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China: Addressing Urban Childhood Obesity through Education

In the late 1950s and early 1960s, 30 million Chinese people died of starvation during the Great Leap Forward – an economic and social campaign designed to completely transform China’s then agrarian society. A generation later, China now sits at the table of world superpowers. The world’s most populous country has seen its national GDP, adjusted for purchasing power parity, rise from \$4.50 trillion in 2000 to \$11.44 trillion in 2011 (“China,” *The World Factbook*). With a thriving economy and urbanization, however, also comes a problem we know all too well in the west. In 2004, China’s Ministry of Education reported 16% of urban children and young adults between the ages of 7 and 22 were clinically obese. In China’s largest cities, such as Beijing and Shanghai, this statistic rose to 20% (French and Crabbe, 11).

Children suffering from obesity, defined as a Body Mass Index number at or above the 95th percentile for children of the same age and sex, are at risk for several health problems. They are likely to have high blood pressure and high cholesterol, increased risk of type 2 diabetes, breathing problems, and joint discomfort (“Basics About Childhood Obesity,” *CDC*). Obese children are likely to become obese adults, thus carrying these diseases throughout their life, which will likely be cut short.

Already, China is seeing these health problems among its youth. A study conducted by the University of North Carolina at Chapel Hill found diabetes four times as common among Chinese youth as American youth (“Child Diabetes Levels Almost Four Times Higher in China Than in US,” *ScienceDaily*). There is no doubt that obesity-related diseases will bear a huge burden on the Chinese health care system in years to come.

A once starving nation now faces steadily expanding waistlines and the health costs associated with them. According to *Health Affairs*, the related economic costs of obese and overweight Chinese represent up to 8% of the economy (French and Crabbe, 13), and will continually rise. In order to combat this detrimental trend, new nutrition education initiatives must be put into place. Personally, this is a fascinating topic, as I was born in China but adopted by American parents and have grown up in the United States. By researching this issue, I hope to give back to my birth country the gift of good health and longevity, a very prized Chinese value.

A typical urban Chinese family consists of one child, his or her parents, and the child’s grandparents from each side. Both parents usually work, so grandparents are instrumental in the child’s upbringing. This structure has created a phenomenon referred to as the “six-pockets syndrome,” where all members of the family are available to spoil the child. Parents and grandparents who recall famine or a poorer economy are said to overfeed their child to express their love and their wealth.

We can draw parallels between China’s parental indulgence with American parents who came of age during the depression. Both parents were or are in a position to indulge their own children with resources they never had. Families who have lived modestly for generations suddenly have spending cash in a steadily growing economy. It’s not surprising they would choose to spend this money on things that make life easier: both things that save time and provide greater recreation.

Children of these families are often provided with pocket money from all family members for leisure. In 2007, Chinese teens were responsible for roughly 15% of urban expenditure (French and Crabbe, 145), a number likely to increase. Food advertisers take advantage of this market by using bright packaging and product placement in popular culture. In November of 2007, a Chinese soap opera produced by PepsiCo

and Starbucks entitled *A Sunny Day* was played in Shanghai subway cars and station platforms, reaching an audience of over two million a day (French and Crabbe, 118). In this subway and internet-exclusive programming, pop star Huang Xao Ming earns the same amount of screen time as the Starbucks logo.

Historically, the Chinese diet contained primarily grain (rice in the south, wheat in the north), vegetables, and very few animal products (Weng and Caballero, 9). This low fat, high fiber diet has increasingly been edged out in favor of high animal product consumption. Today, China's national meat consumption is estimated at 71 million tons, double that of the United States (Larsen, *Earth-Policy.org*).

Fast food industries are also growing in urban China. *Yum!* Brands, the parent company of Kentucky Fried Chicken, Taco Bell, and Pizza Hut, is said to open one KFC in mainland China every day. A country that for centuries subsisted on simple meals prepared by family is now home to 3000 KFC franchises! (Rooney, *CNN.com*). Of course, "finger lickin' good" does not equate to healthy and nutritious.

As well as being convenient, fast food in China is also cheap. Low income has been linked to obesity in many studies ("Why Low-Income...", *Food Research and Action Center*). For poor urban families, when the price of a fast food combo is cheaper than that of many fruits, vegetables, and whole grains, the choice is clear.

Two possible solutions to the growing prevalence of fast food in the Chinese diet are public calorie reporting and portion regulation. A requirement for restaurants reporting basic nutrition information as well as limiting portion size or trans fats in food would lead to more nutritionally aware consumers. A third, and deeply controversial solution would be the implementation of a "junk food" tax. Creating a tax on food deemed unhealthy would create incentive to purchase cheaper and healthier alternatives. A study published in the *British Medical Journal* cites the effectiveness of such a tax using the recent examples of junk food taxes in Denmark, Hungary, and France ("Study: A 20% 'Fat Tax' Would Improve Public Health," *TIME Magazine*). However, with the tax must also come subsidies on healthy food.

Knowing China's nutritional shift, it is imperative children learn and are provided with healthy eating choices. The single best combatant of obesity is a healthy diet. China has a 99% primary school participation rate ("China," *UNICEF.org*) and also the largest number of television viewers in the world ("Chinese Media Statistics," *NationMaster.com*). For these reasons, the two strongest venues to teach nutrition to young people are school and television.

Urban lifestyles are also a contributor to growing weight statistics - physical activity is a necessity for long-term health. Traditional methods of combatting obesity are dependent on burning more calories than one consumes. With fewer people doing the physical labor necessary on farms and more people working in offices, China is becoming increasingly reliant on motorized transportation. While once known as the bicycle country of the world, China's roads are being taken over by public transportation and electronic bicycles, or e-bikes. While certainly more environmentally friendly than cars, these e-bikes eliminate much of the exercise bicycling allows. In 2010, e-bikes reached sales of 25 million ("A Bumpy Road..." *Knowledge@Wharton*).

In addition to increasing dependence on non-active transportation is the appeal of entertainment such as computers and television. Chinese children are spending more time sitting in front of various screens and less time engaged in physical activity. Of course, we have witnessed the same in the west, but urbanization is happening at such a rapid rate in China, the results of this sedentary lifestyle have raised almost immediate concern.

Steps are being taken to combat obesity, though these programs should be expanded. During the 2006-2007 school year, the Hong Kong government launched a program called "EatSmart@School" to

cultivate healthy eating practices among children (“*Introduction*,” EatSmart@school.hk Campaign). By expanding this program, or a similar program, to all of China’s public schools, the Chinese government would reach millions of children who are at-risk for obesity. Ideally, the curriculum of the extended program would include the importance of a balanced diet, lessons on understanding food labels, and inexpensive, healthy, recipes.

Outside of school, however, more action is needed. Chinese Central Television (CCTV) is China’s largest television broadcaster. By airing reminders of healthy living on channels (namely: CCTV-14 – Children and CCTV-15 – Pop Music, ones viewed primarily by children and teens), an audience of over a billion would have access to nutrition and overall health education.

The largest deterrent to this solution is the cost. Approximately \$2.25 billion will be spent to advertise on CCTV this year (“CCTV’s Ad-Sales Auction Draws Record Bids,” *The Wall Street Journal*) and to place ads in prime spots to reach viewers, one must compete with billion-dollar companies. Whether a public or private organization, a television advertising campaign would have to reach out to those willing to invest in a public health cause. However, considering the effect of obesity on China’s economy and health, the investment will yield a rich return.

In conclusion, access to cheap, high-calorie foods and a sedentary lifestyle inevitably accompany urban life. By providing nutrition education to young Chinese through the mediums of school and television, the adverse effects of such an environment will be minimized. Likewise, education regarding the need for physical fitness will inform Chinese youth of the benefits of an active lifestyle. Nutrition and exercise educational campaigns should be implemented as soon as possible to halt and reverse youth obesity.

Works Cited

- "A Bumpy Road Ahead for China's Electric Bikes." *Knowledge@Wharton*. Wharton School of Business, n.d. Web. 02 Aug. 2012. <<http://knowledge.wharton.upenn.edu/arabic/article.cfm?articleid=2751>>.
- "Basics About Childhood Obesity." *Centers for Disease Control and Prevention*. Centers for Disease Control and Prevention, 27 Apr. 2012. Web. 02 Sept. 2012. <<http://www.cdc.gov/obesity/childhood/basics.html>>.
- Bristow, Michael. "China Faces Obesity Explosion." *BBC News*. BBC, 26 Sept. 2010. Web. 1 Aug. 2012. <<http://www.bbc.co.uk/news/world-asia-pacific-11368027>>.
- Burkitt, Laurie. "CCTV's Ad-Sales Auction Draws Record Bids." *The Wall Street Journal* [New York] 9 Nov. 2011: n. pag. *The Wall Street Journal*. Web. 30 Sept. 2012.
- Chance, Giles. "The Modern Scourge That Afflicts China." *China Daily*. N.p., 27 July 2012. Web. 1 Aug. 2012. <http://europe.chinadaily.com.cn/epaper/2012-07/27/content_15623488.htm>.
- "Child Diabetes Levels Almost Four Times Higher in China Than in US." *ScienceDaily*. ScienceDaily, 05 July 2012. Web. 01 Sept. 2012. <<http://www.sciencedaily.com/releases/2012/07/120705194138.htm>>.
- "China." *CIA - The World Factbook*. Central Intelligence Agency, n.d. Web. 1 Aug. 2012. <<https://www.cia.gov/library/publications/the-world-factbook/geos/ch.html>>.

"China." *UNICEF.org*. UNICEF, n.d. Web. 03 Sept. 2012.
<http://www.unicef.org/infobycountry/china_statistics.html>.

"Chinese Media Statistics." *NationMaster.com*. NationMaster, n.d. Web. 03 Sept. 2012.
<<http://www.nationmaster.com/country/ch-china/med-media>>.

French, Paul, and Matthew Crabbe. *Fat China: How Expanding Waistlines Are Changing a Nation*. London: Anthem, 2010. Print.

"From XS To XXL: China's Expanding Waistline." *Worldcrunch*. Worldcrunch, 31 July 2012. Web. 01 Aug. 2012. <<http://www.worldcrunch.com/xs-xxl-chinas-expanding-waistline/5982>>.

"Introduction." *EatSmart@school.hk Campaign*. Department of Health, Government of Hong Kong SAR, n.d. Web. 03 Sept. 2012. <<http://school.eatsmart.gov.hk/en/template/index.asp?pid=2005>>.

Larsen, Janet. "Meat Consumption in China Now Double That in the United States." *Earth Policy Institute*. Earth Policy Institute, n.d. Web. 03 Sept. 2012. <http://www.earth-policy.org/plan_b_updates/2012/update102>.

Li, Qin. "Environmental Determinants and Obesity in China." Thesis. Rijksuniversiteit Groningen, 2007. *IVEM Publicaties*. Rijksuniversiteit Groningen. Web. 01 Sept. 2012.

Nei, Guo. "Child Obesity a Bigger Problem." *China Daily*. China Daily Information Co, 10 July 2006. Web. 3 Sept. 2012. <http://www.chinadaily.com.cn/china/2006-07/10/content_637130.htm>.

Patterson, Sky. "Obesity in China: Waistlines Are Expanding Twice as Fast as GDP." *US-China Today*. USC US-China Institute, 8 Apr. 2011. Web. 1 Aug. 2012.

Prioritizing Areas for Action in the Field of Population-based Prevention of Childhood Obesity: A Set of Tools for Member States to Determine and Identify Priority Areas for Action. Geneva, Switzerland: World Health Organization, 2012. *World Health Organization: Global Strategy on Diet, Physical Activity and Health*. World Health Organization. 1 Aug. 2012.

Sifferlin, Alexandra. "Study: A 20% 'Fat Tax' Would Improve Public Health." *TIME Magazine*. TIME Magazine, 16 May 2012. Web. 30 Sept. 2012. <<http://healthland.time.com/2012/05/16/study-a-20-fat-tax-would-improve-public-health/>>.

Rooney, Ben. "China: The New Fast Food Nation." *CNNMoney*. Cable News Network, 13 July 2010. Web. 01 Sept. 2012. <http://money.cnn.com/2010/07/13/news/companies/Yum_Brands/index.htm>.

Weng, Xiaoping, and Benjamin Caballero. *Obesity and Its Related Diseases in China: The Impact of the Nutrition Transition in Urban and Rural Adults*. Youngstown, NY: Cambria, 2007. Print.

"Why Low-Income and Food Insecure People are Vulnerable to Overweight and Obesity." *Food Research & Action Center*. Food Research and Action Center, n.d. Web. 29 Sept. 2012. <<http://frac.org/initiatives/hunger-and-obesity/why-are-low-income-and-food-insecure-people-vulnerable-to-obesity/>>.