

**MANAGEMENT OF SEVERE  
MALNUTRITION:  
A MANUAL FOR PHYSICIANS  
AND OTHER SENIOR HEALTH  
WORKERS**

World Health Organization  
Geneva

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**Management  
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# Preface

Malnutrition remains one of the most common causes of morbidity and mortality among children throughout the world. Approximately 9% of children below 5 years of age suffer from wasting (weight-for-height below  $-2$  standard deviations ( $<-2$  SD) of the National Center for Health Statistics (NCHS)/WHO reference values) and are at risk of death or severe impairment of growth and psychological development.

This manual is based on *The treatment and management of severe protein-energy malnutrition*, which was published by WHO in 1981. Since then, many advances have been made in the treatment of severe malnutrition. An improved oral rehydration salts (ORS) solution has been developed for the treatment of dehydration. Advances in knowledge of the physiological roles of micronutrients have led to improved dietary management during the initial phase of treatment. It has been shown that physical and psychological stimulation, as well as care and affection, are necessary during the rehabilitation phase in order to prevent retardation of growth and psychological development.

This manual provides guidelines for the treatment of severely malnourished children (below 5 years of age) in hospitals and health centres. The treatment of severely malnourished adolescents and adults is also briefly considered. The manual is intended for health personnel working at central and district level, including physicians, nurses, midwives and auxiliaries.

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