

References:

1. Gungor NK. Overweight and obesity in children and adolescents. *J Clin Res Pediatr Endocrinol.* 2014;6(3):129-143. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4293641/>.

Gungor provides evidence based research to explain the increase in childhood obesity and the comorbidities it may lead to such as hypertension, diabetes and fatty liver disease. The argument is for prevention by identifying children and adolescents at risk for becoming overweight or obese before it happens. Treatment interventions are discussed as well as when to include clinical nutrition. Gungor describes the remedies to childhood and adolescent obesity as spanning beyond just professional medical help but goes on to include that a model culture of health needs to be created as the overall advocate.

2. Raj M, Kumar RK. Obesity in children & adolescents. *Indian J Med Res.* 2010;132(5):598-607. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3028965/>.

Raj and Kumar explain seriousness of the growing obesity epidemic in the child and adolescent population. It is noted that childhood and adolescent obesity is a global issue and is not predicated on specific socio-economic status, age, sex or ethnicity. They argue that the treatment of the epidemic requires a multidisciplinary approach which includes medical professional intervention, family involvement and the influence of policy makers and legislation. They note that if an overall change in the way obesity is treatment is not done then there will be extreme implications on future generations.

3. Lobstein T, Jackson-Leach R, Moodie ML, et al. Child and adolescent obesity: Part of a bigger picture. *Lancet.* 2015;385(9986):2510-20. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4594797/>.

Lobstein et al. focus on examining the promotion of the correct foods being included in the diet of obese children and adolescents. There needs to be an increased focus on the foods and beverages that are being marketed and promoted to the adolescent population. They argue that the governance of food supply needs to be improved to protect the health and wellness of children and adolescents. There should be a decreased promotion of energy-rich but nutrient-poor foods as these are the root cause of the beginnings of the epidemic. Nutrition policy needs to be strengthened to ensure nutrition security as even countries with undernutrition are showing signs of obesity.

4. Kumar S, Kelly AS. Review of childhood obesity: From epidemiology, etiology, and comorbidities to clinical assessment and treatment. *Mayo Clin Proc.* 2017;92(2):251-265. <https://www.ncbi.nlm.nih.gov/pubmed/28065514>.

Kumar and Kelly focus on the examining the true cause of childhood obesity and argue that the most common cause is an excess caloric intake beyond energy needs with a predisposition for weight gain. They also provide evidence based research on many other contributors to obesity as additional concerns. It is argued that the best first steps for overall treatment are to find the root cause for the individual's weight gain and then use a staged approach to treat that root cause and its symptoms. Kumar and Kelly note that family-based lifestyle changes will yield the most success in the treatment of childhood obesity so that the overall patterns intake, behavior and activity may be changed.