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Somalia, Malnutrition

### **Survive or Thrive: Somalia and Malnutrition**

A beautiful country once filled with lively families is now suffering from one of the worst cases of famine the world has ever seen. Families are forced to leave their homes and live in cramped camps with little food. Children are not growing, learning, or playing, farmers are not farming, and people are not thriving.

Located on the horn of Africa, Somalia is the easternmost country in Africa and is bordered by Ethiopia, Djibouti, Kenya, The Gulf of Yemen, and The Indian Ocean. Droughts have forced the Somali people to suffer and struggle to find stability. The people have no idea what to expect tomorrow. Will their child end up in the hospital because parents do not have the resources to provide for their families? Will they eat anything tomorrow or the next day? When is the next time they will see rain? Somalis ask these questions without knowing when the struggles might end or if they will ever end. The people of Somalia have suffered from malnutrition; helping Somalia is a challenging task; however, it is an essential next step.

Somalia is currently one of the most malnourished countries in the world. According to the World Health Organization, “Malnutrition refers to deficiencies, excesses or imbalances in a person’s energy intake and/or nutrients. The term malnutrition covers two broad groups of conditions. One is ‘undernutrition’—which includes stunting (low height for age), wasting (low weight for height), underweight (low weight for age), and micronutrient deficiencies or insufficiencies (a lack of important vitamins and minerals). The other is overweight, obesity and diet-related noncommunicable diseases (such as heart disease, stroke, diabetes, and cancer)” (Malnutrition). Somalia is experiencing undernutrition. The specific type of undernutrition Somalia is experiencing is Severe Acute Malnutrition. Fifty percent of children in Somalia are currently experiencing acute malnutrition. According to International Rescue Committee Doctors, “Severe acute malnutrition leads to thinness, weakness, and lethargy in children. They experience near-constant diarrhea, muscle atrophy, and weakened immune systems. Emotionally, they tend to withdraw and disengage from the world around them. Untreated acute malnutrition can cause stunted growth, learning difficulties, and weak immunity to infections” (Meet the IRC doctors fighting against malnutrition in Somalia). Somalia needs a solution that will help recover from and prevent malnutrition.

The two leading causes of malnutrition in Somalia are drought and lack of imported goods. Ongoing droughts initially caused malnutrition. “Over the last 12 years, Somalia has seen three ‘worst droughts in decades’” (Timeline: Breaking down more than a decade of drought in Somalia). From 2010 to 2011, Somalia experienced a drought some considered “the worst drought in 60 years.” This drought was the start of extreme food scarcity. In 2013, Somalia experienced the only normal rainy season they would see for the next 12 years. Then, 2015 was the most recent rainy season that did not fall short of the average rainfall in Somalia. However, when the rain did fall, none of it soaked into the land as it was hot and dry. In 2017, Somalia experienced another “worst drought in decades,” forcing people to need food assistance. At the end of 2017, long rains gave Somalis hope that times would improve, but the rain fell short. The long rains made no dent in how long the drought would last. Five years later, in 2022, Somalia experienced yet another “worst drought in decades.” This drought was similar to the last two, and it was completely devastating for Somalia. However, malnutrition was already high, and there was still little support from other countries.

In Somalia, the lack of rainfall and the hot and dry climate have made it increasingly difficult to produce food. Lack of food production is the leading cause of malnutrition in Somalia. Each drought has made the

ability to produce food harder and harder. Lack of water in Somalia has forced families to move into camps meant to support and provide food; however, camps cannot produce food, and water is scarce. Families are turning to hospitals for help because their children are so undernourished.

Somalia, unable to produce food due to the droughts, has to rely entirely on imported goods from other countries. Somalia imports goods from multiple countries, including Ukraine, the United States, China, Turkey, and others. One example of the difficulty in imported goods affecting Somalis is Ukraine. Ukraine is one of the leading importers of goods, and its food production directly affects Somalia's well-being. When fighting between Ukraine and Russia started in 2014, Ukraine was able to continue to produce and export goods until February of 2022, when Russia invaded Ukraine. At that point, Ukraine could not handle sending food and other supplies to Somalia. A lot of support Somalia originally had from other countries got rerouted to Ukraine, and Somalia had no way to recover. Not only did the war in Ukraine force Somalia into a worse state of famine, but it also forced prices of food to skyrocket. Before the drought, Somalia's primary source of income was farming. As droughts killed off most crops and livestock, Somalia lost its income.

When a lack of imported goods followed the drought in Somalia, Somalis had nowhere to turn to for support. There was a lack of resources available, so malnutrition rates in Somalia got worse. Families already relying on support camps to provide food were receiving even less. As support from other countries started to fade, the lack of food worsened, and Somalia suffered greatly.

Over time, many steps have been taken to solve malnutrition worldwide. According to The World Food Program USA, the best ways to end malnutrition include breaking the cycle of conflict and hunger, increasing sustainability and building resilience to climate change, Addressing poverty and inequalities through social safety nets, helping rural farmers connect to markets, and reducing food waste and food loss (How to End World Hunger: 6 Zero Hunger Solutions). According to Vikaspedia, it is important to have improved health care, nutritional education, early diagnosis, and nutrition supplementation (Strategies to prevent malnutrition and improve nutrition — Vikaspedia). Although all these movements could benefit Somalia's recovery, the most important ones to Somalia are improving health care, using nutritional supplements, and increasing sustainability and resilience to climate change.

Dr. Abdullahi Mohamed, senior medical officer, and Dr. Ahmed Adan, nutrition officer, have already begun to work on the medical end of Somalia's malnutrition recovery. Dr. Abdullahi Mohamed and Dr. Ahmed Adan work for the International Rescue Committee (IRC). "The IRC has established clinics, empowered community health workers, launched mobile health units, and is simplifying the process of diagnosing and treating affected children" (Meet the IRC doctors fighting against malnutrition in Somalia). As malnutrition mostly affects children, doctors work tirelessly to bring children back to a healthy state. The doctors start by diagnosing the malnourished children. They do this by taking height and weight measurements. If the child is diagnosed with malnutrition, they use ready-to-use therapeutic food as treatment. The ready-to-use therapeutic food treatment is a nutritious peanut-based food. The peanut-based food consists of peanuts, sugar, milk powder, oil, vitamins, and minerals.

There are also two main supplements that need to be incorporated into the diets of patients suffering from severe acute malnutrition: iron and zinc. Iron is important for human development and growth. A lack of iron in the body causes anemia (a lack of healthy red blood cells and hemoglobin). According to the National Institutes of Health, "Your body uses iron to make hemoglobin, a protein in red blood cells that carries oxygen from the lungs to all parts of the body" (Iron - Consumer). Without hemoglobin and red blood cells, people's muscles, brain, and the rest of the body do not receive the necessary oxygen and proteins to develop. According to the National Library of Medicine, "Iron is essential for adequate catch-up growth and neurological development in children with [severe acute malnutrition]. Iron deficiency anemia may cause symptoms such as severe fatigue, and it is a risk factor for severe

complications such as heart failure and death. Iron deficiency anemia can also have long-term effects such as neurodevelopmental delay, especially in children less than two years of age” (“Increased vs. Standard Dose of Iron in Ready-to-Use Therapeutic Foods for the Treatment of Severe Acute Malnutrition in a Community Setting: A Systematic Review and Meta-Analysis”). Iron is essential for the development and growth of people, and ensuring Somalis have access to proper iron will quicken their recovery.

Zinc plays an important role in recovery from severe acute malnutrition because it helps with weight gain, enhances immune function, reduces diarrhea, and reduces the risk of child mortality caused by severe acute malnutrition (Evaluation of Micronutrients and Pro-Inflammatory Cytokines Levels in Nutritionally Deprived Children—A Tertiary Care Hospital-Based Study). The importance of zinc in a diet goes beyond those few examples; studies have shown that “Zinc supplementation has been found to enhance the efficacy of therapeutic feeding protocols, leading to more rapid recovery and improved nutritional status” (Evaluation of Micronutrients and Pro-Inflammatory Cytokines Levels in Nutritionally Deprived Children). Somali people using zinc supplements could allow children to suffer for less time and allow children to live their normal lives.

The final step in helping Somalia recover from severe acute malnutrition is finding crops that can be grown in environments like Somalia’s and teaching people how to grow and make these crops into food. The first thing that needs to be considered when picking crops to grow in Somalia is if they are drought-tolerant. Maiz, cowpeas, and beans have all been bred to be drought-tolerant. Although there is no guarantee that these crops will grow and produce right away in the intense climate of Somalia, it is essential to do trials. The goal is to find between three and five crops to help diminish malnutrition in Somalia. Once there are enough crops, Somalis can feed livestock and produce meat.

Somalia continues to face challenges with undernutrition, drought and an unstable economy. Many world organizations have stepped up their efforts to support Somalia in their efforts to offer life-saving assistance. The United States is the single largest donor of humanitarian assistance to Somalia (USAID). Other assistance comes from The International Rescue Committee, UNICEF’s Humanitarian Action for Children, the European Union humanitarian fund, and many others. Using the budget already in place and other money from fundraisers and other programs fighting malnutrition towards Somalia's recovery could lead to a more efficient recovery.

There are many important aspects of malnutrition recovery worldwide. However, understanding the importance of improving health care, using nutritional supplements, and increasing sustainability and resilience to climate change in Somalia will lead to a faster and more beneficial recovery. Knowing the most important parts of the human diet and how different things affect the human body can help Somalia make a fast and effective recovery. It is also important to Somalia’s recovery to find plants that will be sustainable in a dry climate; this will help push Somalia away from the suffering that severe acute malnutrition can cause.

By using the proposed solutions, families could return to their normal lives. Rather than just survive, they can thrive. Parents know they have doctors to lean on who will help their children if needed. Parents understand the importance of supplements in life. Families understand what it is like to live with stability and freedom from the suffering of severe acute malnutrition.

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