



Practical Guidelines for

Overcoming Obesity in Children

**Arif Rohman Mansur
Mutia Farlina**

Editor: Ibn Tolhah



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This book explores the problem of childhood obesity, a growing concern worldwide. Chapter I provides an overview of the issue, defining obesity and outlining the various factors contributing to its prevalence in children, including diet, lifestyle, genetics, wealth, technology, and cultural norms. The psychological aspects of childhood obesity are also discussed.

Chapter II examines the health problems associated with childhood obesity, such as heart disease, type 2 diabetes mellitus, high blood pressure, and social isolation. The long-term consequences of childhood obesity are also explored, highlighting the risks of continued obesity into adulthood.

Chapter III describes the various methods for measuring obesity in children, including body mass index (BMI), Z-score value, and percentile value. The limitations of using BMI are discussed, and alternative methods are proposed.

Chapter IV focuses on the management of childhood obesity, with an emphasis on healthy eating and physical activity. The chapter outlines strategies for parents and healthcare providers to help children balance calories and develop healthy eating habits, such as reducing high-calorie foods and avoiding fast food. The importance of reducing sedentary time and increasing physical activity is also discussed, with guidelines for aerobic, muscle, and bone-strengthening exercises. Other strategies for managing childhood obesity include reducing stress and improving healthcare team outcomes.

Overall, this book provides a comprehensive overview of childhood obesity, its causes, and its consequences, as well as practical advice for parents and healthcare providers on managing this growing problem.



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**PRACTICAL GUIDELINES FOR OVERCOMING OBESITY
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PREFACE

All the praises be to Allâh, the Lord of the 'Alamîn; all praise is only for Allah Allah, and only with the pleasure of the goodness we strive for can it be realized. With all the conveniences and inspiration bestowed by Allah Jalla Jalaluhu, the writer can complete the preparation of a book entitled "Practical Guidelines for Overcoming Obesity in Children."

This book consists of four chapters that discuss obesity in children. The first chapter introduces obesity in children and the factors that cause children to become obese, such as diet and lifestyle, wealth, technological advances, and psychological aspects. The second chapter discusses health problems associated with childhood obesity, such as health problems, chronic diseases, and obesity in adulthood.

The third chapter discusses methods of measuring obesity, such as Body Mass Index (BMI), Z-Score values, and Percentile values. In this chapter, the author also discusses the disadvantages of using BMI. The fourth chapter discusses the management of childhood obesity, including dietary adjustments at different ages, such as those between 1 and 18 years of age. The author also discusses the importance of balancing calories and advocating healthy eating habits, reducing high-calorie foods, eating too frequently, and avoiding fast food. This chapter also discusses the importance of increasing physical activity and reducing time inactive, such as reducing screen time, increasing aerobic exercise, strengthening muscles, and strengthening bones. In addition, the

authors also discuss the importance of relieving stress and improving healthcare team outcomes.

This book is essential for parents and health professionals who want to understand childhood obesity and how to treat the problem. In this book, the author provides detailed information and practical solutions that parents and health professionals can apply to help children overcome obesity and maintain their health.

Padang, 04 April 2023

Arif Rohman Mansur

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CHAPTER

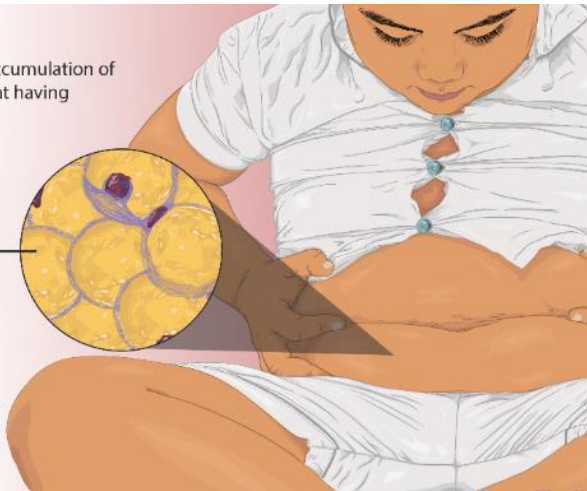
1

UNDERSTANDING OBESITY IN CHILDREN

A. Definition of Obesity

Obesity is accumulation of excessive body fat having a negative effect on health

Adipose Tissue



Picture1. Definition of Obesity

Source:

https://upload.wikimedia.org/wikipedia/commons/f/f6/Depiction_of_a_child_with_significant_abdominal_fat.png

Obesity (overweight) is a condition with excessive accumulation of body fat so that a person's weight is far above average and can endanger health. According to the World Health Organization (WHO) 2014, in general, overweight and obesity are abnormal conditions characterized by an excessive increase in body fat, generally occurring in the skin tissue around the organs. BMI measurement (Body Mass Index/BMI (kg/m^2)) with a value of 25 is defined as overweight and (pre-obese)(Lesiana, 2019). **Obesity** is heavy due to hoarding excess fat with a BMI/U

CHAPTER

2

HEALTH PROBLEMS IN OBESITY CHILDREN

A. Introduction

Obesity in children harms the growth and development of children, especially from a psychosocial perspective. Obese children have a higher risk of various diseases that can cause death, such as heart disease and diabetes. Obesity in children can also cause psychosocial problems such as loss of self-confidence, eating disorders, and poorer health, affecting their quality of life. Obesity in childhood can continue into adulthood and increase the risk of developing degenerative diseases. Obesity is caused by diet, unbalanced nutritional intake, lack of physical activity, socioeconomic conditions, and lack of sleep (Dirjen Pelayanan Kesehatan, 2022). Obesity in childhood can severely affect a child's physical, social, and emotional health and self-esteem. Obesity is also associated with poor academic performance and a lower quality of life for children. Many comorbid conditions such as metabolic, cardiovascular, orthopedic, neurological, hepatic, pulmonary, and renal disorders have also been shown to be associated with obesity (Sahoo et al., 2015).

Toddlers who are obese have harmful effects, including:

- The risk of developing type II diabetes
- High cholesterol values can cause an increase in blood pressure and have an impact on heart disease.
- Sleep disorders such as sleep apnea
- Problems with bones and joints (orthopedics)
- Chances of getting asthma and liver disease

CHAPTER

3

OBESITY MEASUREMENT METHODS

A. Body Mass Index (BMI)

Body mass index (BMI) is an indicator that is most often used to detect nutritional problems in a person, one of which is the problem of obesity. BMI is the ratio between your weight and your height squared (in meters). Body Mass Index (BMI) is an indicator of thinness and obesity. BMI measurement is the cheapest and easiest way to detect obesity in an area. The problem of obesity is now increasing with increasing social welfare and technological advances enabling community activities.

Body mass index (BMI) in children is essential in assessing children's nutritional status and health. BMI can be used to determine whether a child is overweight or obese, which can increase the risk of developing various diseases such as diabetes, high blood pressure, and heart disease in adulthood. At the same time, BMI can also help assess whether a child is malnourished or underweight. Children who are malnourished may experience growth and development problems, a weak immune system, and a higher risk of developing infectious diseases.

By knowing a child's BMI value, parents and doctors can provide the proper care and attention for the child, including recommendations for a healthy diet and physical activity to help keep the child healthy. Therefore, monitoring and assessing a child's BMI regularly is essential to ensure that the child is growing and developing healthily.

CHAPTER

4

OBSESITY MANAGEMENT IN CHILDREN

A. Arrangement Pattern Eat

To help children maintain a normal weight, try to balance calories from food and drinks consumed by children with the calories children need for physical activity and expected growth. An important principle to note is that in children who are overweight, the focus is to reduce the rate of weight gain while the process of growth and development is expected. Children should consult a nutritionist or health worker before a weight-loss diet.



Picture 17. The Child is Eating an Apple

Source:<https://www.cdc.gov/healthyweight/children/index.html>

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