

Part of the Solution - low and no calorie soft drinks could to help keep weight down

Obesity is one of the most serious health challenges of the new century. As a risk factor not only for coronary heart disease but also Type 2 Diabetes, obesity is now high on the agenda of health professionals and healthcare providers everywhere.

Data released by the UK's National Audit Office in 2001 revealed that the growth in the number of adults classified (by their Body Mass Index) as obese has accelerated rapidly over the past twenty years. In 1980, 8% of adult males in England were obese. For women, the figure was 6%. Figures for 1998 show that 21% of men and 17% of women are obese. The figures for children and teenagers are equally concerning, with a rapid increase in the number of teenagers, and even very young children, who are overweight or obese.

Data gathered by the World Health Organisation indicates that obesity is a problem internationally. In fact, the number of people throughout the world who are obese now exceed the number of those who are undernourished.

The costs are enormous. The National Audit Office estimates that obesity results directly in 30,000 premature deaths in the UK each year, 18 million working days lost through illness, £500 million in National Health Service treatment costs and an overall economic cost in excess of £2 billion per annum. In fact, after cigarette smoking, being overweight is the single most significant cause of ill health in the UK. And the health issues may extend beyond those who are obese - ongoing research into the very significant rise in the numbers of people with Type 2 Diabetes indicates that even those with a healthier weight may be at risk if they snack (or 'graze') thereby frequently putting stress on the liver¹.

Consumer interest in adopting a healthier approach to weight management and diet is high. The message from healthcare professionals is relatively simple - more exercise, a more balanced diet and fewer calories, especially from fat and simple sugars - but often difficult to follow.

Undoubtedly too little exercise and a more sedentary lifestyle is a key factor in the escalating weight gain which burdens many of us, and particularly children. But we can't escape the fact that over consumption of calories is an issue too.

Drinking no-sugar or sugar-reduced drinks is a particularly easy way to reduce the number of calories consumed each day. Furthermore, research is demonstrating that drinking beverages which are calorie-free or calorie-reduced can make a very real difference to overall energy intake.

What is emerging is that, while our bodies are quite good at rebalancing our metabolism to maintain a stable bodyweight, the way the body takes into account calories from drinks is different from its recognition of calories consumed as foods. In fact, it seems that our liquid intake has little effect on our intake of food eaten after or with those beverages. So unfortunately whether we drink a glass of wine (about 125 Calories for a 175 ml. glass) or a glass of water (0 Calories for the same volume) we are likely to consume the same amount of food (and calories) during the following meal.

Research undertaken at the University of Burgundy² has demonstrated this clearly. Student volunteers with a normal body weight were recruited to take part in a research study. During the study, which was tightly controlled in terms of measurement of the food and drinks consumed and which lasted three weeks, the volunteers were asked to maintain their usual level of physical activity and not to consume caffeinated or alcoholic drinks. The students were given either still

mineral water, or the same water flavoured with orange and unsweetened, or the orange-flavoured water sweetened with sugar, or the orange-flavoured water sweetened with aspartame.

The study showed that "irrespective of the nature and the volume of the beverage consumed, subjects had the same energy intake at meals". This meant that the students drinking sugar-sweetened beverages consumed about 640 Calories more each day than those who drank water or aspartame-sweetened beverages. The authors of the paper conclude "it seems probable that when only one type of flavoured or unflavoured beverage is available, the sensorial properties of the beverage consumed exerts little influence on the amount of fluid consumed. On the other hand, the volume of fluid consumed did not modify food intake. As a consequence, the energy provided by a sucrose-containing beverage was not taken into account by energy-balance mechanisms"

It is possible that there is a delayed adjustment in energy balance by regulation of subsequent food intake, however these findings are just some of the latest in a body of published research from many sources dating right back to the Seventies. Wooley³ demonstrated in 1971 that people consumed more calories overall when the liquids they drank were high in calories. Spiegel⁴ reported in 1973 that people failed to compensate for changes in the calorie content of liquids by adjusting meal size or meal intervals. Other studies have shown that the energy content of drinks (including milk or juice) taken with or before a meal exert little effect on the food intake during this meal or meals eaten thereafter. And the lack of compensation in food intake, in response to energy provided by alcoholic beverages, has also been reported in several studies.

So back to that glass of wine....

One glass of wine every day throughout the year provides 45,625 Calories. If these were not used up by exercise or other energy expenditure, they could turn into more than five kilos of fat. Have you noticed, in the gym, how hard you have to work to exercise away a kilo of fat?? Put another way, exchanging that drink for a lower calorie beverage on just one occasion each day could really make a difference.

References:

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