid on the package to show the consumer how well that product fits into a healthy diet. As with any simplified message, the Food Pyramid has limitations. The recommendations may not be transferable to different cultures and ethnicities, and may not address special nutritional needs of pregnant mothers, vegetarians, lactose intolerant individuals, young children, or other special populations. The Pyramid recommends servings of different food groups: 2-4 dairy, 6-11 grains, and so forth. Just because the
public recognizes the Food Pyramid and sees it on a package does not mean it is clear how many servings a product represents or what a serving would look like.

Some nutritionists would argue that the division of food into food groups does not help the public's understanding of healthy foods. The difference between a healthy diet and an unhealthy diet is within each of the food groups, as well as among food groups. This message is too often lost. For example, a box of fruit flavored sugar cereal could put a Food Pyramid on its box to suggest it provides a healthful grain serving. Some nutritionists are suggesting other ways of categorizing food. For example, food could be grouped in a pyramid based on its glycemic index (that is to say, how quickly the carbohydrates are broken down and raise blood sugar in the body) (13). This kind of categorization would place whole grains and sugar cereals into very different food groups. The Harvard School for Public Health, through their Department of Nutrition, has presented a revision of the original Food Pyramid (online at www.hsph.harvard.edu/nutritionsource/pyramids.html) (6). This revised pyramid places whole grain foods on the same level as plant oils. At the top where it the original places fats, oils, and sweets, the revisions places red meat. Research from the Nurses' Health Study has shown that increased consumption of trans fat will double one's risk for heart disease yet increased consumption of polyunsaturated or monounsaturated fats lowers one's risk for heart disease by 30-40% (5). These are drastic different health outcomes between saturated and unsaturated fats. It is no longer scientifically correct to recommend a blanket low fat diet.

The new food pyramid that has been published by the United States Department of Agriculture (USDA) emphasizes not only eating healthy but also the need for daily physical activity. The pyramid has been structured to show the different groups are important in different quantities and the type of foods in each category. Such as whole grains, dark green vegetables, low-fat or fat-free dairy products (29). To look at the new food pyramid go to the following website and learn more: http://www.mypyramid.gov/index.html.

Though there is no perfect diet for every individual, there are certain things that all individuals need to make sure that they are eating in order to have a healthy diet. All people should make sure that they are getting food sources from the main food groups, grains, vegetables, fruits, dairy, and meat. Getting the vitamins and nutrients that these groups provide are essential to all and important to maintain a healthy lifestyle.

The Centers for Disease Control and Prevention and the Surgeon General’s Office have offered some policy recommendations for schools and children (14, 15). These include providing more nutrition education to teachers, promoting healthy eating among teachers, ensuring healthy alternatives are available in the schools, promoting healthy choices among students, and “enforcing existing U.S. Department of Agriculture regulations that prohibit serving food of minimal nutritional valued during mealtimes in school food service areas, including in vending machines,” (15).
Further Recommendations

It is important for the public to learn more about how to maintain a healthy diet as well as to how to exercise and eat right. Some good websites that offer this type of information are:

**“Proper Diet”** - This website explains the main reason why people get sick from not eating healthy and what a proper diet contains and what foods contain the basic vitamins and nutrients to achieve a healthy diet. [http://www.culinary-yours.com/diet.html](http://www.culinary-yours.com/diet.html)

**“Guidelines to Nutrition”** - This website explains the servings of the types of foods that should be eaten, and also why these foods are important to keeping a healthy diet. More importantly the website also has a small video that explains what consists of a proper diet. [http://medicalcentereast.client.web-health.com/web-health/topics/GeneralHealth/generalhealthsub/generalhealth/nutrition&food/nutrition.htm](http://medicalcentereast.client.web-health.com/web-health/topics/GeneralHealth/generalhealthsub/generalhealth/nutrition&food/nutrition.htm)

**“What is the Proper Diet”** – This website explains how eating properly also affects ones emotional stability as well. Therefore eating well is very important. The website explains the types of foods to be avoided and why they are bad and also the effects that the foods have not only on the body but also the mind. [http://www.anxiety-and-depression-solutions.com/articles/complementary_alternative_medicine/diet/diet.php](http://www.anxiety-and-depression-solutions.com/articles/complementary_alternative_medicine/diet/diet.php)

Furthermore, it is important to look at certain health programs that have been established in the United States to know that there are certain regimens that work to keep people healthy and in shape. The U.S. military program is probably the most noticeable and one that works the best. Everyone in the military is expected to maintain a certain level of physical fitness and control their weight, in order to be fit to be in the military. Their training is important so they can be prepared for any type of situation that may come up at any time. They are required to perform various Physical Training tests at various times to make sure that they are in the best shape, and as a result the people in this program can not afford to have a poor diet or eating habit (30).

Also, though not a program to be followed, the work ethic of the Amish community is one that should be admired everywhere due to the amount of physical activity and exercise that these people do everyday. As a result of the amount of work and work they do daily for a living, they are one of the most fit and healthiest groups in the country and have one of the best life expectancies and lowest rate of sickness. Studies show that rates of hypertension are much lower in Amish than non-Amish among other disease as well (31).

In conclusion, diet and nutrition are of fundamental importance for public health. To improve the public’s knowledge and opportunity to make healthy food choices, there needs to be policy changes that impact the social and physical environments. By understanding the relationship between media and public nutrition knowledge and food choice, public health professionals can limit damage and work for positive changes.
References


**Further Resources**

American Dietetic Association [www.eatright.org](http://www.eatright.org)

American Heart Association [www.americanheart.org](http://www.americanheart.org)

American Public Health Association [www.apha.org](http://www.apha.org)

Centers for Disease Control and Prevention [www.cdc.gov](http://www.cdc.gov)

Center for Science in the Public’s Interest [http://www.cspinet.org/foodspeak/](http://www.cspinet.org/foodspeak/)

Department of Health and Human Services [www.hhs.gov](http://www.hhs.gov)

Federal government resources [www.nutrition.gov](http://www.nutrition.gov)

Harvard School of Public Health [www.hsph.harvard.edu](http://www.hsph.harvard.edu)

National Institutes of Health [www.nih.gov](http://www.nih.gov)
