



## **Dieting: A fat lot of use?**

The scourge of smoking and the epidemic of obesity are both important causes of 'lifestyle' diseases. In the case of excessive weight gain these include cardiovascular disease, diabetes and worn joints. Both smoking and obesity resist cure strenuously. While smoking has declined in the developed world because of state and other interventions, the global tobacco industry is aggressively and shamelessly exploiting the markets of the developing world, where smoking is on the rise. Obesity is on the increase all over. Neither can simply be left to individual choice, and they are good examples of conditions that require nations and global organisations to develop strategies to deal with them effectively.

Obesity can be blamed on evolution. It rewarded species that could store energy successfully in order to survive famines. Furthermore, the unrestricted availability of calories is not a natural condition. Such bounty results in many people entering a state of prolonged imbalance between energy intake and energy expenditure, resulting in weight gain. Achieving an ideal physical shape, which would appear to require simple restriction of energy intake, is therefore very hard to achieve.<sup>1</sup>

The diet industry is a multi-billion dollar business. Magazines depict the looks and shape of people that are popularised as the ideal. As in the cosmetics industry, people are willing to invest large sums in the hope of attaining this. Weight-loss remedies of all kinds have made fortunes for those whose current fad found favour. Among these are the proponents of all manner of diet variations. Diets that have had their day include high-carbohydrate, low-fat diets and vice versa (the Atkins diet), and high-protein diets (on the basis that protein is thought to provide more satisfaction per calorie than fat or carbohydrates). Intervention studies of all kinds have shown initial weight loss followed by weight gain by participants.<sup>2</sup> Those who did better in holding onto their weight losses had more counselling and adhered more closely to their dietary programme. Investigators have concluded that any type of diet, when used for the purpose of weight loss with enthusiasm and persistence, can be effective. Behavioural factors rather than dietary composition are therefore the main influences on weight loss.<sup>3</sup>

Weight losses among participants in diet trials will at best average 3 - 4 kg after 2 - 4 years. They will be less among people who are poor or uneducated, groups that are hit hardest by obesity. A change of paradigm rather than another diet trial is called for. Katan<sup>2</sup> also draws attention to a study in France in which a town, via a total community effort, was able to significantly reduce the prevalence of overweight children compared with neighbouring towns where it had risen. The total community approach is now being extended to 200 towns in Europe.

What about the effect of exercise on weight loss?

Understandably exercise enthusiasts will push their vision of trim, fit and healthy individuals and communities as a result of burning off calories and toning the body. And certainly part of the equation is exercise – but its importance in weight loss is probably rather overstated. A meta-analysis on the effect of school-based physical activity interventions on body mass index in children disappointingly showed no improvement in the body mass index, although they had other beneficial health effects.<sup>4</sup>

What to do about obesity? A total community effort is required. However, interventions may pose ethical issues about personal choice versus what is perceived as being for the general good, for example deciding when severe childhood obesity becomes a child protection issue.<sup>5</sup> Secondly, major changes are required in encouraging less and healthier energy consumption in what we eat and drink. Suppliers preferably need to become part of the solution, but occasions may demand tough action and legislation as with the tobacco industry. Thirdly, exercise may not play as important a part in weight reduction as calorie reduction, but it has many other benefits. For example, cycling to work should be encouraged by cycle lanes and other planning strategies. Finally, people are being swindled by many commercial weight-loss providers (drugs, food supplements, diets, etc.) that are happy to exploit consumers' hopes and dreams by creating false expectations. Health professionals and the government have a responsibility to expose and regulate claims that are not based on sound evidence,<sup>6</sup> such as the successful legal challenge of Dr Rath's claims of curing AIDS with vitamin supplements. Most weight-loss fads are a fat lot of use.

**J P de V van Niekerk**

*Managing Editor*



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