



- ▶ Joint problems such as osteoarthritis
- ▶ Sleep apnea and respiratory problems
 - ▶ Psychosocial effects
 - ▶ Having diabetes
 - ▶ Metabolic syndrome

▶ Nutrition therapy in adolescents with obesity ◀

The standard protocol recommends 30 to 40 percent kcal fat intake in children 1 to 3 years old and 25 to 35 percent kcal calories in children 4 to 18 years old. Also, 45 to 65 percent kcal calorie intake is recommended in all children and adults and protein Recommendations from 5 to 20 percent of calories in children 1 to 3 years with a gradual increase to 10 to 30 percent of calories in children 4 to 18 years is recommended.

Tips for Obesity in Adolescents

Do not reduce your fat intake to zero.

Consumption of fats in fatty fish or fruits such as avocado can also be beneficial if consumed optimally.

- ▶ Try to buy less unhealthy foods such as chips, biscuits, candy, and sugary drinks so that they are not available to your children.
- ▶ Do not consume sugary drinks such as soft drinks and unnatural juices
 - ▶ Instead of focusing on calorie content, choose foods based on nutrient density. (Pay attention to its micronutrients and macronutrients)
 - ▶ Limit the intake of added sugars.
- ▶ The fiber in vegetables, whole grains, and fruits, as well as the protein in sources such as eggs, chicken, beans, and nuts, can help you in between meals and may prevent overeating.



- ▶ Drinking water throughout the day can help regulate appetite and reduce the urge to snack when you are not necessarily hungry.
- ▶ Australian guidelines recommend that children ages 5-18 have at least 60 minutes of moderate to vigorous physical activity.
- ▶ It is necessary to reduce the consumption of foods, plan the consumption of healthy snacks, follow a balanced diet, adequate consumption of fruits and vegetables, the proper fiber content in the diet, and avoid high-calorie and high-fat foods should be considered.
- ▶ **In obese adolescents, the following mistakes can be observed about food consumption:**
 - ▶ Irregular food intake
 - ▶ Get lots of meals during the day
 - ▶ Not receiving breakfast
 - ▶ Eat fewer fruits and vegetables
 - ▶ Eat more salty and sweet foods

Nutrition in adolescent obesity

Nutrition in adolescent obesity



- ▶ More physical activity with an exercise program

Individual or group therapy that focuses on changing behaviors and dealing with weight-related emotions and issues related to normal body growth.



Possible complaints of adolescents with obesity

- ▶ High blood pressure and high cholesterol

- your heart and cause plaque.
- ▶ Fasting blood sugar; Mild high blood sugar may also be an early sign of diabetes.

Other groups are at risk for metabolic syndrome:

People with abdominal obesity, People who have a passive lifestyle, People with a history of diabetes and insulin resistance, People who have siblings or parents with diabetes, It occurs more often in women than in men, Women with a history of polycystic ovary syndrome.

Approximately 12.7 million people or 17% of children and adolescents are obese. Obesity is one of the simplest medical conditions that can be diagnosed but difficult to treat. Unhealthy weight gain due to poor diet and lack of exercise is the cause of more than 300,000 deaths each year.

Causes of obesity in adolescents

- ▶ Genes
- ▶ Socio-economic issues
- ▶ How food is converted into energy in the body (metabolism)
 - ▶ Not getting enough sleep
 - ▶ Choose an unhealthy lifestyle

Treatment of obesity in adolescents

Obesity treatment can include the following:

- ▶ Advice and diet by a nutritionist
- ▶ Changes in diet and calorie intake