

## Childhood Obesity: Prevention and Treatment

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### Background and Aims

The World Health Organization (WHO, [www.who.int](http://www.who.int)) and European Association for the Study of Obesity (EASO, [www.easo.org](http://www.easo.org)) have suggested to substitute the term Obesity with Adiposity Based Chronic Disease (ABCD) in the 11th International Classification of Diseases ICD-11. The term ABCD is believed to be more precise based on three dimensions—etiology, degree of disease and health risk. The intention is to improve the diagnostic and therapeutic algorithms as well as the relationship between healthcare professionals and society [1].

### Aim

The aim of the present study is to make an overview of the current data for epidemiology, diagnosis, treatment and prevention of childhood obesity. The current data for the prevalence of severe obesity among primary school children in 21 European countries show differences among the countries: from 1 in 5 to 1 in 3 obese children [2].

Childhood obesity is an extremely heterogeneous disorder and demands proper diagnostic evaluation for every individual patient. Early onset and severe obesity may be caused by rare mutations of the genes associated with appetite or energy control and rare syndromes. Once diagnosed, treatment options are available [3].

The most prevalent type of obesity is polygenic and is called “simple obesity”. It is extremely heterogeneous in genetic susceptibility. The new approach of quantifying inherited susceptibility has led to the validation of the genome-wide polygenic score (GPS) [4].

The treatment options for childhood obesity are still limited and the success rate is inconsistent [5]. The success rate of childhood obesity treatment and prevention of severe obesity is highly dependent on timely referral to specialist care.

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