Satiety: not the problem, nor a solution

This comment further extends the argument put forward recently by Booth and Nouwen (2010) that satiety claims have limited value for weight control and are misleading for consumers. Consumers need to be made aware of the bigger picture of weight control rather than fed with the too simplistic promise that a special satiety-enhancing food can effectively improve their weight control.

Satiety claims: weak and misleading

A principle reason that products bearing satiety claims provide no solution is that satiety claims are inherently weak because there is no direct link between increased satiety and decreased energy intake or body mass index: the outcome measures of successful weight control. Other health claims also suffer from the complexity of the ‘problems’ they address, however, they usually state an effect of a product or substance on a biomarker or risk factor that is known to be associated with a lower (disease) risk. E.g., products may act to lower serum cholesterol or blood pressure. Satiety-enhancing products may, at best, help to increase the chances of short-term success within the context of a reduced-energy diet plan or program. Interestingly, the European Commission (EC) is well aware of the limited health value of single products, given her statement with regard to nutrition and health claims that ‘A varied and balanced diet is a prerequisite for good health and single products have a relative importance in the context of the total diet.’ (Corrigendum, 2007, point 1). This touches upon the fallacy that there are healthy (‘good’) and unhealthy (‘bad’) foods, whereas it is only sensible to talk about a healthy diet or, even better, a healthy lifestyle.

It is actually surprising that satiety claims are allowed since regulating bodies like the European Food Safety Authority (EFSA) and the American Food and Drug Administration (FDA) apply strict criteria and approve claims on the basis of scientific evidence. Moreover, they are both trying to prevent claims from being misleading. E.g., in the 2007 Corrigendum to the EC Regulation on nutrition and health claims made on foods it is stated that ‘It is important that claims on foods can be understood by the consumer.'
and it is appropriate to protect all consumers from misleading claims.' (Corrigendum, 2007, point 16). To achieve this, claims have to be comprehensible for the ‘average consumer’. However, effectively conveying other than very simplistic claims to ‘average consumers’ turns out to be difficult (Hooker & Teratanavat, 2008; Kapkass, Schmidt, Childs, Meunier, & White, 2008). To make things worse, consumers may mis categorize the ‘healthiness’ of foods or their caloric content on the basis of nutrition claims or other highlighted information on the package. For example, it has been shown that labeling a product as ‘organic’ leads people to infer that organic cookies are lower in calories that conventional cookies with the same amount of calories (Schuldt & Schwarz, 2010). Moreover, in another study merely labeling a snack as healthy rather than unhealthy boosted intake by 35% (Provencher, Polivy, & Herman, 2009). Similarly, consumption of a so-perceived healthy satiety-promoting food is likely to give consumers the impression that they are successfully restraining their energy intake, which may lead them to overeat (Booth & Nouwen, 2010). This pitfall is also acknowledged in the EC regulations which state that products bearing a claim can ‘encourage consumers to make choices which directly influence their total intake of individual nutrients or other substances in a way which would run counter to scientific advice’ (Corrigendum, 2007). To tackle such undesirable effects the EC decision risk appropriate to impose certain restrictions on the products bearing claims.’ Satiety claims would qualify for such restrictions. Given the difficulty of appropriately conveying health-related information to consumers, one could even argue that it might be better to deprive consumers of any such information by prohibiting specific health-related product claims altogether, and only providing diet and lifestyle recommendations.

**Body weight: hard to control**

The abundance of ‘weight control’ products is quite striking, especially given the fact that the issue with the control of food intake is that many people lack control. Quite ironically, the consumers at which weight control products are targeted are the ones that are unsuccessful in controlling their weight. In fact, it is well-established, and any ‘dieter’ can confirm, that reducing energy intake by means of a deliberate reduction of energy intake (‘dieting’) is very hard and usually unsuccessful on the long term (Mann et al., 2007). Accordingly, people characterized as ‘restrained eaters’ usually have the intention to restrain their intake, but they are unsuccessful in actual restraint behavior (Stice, Fisher, & Lowe, 2004; Stice, Sytsko, Roberto, & Allison, 2010). Weight control products appear to keep the myth of successful weight control alive rather than promoting actual sustained weight control, i.e., satiety claims give consumers an illusion of being in control.

**Weight control: the gender bias**

Weight control products are usually targeted at women. The reason for this seems to be that women are more likely to buy such products than men. Indeed, women are more concerned with their health and their weight, whereas men are less health-minded when it comes to food choice and are less likely to diet than women (Neumark-Sztainer, Sherwood, French, & Jeffery, 1999; Wardle et al., 2004). Therefore, from a marketing perspective it makes sense to target products at women. Men tend to store excess fat intra-abdominally, and this is associated with a higher cardiovascular disease risk (Erlingsson et al., 2009; Lemieux et al., 1994). Therefore, from the perspective of public health, it would make sense to also develop weight control products for men, under the assumption that such products would be effective. In addition, satiety claims aimed at a specific group of consumers, namely ‘weight-concerned women’, should be judged even more stringently on their misleading nature, in line with the regulation that ‘the exploitation of consumers whose characteristics make them particularly vulnerable to misleading claims’ should be prevented (Corrigendum, 2007). According to this regulation ‘it is desirable that the impact of the claim be assessed from the perspective of the average member of that group’. Thus, the limited value of satiety-enhancing products should be made very clear to potential consumers who desire to lose weight in order to prevent them from perceiving such a product as ‘the solution’.

**Concluding remarks**

It is surprising that satiety claims are allowed, since they are inherently weak and misleading for consumers. In the interest of public health consumers should be provided with a realistic perspective on weight control including the concept that successful weight control will require them to permanently change their eating habits and likely other aspects of their lifestyle. This message needs to be an explicit part of any dietary regimen and weight loss program. While specific food products may help people in the process of changing their habits, such products need not be part of what should always be the endpoint: a healthy diet and lifestyle (not e.g. ‘short-term weight loss’). Thus, consumers need to be made aware of the bigger picture of weight control rather than fed with the simplistic and false promise that a special satiety-enhancing food can effectively improve their ‘weight control’.

If satiety claims continue to be allowed, it should be obligatory that their limited value is clearly mentioned on food packages and in commercials. One can doubt the effectiveness of this, but at least it is giving consumers a clue about the limited usefulness of such a product for weight control purposes.

**References**


