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Uzbekistan, Dietary Diseases

Uzbekistan: A Comprehensive Approach to Dietary Diseases

The words “food insecurity” are commonly associated with the idea of not having enough food, but what some may not know is that food insecurity can also mean not having access to food that is safe, affordable, and nutritious as well. With more awareness about the complete definition of food insecurity, its effects can be seen on a wider global scale. One country that struggles with food insecurity is Uzbekistan which ranks among the worst in the world for dietary disease. The lack of dietary diversity and physical activity in Uzbekistan has contributed to its high rate of dietary disease but these issues can be solved by taking steps to educate on proper nutrition and encourage exercise.

Uzbekistan is an independent, republican country located in Central Asia with a population of around 33 million people. Of those 33 million people there is a near equal split between the number of people living in urban areas (50.6%) and those living in rural areas (49.4%). Since much of Uzbekistan’s territory consists of dried wastelands which include low ridges, salt marshes, sinkholes, and caverns, only ten percent of the land is able to be cultivated (Smith, David Roger, et al.). On average, the farm size in Uzbekistan is around 59,000 acres which would be about 28 times the size of a large farm operation in the United States. Much of Uzbekistan’s agricultural infrastructure is dedicated to cotton production which accounts for 41% of its cultivable land. Other portions of the cultivable land are 42% grains and other crops with only 15% being devoted to the production of fruits and vegetables (Glenn E. Curtis, ed.).

A typical family in Uzbekistan has seven or more children with the average home being around 1000 square feet with an outhouse and a separate kitchen building typically having a bread oven and a stove (Hays, Jeffery). While Uzbekistan does have a national free healthcare policy, families trying to receive quality healthcare may face challenges due to the lack of medical professionals and medical supplies as well as discrimination issues in which some hospitals only cater to the wealthy elite (Pacifica

Prime). In 2019 the average yearly income in Uzbekistan was around \$235 USD with around 70% of that income being used to purchase food (Akbariyusupov). The common diet of Uzbekistan families can be classified as an agrarian diet that contains many calories and heavily includes meat such as fatty sheep and other staples such as flour, rice, and oil (Weidman, Taylor).

Uzbekistan citizens suffer from food insecurity due to their lack of dietary diversity and lack of physical activity. A diet, like the Uzbeks, that is high in sodium and lacking in a variety of nutritious fruits, vegetables, and whole grains can leave someone susceptible to suffer from dietary diseases. A study in the Lancet medical journal found that globally 1 in 5 deaths in 2017 were associated with poor diet, and among the 195 countries studied Uzbekistan was found to have the most diet-related deaths. In Uzbekistan, the diet-related death rate is 892 per 100,000 people (Afshin, Ashkan, et al.). Of the dietary diseases that Uzbeks suffer from, cardiovascular disease, nutritional deficiencies, and diabetes are the most prevalent. The World Health Organization (WHO) found that of all deaths in Uzbekistan 56% were contributable to cardiovascular disease, 14% to nutritional deficiencies, and 2% to diabetes. WHO also found that 54% of men and 63% of women were overweight. Contributing to disease trends and overweight trends is the tendency of Uzbeks to eat over the recommended amounts of food and to not get regular physical exercise (World Health Organization).

Currently, Uzbekistan's approach to solving its issues with food insecurity is to provide widespread education and awareness about nutrition. On September 24, 2019, the United States Embassy in Uzbekistan held an international conference in the capital of Tashkent in order to educate officials on how public knowledge about proper nutrition could help improve the overall health of Uzbekistan's population. An important focus of the conference was to educate on the value of healthy nutrition for adolescent girls and women of child-bearing age (U.S. Mission Uzbekistan). Providing education and awareness about the nutritional issues facing the Uzbekistan public can help bring attention to issues that the public may have not been aware of or may have not fully understood. Also by specifically raising awareness about adolescent girls and women, the conference shed light on the nutrition of groups that may be underserved in the healthcare system of Uzbekistan.

While providing education and awareness is a necessary step in helping solve the issue of food insecurity in Uzbekistan, providing education without implementing other solutions too cannot solve the problem alone. The Stanford Social Innovation Review explains that their research shows that just educating people about topics is not likely to change their behavior or thinking and instead of just educating, "... change activists need to use behavioral science to craft campaigns that use messaging and concrete calls to action that get people to change how they feel, think, or act, and as a result, create long-lasting change," (Christiano, Ann, and Annie Neimand). By using campaigns or implementing policies that aim to change the behavior of Uzbekistan people or make nutritious food more accessible, Uzbekistan can move beyond solely providing education about nutrition.

The country of Singapore went beyond just giving people information about nutrition to implementing programs, like school nutrition programs, in order to help with the prevention and management of dietary diseases. In school classrooms, messages are taught using fun interactive activities, like puppet shows and food-making competitions to teach and model for children the recommended daily requirements of food groups like fruits and vegetables and the importance of eating a well-balanced diet (Lim, Yen-Peng). This model of education is successful for Singapore because it not only teaches children about nutrition but it allows them to creatively engage in making healthy food choices that they can then bring back to their homes and use throughout their lives. Recently the Mercy Corps, the Ministry of Preschool Education, and the Sanitary-Epidemiological Welfare and Public Health Service partnered with McGovern-Dole International Food for Education and Child Nutrition Program to promote healthy practices within early childhood education in Uzbekistan. This program would focus on increasing awareness about nutrition, health, and hygiene practices in preschools throughout the Karakalpakstan and Surkhandarya regions of Uzbekistan (U.S. Mission Uzbekistan). This program has great potential for Uzbekistan and can further be improved by following Singapore's education model example and expanding to reach children in other regions of Uzbekistan as well as expanding to include educating children beyond preschool. While these kinds of programs may be expensive to implement,

they are well worth the cost because they equip a future generation with knowledge about proper nutrition.

Another step that Uzbekistan can take to become healthier is to implement programs that encourage exercise. For example, in the 1960s Finland, much like Uzbekistan now, had the worst male heart-disease rate in the world, and part of their solution to overcoming this was to increase physical activity. Finnish people began encouraging exercise in many ways from employers offering incentives like workout facilities and gym vouchers to employees, coming up with a new way to measure heart health called the FINRISK calculator, and even inventing new sports that make exercise more versatile (Brueck, Hilary). One of Finland's successful approaches to encouraging exercise included developing national programs that focused on encouraging physical activity for different phases of life. There are programs for younger age groups like "Finnish Schools on the Move", a program targeted towards incorporating physical activity in schools, to programs for older age groups like "Strength in Old Age" which offers services like strength training and balance exercises to older adults, as well as physical activity programs for age groups in between (World Health Organization Europe). Finland is now one of the fittest and happiest countries in the world. Following Finland's approach, Uzbekistan can develop programs that will help specific age groups increase their physical activity. This model can be successful for Uzbekistan because it can be adapted to follow cultural customs and it can address the physical activity needs of different age groups.

Uzbekistan's food insecurity issue is not a simple one therefore it cannot be solved with a simple solution. By combining education, school nutrition programs, and encouraging exercise Uzbekistan can begin to overcome the dietary diseases that plague their citizens. Since the United States Embassy has already begun to provide nutritional education, they could expand their reach to help Uzbekistan begin providing school programs and encouraging exercise as well. In order for these solutions to be effective, the cultural norms surrounding food in Uzbekistan must be adapted too. Social events in Uzbekistan often result in overeating; however, if Uzbeks gain a better understanding of nutrition they can begin to make conscious choices about the amount of food they are eating. The government's role in decreasing dietary

diseases should be to support these healthy solutions by making them more accessible to all citizens.

Alas, it is up to the Uzbek citizens themselves to change their eating and exercise habits with the newfound knowledge and practice from nutritional experts in order to create a sustainable healthy future.

Although Uzbekistan has one of the worse rates of dietary disease due to a lack of dietary diversity and physical activity, its food insecurity issues can be improved through solutions like implementing school nutrition programs, and encouraging physical activity. Addressing Uzbekistan's food insecurity issues means that their rate of dietary diseases is addressed as well. With less dietary diseases Uzbekistan won't lose as many people to preventable disease and its people can go on to live happier, healthier lives.

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