

Obesity link to puberty cancer risk

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Children who are overweight and do little physical activity are more likely to reach puberty earlier which can carry long-term health risks, doctors have warned. Cancer experts want to see more being done in primary schools to make children aware that what they eat will have a major impact on their future wellbeing.

Puberty is happening at an earlier stage than ever, largely due to the amount of fat and high-calorie food in the diet. Girls, on average, now start their periods at the age of 12 years and 10 months, eight months earlier than 30 years ago.

Some cancers are known to be linked to early puberty. With breast cancer, a woman whose periods began at 11 is 50 per cent more likely to develop the disease than one who began at the age of 15.

Professor Tim Oliver, an expert in testicular cancer at Bart's Hospital in London, is involved in research looking at whether early puberty in boys may be affecting the age at which they develop the cancer. Vigorous exercise and sport, along with a balanced diet, can delay the onset of puberty, but most parents are unaware of the connection.

There has also been a general decline in the amount of overall physical activity among children since the Seventies. The Observer has been campaigning for a boost to school sports, to ensure that all children are given at least two hours' activity a week.

A study carried out by Bristol University three years ago, which looked at the development of more than 14,000 children, found very early signs of puberty in some eight-year-olds. There was evidence that one in 14 eight-year-old boys had some pubic hair - an early indication of puberty, which was seen in only one in 150 boys looked at in the previous generation.

Professor Ian Johnson, from the Institute of Food Research in Norwich, said: 'There is a general decline in the age of puberty, and we are seeing this trend towards more obesity and a less active lifestyle. The interrelationship with cancer is complex, because there are so many factors involved. But many studies have shown that being overweight and obesity are linked to a range of cancer, particularly colorectal [bowel] and oesophageal cancer.'



'We are already beginning to see Type 2 diabetes in children, a disease which normally would only appear in late middle-age. If children are overweight early in life, then there is a risk of disease that would occur later on happening earlier.'

Johnson would like to see more promotion of healthy activity in schools. 'Exercise is good in itself, because it stimulates a whole range of protective physiological mechanisms. The heart will work better, and the circulation is more efficient.'

Colorectal cancer is linked to the build-up of fat around the middle of the body, but not to puberty. The cancer develops over a 20- to 30-year period, but it is thought that fat cells

from an early age perform some form of endocrine, or hormonal function, and can produce factors which stimulate pre-cancerous changes.

Dr Peter Betts, a diabetologist from the University of Southampton, gave evidence last week to the Commons health select committee which is holding an inquiry into obesity. Betts believes that the country is likely to see an increasing number of health problems related to early obesity, including depression, heart disease and polycystic ovaries in women.

'The Americans have already begun to see liver damage in children, which is caused by a build-up of fatty deposits that may cause some inflammatory response, and lead to cirrhosis,' he said.

'Here in Southampton, I've seen a big increase in the number of children who are very overweight. The depressing aspect of it is that it is extremely hard to manage children who are obese.

'We should be putting far more resources into preventing the problem. Children no longer cycle to school, and their school lunches give them a healthy option, but also the option of eating chips and pizza.

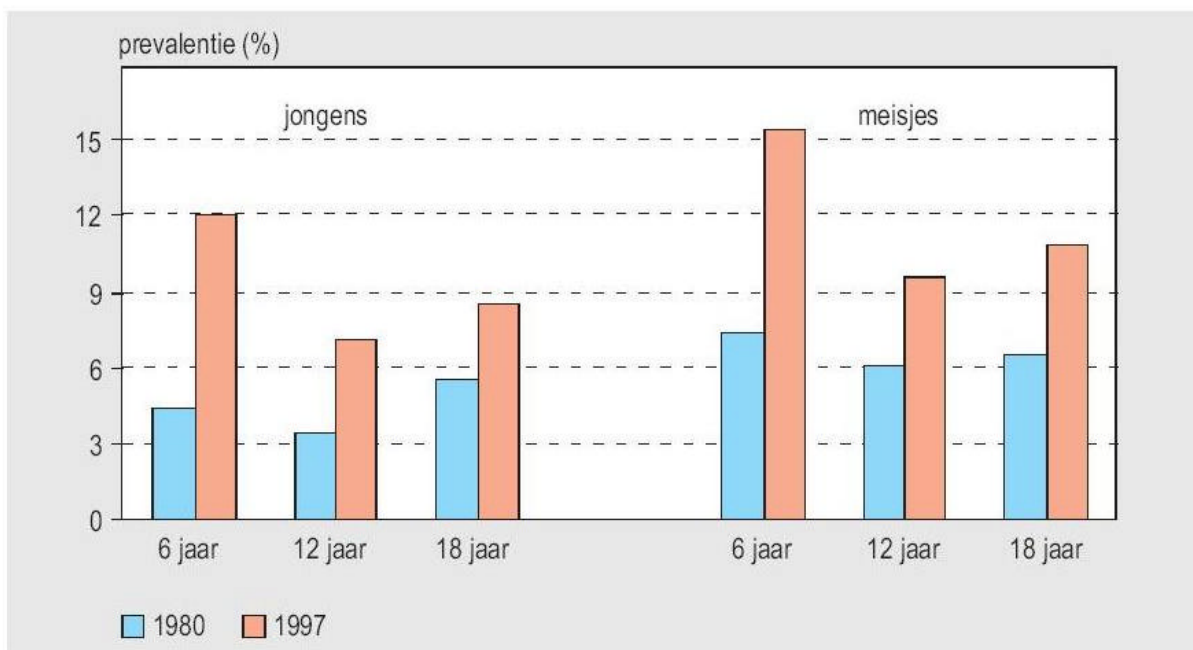
'The schools have vending machines selling them drinks full of glucose. What chance do we have against that?'

“ Ons eten gemeten ”

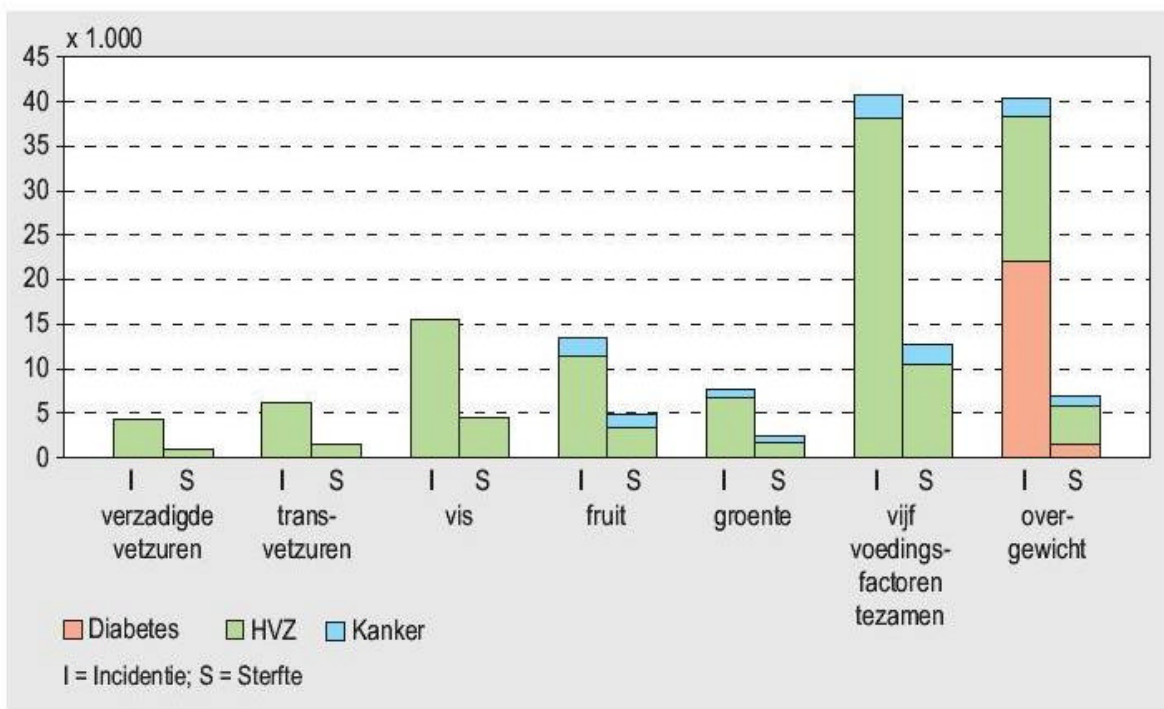
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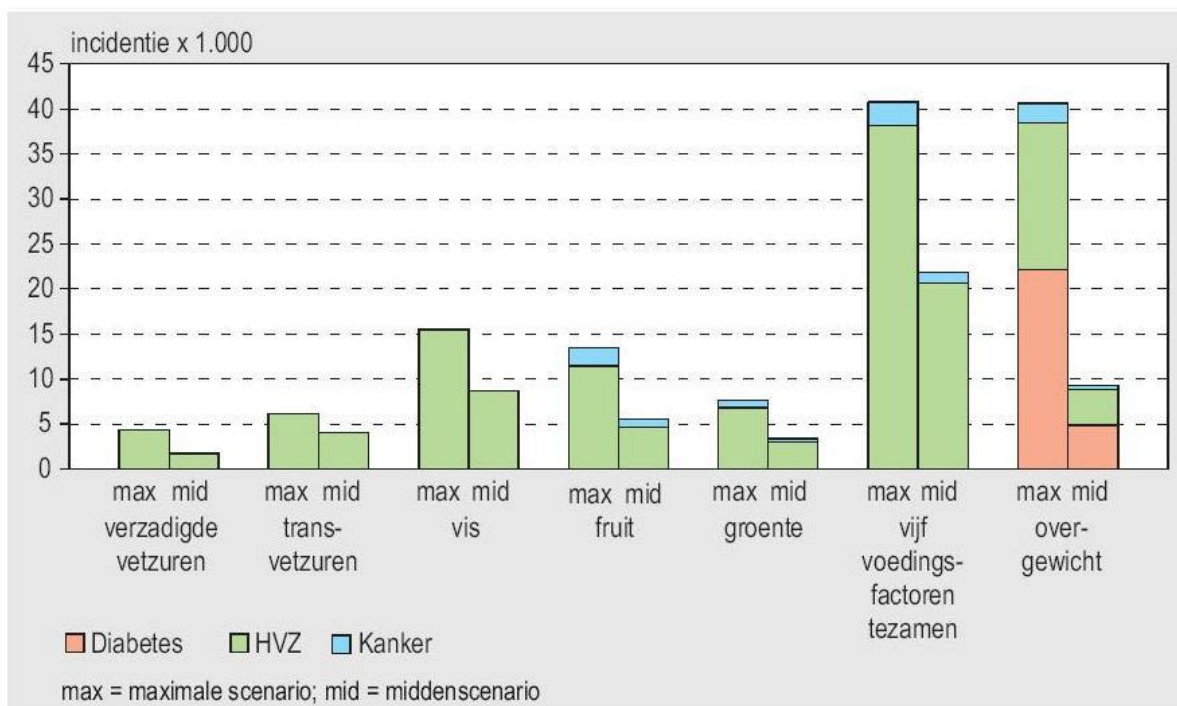
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Figuur 1: Prevalentie van overgewicht bij Nederlandse jongens en meisjes naar leeftijd (Bron: Fredriks et al., 2000; bewerking RIVM).



Figuur 2.5: Berekend gezondheidsverlies doordat de consumptie van verschillende vetzuren, fruit en groente (afzonderlijk en in combinatie) en het lichaamsgewicht niet voldoet aan de aanbeveling; aantal gevallen van ziekte (incidentie) of sterfte, direct toewijsbaar op 1-jaarsbasis.



Figuur 3: Aantal vermijdbare ziektegevallen per jaar in het maximale en middenscenario.