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Egypt, Factor 11: Malnutrition

## **Egyptian Malnutrition**

Experts say the main reason malnutrition is on the rise in Egypt is not because of a shortage of food, rather it is more of a shortage of access to proper foods. For many Egyptians, the main purpose of the food is to fill their stomachs. In Egypt, the meals have little to no nutritional value; this leads to a deficiency in vitamin A, iron, calcium and iodine that the human body needs to thrive. According to the World Health Organization, “Vitamin A deficiency is a leading cause of night time blindness in children” (Micronutrient, np). According to a publication by the World Health Organization, the shortage of iodine in the diet is the leading contributor to preventable brain damage (New Online, np).. Beside the nutrient deficiencies, Egyptians also face the more noticeable effects of malnutrition: weight-for-height (wasting) or height-for-age (stunting). Since Egypt is among the top twenty countries facing malnutrition, this is a major problem for the typical family.

In urban areas the common family has roughly two to three children; whereas, families in rural areas often have as many as seven children. In an article by World Food Bank, in 2013, fifty-seven percent of families live in rural areas (Egypt, Arab,np). An article by CultureGrams states that having a large family use to be part of the traditional culture. As Egypt continues toward the future, this tradition is slowly dying out in urban areas- so is the tradition of living with the entire extended family. (Egypt. CultureGrams, np). According to the website Kwintessential, families in rural countryside areas live off of 21,370 Egyptian pounds a year. Whereas families in urban areas are fortunate enough, compared to rural income, to live off of 30,205 Egyptian pounds a year. In Egypt, family kinship is an extremely important value that helps define social classes (Egypt - Language,Culture,np). . Another important family value is religion. Another strong cultural identity in Egypt, according to CultureGrams, is that the choice religion for ninety percent of all Egyptians is Muslim (Egypt. CultureGrams, np). Since religion is important to most Egyptians, they pray five times a day as well as observing a month of fasting known as Ramadan. During the month of Ramadan, Muslims do not eat between dawn and sunset. This is not a food shortage or malnutrition issue, and is not considered part of the problem Egyptian malnutrition problem.

With starchy food being readily available, it is easy to understand why the Egyptian diet consists mainly of carbohydrates. The typical Egyptian meal consists of mainly beans, bread, and rice. While families are able to eat their fill in rice, this is not the healthiest or most nutritious. A study done by researchers at Harvard has come to the conclusion that people who eat rice everyday “increase the risk of Type 2 diabetes by 10%” (Sifferlin, np).. With rice not providing a sufficient amount of substance for nutrients, another common food eaten is legumes. Legumes is a crop that can be substituted for protein. According to CultureGrams, meat is very expensive and rarely eaten by the common or lower classes. (Egypt. CultureGrams, np). While there is food available in Egypt, the problem is more the equal distribution of food among the classes and across the country.

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Egypt does have multiple medical sources with doctors, mostly men. A problem arises in the fact that medical facilities are scarce in rural areas. The United Nations does help solve this dilemma by sending in volunteers to rural communities to have one-week clinics. These clinics help to provide basic hygiene knowledge and child examinations, hand out medicine, administer shots and provide first aid as well as educate on methods of family planning. The Egyptian government has welcomed this group program to the extent of expanding it by placing a hospital in every small city. Although private hospitals hold modern day equipment, it is only available to the wealthy. Just the way that hospitals are more accessible by the wealth, this is the same with the distribution of the nutritionally rich food.

As stated by the Rural Poverty Portal, since fifty percent of families live in rural areas, farming is an important aspect to a typical family. The average farm size is 1.7 hectares, approximately 4.2 acres. Fifty percent of small farms size less than 1.0 hectares ,approximately 2.4 acres. On the other hand, ten percent of farmers cultivate more than 4 hectares, 9.9 acres(np). Fibre crops, also known as cotton, are the most important export crop grown in Egypt. Along with fibre crops, another main crop is rice. Rice is the second most important export crop. The majority of agricultural practices are related to the Nile. With the warm weather, they are able to grow several crops per year. When growing cotton, the cotton fields require water year round. That can be accomplished with modern day irrigation techniques and regulations of the rich Nile Delta water. Rice is also a crop that requires a great deal of water. By replacing rice with other less aquatic crops, Egyptians could grow more nutritious food. By growing more nutritious foods, this would help to reduce the widespread problem of malnutrition in Egypt.

One of their main agricultural techniques is water irrigation. Dr. Farouk El-Baz states that water irrigation is good because the land is ninety-six percent of the land in Egypt is covered by the Sahara Desert (np). It would be impossible to cultivate more land because of this. The way to increase the productivity would be to better the land currently being cultivated. To make this idea work, the smaller farmers would need to be educated on how to grow more product. Since smaller farmers are from rural areas, it is more than likely that they dropped out of school early or did not attempt to go to a high-end career, thus making them less educated. This situation could be helped by sending Peace Corps volunteers there and teaching techniques to prevent soil erosion. The volunteers could teach more about agriculture in general-teaching small farmers the basics of growing crops and farming techniques, such as irrigation.As irrigation is an important part of Egyptian farming, the flooding of the Nile also becomes a huge factor in irrigation. During the annual flooding of the Nile, ninety percent of the topsoil can erode (Erosion and Desertification, np). This erosion is what brings natural minerals and nutrients to the soil near the Nile. The Aswan Dam, located at the southern end of the Nile, helps control and regulate flooding periods of Nile as to provide a constant flow of water used in irrigation practices. This dam was put in place in 1902 to find a balance between high-water and low-water floods. Since Egyptians have been willing to work to find ways to improve agricultural techniques, it stands to reason that they would work on ways to improve food production or produce more nutrient rich foods.

One barrier to accessing food in Egypt is traveling long distances. In Egypt there are open air markets. These markets are not in every small town, so sometimes people have to make do on their own, either by slaughtering their own animals or growing a small garden. A concern with this process is the animals utilized do not get tested so the livestock could have diseases, like

salmonella, that could be dangerous to a human. A problem with a personal garden is that sometimes small unwanted diseases or microorganisms like E- coli can grow in the food. E coli can contaminate the soil if fresh manure is used (Mary Robson, Garden Manure and E coli, seattletimes.com). While manure does help put nutrients in the soil, it has to be slightly aged first otherwise the manure may compete with the plants for the nutrients in the soil. The purpose of using manure as a fertilizer is to improve the productivity of plants and not reduce it, especially in an area where food production and nutrition is already a problem.

Another barrier facing the typical Egyptian family is living in poverty. Dahlia Kholaf stated in an article for Al Jazeera Media that the new Prime Minister raised minimum wage from 700 Egyptian pounds (102 American dollars) to 1,200 Egyptian pounds (174 American dollars) for a monthly salary in January 2014 (Dahlia Kholaf, Egypt's New Minimum Wage, www.aljazeera.com). Unfortunately, this wage raise was only for government officials. This new wage law falls short in supporting many families such as farmers. Another concern is farmers do not have regular wages; they are paid for only what they grow. Some of the costs and risks could be eliminated if the government paid for the land or the seeds. Another factor that could help secure an income for farmers would be crop insurance. In September of 2012, the African Bank created a grant to raise awareness for the "concept of crop insurance as a risk management tool"(Publication, np).

In an article for Egyptianstreets.org, it is mentioned that malnutrition affects twenty-two million people in Egypt. Twenty-six percent of Egyptians live in poverty, with forty-nine percent of Upper Egypt unable to provide the basic necessity of food (More than 22, np). Malnutrition affects all families. Expecting mothers who have a deficiency in nutrients are at risk of having low birth weight children. Overall, the presence of malnutrition in Egypt has not improved since 1990. According to a web site for UNICEF, stunting in children has increased from twenty-three percent in 2000 to twenty-nine percent in 2008 (Young Child, np). Population growth affects malnutrition. The more children a family has, the more the short food supply has to be stretched. This is especially true in rural homes where they average seven children compared to two or three children in urban areas. Splitting the food means that the limited nutrients that are available are split between the children too. The problem of splitting the food needs to be addressed along with the lack of nutrient rich foods in order to reduce the problem of malnutrition in Egypt.

One project that could be expanded in Egypt would be the Food and Agriculture Organization of the United Nations. This project is one similar to the one mentioned earlier when describing their access to health care. These are both branches from the same agency; they just need to be combined. If the Food and Agriculture Organization also gave supplements for food, this would greatly decrease the amount of undernourished children. It is not the fact that they do not get enough food, they get plenty of bread and rice; they just do not get enough nutrients in their food. By doing this, it could break the cycle of birthing underweight children who are more likely to grow up and suffer from malnutrition. This organization could also help show how to grow proper gardens with crop seeds for their specific climate. This would offer families personal access to fruits and vegetables packed with nutrients. Another option that the Food and Agriculture Organization could bring to Egypt is genetically modified organisms, GMO. Currently the Egyptian government allows their farmers to grow GMO crops and export them. However, Egypt is not allowed to import GMO crops from other countries. While GMOs have developed a negative connotation, that should not all be viewed as evil. According to an article in

the American Journal of Nutrition, a golden rice product is being developed for human consumption that would have an increased level of vitamin A in the rice which would help to reduce the deficiency of vitamin A in the diet(Tang, np). Genetically modified food needs to be monitored closely before being deemed safe for human consumption, but once it is approved, it can reduce the extent of malnutrition in countries such as Egypt.

The national government already allows United Nation organizations to come in and help. The national government could help these organization by sharing a tax revenue with them. This would even assist the national government in the long run by having more children grow up to achieve more of their potential. The community role would be to supply living space for the volunteer workers. It would be beneficial for the volunteer workers to stay at a service camp to provide service and assistance. The community would have to work with the organization to make a schedule so that all the families would be able to get a session with the volunteers. If this was done ahead of time, it would inform the volunteers of how many supplies to bring. After the volunteers reached the cities involved, this program can be expanded into markets. This way it would keep all the aspects in the country and eliminate the need for volunteers allowing the volunteers to help other developing countries too. Using tax revenue, while an option, should not be the first choice in reducing the problem of malnutrition. The best way to reduce the incidence of malnutrition in Egypt would be to change the plants grown for food and the choice of food eaten.

With these recommendations, the typical family would be able to benefit greatly. These families would be able to communicate with the volunteers and ask questions. After gaining as much knowledge as possible, they can pass the information to other family members and to future generations. They would also have physical items to take away from the experience. According to the International Statistical Institute, a nation becomes developed once it reaches a Gross National Income of \$11,905 in United States dollars. At the rate which Egypt is developing, it has roughly five years before it officially becomes a developed country (Developing, np). Once this happens, foreign aid will be reduced. With Egypt being a leader in Africa, they can rise above the struggles of malnutrition and poverty. With the family culture of helping each other, Egypt would be able to greatly decrease the percentage of malnutrition in Egypt and set an example for the rest of Africa. Malnutrition in Egypt has many causes, therefore, the solution needs to be many faceted. The government and the people need to work together. At the same time, Egypt needs to be willing to work with foreign agencies to instruct the rural population on ways to improve food choice and nutrition as well as choice of crops to grow. As Egypt continues to grow into a developed country, the best it can do for all members of its society is to recognize malnutrition as a problem and work to improve the quality of life for all.

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