Obesity, Poverty, and Their Healthcare Implications

No longer the plight solely of the rich and overfed, the obesity epidemic now affects over 30% of Americans (Center for Disease Control and Prevention, CDC, 2000) regardless of income, race, sex, or education. "The relationship among malnutrition, infectious disease, and poverty and the relationship among obesity, chronic disease, and economic well-being are no longer applicable in the developed countries…" (Pena & Bacallao, 2000). In fact, as our society continues to change, the opposite actually becomes true; those of the lowest socio-economic bracket in the United States (represented mostly in this paper by those receiving welfare benefits) are actually at the greatest risk of being or becoming obese (Peeples, 2000). How have we evolved from a society where being overweight was a luxury for those who could afford overeating, to one where individuals in the crux of poverty find themselves at the greatest risk for both malnutrition and obesity (no longer mutually exclusive concepts)? This paradox and the historic contributors leading to it along with the implications of such an obese society are discussed below. Finally, a discussion of what can be done to fix this ever growing problem ensues as neither turning to our medical doctor nor waiting for change on the policy level will produce the results we currently need. We must broaden our definition of "healthcare" to include individuals and their communities to combat this epidemic and empower those individuals to take up the cause.

The Paradox

The poorest Americans who turn to government assistance programs (such as welfare) for help to cover one of the most basic human needs, access to food, are among the highest at risk of becoming obese. With little knowledge of and certainly fewer resources to combat their obesity, the problem is left untreated and years later turns into coronary heart disease, type II diabetes, cancer or myriad other health issues. These same individuals, still poor, now have little access to healthcare and when they do, find their condition to be fundamentally untreatable without habit and lifestyle change. Information provided by physicians about whole-foods diets and the importance of daily physical activity comes too little too late; not only are a family's dietary and sedentary habits already created by the time they are diagnosed with a severe health problem, but the patient leaves the office facing the same issues that led them to their current obese and unhealthy state.

The obesity epidemic is so rapidly accelerating that the current healthcare system struggles to provide quality care for those even with the money to afford top-rated preventive care, let alone those with restricted financial resources. "Inequalities in access to health promotion messages, health education, and adequate health care services make it difficult to know the importance of changes in behavior needed to achieve a healthier lifestyle" (Pena & Bacallao, 2000). For example, without access to proper prenatal care, the poor are already set up for this catch-22; those born with the greatest need for adequate nutrition (as a result of intrauterine malnutrition) will be the least likely to have the resources to receive it (Pena & Bacallao). Let us first examine how we became a nation nearly 2/3rds overweight to shed light on how we can combat this problem.

How we got Here

Ample research, articles, commentaries and debates are available discussing the ways we have become one of the largest (fattest) nations on earth. Primarily, the reasons boil down to two simple concepts: globalization has increased the availability of (and demand for) highly processed (frozen, packaged, enriched, and preserved) food, and sedentary lifestyles prevent the physical labor required to work off the excess calories. How these factors specifically affect individuals receiving welfare benefits starts with a look at the history of the Food Stamps Program, (now the Supplemental Nutrition Assistance Program or SNAP).

During the Depression, a "Food Stamp Plan" began in 1939 to help families catastrophically affected by the stock market crash of 1929. The program was created as much to help those suddenly living at the poverty level as a part of the Great Depression, as it was to absorb the post-war food surpluses prevalent during that time period (MacDonald, Maurice 1997). In The Omnivore's Dilemma, Michael Pollan outlines the history of the American corn surplus and how we as the American public have both subsidized this overproduction (through tax dollars and government assistance programs), as well as consumed it (through innovative uses of corn and its by-products to produce low-cost food) (Pollan, Michael, 2006). The Food Stamps Program (FSP) has evolved from its original role into a primarily welfare-oriented program since 1974 when Congress required all states to offer food stamps to low-income households, thus splitting responsibility between the individual states and the Federal Government (United States Department of Agriculture Food and Nutrition Service, 2009). This is considered one of the most important changes in public welfare policy since the Social Security Act of 1935, making the whole of welfare more equitable (MacDonald, Maurice, 1997).

Close ties between the overproduction of corn (necessary for the farmers' livelihood) and the use of this crop to create cheap and low-nutrient foods, affect the obesity rates of FSP recipients most of all. Those receiving welfare benefits are unknowingly required to purchase the cheapest products supported by food stamps: those highly processed with these extremely unhealthy corn byproducts contributing to the obesity epidemic. Jay Zagorsky, research scientist at The Ohio State University's Center for Human Resource Research states, "Every way we look at the data, it [is] clear that the use of food stamps [is] associated with weight gain" (Peeples, Lynne).

In 2008, the Farm Bill was enacted as part of the Food, Conservation, and Energy Act of 2008 which (among many other initiatives) increased the food assistance programs by more than $10 billion over the next 10 years. Historically, similar farm bills both increased money allocated to food assistance programs (like FSP) while also subsidizing corn production as assistance to farmers for falling crop prices. The same is true for the 2008 bill suggesting that this indirect partnership between highly processed food products (a result of the necessary overproduction of corn) and those receiving welfare benefits will continue to perpetuate the cycle of obesity among the poor. However, in its defense, the 2008 Farm Bill did change the name of the Food Stamps Program to the Supplemental Nutrition Assistance Program (SNAP) to "reflect our focus on nutrition and putting healthy food within reach for low income households," (USDA FNS, 2009) as well as increase funding for The Fresh Fruit and Vegetable Program and farmers' market distribution programs (USDA AERS, 2008). Hopefully this projected

emphasis on nutrition (via promoted nutrition education and accessibility to nutrient dense whole foods for those currently without access to such diet options) reflects more than simply a change of the program's name.

A Personal Perspective

In 2007, Members on Congress were encouraged to take the "Congressional Food Stamp Challenge" and live on a food stamp budget for one week. Congressman Van Hollen reflected that the experience "quickly focuses your mind and your stomach on just how little food $21 a week buys. It also demonstrates that it is difficult, if not impossible, to eat a balanced diet on $21, especially fresh fruits and vegetables." Many other Members echoed the sentiment. "Eating nutritionally is virtually impossible," said Illinois Democratic Rep. Jan Schakowsky, whose week's worth of fruits and vegetables consisted of one tomato, one potato, a head of lettuce and five bananas. Many commented that health problems were a likely result of having a food stamp available diet long term, as the cheapest foods are carbohydrates: bread, tortillas, crackers, rice, canned beans, ramen and other noodles (and almost all enriched with corn byproducts such as high-fructose corn syrup, a cheaper alternative to sugar). Eric Schockman, president of MAZON: A Jewish Response to Hunger, noted that the diet "was physically debilitating and emotionally exhausting. I was lethargic and found that I lacked my usual enthusiasm for getting through the day. I had difficulty reading, writing, communicating − doing anything other than anticipating (and, in some ways, dreading) my next meal" (Tivol, 2007)

What these testimonies showcase is a window into the world of food consumption for those who rely solely on the SNAP program for food funds (though the program was originally intended to supplement a family's food budget.) Many of the Members of Congress know both conceptually and from experience the benefits of a healthy whole foods diet. This knowledge is a luxury often not known to those who have spent their entire lives eating on a welfare restricted diet. Nancy Tivol, executive director of Sunnyvale Community Services who also took the Congressional Food Stamp Challenge, summed up this concept well:

> Certainly, not all poor, diabetic, and overweight people make wise food choices, but for the poor, wise choices aren't as available. Unlike those who took the one-week challenge, they don't have a newspaper to search for sales or a car to drive to the stores featuring them. In Sunnyvale, there are only two supermarkets north of El Camino Real. Rather than paying bus fares for themselves and children, our clients usually walk to smaller neighborhood markets that don't carry the volume of fresh fruits and vegetables necessary for affordable prices.

This leads to the problem of accessibility. Even with the knowledge of which foods to eat to maintain a healthy Body Mass Index (BMI), thereby reducing the risk of disease, access to these foods is often unavailable. Grocery stores offering fresh food are often not within walking distance and if they are within walking distance (from home or a public transportation stop) the walk may not be a safe one. In this circumstance,

shopping for food at a local, more convenient and perhaps safer store, despite its lack of fresh produce, is often the option chosen. Even in a desirable situation, if the store does offer fresh and healthy produce, it may not be available to the welfare recipient. In Nickel and Dimed: On (Not) Getting By In America, Barbara Ehrenreich comments that with her food voucher (granted in lieu of cash), "My dinner choices… are limited to any two of the following: one-box spaghetti noodles, one jar spaghetti sauce, one can of vegetables, one can of baked beans, one pound of hamburger, one box of Hamburger Helper, or one box Tuna Helper. No fresh fruit or vegetables, no chicken or cheese, or, oddly, no tuna to help out with" (Ehrenreich, Barbara, 2001). Clearly, these options limited her to a highly processed diet, even though healthier options may have been offered in the store. And even without these specific restrictions (as the food stamps program offers a stipend instead of specific processed options) price becomes a barrier to healthy food options.

> High prices for fresh fruits and vegetables and other foods with high nutritional quality make these foods inaccessible to the lowest income groups. In addition, the food industry offers various foods that have high energy density (rich in fats and sugars) but are deficient in other essential nutrients: their great ability to satiate, their pleasing taste, and low cost make them socially acceptable and preferable to the poorest groups. In addition, those who live in these (aggressive and insecure) areas usually receive less information on the health and quality-of-life benefits of exercise (Pena & Bacallao, 2000).

We make a grave assumption that the poor population has knowledge of these barriers, of the benefits of hurdling past them, and the resources to do so.

Precursors to Disease

Though not a disease in and of itself, obesity is the precursor to many serious ailments as outlined by the Centers for Disease Control and Prevention: coronary heart disease, type II diabetes, cancers (Endometrial, Breast, and Colon specifically), hypertension, dyslipidemia (including high cholesterol and triglyceride levels), stroke, liver and gallbladder disease, sleep apnea and respiratory problems, gynecological problems (including abnormal menses and infertility) and osteoarthritis. Obesity is also indirectly responsible for many other serious health conditions (CDC). According to Dr. F. Xavier Pi Sunyer, director of the Obesity Research Center in New York City, "The evidence is solid that the risk for various cardiovascular and other diseases rises significantly when someone's BMI is over 25 [clinically overweight] and that the risk of death increases as the body mass index reaches and surpasses 30 [clinically obese]" (The National Institute of Health, 1998).

Additionally, the healthcare system does not have the resources to support the prevention of obesity and the resulting threats of these diseases. Instead, the current system only covers care after the condition materializes. This fact is true for everyone regardless of income level. However, there is even less incentive for those with financial constraints to improve their health, even assuming they knew the benefits of doing so. The CDC

maintains that "to be successful, obesity treatment requires a long-term commitment and patients must be highly motivated and involved" (CDC)

> The poor do not eat what they want, or what they know they should eat, but what they can afford. Restrictions on access to food determine two simultaneous phenomena that are two sides of the same coin: the poor are malnourished because they do not have enough to feed themselves [thereby compromising their body's ability to fight off infectious disease] and they are obese because they eat poorly, with a significant energy imbalance [making them more susceptible to disease] (Pena & Bacallao, 2000).

Perhaps not surprisingly, minorities are at a greater risk than the white population for many of the aforementioned conditions According to the Agency for Healthcare Research and Quality (AHRQ), a division of the U.S. Department of Health & Human Services. The prevention methods for obesity related diseases "require interventions that are culturally sensitive and population specific." Additionally, many minorities have a preference for more familiar traditional remedies (and sometimes a distrust of pharmaceutical therapies) for the treatment of obesity related diseases. The AHRQ also suggests "designing strategies for managing the disease(s) and (their) complications to be culturally sensitive and targeted to specific populations" (Agency for Healthcare Research and Quality).

Given these obstacles to providing culturally sensitive medical care to minorities with the previously mentioned obesity related conditions, coupled with the fact that preventive care both greatly reduces health care costs while improving patient health, it makes sense that we work on the root cause of these diseases: combat the obesity epidemic.

What is Being Done About It?

Regardless of my skepticism of the 2008 Farm Bill, what can we do to combat obesity (and the diseases for which it is a precursor) for low income welfare and SNAP recipients? After all, the FSP was created to help keep people from starving during the Great Depression, has in many ways contributed to (though not solely responsible for) the perpetuation of obesity among the poorest in our nation, but cannot feasibly be expected to both feed the poor and also ensure that they are eating the foods that result in optimal health. Changes need be made on the policy level but if we wait for these changes, it might be too late. We must become empowered as individuals, as families, as neighborhoods and as communities to broaden our definition of healthcare such that we take on the responsibility for the health of ourselves and of those around us.

Perhaps on the largest scale, the Division of Nutrition, Physical Activity, and Obesity under the CDC had its first annual Weight of the Nation conference in July this year to address obesity prevention and control. Former President Bill Clinton gave the keynote address, and touched on many of the important issues surrounding obesity, culture and poverty.

> [The poor and] rural obesity problem in America…cuts right across racial lines. Diabetes in particular has enormous racial disparities…but vulnerability of obesity and its other consequences are broadly shared, and in rural areas, encompass people of all races and ethnic backgrounds who live there. Do we really understand how much more difficult it is for these people…than those in more densely populated areas?…These questions go right to the core of everything from how we organize society, to the way people who are just over the knife's edge of need have to manage their own budgets, to the psychological pressures going on in people's lives, to how our bodies react to the stuff we can afford to take off of the [grocery store] shelves. This is a test of really whether we can go forward together and not be divided [by the] economic polarization that has gripped our country for [so many] years.

At the conference, the "CDC announced its first comprehensive set of recommended strategies and measures to help communities tackle the problem of obesity through environmental change and policies that promote healthy eating and physical activity" (CDC DNPAO, 2009). These extremely comprehensive and well researched strategies directly impact communities facing the greatest barriers to living healthy lifestyles. "Environmental factors (including lack of access to full-service grocery stores, increasing costs of healthy foods and the lower cost of unhealthy foods, and lack of access to safe places to play and exercise) all contribute to the increase in obesity rates by inhibiting to preventing healthy eating and active living behaviors" (Kahn, L.K. et. Al, 2009).

The 24 strategies, though worth noting individually, are split into 6 broader categories. These are Strategies to:

* 1) promote the availability of affordable healthy food and beverages,
* 2) support healthy food and beverage choices,
* 3) encourage breastfeeding,
* 4) encourage physical activity or limit sedentary activity among children and youth,
* 5) create safe communities that support physical activity, and
* 6) encourage communities to organize for change.

Within each of these 24 strategies are specific instructions on how to go about achieving the goal (Kahn, L.K et al, 2009). Now that a comprehensive plan has been laid out, all that is needed is community leaders to take up the cause.

Boston, Mass. has implemented a program that gives people vouchers to double the value of their food stamps. "Boston Bounty Bucks" are accepted at 14 of the city's 22 farmers' markets to make it easier for those receiving food stamps to make healthier food choices and to benefit the farmers by encouraging more customers. Atlanta and San Diego are among other communities across the nation with double-voucher programs helping provide whole foods to those who (arguably) need them the most (Ryan, Andrew, 2009).

The People's Grocery of Oakland California began their "Mobile Market," driving fresh, local, cheap produce in an old postal truck to communities in Oakland who

lack access to healthy fruits and vegetables. Additionally, the employees were able to educate community members of the benefits of healthy foods and how to cook some of the more obscure items (People's Grocery, 2009).

Food movements are cropping up (pun intended) all over the country. They provide education healthy food options to everyone. The Slow Foods Movement, Jewish Food Movement, Youth Food Movement, Local Food Movement, and many more include creating direct connections between community members and farmers (via farmers' markets and CSA subscriptions.)

Conclusion

The truth is, we must take back the responsibility for our own health, the health of our families and the community around us. Ensure your local farmers' market accepts food stamps. Demand that your local school board replace processed food with healthy meals for our next generation. Buy fresh produce direct from the source by joining a Community Supported Agriculture (CSA) farm. Coach a sports team for underprivileged kids. Plant a community, school or personal garden. Make a point to know where your food comes from and support companies using sustainable practices. Throw a dinner party with sustainable food and educate those who come about your mission. Donate to non-profits whose cause is aligned with your sustainable food values. Take a walk. Try changing to a mostly vegetarian diet. Become aware, make connections and get involved.

No longer should we place the weighty duty (pun again intended) to "fix" our health on the shoulders of doctors and healthcare providers when we can prevent so many ailments ourselves. We can work to correct the imbalance of how food is accessed across races, cultures and income brackets on both the policy and individual level. Through collaboration, we can create a healthy foundation for everyone in our society.

References

Center for Disease Control and Prevention (CDC). Overweight and Obesity(2009, November 20).

Retrieved December 5, 2009, from http://www.cdc.gov/obesity/data/index.html.

Pena, Manuel and Bacallao, Jorge (2000). Obesity and Poverty: A New Public Health Challenge. Scientific Publication No. 576. World Health Organization. Retrieved on November 20, 2009 from the Google Scholar online book database.

Peeples, Lynne. (2009, August 11). Do Food Stamps Lead to Obesity? Scientific American. Retrieved December 2, 2009 from http://www.scientificamerican.com/blog/60-second-science/post.cfm?id=do-food-stamps-lead-to-obesity-2009-08-11.

National Institutes of Health (NIH), National Heart, Lung and Blood Institute. (1998, June 17). First Federal Obesity Clinical Guidelines Released [Press Release]. Retrieved December 6, 2009 from http://www.nhlbi.nih.gov/new/press/oberel4f.htm.

Agency for Healthcare Research and Quality, U.S. Department of Health & Human Services (2001, November). Diabetes Disparities Among Racial and Ethnic Minorities. Retrieved December 6, 2009 from http://www.ahrq.gov/research/diabdisp.htm#CulturalVariations.

United States Department of Agriculture Food and Nutrition Service (USDA FNS) (2009, November 25). Supplemental Nutrition Assistance Program. Retrieved December 4, 2009 from http://www.fns.usda.gov/FSP/faqs.htm#21.

MacDonald, Maurice (1977). Food Stamps: An Analytical History (Abstract). Abstract received from the JSTOR Trusted archives for scholarship: http://www.jstor.org/pss/30015546.

Pollan, Michael (2006). The Omnivore's Dilemma: A History of Four Meals. New York, NY: The Penguin Press.

Ehrenreich, Barbara (2001). Nickel and Dimed: On (Not) Getting By in America. (102-103). New York, NY: The Holt Paperback.

United States Department of Agriculture Economic Research Service (USDA AERS) (2008, August 20). 2008 Farm Bill Side-By-Side. Retrieved December 6, 2009 from http://www.ers.usda.gov/farmbill/2008/Overview.htm.

Tivol, Nancy (2007, October 9) Food stamp diet challenge was an unhealthy exercise. Message posted to http://foodstampchallenge.typepad.com/.

Kahn, L.K., Sobush, K., Keener, D., Goodman, K., Lowry, A., Kakietek, J., & Zaro, S. (2009, July 24). Recommended Community Strategies and Measurements to Prevent Obesity in the United States. Retrieved from http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5807a1.htm.

Ryan, Andrew (2009, June 25). Vouchers double value of food stamps at Boston farmers' markets. The Boston Globe. Retrieved on December 6, 2009 from http://www.boston.com/news/local/breaking_news/2009/06/vouchers_double.html.

People's Grocery (2009). Mobile Market FAQs. Retrieved on November 27, 2009 from http://www.peoplesgrocery.org/article.php?story=faqs&query=mobile%2Bmarket.