## Childhood Obesity: The Role of Physical Activity and Diet.

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The world-wide epidemic diffusion of obesity and the health and socio-economic implications of it has promoted extended research during the last decades on the aetiopathogenesis, treatment and prevention of this disease. The objective of the current paper is to review the existing literature on childhood obesity, focusing primarily on the role of physical activity, both in the pathogenesis and the treatment of the disease. Both the cross sectional and the prospective studies reviewed are quite consistent in demonstrating a relationship between obesity and physical activity in children. Furthermore the findings of the experimental studies are supportive to this relationship indicating that enhanced physical activity through structured exercise programmes, is an effective tool in treating childhood obesity. This tool can be even more effective if diet is also included as a component of the intervention.

However, the long-term benefits of such interventions are questionable and definitely not cost effective if they have to be implemented in large group of children. Understanding human behaviour and the role of family and school in the development of life habits, seems to be the key point in developing effective interventions with long term benefits. During the last two decades several school based programmes, with extended parental involvement, focusing both on developing healthy eating habits and increasing voluntarily physical activity, indicate a promising, effective approach without requiring substantial school time or new resources.