

## New Year's Resolutions to Lose Weight – Dreams and Reality

Sophia M. Rössner<sup>a</sup> Jakob Vikaer Hansen<sup>b</sup> Stephan Rössner<sup>c</sup>

<sup>a</sup> Department of Woman and Child Health, Karolinska Institute, Stockholm, Sweden

<sup>b</sup> KOMPAS Kommunikation, Copenhagen, Denmark

<sup>c</sup> Obesity Unit, Karolinska University Hospital Huddinge, Stockholm, Sweden

Overweight and obesity are escalating problems in the Western world. It has been said that in the USA between 25 and 50% of the female population is constantly trying to lose weight, obviously with little success, since the process continues and the prevalence of overweight and obesity in the USA and elsewhere has reached an all-time high situation [1]. Obesity is by now a well-known medical risk factor both in itself and for numerous other metabolic, mechanical and psychological complications. There is a huge amount of individuals, in particular females, who constantly want to lose weight, although their overweight and medical risk pattern may be modest. Statistically they may be at a slightly higher risk for complications than normal-weight women, but the main purpose for them to lose weight is often a combination of health concerns together with a desire for a better appearance. In this group of women enormous resources are spent on weight loss attempts. Whereas frustration is common, weight loss maintenance is rare.

A common point in time to decide to approach the weight problem is around New Year. The tradition to express New Year's resolutions is deeply rooted in the Western civilization, when the change of one year into another offers a given opportunity also to change lifestyle.

There may however be other reasons why New Year is a time to make promises for the future. In the Western world and on the northern hemisphere the end of the year marks a period when cold and dark hours make outdoor activities less available. A number of seasonal festivities take place, generally associated with an abundance of food. In the USA Thanksgiving is the peak of food consumption, whereas in many other European countries the period around Christmas is a danger zone. Whether the reduced number of light hours affects diet behavior and exercise willingness remains unclear, with some studies suggesting that light-sensitive

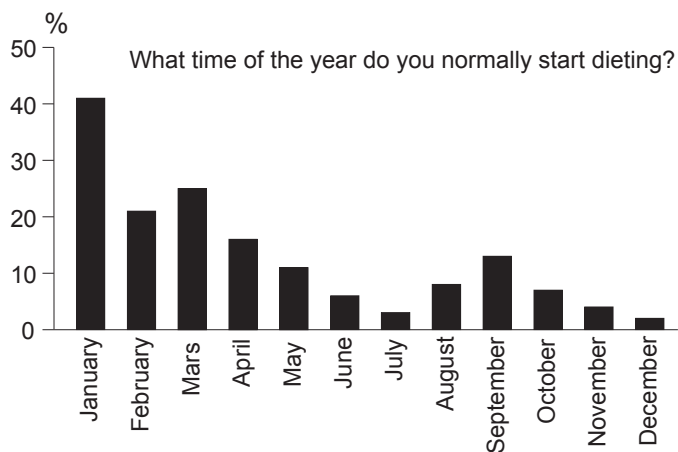
hormones like melatonin may play a role in metabolic regulation [2].

Yanovski and Yanovski [3] described body weight development over time and found a significant increase from late November until early January with a return towards pre-party weight levels but not completely. The ensuing weight development over time shows a saw-like pattern with an upgoing curve terminated by an incomplete reverse to initial levels and with an ensuing continuous weight increase as a consequence.

In the obesity unit at the Karolinska University Hospital we studied the development of body weight over Christmas in a sample of obese patients and normal-weight controls [4]. Surprisingly the mean weight increase in the obese over Christmas was not significant, mainly depending on the great inter-individual variations over time. Some patients were clearly adhering to the program they had received and maintaining their efforts, whereas others would indulge in food and put on excess weight. In the normal control group there was indeed a small but significant transient increase with a much smaller degree of variation.

With the launch of orlistat 60 mg as an OTC prescription in most countries a survey was made about the attitudes of overweight women to weight loss programs in relation to their New Year's resolutions. Although this program was designed as a commercial support, the material is sizeable and the results interesting, in spite of the fact that the design of the survey was not primarily done for scientific purposes. Hence we decided to extract some salient information for a proper scientific publication.

The data presented in this paper are incurred as a result of an internet survey produced by OTC orlistat 60 mg, copyright by GlaxoSmithKline, in collaboration with Kompas Kommunikation, Copenhagen. The questionnaire focused on women and weight loss including New Year's resolutions as related to



**Fig. 1.** Time for attempted start of weight loss programs.

weight development. The women were invited to the survey through internet advertising and recruitment companies in 6 countries. 12,410 women from 6 European countries (Belgium, Finland, Denmark, Holland, Norway and Sweden) participated in the OTC orlistat 60 mg weight loss survey, which was conducted during March 2009. Two thirds of the respondents – 8,152 women – were overweight with a BMI above 25 kg/m<sup>2</sup>. The survey was produced to provide quantitative results for a general analysis of weight loss attempts, wishes and failures.

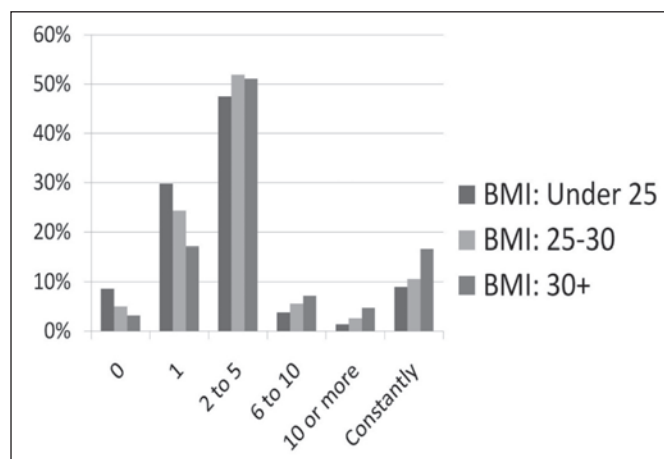
About 50% of all women and in all weight classes had weight loss as a New Year's resolution during the last 2 years. Ironically 20% of women with a BMI < 25 kg/m<sup>2</sup> indicated that they were successful, whereas in women with BMI > 30 kg/m<sup>2</sup> only 9% indicated some success. 39% of all women planning a weight loss program started in January, 22% in February and 26% in March, compared to 6, 3 and 2% in October, November and December, respectively. Figure 1 describes the planned program start for women over the year.

The mean age of the women and the fact that other data from the six European countries did not differ between countries led us to collapse the results from all countries.

Figure 2 demonstrates that the typical participant of the study has made 2–5 annual attempts to lose weight. Women with a BMI > 30 kg/m<sup>2</sup> were most often represented in this group. Strikingly, almost as many women with BMI < 25 kg/m<sup>2</sup> had attempted weight loss a similar number of times.

Heavier women naturally wanted to lose more weight and indicated a hope for 22 kg in the BMI > 30 kg/m<sup>2</sup> group. In reality the weight they initially lost was about 9 kg, which was not much different from the weight loss of women with BMI < 25 kg/m<sup>2</sup> who lost 5 kg.

73% of the women with a BMI > 30 kg/m<sup>2</sup> agreed that they had failed over and over again, and one of the most common reasons for dropping out of any program was the fact that it



**Fig. 2.** Distribution of weight loss attempts in the OTC orlistat 60 mg internet survey.

took too long time before any results could be seen. Lack of self-confidence was a common reason, stated by about one third of the women with overweight or obesity. Many of these women seemed to start in a negative spiral never believing that they would succeed, yet at the same time being desperately anxious to do anything if only weight loss and maintenance thereof could be achieved. Many of them argued that if a method would really work for them the price was not an issue anymore.

The seasonal metabolic risk variation has been studied to some extent. Chen and co-authors [5] explored the summer-winter difference in insulin resistance in Taiwan and found higher levels of fasting insulin, insulin resistance and triglycerides in the summer than in the winter. Even after controlling for BMI and other metabolic risk factors, the summer season was independently and positively associated with fasting insulin and insulin resistance regardless of the metabolic syndrome. Similarly Kamezaki and co-workers [6] studied seasonal variations in the metabolic syndrome prevalence in Japan. They found higher frequency rates for the metabolic syndrome in winter compared to summer with blood pressure being the most consistent variable affecting the full definition of a metabolic syndrome. These authors indicate that the season when a health check-up is conducted may affect clinical diagnosis and management of the metabolic syndrome. In a Finnish study a so-called 'seasonal pattern assessment questionnaire' was used to evaluate changes in mood and behavior. The authors could demonstrate that in particular seasonal changes in weight were risk factors for a metabolic syndrome after controlling for a number of known potentially confounding factors [7]. The authors concluded that at a population level individuals who exhibit a metabolic syndrome have more seasonal changes in mood and behavior. They argue in line with the thoughts about hormonal factors affected by light that treatment options including scheduled exposure to light might be considered.

The question about expectations and reality has been studied in the literature. Foster et al. [8] looked at the hopes of obese individuals from failure to dream result and found that there was no single method available that could make these individuals satisfied. We reported similar results in a study of Swedish participants in our weight loss programs [9].

As far as regards the relationship between the hopes of a New Year's resolution and the grim eventual outcome there is no literature regarding these issues. The results from our study demonstrate that the time around the beginning of the New Year is really the critical period when an overwhelming majority of women who want to affect their weight decide to enter a weight loss program. Unfortunately, most of them are unsuccessful. The OTC orlistat 60 mg study was never designed to clarify the underlying mechanisms behind resolution and outcome. However, the literature review helps explain why a New Year, apart from the psychological and social aspects of lifestyle changes at that time, also provides a seasonal variation that invites a weight loss approach at this time more than during other times of the year.

## Acknowledgement

The internet survey was commissioned by Glaxo Smith Kline, producer of alli™ (OTC 60 mg orlistat), and was conducted by KOMPAS, Copenhagen.

## Disclosure Statement

Jakob Vikaer Hansen is employed by KOMPAS, Stephan Rössner has received lecture honoraria from Glaxo Smith Kline.

## References

- 1 [www.iaso.org](http://www.iaso.org).
- 2 Korkmaz A, Topal T, Tan DX, Reiter RJ: Role of melatonin in metabolic regulation. *Rev Endocr Metab Disord* 2009;104:261–270.
- 3 Yanovski JA, Yanovski SZ, Sovik KN, Nguyen TT, O'Neil PM, Sebring NG: A prospective study of holiday weight gain. *N Engl J Med* 2000;342:861–867.
- 4 Andersson I, Rössner S: The Christmas factor in obesity therapy. *Int J Obes* 1992;16:1013–1015.
- 5 Chen S-H, Chuang S-Y, Lin K-C, Tsai S-T, Chou P: Community-based study on summer-winter difference in insulin resistance in Kin-Chen, Kinmen, Taiwan. *J Chin Med Assoc* 2008;71:619–627.
- 6 Kamezaki F, Sonoda S, Tomotsune Y, Yunaka H, Otsuji Y: Seasonal variation in metabolic syndrome prevalence. *Hypertens Res* 2010;33:568–572.
- 7 Rintamäki R, Grimaldi S, Englund A, Haukka J, Partonen T, Reunanen A, et al: Seasonal changes in mood and behavior are linked to metabolic syndrome. *PLoS ONE* 2008;3(1):e1482.
- 8 Foster GD, Wadden TA, Vogt RA: What is a reasonable weight loss? Patients' expectations and evaluations of obesity treatment outcomes. *J Consult Clin Psychol* 1997;65:79–85.
- 9 Linné Y, Hemmingsson E, Adolfsson B, Ramsten J, Rössner S: Patient expectations of obesity treatment – the experience from a day-care unit. *Int J Obes* 2002;26:739–741.