



PODIATRY

# FootScope

A foot health message from

## The impact of obesity on children's feet



Obesity affects the entire body, but it is the feet that take the impact and that are immediately and obviously affected by excess weight. As the health of the feet affect the health of the entire body, the impact of obesity in children is multiplied as growing feet are injured, leading to a lifetime of biomechanical problems and long-term difficulty losing weight due to exercise limitations enforced by damaged feet.

Obesity is linked to higher rates of disease throughout the body as weight gain puts increased pressure on the heart and other organs. The impact of obesity on the feet leads to structural abnormalities and joint deformities that lead to difficulty walking and contribute to foot, leg, hip and back problems.

In children, the bones of the feet are still growing, making them soft and malleable, and therefore require care to avoid long-term damage. A study has shown that obese children have wider and longer feet than children of a healthy weight. The extra weight makes it more difficult for the feet to absorb shock and multiply the force applied through the feet when walking.

Childhood obesity has long lasting effects and will negatively impact health long into adulthood. Prevention is better than cure to avoid long-term problems including chronic pain and disability, and children should be treated by a podiatrist, as part of a larger care team, to improve health.

# Tips to ease the effects of childhood obesity

The following tips outline the action needed to ease pain and avoid long-term suffering for overweight or obese children.

1. **Diet:** a dietary plan is an obvious, yet necessary, first step to limit weight gain. Eating a varied and healthy diet is important for overall health, and children can be encouraged to change their eating habits if foods are made to interest them and healthy alternatives of favourite foods can go a long way to easing the change.
2. **Exercise:** obese children are likely to have difficulty walking and the force of the extra weight on their feet make exercise programs unsuitable due to the potential for damage to the structure of the feet. Sports that remove pressure from the feet are the way forward; swimming and bicycle riding are good options.
3. **Footwear:** obese children have been shown to have longer and wider feet than children in the normal weight range. Children should always have shoes that fit their feet properly, and obese children will need shoes that allow for the extra width and that have a wide toe box to provide room to move; the wider toe box will make balancing easier.
4. **Orthotics:** custom orthotics are recommended for obese patients because of associated symptoms that may necessitate treatment. Orthotics are made to fit the feet of the patient and are customised to allow for the specific needs of the foot in question. In obese children, orthotics can help to support arches that are at risk due to excess weight, and to prevent the feet from rolling inwards.
5. **Education:** providing children with the tools to make healthy decisions about their lives will empower them. Positive outcomes are more likely when a child is choosing to change their behaviour without being forced to do so. Children should be informed about the negative impact of obesity on long-term health and of the benefits and achievability of a normal weight range.

