

## Protracted economic consequences of early marasmus.

Robert Bandsma HJ\*

Department of Biochemistry, College of Medicine, University of Malawi, Blantyre, Malawi

### Abstract

Each year, nine million children under the age of five die, with hunger accounting for one-third of these deaths. Sustained malnutrition in childhood can occur in secondary pathological conditions of severe acute malnutrition: oedematous and non-oedematous. The mortality rate of kwashiorkor is considerably greater than that of marasmus. There is currently no explanation for why some adolescents waste gradually without having puffiness, whereas others waste less but have oedema. Patients with kwashiorkor and marasmus have different body compositions. As a result, when children die of kwashiorkor, they still have large protein and fat tissue reserves, which are insufficiently mobilised during the disease transition stage.

**Keywords:** Acute malnutrition, Nutrition, Marasmic syndromes.

### Introduction

Undernutrition can occur for multiple reasons. Food resources may be unavailable, or you may have a condition that makes it difficult to eat, absorb nutrition, or prepare food [1]. Drinking too much alcohol can also lead to undernutrition.

Children with marasmus, on the other hand, are better able to maintain drawdown from protein and lipid stores. They had higher survival rates despite having more tissue wasting on presentation. There are no consistent changes in pre-morbid dietary intake. Patients with Kwashiorkor and marasmic syndromes have distinct patterns of intermediate metabolism. Down regulation of protein turnover is stronger in kwashiorkor than in marasmus during the acute stage

Patients with kwashiorkor have decreased lipid turnover. They also have decreased intracellular glutathione contents and rates of production. This distinct metabolic response to acute malnutrition may explain marasmic patients' ability to maintain amino acid and lipid availability for intermediate metabolism throughout periods of reduced caloric intake [2].

Most children with marasmus look shrunken and have lost most of their muscles and body fat. Their bodies try to save as much energy as possible by shutting down the immune system, not growing, and giving less energy to the liver, kidneys, heart, and gastrointestinal system.

Having too much fluid in the body, because the kidneys are not working well enough to get rid of it. This can lead to edema [3].

### Diagnosis

Doctor will first look at physical symptoms. They'll also ask questions about your access to food, any history of

eating disorders, and medications you're taking. They may also ask about your current mental state or mood. They may take a stool sample to rule out other issues related to diarrhoea.

### *Difference between Marasmus and Kwashiorkor*

Kwashiorkor is a type of malnutrition caused by protein deficiency. It mainly occurs in children who are weaning off breast milk, while marasmus can develop in infants. If your diet has a lot of carbohydrates and very little proteins, you may develop kwashiorkor. This is not a concern for most people living in developed countries, and only occurs in severe cases of malnutrition [4].

### *Treatment*

Marasmus is left untreated it can cause death due to infection, electrolyte imbalance, heart failure, or hypothermia

### **Nutritional rehabilitation and follow-up**

Increase nutrient intake through a protein and energy-rich diet. The nutrients help your body repair and grow normally. It also helps you restore your optimal weight and height over time. Once your symptoms have gone and you recover, you must stick to a balanced and nutrient-rich diet to stay healthy [5].

### **Conclusion**

This is the first report on the dietary and environmental risk factors implicated in the aetiology of early childhood malnutrition in Uganda, and it shows that risk variables for marasmus and underweight differ from stunting and poor MUAC. The significant frequency of malnutrition and current illness among children in this survey shows that low nutrition is causing poor immune function.

\*Correspondence to: Robert Bandsma HJ, Department of Biochemistry, College of Medicine, University of Malawi, Blantyre, Malawi, E-mail: r.h.j.bandsma@bkk.umcg.nl

Received: 09-Jun-2022, Manuscript No. AAAFN-22-67411; Editor assigned: 11-Jun-2022, PreQC No. AAAFN-22-67411(PQ); Reviewed: 24-Jun-2022, QC No. AAAFN-22-67411;

Revised: 27-Jun-2022, Manuscript No. AAAFN-22-67411(R); Published: 30-Jun-2022, DOI:10.35841/aaafn-5.3.115

## References

1. Galler JR, Ramsey FC, Forde V, et al. Long-term effects of early kwashiorkor compared with marasmus II Intellectual performance. *J Pediatr Gastroenterol Nutr.* 1987;6(6):847-54.
2. Barltrop D, Sandhu BK. Marasmus-1985. *Postgrad Med J.* 1985;61(720):915.
3. McLaren D, Read WC. Classification of nutritional status in early childhood. *The Lancet.* 1972;300(7769):146-8.
4. Macdonald I. Comparison of changes in serum proteins during early treatment in kwashiorkor and marasmus. *Archives of Disease in Childhood.* 1960;35(183):448.
5. Benedictow OJ. Breast-feeding and sexual abstinence in early medieval Europe and the importance of protein-calorie malnutrition (kwashiorkor and Marasmus). *J Hist.* 1988;13(2-3):167-206.