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Considering the Use of Ready-to-Use Therapeutic Food for Children with Severe Acute Malnutrition


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INTRODUCTION

RUTFs are energy-dense, micronutrient-enhanced pastes used in therapeutic feeding. These soft meals are a homogenized composite of lipid-rich foods with a nutritional profile. The therapeutic milk formula suggested by the World Health Organization is used in inpatient therapeutic feeding programs. Peanuts, oil, and sugar are common to major constituents in RUTF. Sugar, milk powder, and vitamin and mineral supplements are all used in this recipe.

RUTF is critical for the community-based care of children with disabilities for a variety of reasons, especially for those who have uncomplicated severe acute malnutrition and nevertheless have an appetite. For starters, it has all of the nutrients essential for rehabilitation. Secondly, it has a long shelf life and doesn't go stale even after it has been opened. Thirdly, because RUTF is not a water-based product, germs cannot grow on it; it is acceptable to use without refrigeration and in situations where cleanliness is a concern.

The introduction of RUTF has changed the way children with severe acute malnutrition are treated. This condition is a leading risk factor in children under the age of five, with the World Health Organization (WHO) estimating that it affects over one million children each year. The demand is enormous: According to the World Health Organization, over 20 million children under the age of five suffer from severe acute malnutrition. According to a 2008 study published in *The Lancet Series on Maternal and Child Undernutrition*, children with severe acute malnutrition have a 9-fold higher risk of mortality than their well-nourished counterparts.



The weight-for-height ratio of children suffering from severe acute malnutrition is extremely low (below -3 z scores of the WHO median growth criterion). In children aged 6–59 months, apparent wasting, nutritional edema, or a mid-upper arm circumference of less than 115 mm are all signs of malnutrition. Children from communities with inadequate access to nutritional foods are more likely to develop the disorder. All kinds of severe acute malnutrition were treated in institutions for decades. Once a kid has been diagnosed as having the disorder, they will be evaluated by a healthcare professional who has been trained in a medical facility to determine if they require inpatient treatment.

However, the conventional therapy of specialized therapeutic milk provided on a strict schedule was often ineffective in preventing the deaths of extremely malnourished infants, because children were brought to feeding centers too late.

The majority of children with this ailment are not taken to a health institution in many situations, notably among the poorest and most vulnerable groups. Many constraints, including distance from and time spent in health institutions, obstruct access to care.

KEYWORDS

Malnutrition: Malnutrition refers to deficiencies, excesses or imbalances in a person's intake of energy and/or nutrients. The term malnutrition covers 2 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 non-communicable diseases (such as heart disease, stroke, diabetes, and cancer).

[The Lancet Series on Maternal and Child Undernutrition:](#) Beneficial article related to the topic.

Eating Disorder: Formally classified as "feeding and eating disorders" in the Diagnostic and Statistical Manual of Mental Disorders (DSM-5), the term "eating disorders" represents a group of complex mental health conditions that can seriously impair health and social functioning. Because of the physical nature of their defining symptoms, eating disorders can cause both emotional distress and significant medical complications. They also have the highest mortality rate of any mental disorder.

Food Shortage: Food shortage occurs when food supplies within a bounded region do not provide the energy and nutrients needed by that region's population. Food shortage is most easily conceptualized as a production problem, but constraints on importation as well as storage can also cause or contribute to food shortage.

Therapeutic Feeding: Therapeutic foods are foods designed for specific, usually nutritional, therapeutic purposes as a form of dietary supplement. The primary examples of therapeutic foods are used for emergency feeding of malnourished children or to supplement the diets of persons with special nutrition requirements, such as the elderly.

Therapeutic Milk: Therapeutic milk (F-75 and F-100) is a commodity used for the treatment of children. Severe Acute Malnutrition (SAM) with medical complications in an inpatient setting. Both products require reconstitution with clean water before use and trained health care staff for their administration.

The Weight-for-Height Ratio: A weight-for-height ratio is an estimate of body fat and a good measure of your patients' risk for diseases that can occur with overweight and obesity. For adults, a healthy weight is defined as the appropriate bodyweight concerning height. This ratio of weight to height is known as the body mass index (BMI).

USEFUL LINKS

<https://www.unicef-irc.org/files/documents/d-3838-Position-Paper--Ready-to-.pdf>

<https://motherchildnutrition.org/malnutrition-management/info/rutf-plumpy-nut.html>

<https://www.unicefusa.org/stories/what-ready-use-therapeutic-food/32481>

<https://pubmed.ncbi.nlm.nih.gov/10188315/>

<https://academic.oup.com/advances/article/12/5/1930/6220155>

<https://nutritionj.biomedcentral.com/articles/10.1186/s12937-017-0276-z>

https://www.nhm.gov.in/images/pdf/programmes/child-health/IEC-materials/PARTICIPANT-MANUAL_FBCSA-Malnutrition.pdf

<https://www.unicef.org/evaluation/media/966/file/Ready-to-Use%20Therapeutic%20Foods%20Scale-Up.pdf>

<https://medicalguidelines.msf.org/viewport/CG/english/severe-acute-malnutrition-16689141.html>

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Schoonees, Anel, et al. "Ready-to-use therapeutic food for home-based treatment of severe acute malnutrition in children from six months to five years of age." *Cochrane Database of Systematic Reviews* 6 (2013).

Bahwere, Paluku, et al. "Effectiveness of milk whey protein-based ready-to-use therapeutic food in treatment of severe acute malnutrition in Malawian under-5 children: a randomised, double-blind, controlled non-inferiority clinical trial." *Maternal & child nutrition* 10.3 (2014): 436-451.