I am concerned about my granddaughter. She is 9 years old, tall for her age, but markedly overweight. The family eats at fast-food outlets regularly, and she drinks large amounts of soft drinks daily. What do you advise?

You have reason for concern. The problem of childhood obesity is increasing at an alarming rate in developed and emerging countries. In the United States the number of overweight children has doubled between the years 1980 and 2002. (Overweight is defined as a body mass index at or above the 95th percentile for age and gender.)

Type 2 diabetes, which was found mainly in middle-aged people 30 years ago, is increasing rapidly in children. In the United States almost half of the newly diagnosed cases of type 2 diabetes are found in children. High blood pressure, increased insulin in the blood, and abnormal cholesterol and other blood fats are commonly present in overweight children. In the past 25 years problems associated with obesity such as gallbladder disease and breathing difficulty at night (sleep apnea) have increased threefold in children and adolescents.

Children who are overweight require a thorough evaluation. The family history should be studied, and all the dietary and activity patterns established. Features that may point to underlying congenital or hormonal abnormalities should be evaluated. This latter category accounts for a very small number of cases of childhood obesity.

Particular attention needs to be given to the diet, and also the education of those responsible for providing the child’s nutrition. Foods high in calories and low in nutrition need to be eliminated and replaced with nutritious, less-calorific foods. Soft drinks are especially problematic, and should be eliminated. Activity needs to be encouraged.

Children spend a lot of time watching TV and playing video/computer games. Physical education at school should be encouraged, and specific advice given on regular and healthy exercise. Regular exercise is a vital intervention to preservation of health, and also to maintain weight loss.

Family engagement is critical. The problem needs to be addressed at the earliest age possible in order to prevent lifetime complications. Time is of the essence.