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Guyana, Factor 10: Dietary Diseases

Guyana: Addressing dietary diseases by providing informative nutrition education, encouraging healthy behavior regarding dietary choices, facilitating stable employment generating opportunities, and providing access to nutritious foods through infrastructure development.

Introduction:

Food security as a concept was first introduced globally in the early 1970s. At that time, emphasis was mainly placed on the volume and stability of food supplies. Over time, governments made international efforts to achieve food security for their populations and realized that simply having a steady supply of food was not satisfactory (“Food Nutrition Security Strategy for Guyana”). In the 1980s, two additional aspects to the definition of food security were added: 1) access, to all peoples at all times, and 2) enough nutritious food to provide for an active and healthy lifestyle. The modern and more widely utilized definition is the 2001 refinement by the Food and Agriculture Organization of the United Nations (FAO) of its earlier 1996 World Food Summit definition, which states: “Food security is a situation that exists when all people, at all times, have physical, social, and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy lifestyle.” Therefore, the key variables that characterize food security have been recognized globally as: accessibility, availability, utilization and stability (“Food and Nutrition Security Strategy for Guyana”). Based on the modern definition, it is clear that despite Guyana being a net exporter of food, the country still faces elements of food insecurity because food security is not only defined by food being available, but encompasses other elements such as food access and satisfactory nutrition. “The problem for the Government of Guyana does not lie in making enough food available for its residents, but [in] making food accessible to its population” (“Food Nutrition Security Strategy for Guyana”). The main causes of dietary diseases in adults and children alike in Guyana lie in the unstable nature of two main variables: food accessibility and the proper utilization of food resources.

Background:

Given Guyana’s large endowment of natural resources and high levels of agricultural production historically, food availability is not generally considered a major challenge. Considering the six main (Caribbean) food groups: “ground provisions” (tubers, roots, etc.), meats, legumes, fruits, and fats and oils, one can conclude that Guyana is self sufficient in the production of the necessary foods from each of these groups (“Food and Nutrition Security Strategy for Guyana”). Guyana’s food insecurity issues reside more in challenges related to food accessibility, which is undermined because of limited employment opportunities, and the proper utilization of food resources, than they do in the physical availability of food (“Nutrition Country Profiles: Guyana Summary”). Poor dietary choices are made due to insufficient health education, unsatisfactory food preparation, and lacking efforts to ensure food quality and safety. Despite its vast wealth in natural resources, one third of the Guyanese population lives below the poverty line, indigenous peoples being the ones that are affected the most. Almost 40% of the country’s population lives in poverty, earning a net minimum wage of \$0.50 (USD) daily (“Food for the Poor”). The main livelihood systems associated with food insecurity related to accessibility are small scale independent artisans (e.g., small fishermen, small-scale miners); marginal populations in urban areas (e.g., laborers, single parents, elderly persons living alone on fixed incomes or without support); and the Amerindians in the hinterland regions (“Food and Nutrition Security Strategy for Guyana”).

The “Typical” impoverished family:

“The family, in all its variety of forms, is the pivotal institution in any society. As the Family Code of the Caribbean asserts: ‘the family ... is the elementary cell of society, and as such, contributes to its development and plays an important role in the upbringing of the new generations’” (“The Family and its Most Vulnerable Members”). The family is pivotal for the good or ill of the society because it shapes individuals who in turn shape the society. Just as the family is impacted by constraints in the macro-economic, social, and cultural environment, so it in turn impacts on that environment, most visibly in the skills, attitudes and behavior of people in the community. Neither in Guyana nor anywhere else is family structure without change. Instead, family structure is largely influenced by the environment that surrounds it. For example, three main ethnic groups reside in Guyana: the Afro-Guyanese, the Amerindians, and the Indo-Guyanese. In countries such as this, in which several ethnic groups that originate from vastly different parts of the world reside, varying traditions and cultural practices coexist with one another, all within the same country. Each of these ethnicities all have different social and cultural beliefs, which have a great amount of influence on typical familial structures. Therefore, one can conclude that there is no one “typical” Guyanese family structure, but different family structures shaped largely by cultural differences, ancestral patterns of life, and ethnic histories (“The Family and its Most Vulnerable Members”).

However, a popular Guyanese belief says that an ideal family form is the nuclear family; one that is stabilized by a marriage that is either legally or religiously acknowledged (“The Family and its most Vulnerable Members”). This belief dates back to the time of slavery, despite it being a time when slave owners and their supporters sought to extinguish any possibility of forming such a stable and strengthening family structure. As a result of the assault on the nuclear family structure, “single-parent, female headed households became the dominant [family setting] in the Afro-Guyanese working class” (“The Family and its most Vulnerable Members”). However, this structure is less prevalent among the Amerindians and Indo-Guyanese of the nation, who still maintain that the nuclear family setting grounded in marriage is more favorable. As the Indo-Guyanese make up the largest part of the nation statistically, a conventional Indo-Guyanese familial setting will be used.

A typical impoverished urban Indo-Guyanese family structure usually consists of a nuclear family, with a heterosexual marriage and an average household size of four people (“Guyana: Global Alliance for Clean Cookstoves”). Without the abundant living space otherwise available in rural areas, most of the urban poor live in crowded and unsanitary conditions (“Food for the Poor”). At a social and cultural level, constraints on poor urban families include the critical shortage of housing and poor quality of and access to services due to the dire need for infrastructure development, especially in the hinterland (“The Family and its most Vulnerable Members”).

Within the family, males usually have more power than females. Most men work outside the home, while women are expected to stay at home to watch the children and take care of the housework. Depending on the employment of the male, in some families, both parents must work to provide for the family. In addition, when compared to conventional Western European culture, Guyanese children have more responsibility in the family. When they are considered of age, they immediately take up odd jobs to contribute to the upkeep of the household (“ESL Cultural Pages: Guyanese Culture”).

A large percentage of the population is located in urban coastal towns where agricultural production is limited to backyard gardening (“Food and Nutrition Security Strategy for Guyana”). The common Guyanese diet includes a staple of “ground provisions” such as cassava, sweet potato, edo, and other starches, including rice. In rural areas and small villages along the coastland, fresh fish and seafood are an essential part of the diet, although among the more affluent urban peoples, and smallholder farmers as well, chicken is also a popular dish. There is an abundance of fresh fruits and vegetables along the coast, and these commodities are readily available in local markets. Most individuals use fresh fruit to make their own homemade beverages, which are called “local drink”. Popular homemade drinks are mauby

(made from the bark of a tree), sorrel (made from soaked and dried hibiscus) and ginger beer (made from the ginger root).

Although a majority of the Guyanese population lives along the coastland (90%), the other 10% live in more urban areas, for example, Georgetown, the nation's capital. Despite Guyana being widely considered the self-sufficient "breadbasket" of the Caribbean due to its large land area, approximately 216,000 km squared, as well as its vast natural resources, this overall view of the country is misleading. Because averages often tend to lump everyone together, the poverty of some is obscured by the wealth of others. Consequently, the hardships endured by people in poor urban communities are often concealed, and thus exacerbated, by statistical averages on which decisions about initiatives geared towards improvement are based. For example, one should note that all of the foods listed above fall under the category considered to be "traditional" Guyanese cuisine. Presently, as the country continues to become more urbanized and adopts more Western European ways of life, many people are bypassing the more expensive (but healthier) fruits and vegetables for cheaper and "better tasting" unhealthy fast foods, such as Kentucky Fried Chicken or Pizza Hut. This happens especially with poor urban families who do not live along the coastline, because the lack of this geographic advantage cuts out a large part of an otherwise cheap and affordable staple of the Guyanese diet. Fresh fruits and vegetables now have to be bought with an average of \$3,340 (USD) per capita for wage earners, and meats and fresh fish are also unaffordable. Thus, rather than struggle to survive on a meager supply of healthy tubers and the occasional fruit that they would need to travel to markets to buy with limited funds, many of the urban poor opt to buy cheap (but filling) fast food in order to meet their needs.

Another contributor to dietary disease is the inadequacy of the Guyanese healthcare system. Nearly all Guyanese citizens receive access to some measure of treatment, and are well immunized against harmful viruses like Hepatitis B3 and polio. Fifty six point eight percent of all routine EPI vaccines are financed by the government for the general public, and 90%-99% of all children are effectively immunized and protected against diseases ranging from tetanus to tuberculosis ("UNICEF-Statistics-Guyana"). Despite the Guyanese healthcare system's wonderful job of providing vaccinations, there is a problematic lack of emphasis on nutritional health. More and more Guyanese peoples are developing dietary diseases later on in life due to their increasingly unhealthy eating habits. The total adult population (aged 20-70 years) in Guyana constitutes 427,230 people, and 60,150 of them currently have diabetes. ("International Diabetes Federation: Guyana") Unfortunately, these statistics are trending upward: "a national study on physical activity in Guyana conducted in 2000 found that 22.4% of the population 20 years and older are obese and that an additional 29.0% are overweight. Significantly more females are obese than males. Compared to a previous survey (1996-97) these values indicate an increase in the prevalence of excess weight over the period 1996-97 to 2000. According to the 1996-97 survey there were marked variations with respect to the prevalence of overweight and obesity at the regional level. Therefore, due to potential changes, the dietary situation in a rural family is most likely going to get worse" ("Nutrition Country Profiles: Guyana").

Most Guyanese citizens are able to receive a good education by attending local public schools that are largely funded by Christian churches, with some additional help from the government. Many of the schools lack monetary resources (adequate number of books, computers, etc.), but the quality of the education provided is not affected. On average, 85% of all primary-level males are enrolled and participate in schooling, while 88.7% of primary-level females do the same. Most children continue their schooling well into high school and sometimes even college-level age. The literacy rate for Guyana's youth (15-24 years of age) for males is 92.4%, while female literacy rates at that age reach 97% ("UNICEF-Statistics-Guyana"). However, the education provided in schools needs to be more relevant to the current challenges the country faces. Formalized education covers basic topics that are deemed essential, but students are not receiving education on nutrition, wellness, or disease. Currently, primary school education includes basic courses in Mathematics, Literacy, Social Studies, and Science ("Ministry

of Education, Guyana”). Although these courses are essential and helpful for children to learn, they are not enough. Health or Physical Education courses are not included in common curriculums, and this absence has taken its toll on Guyanese citizens (“Ministry of Education, Guyana”). In addition to not being taught how to care for their bodies, Guyanese students are not taught how to utilize the plants native to their country and care for them in a more holistic way. Guyana has an abundance of untapped wealth in the form of plant life, and capitalizing on that abundance would be highly beneficial for the populace.

Recommendations:

1. All students should be required by law to take at least one health education course during a trimester or semester during the school year to encourage healthy behaviors from an early age.
2. Physical Education courses should also be taken at least once during a trimester or semester.
3. Teachers should incorporate nutrition education into classes where applicable (e.g., in Home Economics or Culinary Studies), and students should be instructed on how to prepare affordable and healthy meals for a typical family. For example, students should be instructed on agricultural sciences, such as which traditional foods to eat more of and which to avoid (e.g., teach students that a high starch diet consisting mainly of ground provisions is detrimental to one’s health, and emphasize the need for more consumption of fruits and vegetables)
4. Currently there is a growing market for organic produce in more developed countries such as the Unites States. Guyana, unlike many less fortunate underdeveloped countries, has enormous wealth in the form of its fertile land. Its vast amount of natural resources could easily be used to plant not only rice and sugar (its current major commodities), but fresh and healthy organic produce, such as fruits and leafy green vegetables. The Guyanese national government and its agricultural private sector should invest in agricultural technologies such as canneries or packaging facilities that can process and package organic produce in a way that will retain the essential nutrients, while readying them for international trade (e.g., utilizing flash freezing, dehydration techniques, vacuum packaging, etc.)

This investment will allow a typical Guyanese smallholder farmer to exploit the market, and in so doing, it will improve infrastructure support for agriculture, provide jobs for the urban poor, and boost the national economy.

- a. By increasing trade in healthy produce, the Guyanese people will be sustaining a healthy economy that will help to stave off dietary diseases within the country. The produce grown on farms would not only be for international trade, but would also supply the populace with more healthy fruits and vegetables at a cheaper price. This would effectively make healthier foods more readily available for those who do not live in agricultural environments. In the long run, as fruits and vegetables become more available and more common for a typical rural or urban family to eat, a diet of unhealthy fast food and traditional high-starch staples will be replaced by fresh, organic produce as a common staple in the typical Guyanese diet.
- b. The factories in which processing and packaging the produce takes place should be built in and around poor urban areas in order to provide them with dependable jobs, so as to provide impoverished urban peoples with economic stability.
- c. In addition to investing in the factories and farms, the national government and private sector should build better roads and highways throughout the country so that smallholder farmers will be able to bring their produce to factories, and also to poor urban areas; better modes of transport should also be provided.

Relation to Millennium Development Goals (MDGs):

The eighth MDG aims to develop a global partnership for development. Targets 8.A (Develop further an open, rule-based, predictable, non-discriminatory trading and financial system), and 8.F (In cooperation with the private sector, make available benefits of new technologies, especially information and

communications) should be addressed. Initiating a stable trade in healthy produce would be a great help to the Guyanese economy, and would also aid in combating the dietary disease epidemic. In addition, the national government and private sector should work to make transportation and agricultural technologies more readily available to produce workers by using the profits from international trade.

MDG 2, which aims to ensure that children everywhere, boys and girls alike, will be able to complete a full course of primary schooling, should be altered to fit Guyana's specific needs. Although the country's education system is inclusive for both girls and boys, and provides quality affordable education, the current curriculum requirements are lacking. Reform of the education system is essential in order to overcome the country's current challenges.

In addition, MDG 7.A (Integrate the principles of sustainable development into country policies and programs and reverse the loss of environmental resources) must also be addressed. This goal is primarily a preventative measure. Smallholder farmers and larger organic produce companies alike should participate in mandatory educational programs that emphasize the need for sustainable development practices so as to preserve the country's natural resources as its exports increase. In this way, the national government will pave the way for a more stable and dependable source of produce for Guyanese citizens and businesses, and their international counterparts.

Conclusion:

The attainment of food and nutrition security for Guyana entails actions in "areas that fall within diverse ministries and institutions at a national level and across regional institutions of the community" ("Food and Nutrition Security Strategy for Guyana"). The diversity in the scope and nature of these issues highlights the need for a holistic, multi-disciplinary, uniform, and coordinated approach for their resolution, being mindful of three important concerns:

1. The need to inform citizens of linkages between health, nutrition, food retailing, and manufacturing and production (providing informative nutrition education and encouraging healthy behavior regarding dietary choices);
2. The requirement of an economically feasible and sustainable degree of food self sufficiency, along with the assurance of adequate environmental conservation measures (providing access to nutritious foods through infrastructure development);
3. The protection and expansion of agricultural and other forms of employment and income in a value-chain approach (facilitating stable employment generating opportunities).

An effective policy framework for national food and nutrition security to address these concerns will require action on the following issues:

1. The main gaps and constraints that limit food security effectiveness in terms of food availability, access, utilization and stability in both the short and long term;
2. Key policy actions and investment programs and projects funded by the national government and private sector to move Guyana towards self reliant food and nutrition security;
3. The implementation of strategy within the respective roles and functions of necessary parties (e.g., government, civil society, farmers, traders etc) and the institutional framework to facilitate action.

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