

Obesity

The epidemic of excess weight and risks of related health problems

According to a recent estimate by the World Health Organization (WHO), more than one billion adults worldwide are now overweight or obese and most suffer from weight-related health problems.¹ These weight-related problems are associated with an increased risk of death and a decrease in quality of life. The problem of excess weight is rising to epidemic proportions at an alarming rate in both developed and less developed countries. For example, the prevalence of obesity has risen by between 10-50 per cent in the majority of European countries in the last 10 years.²

One of the most common health problems associated with excess weight is type 2 diabetes. More than 90 per cent of all people with type 2 diabetes are overweight.³ Excess weight is well recognised as the most important modifiable risk factor for the development of type 2 diabetes.³

Cardiovascular disease (including high cholesterol, high blood pressure, coronary heart disease (CHD) and stroke) is also strongly linked to excess weight. The number of overweight people with high blood pressure (hypertension) is almost three times higher than the number of adults with a healthy weight.⁴ The risk of CHD increases two-to-threefold in overweight people compared to people with a healthy weight.⁵

Excess weight can also increase the risk of developing other health problems, such as certain cancers, gall bladder disease, respiratory disorders and joint diseases. According to a recent study, up to 6 per cent of the cases of cancer in Europe are attributable to excess weight.⁶

Weight-related type 2 diabetes – treatment and prevention

- Type 2 diabetes results from an inability of cells in the body to take sugar from the blood and use it for fuel in the normal way, a process that requires the action of insulin. This may occur because the body does not produce the amount of insulin required (insulin deficiency) or does not respond well to the action of insulin produced by the pancreas (insulin resistance).
- As weight increases, the body becomes less sensitive to insulin and the role it plays in the body. Insulin resistance develops leading to high blood sugar levels (hyperglycaemia), signalling the onset of type 2 diabetes. Insulin resistance improves with weight loss and once type 2 diabetes has developed, weight loss can help to control hyperglycaemia.
- While a number of recent studies have shown that lifestyle changes (to reduce weight and increase physical activity) have a dramatic effect on delaying or preventing the development of type 2 diabetes, XENDOS is the first study to confirm that the addition of the weight loss medication Xenical to lifestyle changes, is a more effective intervention than lifestyle changes alone.⁷ This was true for patients with both normal and impaired glucose tolerance. Patients with impaired glucose tolerance (IGT or pre-diabetes), a condition where a person's blood glucose is above normal, are at significant risk of developing diabetes.
An analysis measuring the change in blood glucose levels vs. weight at study end point confirmed that the improvement in glycaemic control with Xenical was greater than expected based on weight loss alone.
This is the first study to demonstrate Xenical's independent effect on glycaemic control and it confirms that Xenical could play a major role in the management and prevention of diabetes. [Ref: Jacob S, Meier M, Rabbia M, Hauptman J. Orlistat has positive effects on glycaemic control in type 2 diabetes beyond improvements produced by weight loss alone. Poster presented at the 10th International Congress on Obesity, Sydney Australia.]
- A clear relationship exists between weight and type 2 diabetes. For example:
 - The risk of developing type 2 diabetes doubles in women who gain 5 to 7.9kg and triples in those who gain more than 8kg after the age of 18 compared with those of normal weight³
 - Women who lose more than 5kg reduce their risk of developing type 2 diabetes by half³
- Weight loss is often more difficult to achieve for people with type 2 diabetes. People who are receiving medications for the treatment of their type 2 diabetes, such as insulin and some oral treatments, often continue to gain weight because of

the medication.⁸ People with type 2 diabetes are therefore faced with the health problems and challenges of losing weight beyond those faced by other overweight people.

- Type 2 diabetes leads to a number of disabling and life-threatening conditions, such as heart disease, nerve damage, amputation and stroke.⁹ Effective weight management is essential to the long-term treatment of type 2 diabetes. Moderate weight loss can improve blood sugar control and insulin sensitivity.¹⁰ Even a small decrease in weight (around 5%) can reduce the risk of related conditions such as blindness, leg ulcers, high cholesterol, high blood pressure or death from type 2 diabetes.¹¹

Weight-related cardiovascular health problems

- Elevated cholesterol and coronary heart disease are strongly linked to excess weight.
- Elevated cholesterol levels contribute to blockages in the arteries (atherosclerosis) and as a result the risk of developing CHD is greatly increased. Atherosclerosis affects the flow of blood in coronary arteries and in doing so reduces the oxygen available to the heart, and can result in a heart attack. In people who have high cholesterol, weight loss of 5-10 per cent helps to lower cholesterol levels.¹²
- Body weight and blood pressure are directly related. As body weight increases, so does the risk of increased blood pressure. However, in people who have hypertension, weight loss of 5 to 10 per cent is associated with a significant reduction in blood pressure.¹²
- Xenical has shown to significantly improve blood pressure in normotensive and hypertensive patients vs. placebo. [Ref Caterson I, Witter G. Orlistat markedly reduces blood pressure in obese patients independently of clinical setting – especially in those with baseline hypertension. Poster presented at the 10th International Congress on Obesity, Sydney Australia.]. Improvements are seen in both general practice and hospital clinical settings. Xenical is currently the only available weight loss medication to demonstrate this effect on blood pressure.

Weight-related cancers and other conditions

Excess weight increases people's risk of developing certain cancers, especially bowel, endometrial and breast cancers. It increases their risk of developing gall bladder disease, respiratory problems, joint diseases like osteoarthritis, infertility in women and depression. Weight loss has been shown to reduce the risk of, or to improve many of these problems.

References

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