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South Africa, Factor 11: Malnutrition

South Africa Malnutrition in Urban Areas

An urban country in South Africa is one of the most poverty-stricken areas in the world. The population is predicted to double in size within the next two decades (Indicators). The current population of South Africa is over fifty five million people, and increasing at a rapid rate. The working population has grown significantly within the last 15 years, and is also predicted to continue increasing at a rapid pace (Ratshitanga). Some argue that this increase of the working population will create a “demographic window of opportunity” for South Africa’s economy. Though the country still suffers from high unemployment rates as well as few new jobs being formed (Ratshitanga). Nonetheless, South Africa’s middle-income markets are among the top 20 in the world. Another problem that South Africa suffers from its extremely high rates of income inequality. It is one of the highest rates in the world and causes further problems for South Africa citizen’s well-being and malnutrition rates (Orthofer). This uneven distribution of the country’s wealth can cause citizens to struggle with welfare in the future (Orthofer). It can also make it a challenge for South Africans to receive enough income in order to get foods that contain proper nutrients for their health. After looking at the country's population and its current trends, if the population continues to increase by the year 2050 South Africa will have over 65 million people. This means South Africa will have to find a way to sufficiently feed over 10 million more people. In regards to demographics of the fifty five million people, 64.3% live in urban areas. This number is expected to jump to nearly 75% by the year 2050. With South Africa’s growing population in the urban areas high quality nutritional food is a must, to sustain the populations’ health (South African Population).

Urban South African families live in a nuclear household meaning that the family would consist of a mother, a father, and their children (HSRC). In South Africa nutritional needs are often not met. Though these families’ diets have gradually become more diverse, that does not necessarily mean they have improved (Goldbalt). Urban South Africans have begun eating more processed foods which contain a large amount of unnecessary sugar and fats. This type of food is cheaper and generally easier to access in South Africa. Eating highly processed foods creates nutritional deficiencies in the diet leading to obesity, hypertension, and diabetes (Monyeki).

The education level of South Africans varies from person to person. Currently people are struggling to become educated. The schooling system in South Africa is very inadequate. The main reason for this is because they lack access to transportation and therefore people cannot get to school (Indicators). The few number of children, which are able to receive public education, receive poor quality instruction. Only one out of eighteen poor South African students will end up with any form of a college education (Indicators). Thus several of the people in urban South Africa are lacking education and nutritional needs.

Access to health care is an issue that many South Africans struggle with. Though it has not been proven, many believe that health care is a large factor in why rural South Africans move to urban areas. While it is true that municipal areas do have better access to these resources, it is still a challenge for many urban residents to gain access to or afford them. Poor, urban residents of South Africa often live on the edges of the city rather than the middle or central part of town, making it difficult for these citizens to get to a place that offers these services. On top of this, a large number of African Americans are sick and in need of health care. The overcrowded cities create unhealthy living conditions, and most African Americans have little to no education about health (HSRC).

Another problem that the lack of access to transportation creates is that it makes it makes finding jobs extremely difficult. Many African American worker's jobs have changed from permanent to only temporary, making it very hard for them to know how or when they will get money for their next meal or other living necessities (Goldblatt). South Africa has one of the world's highest unemployment rates and they are not getting any better. The number of unemployed people in South Africa has doubled since 1994. Overall, the average wage of public sectors in South Africa is higher than the private sector (June). "Statistics South Africa has shown that poor households spend about R8, 485 per year (US\$540 at current rates) on food. This makes up 34% of their total household expenditure. Non-poor households spend R14, 020 (\$894) on average per year on food. It makes up only 10% of their total household. South Africa's food production and imports will need to double in order to keep up with its rapidly increasing population. Rising costs in transportation, electricity and fertilizer have caused food prices to quickly rise. Most poor South African families spend about 33% of their income on food. Urban South Africans have an advantage over the rural residents, because they do not have to travel to the city to purchase food (Goldblatt).

Malnutrition is defined as a lack of certain nutrients, vitamins, or minerals in the diet that can cause growth stunting or low energy levels. It can cause short stature, slow growth, dizziness, fatigue, or water-electrolyte imbalance, weak muscles or loss of muscle (Mayo). Malnutrition can be caused by lack of food in general, but it could also be cause by not getting the proper kinds of foods. Most South African citizens are able to get to a food market, but not as often as they need to. Even when they get there they can't always afford the healthy food that will supply them with all the needed vitamins and minerals. The South African government controls imports and exports out of the country thus having control on the food people can consume. In urban areas of South Africa people can gain access to food and food markets to purchase adequate food, but that comes with a cost and people have to be able to get to those food markets (Goldblatt).

The constitution of South Africa "guarantees all citizens the right to an environment that is not harmful to their health." (Goldblatt). However, the people of South Africa are rapidly developing health issues, because of South Africa's worsening Agricultural setting. An example of this is the water in South Africa. About 20% of South Africa's water contains atrazine (Pick.et al., 1992). Atrazine is a harmful chemical that has been proven to influence sexual maturation to growing boys and in babies before they are born. The water also contains pesticides which have connections to many different types of cancer. "By 1997, eight of the twenty six pesticides classified by the International Agency for Research on Cancer to have

sufficient evidence to be considered carcinogenic were still registered for use on crops in South Africa.” (Infante-Rivard) (Goldblalt) It could be argued that malnutrition in South Africa is improving because the absolute poverty rate has lessened, but 45 percent of people still reach the definition of living in poverty. This means they only make an average of \$2 per day. Over 10 million live on half of that (\$1 per day). Overall, “Relative poverty has become worse, with the Gini coefficient increasing from 0.6 in 1995 to almost 0.7 in 2009” (Mayosis). If nutrition was better in South Africa people in the Urban areas would not suffer and nutritional needs would be met. Thus allowing people to be healthy and able to produce well-nourished products.

South Africa is in great need of help in order to improve their rapidly increasing food problems. They need a food that can provide them with the necessary nutrients that they are not getting adequate amounts of from their other food sources. The solution to this is the sweet potato vegetable. Economist Howard Bouis dreamed up the idea of using this vegetable in order to solve the malnutrition problem in Africa, and has been working to raise awareness about it ever since. Many health experts believe that the sweet potato can help to fix South Africa’s food problems. Most poor South Africans are more concerned with quantity of food rather than quality, thus they often buy inexpensive foods like rice and corn. The problem with this is, though these foods do a sufficient job of providing energy, they lack important micronutrients as well as other vitamins and minerals. Capsules that contain various vitamins work in order to provide people with important vitamins and minerals, but they can get very expensive and it becomes a challenge to get them to people in distant areas. This is why the sweet potato is a good alternative (Barne).

One medium sweet potato provides approximately 180 calories and 214% of the recommended Vitamin intake per day. Just one cup of them (200 grams) provides 4.02 grams of protein, 41.42 grams of carbohydrates, .30 grams of fat, and 6.60 grams of dietary fiber. They are also a great source of Vitamin A, which provides the body with beta carotene. In fact, sweet potatoes have the potential to provide a person with 90% of the recommended vitamin A intake per day. Sweet potatoes also contain Vitamin C, copper, manganese, as well as many other nutrients. They provide people with potassium and dietary fiber. More benefits include that they have proven to be anti-inflammatory, provide antioxidants, and could improve blood sugar levels (NC Sweet Potatoes). Some growers claim that sweet potatoes are more appealing to customers and that they have more success when selling them at markets. They believe people are drawn to them because of all of the vitamins they contain.

Countries in Africa such as Mozambique and Uganda are already successfully growing sweet potatoes and it has been proven that the children in these countries have more Vitamin A in their bloodstream. Vitamin A is one of the main vitamins that South Africans are lacking and the sweet potato could be a huge factor in solving this problem. Biofortification, the use of agricultural practices in order to improve the nutritional value of food can be used on the sweet potato in order to better their nutritional contents even more. Campaigns could also be started in order to teach people about the nutrition of sweet potatoes, how to cook them, and where to store them (Barne). The American Sweet Potato Marketing institute or ASPMI, is “a U.S. agricultural trade association representing U.S. sweet potato packers, growers, exporters, processors, trading companies, state associations, and affiliated industries” (Langdon). ASPMI exports many sweet potatoes each year to many countries including the UK, Benelux, and Canada. The USDA’s Market Access Program provides the funding for ASPMI and would potentially

fund this campaign (Langdon). This export of sweet potatoes into South Africa would need to be approved by South African leaders as well as its agricultural extension program: South Africa's Society for Agricultural Extension or, SASAE. The members of SASAE would then determine if this project would be a natural fortified product as well as economical (SASAE). South African sweet potatoes need to be stored in a fresh and cool place to remain fresh. The campaign would also explain the best way to prepare the sweet potatoes and what to eat them with in order to get the most benefits from them. Studies have proven how the sweet potatoes are prepared and what they are eaten with can have a huge impact on how much Vitamin A the consumer is receiving. For example, boiling or mashing the sweet potatoes is better than baking or steaming in order to get maximum vitamin potential. Eating the sweet potatoes with foods that are higher in fat can improve Vitamin A absorption. Only 3-5 grams of fat are needed in order to do this. This makes stir frying the sweet potatoes in olive oil or topping them with butter a great option. Another great aspect of sweet potatoes is the fact they can be served cold. This would make them an easy food for South Africans to take on the go. Sweet potatoes provide an easy alternative for South Africans, they enhance their current diet by providing key nutrients and vitamins thus reducing malnutrition levels in South Africa.

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