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Permissive flexibility in successful lifelong weight management

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Abstract

Maintaining normal weight in the current obesogenic environment is a challenge. However, some people can do it. More insight is needed to understand how and why some people succeed in long-term weight maintenance. This study uses a rare, qualitative approach by describing the thoughts of successful weight management and self-perceived requirements for success in weight maintenance. We interviewed 39 individuals who have maintained normal weight for their entire lives (men and women). The content analysis revealed a main theme: flexible, permissive and conscious self-regulation, which was divided into two subthemes (eating-related behavior and weight-related behavior). The informants reported certain routines that supported their weight management: regular eating, sufficient meal sizes, eating in response to hunger, healthy and vegetable-rich diet along with moderate feasting and flexible eating restriction. Flexibility in routines allowed freedom in their eating behavior. In addition, informants regarded themselves as physically active, and they enjoyed regular exercise. Regular weighing was generally considered unnecessary. Normal weight was regarded as a valuable and worthwhile issue, and most of the informants worked to keep their weight stable. Although the perceived workload varied among informants, the weight management strategies were similar. It was crucial to be conscious of the balance between eating and energy consumption. Further, flexibility characterized their behavior and was the basis of successful weight management. Women were more aware of weight control practices and knowledge than men, but otherwise, women and men reported similar weight management methods and attitudes. In conclusion, the interviewees who have maintained the normal weight had created a personal weight-management support environment where weight management was a lifestyle.

Keywords

Successful weight management
Normal weight
Flexibility
Qualitative research

Introduction

Drastic changes in lifestyle over the past 30 years have increased the prevalence of obesity in all parts of the world (World Health Organization, 2016). Obesity represents a growing public health problem

predisposing individuals to various diseases. The treatment of obesity is typically separated into two periods: Losing weight is the first and perhaps easier part, whereas weight management after weight loss (prevention of weight regain) is challenging (Elfhag & Rossner, 2005).

The definition of weight management varies. Typically, definitions determine successful weight management as maintained body weight after an intended weight loss of, for example, 10% (Wing & Hill, 2001; Wing & Phelan, 2005) or 5% (Stevens, Truesdale, McClain, & Cai, 2006) of initial weight, is maintained over a year. In this study, we are interested in life-long successful weight management. The focus is on people, who have managed to maintain a stable weight throughout life.

Population studies have explored factors that contribute to changes in weight. Regular physical exercise (Fogelholm & Kukkonen-Harjula, 2000) and the intake of fiber-rich foods (Fogelholm, Anderssen, Gunnarsdottir, & Lahti-Koski, 2012) are associated with less weight gain. Similarly, a prudent diet pattern, comprised of high intake of fruits, vegetables, fish and whole grains, is associated with lower weight gain, according to a systematic review (Fogelholm et al., 2012). However, typically population-based studies focus on predefined hypotheses on the association of some behavioral factors and weight change on group level. It is not clear if this kind of an approach can capture more complicated individual issues.

In order to get more insight into weight management, we feel that population-based quantitative data should be supplemented with individual-based and hypothesis-free approaches. We aim to bridge this gap with a qualitative approach, which is rarely applied in obesity research. This unique approach may open up new dimensions of lifelong success in weight management which researchers in hypothesis-based studies have not been able to examine. We need to understand why some people succeed and which factors and forms of behavior could explain their success. Life-long maintainers as informants lead this research closer to solving the mystery of successful weight management.

In this study, for gaining insight into weight management from an individual' perspective, we analyzed individuals' views and thoughts on their own long-term weight management and the perceived success. A subsidiary objective is to explore the requirements for maintaining the normal weight in an obesogenic environment. By interviewing men and women, we were also prepared to analyze gender differences.

Methods

This qualitative study, based on 39 semi-structured theme interviews, explored successful life-long weight management. The empirical study was conducted in Finland. In the present study, successful weight management is defined as the ability to maintain a normal weight (body mass index, BMI, between 18.5 and 24.9) during one's lifetime. The anonymity of the participants was guaranteed, and they were aware of their right to withdraw from the study. The ethics committee of Human Studies at the University of Helsinki

reviewed the research in 2012. The study used the snowball sampling method to find suitable participants. This method is useful when informants are members of certain subgroups. An existing participant is encouraged to recruit possible future participants among acquaintances (Flick, Kardoff, & Steinke, 2004). The participants recruiting started from the Public Works Department of the City of Helsinki and from the parish union of Helsinki, where the principal investigator (AJ) had contacts. We mailed an invitation letter with information about the research and the criteria for participation to two employees at these workplaces who forwarded it to the possible participants. Subsequently, the principal investigator (AJ) e-mailed to each eligible and interested candidate and offered him or her detailed information about the research. In addition, to recruit additional participants, the principal investigator (AJ) promoted the study in her social networks.

The participants were men and women from two different age groups (age 30–45 and 55–70 years). They had maintained normal weight throughout their lives. The women had gained some weight during pregnancy but had returned to their regular weight or at least to normal weight range after delivery. All participants lived in the metropolitan area in Finland.

The participants' characteristics are shown in Table 1. It should be noted that the information is based on self-report. Average BMI was 22.6. The education level varied, but most of the informants had studied at least 13 years. They were physically active: with the exception of four informants, they exercised few times per week.

The study comprised 41 interviewees; however, the analysis is based on 39 participants. We excluded two participants, who during the interview reported they had had a weight-gain period. The number of interviews proved to be satisfactory as during the interviews and the analysis as certain codes such as weight control means, food relationship, dietary habits and eating restriction were saturated.

Semi-structured theme interviews are flexible and offer opportunities to adjust the interview structure adequate for every interviewee (Bernard & Ryan, 2010). Typically, there is a list of questions to address, but the interviews are not identical. With different types of probing (the "echo" probe, the "tell me more" probe, and the long question probe), the success of in-depth interviews is improved; Bernard & Ryan, 2010). Probing assisted in answering the answers without too strong influence by the interviewer.

Results from the previous, mainly quantitative studies (Elfhag & Rossner, 2005; Hill, Wyatt, Phelan, & Wing, 2005) were used to create six interview themes. Participants reflected on their relationship to food and eating in the interviews. Further, they defined weight and eating management and factors associated with and potentially affecting their weight, as well as discussed the connections between weight management and health behavior.

Experiences from three pilot interviews (the participants belonged to the study's target group) improved the probing technique of the questions. The interviewer added the long question probes (Bernard & Ryan, 2010) which are suitable for sensitive questions, for instance, introducing the following topic through an illustration. The pilot interviews were not used in the final analysis.

Finally, the interviewer had a list of questions and themes for discussion. The principal investigator conducted all 39 interviews, which lasted from 45 minutes to 2 hours. The interviews were held in settings the informants had selected: the participants' home (20), work (16) or the University of Helsinki (3). After each interview, the researcher wrote interview memos. Participants received a book to thank them for their participation. All interviews were recorded with a digital voice recorder and transcribed verbatim for a total 463 pages.

The conventional content analysis, appropriate for great amounts of textual information and fields with limited existing research findings (Hsieh & Shannon, 2005), yielded the results of this study. Atlas.ti software was used to assist in the systematic analysis of the data (Seale, 2005). In the first phase of the analysis, the transcribed data was entered in the program. After rigorous rereading, the researcher extracted text quotations that characterized the significant information concerning the research questions (Hsieh & Shannon, 2005). First, the text quotations were grouped into 18 codes. For example, text referring to the reasons for participants' eating and hunger were assigned the code "Hunger and satiety," and text referring to efforts to maintain a stable weight were assigned the code "Weight control efforts." In the following phase, the researchers discussed and evaluated the adequacy of the coding and decided to combine codes into larger categories. For example, the codes representing diet, dietary habits and eating regularity formed the code "Dietary habits," and the code "Weight" included facts about ideal weight, weight-monitoring practices, weight history and reactions to weight gain. After the codes and quotations were re-evaluated, they were merged into 10 codes.

In the interpretation phase, the researcher reviewed the coded texts separately for men and women and summarized the main findings, differences and similarities found for each gender. The relations and similarities among the codes formed two subthemes: eating-related behavior (eating management, food relationship, dietary habits, hunger and satiety, and eating restriction) and weight-related behavior (weight management definition, weight, weight control means, weight control efforts and health behavior). Together, the eating- and weight-related behaviors formed self-regulation, which described the main weight management approaches of the participants.

Results

The subsequent chapters present the main findings of our study. We address the views and thoughts of the informants on ideal body weight, weight control practices, eating management, food and diet and, the challenges of weight management. Finally, we also analyzed gender differences.

Weight management and ideal body weight

Foremost, the participants understood weight management as a way of keeping their ideal weight stable without huge variations. Self-regulation and balance between eating and physical activity played a pivotal role in weight management. Intriguingly, there were differences between genders in defining the concept. Women were more familiar with the concept than men. According to women, long-term, seemingly effortless work to maintain a stable and satisfying weight was the key to success in weight management. In contrast, men faced difficulties in defining the term. They valued regular exercise and good eating patterns more than stable weight that remained a subsidiary issue. Welfare and flexibility characterized men's definitions of successful weight management: It was easy to manage their weight if their lifestyle supported it.

Although nature-nurture connections evidently operate in weight management, their distinct functions remain undetermined (Wilding, 2012). The informants stated that their relatives' weight varied from normal weight to overweight. The informants commended that their genes supported weight management. Nonetheless, the interviewees thought that lifestyle factors influenced successful weight management more than genes: Careless eating and weak physical activity would lead to weight gain despite good genes according to the participants. *"People have had the same genes for forever, but the lifestyle has changed substantially in tandem with obesity in recent years!"* (I20M66)¹.

Women were more conscious of their ideal body weight than men. However, all participants valued appearance more than just weight. The informants permitted weight fluctuations within a relatively narrow weight band and adopted a strict upper weight limit that was not to be exceeded. They monitored their weight by the fit of their clothes and body images, whereas only a few weighed themselves regularly on a scale. They were quite satisfied with their current weight. Furthermore, infrequent lapses, like a weight gain of several kilos toward the upper weight limit, were tackled with reduced meal sizes, lighter eating and diminished feasting. Moreover, regular eating and increased physical exercise followed weight gain.

Weight control practices

¹ Interviewee 20, Man, 66 years

Informants did not rely on magic tricks in their weight control means but maintained their ideal weight with flexible exercise and eating practices. Regular physical activity was repeatedly mentioned as essential for success. Frequencies and amounts varied: Only a few exercised daily, and the majority several times weekly. Exercise was regarded as joyful and as bringing well-being. None of the participants felt a compulsive need to exercise. Equally, healthy eating, with a vegetable-rich diet, and regular frequent meals simplified weight management. Many of the informants highlighted the meaning of childhood in learning the right relationship to eating patterns: responding to hunger cues and moderate eating and feasting. Success stimulated a certain weight awareness: The participants considered a normal weight valuable and willingly worked for it. They emphasized the balance between consciousness and overthinking.

Further, in interviews, most of the informants were happy to share their expertise for successful weight management. Their advice, based on their own experiences, included finding an enjoyable way to exercise and increasing daily commuting activities, such as taking the stairs or walking to the grocery store. The interviewees emphasized moderate eating and feasting, adding vegetables to their diet, avoiding sugar and sweets, reducing meal sizes and expending more calories than consuming. Flexible restriction was desirable, and favorite foods could and even should be included in one's diet. Permissive flexibility was also seen in their weight management advice.

"Somehow it seems so simple and easy to me, it is so logical...I believe, you do not need to restrict your eating a lot, but you need regular meal pattern along with healthier food...it is unnecessary to totally end eating...I would try above and then add exercising little by little...no skipping meals, but if you are used to enormous meal sizes, then a regular meal pattern helps decrease eating and guiding it in a healthier direction...then to exercising more. The point is not to aim at results in a week rather aspire the goal for longer-term periods." (I40M31).

Eating management, food and diet

The informants defined eating management as an awareness of the quality and amount of consumed foods and as the ability to recognize a satisfactory meal size. According to the participants, avoiding overeating and extreme eating restrictions was integral, in addition to control over food. Furthermore, the informants adjusted their eating management to recognized body needs and ate in response to hunger. Although some mentioned tiredness as a trigger increasing feasting, emotional eating was only rarely mentioned. Instead, negative feelings, such as sorrow, decreased eating. The majority of interviewees did not feel eating management was challenging. A few experienced sweets as a minor challenge but not a problem. A 44-year-old woman stated, *"In a way, instincts and cravings don't lead me and cookies don't tempt me, but I*

decide whether I eat something or not!"(I26W44). In addition, a 37-year-old man stated, *"If someone offers you a meal and you have just eaten, you should politely refuse because you are not hungry."* (I23M37).

Second, an uncomplicated relationship with food conveyed informants' views of food. Food served as fuel for living. In addition, food was perceived as a source of pleasure. The interviewees preferred good, tasty and healthy food. It played a crucial part as an energy source, but food did not dominate their life. Moreover, the informants rarely thought about food even though they were conscious of it.

Balancing between healthy and unhealthy foods along with adjusting eating to alternating situations played a critical role in success according to the participants. In conclusion, flexibility was central in dietary patterns. The participants viewed the entire diet as more essential than single food items. Further, dietary patterns rich in vegetables and fruit characterized their diet. Regular eating, homemade food and a vegetable-rich diet had characterized their eating habits since childhood. Food memories, mostly from childhood, conveyed a warm longing for eating patterns. *"My mom loved to grow vegetables, and she was famous inside the garrison for her products like cucumber, salad and tomatoes...this so-called unmanly preference for vegetables was born there."* (I29M67)

Additionally, attempts to improve health had an effect on informants' food choices, and they mentioned they had improved their childhood patterns further, for instance, by adding fruit to their meals. All informants ate breakfast every morning, and most ate four to six daily meals, including two hot meals. In addition, flexibility and leniency offered an option to enjoy a wide selection of delicacies moderately. Frequencies and amounts varied: A few treated themselves to some chocolate or a couple of cookies daily, the majority weekly. A 56-year-old woman said, *"Everyone earns delightful moments of feasting sometimes!"* (I1W56).

The interviewees were surprised at how emotionally people react to food today. The low-carb diet had influenced only a few of interviewees; none dieted, but some had decreased their consumption of sugar and refined grains. Rigid dieting and extreme diets appeared unnecessary, frightening and temporary according to the participants. Instead, they felt that long-lasting prudent dietary habits and sufficient physical activity guaranteed their success in weight management.

The relationship with eating

Moreover, the informants mentioned mostly eating in response to hunger, but joy represented a common reason for feasting. They recognized hunger cues, and some ate beforehand to avoid extreme hunger and consequently overeating. Moreover, the interviewees acknowledged a sense of fullness. They evaluated and adjusted their eating behavior to the needs of their body. An appropriate meal size satisfied hunger but did not result in overindulgence. Significantly, the participants decided to stop eating when they were

satisfied. The analysis found two eating types: The first type carefully mirrored their satisfaction cues and in accordance with them finished eating. *“All at once, you get a feeling that you cannot eat another mouthful...it does not matter how little you got...you just cannot eat anymore...and then you finish.”* (I34W62). The second type adopted a flexible attitude to eating and did not rely only on satiety cues but also identified suitable meal sizes. The majority (30 out of 39) of the informants belonged to the latter type.

Eating restriction divided interviewees into two groups: Most of the informants experienced eating restriction unnecessary. However, almost half of women but only two men restricted their eating. A 34-year-old woman explained, *“I think I need to restrict my eating. I would feast more if I was not aware of my eating...I need to monitor myself and now and then forbid some delicacies...however, I am more graceful now and I am able to eat everything, but I just need to watch the amounts.”*(I22W34). Interestingly, the participants' eating behaviors did not differ, and they valued conscious eating and the balance between eating and energy consumption despite their restriction group. Although nothing was forbidden in their diets, they reluctantly ate chips, meat pastries and other fattening foods on a daily basis; however, they were accepted if served somewhere outside home. The only difference between the groups was how the demanded restrictions were experienced. According to the informants, some preferred monitoring their meal sizes and delicacy consumption to eating restrictions; others disagreed.

Eating was flexible also on special occasions. Feasts and holidays changed the regular diet. Christmas, in particular, with the extensive selection of foods and sweets increased eating. Moreover, the informants stated they responded with pleasure and joy to buffets without any anxious feelings. Most of them could overeat at a buffet, but these unusual occasions did not impair the informants' eating management. A 58-year-old man said, *“I really do not plan my eating beforehand. I have a look what feels and tastes good, and my eating will be base on it, not any weight or eating control.”*(I9M58). Some of the interviewees followed their controlled behavior at buffets and finished eating when they were satisfied. They did not restrict their eating but reacted to internal satiety cues, such as the physical sensations of a full stomach. Instead, overeating reduced the following meal sizes because informants were not hungry. Only three women intentionally limited eating after overeating. They maintained their eating habits but ate lighter meals than usual. After Christmas, feasting decreased and the usual diet continued. The informants recognized they did not intentionally restrict feasting but were unwilling to buy sweets.

The challenges of weight management

Although flexibility was often mentioned by the informants, most of them experienced they needed to work on keeping their weight stable. A 31-year-old woman said, *“Well yes and no, I do not work greatly but still a little. I exercise regularly, and I kind of try to think of my eating...but not all the time.”*(I27W31). Working was unlaborious and flexible, and the interviewees emphasized the importance of being conscious

of eating patterns and lifestyles, as well as regulating them to maintain the balance between energy consumption and supply. Some considered that weight management did not require any extra work. Balancing between eating and exercising was significant for them: Decreased energy consumption led to reduced eating. Further, weight management targeted only a positive by-product for the few informants whose lifestyles supported stable weight. Despite the experienced efforts, their weight-related behavior maintained identical and certain consciousness of lifestyles was demanded.

Notably, weight management was observed as positive and beneficial for the physical and mental health of the informants. They mentioned they had confronted difficulties in their lives, which they accepted and managed without struggling with their weight. Moreover, they were satisfied with their lives and happy about their success in weight management. Support was not necessary. Furthermore, they supported their relatives in weight management.

Finally, the informants' health behavior corresponded to general health guidelines. Informants thought eating and exercising lightened weight maintenance, and their alcohol intake was moderate. Although the main aspects of health behavior were in order, the informants had adopted some unhealthy habits. Two men smoked, and two men used snuff. In addition, some mentioned sweets as a bad habit and wished to decrease their consumption. A couple of women monitored their weekly wine portions, avoiding excessive drinking, and a few men mentioned drinking too much at parties a few times a year. Interestingly, women suggested alcohol consumption could play a significant role in the obesity epidemic in general. Accordingly, abundant alcohol consumption increases the energy supply directly and indirectly by adding unhealthy food eating. Some men also addressed this idea. The informants claimed that poor health behavior may explain unsuccessful weight management.

Gender differences

Generally, the informants' weight management appeared similar among men and women. However, some topics differed slightly. Women were more conscious of the term weight management than men, who emphasized healthy eating and active lifestyles more. Interestingly, women declared that weight management guided their food choices; in contrast, men disagreed on the suggested connection. In addition, women mentioned that exercising enabled enjoyable consumption of food with lower eating restriction and consequently eased weight management. Women emphasized they needed to restrict their eating more compared with men. Other than this, weight control practices did not differ between genders. Differences were associated with weight management knowledge while concrete weight control means and a flexible approach to weight management were identical.

Discussion

Flexible, permissive and conscious self-regulation

Self-regulation and long-term flexibility formed the core of successful weight management. Those who maintained a normal weight created a balance between certain limits in eating and weight to prevent weight gain. Similarly, their dietary choices were characterized by leniency, awareness of one's own eating habits, flexibility and a permissive mindset.

Previous studies support our results by introducing the essential role of self-regulation in weight management (Forman & Butryn, 2015; Teixeira et al., 2015). In an obesogenic environment, unhealthy foods constantly tempt individuals, and a great temptation to give up weight control is abundant. Accordingly, adequate self-regulation skills, such as self-monitoring of weight, physical activity and diet, supported weight management.

Previous studies have shown that those who maintain their weight loss exercise intensively (Santos, Vieira, Silva, Sardinha, & Teixeira, 2016; Thomas, Bond, Phelan, Hill, & Wing, 2014), consume a low-fat and low-energy diet, eat regularly, including daily breakfast, and select healthy foods (Elfhag & Rossner, 2005; Santos et al., 2016; Stuckey et al., 2011; Wing & Phelan, 2005). Success required "high levels of restraint" concurrently with "low levels of disinhibition" (Thomas et al., 2014, p. 22). An individual is more likely to maintain a weight loss if the diet was the same on weekdays and weekends, as well as during holidays (Wing & Phelan, 2005). Furthermore, "mindlessly slim people," a subgroup of group of normal weight individuals with no weight problems, eat lots of fruits and vegetables and rely on home-cooked foods to maintain a healthy weight (Vuorinen & Wansink, 2015, p.75).

Our results confirmed the role of regular meal habits and healthy eating in successful weight management. However, our participants highlighted the entire diet more than its parts and were unwilling to "count calories" or limit fat intake. In addition, they altered their eating when necessary, and this flexibility supported their success. The eating behavior of "mindlessly slim people" (Vuorinen & Wansink, 2015, p.75) resembled our participants' eating behavior. Even though this study and the above mentioned are not directly comparable, it seems that our successful maintainers behaved in a more flexible way than those who successfully maintained their weight loss in the cited studies. A possible reason for this difference may be their weight history: Our interviewees who maintained a normal weight throughout their lives had never been overweight. However, individuals who have maintained their weight loss experience a weight loss period, and after that, weight management seems more disciplined than the weight management of our informants.

Some qualitative studies have investigated the weight control practices of those who had maintained a normal weight (Byrne, Cooper, & Fairburn, 2003; Chambers & Swanson, 2012). Those who maintain their weight loss seem to monitor their weight control means more than our informants. They typically measured their activity levels by counting their daily steps or document consumed foods to improve weight control (Chambers & Swanson, 2012) and attentively followed their eating and diet (Byrne et al., 2003). However, “*lifelong weight maintainers*” (people who maintain the same weight throughout adulthood) are more flexible with their weight control practices, and their weight behavior mirrored that of our informants’ (Chambers & Swanson, 2012). In contrast to our results, support by important others appears to be very significant for those who maintain their weight loss (Ng, Ntoumanis, & Thgersen-Ntoumani, 2014).

In line with our results, “mindlessly slim people” tended to follow hunger signals (Vuorinen & Wansink, 2015, p. 75). In contrast, successful weight-loss maintenance studies disregarded hunger and satiety cues in weight management. Those studies suggested eating restriction is a more effective strategy for weight control (Elfhag & Rossner, 2005; Sarlio-Lähteenkorva, 2000). However, a large cohort study suggested a strong inverse association between BMI and intuitive eating (individual’s vulnerability to eating in response to hunger and satiety cues rather than in response to external impulses; Camilleri et al., 2016). Although the cross-sectional study was unable to show the causality of the detected connection, it seemed persuasive that intuitive eating protects against weight gain (Camilleri et al., 2016).

Undeniably, hunger and satiety played a significant role in regulating the eating behavior of our informants. Nonetheless, previous findings suggested that psycho-behavioral factors, for example, the ability to control food intake, influenced more than the diet’s satiety effects for success in weight management after weight loss (Karhunen et al., 2012). Eating restriction played a main role in weight management after weight loss (Sairanen, Lappalainen, Lapvetelainen, Tolvanen, & Karhunen, 2014; Thomas et al., 2014; Westenhoefer, Stunkard, & Pudel, 1999). Eating restriction is divided in two components: rigid and flexible control. A dichotomous thinking style (all or nothing) is characteristic of rigid control whereas flexible control is more allowing with no guilty feelings after eating unhealthy foods (Westenhoefer et al., 1999). The Three-Factor Eating Questionnaire (TFEQ), with 51 items, measures flexible and rigid control of cognitive eating restraint (Westenhoefer et al., 1999). Flexible eating control was one of the main strategies for controlling weight after weight loss (Karhunen et al., 2012; Sairanen et al., 2014; Sarlio-Lähteenkorva, 2000; Stuckey et al., 2011; Wing & Phelan, 2005). Our results confirm the importance of flexible control in success. However, we did not use the TFEQ and consequently are unable to specify our informants’ flexibility level. There must be different stages in flexibility, because our participants did not count calories or consider the energy balance continually as the successful weight-loss maintainers did. It seemed that individuals who lose weight required guidance by stricter rules for their eating, and there was no space for desires (Karhunen et al.,

2012; Sarlio-Lähteenkorva, 2000; Wing & Phelan, 2005). They also compensated for feasting in advance or afterward and designed attentive eating in specific situations, such as buffet servings, which amazed our informants. They controlled their eating behavior over long-term periods and allowed variations in their regular diet.

Regular weighing was a common means for those who successfully maintained their weight loss (Byrne et al., 2003; Chambers & Swanson, 2012; Sarlio-Lähteenkorva, 2000; Stuckey et al., 2011; Wing & Phelan, 2005). Studies have highlighted its meaning in maintaining weight loss (Zheng et al., 2015). It is reasonable to monitor weight frequently when there have been problems with it, and therefore, it is possible to react rapidly to weight gains. However, our participants viewed regular weighing as unnecessary, and it was a habit rather than a weight control practice for those who frequently did it. Similarly, “mindlessly slim people” randomly weigh themselves (Vuorinen & Wansink, 2015, p. 75) and the “*lifelong weight maintainers*” saw regular weighing as redundant (Chambers & Swanson, 2012, p. 225).

Studies have shown that weight-loss maintenance requires work (Befort et al., 2008; Elfhag & Rossner, 2005; Sarlio-Lähteenkorva, 2000; Thomas et al., 2014). According to these studies, those who successfully maintained a weight loss followed multiple weight control practices (restricting dietary intake, monitoring weight, eating low-fat foods, exercising intensively) and observed their weight management carefully. Success stimulated daily exercise, and new routines consumed time (Befort et al., 2008). In addition, weight management was described as a struggle even years after losing weight (Sarlio-Lähteenkorva, 2000). However, Williams, Germov, and Young (2007) were surprised that “doing nothing for controlling weight” does not necessarily lead to weight gain. These participants, whose BMI was within the normal range, did not try to lose weight and possibly therefore did not mention any weight control practices. Their weight remained more stable than the weight of women, who actively controlled it (Williams et al., 2007). This study gathered data with a questionnaire that concentrated on active weight control practices, such as losing weight or preventing weight gain. Due to the study’s viewpoint, it failed to discover feasible routines for weight maintenance. However, results suggested that successful weight management does not require a lot of work, and this finding is corroborated by our data.

We conclude that those who had successfully maintained a normal weight had created a more or less unconscious personal weight-management support environment inside this obesogenic environment. A normal weight value guided their behavior, and they were ready to work for their goal: successful weight management. They had developed routines for achieving their aims. Their holistic view of weight management, as well as life, combined several practices for controlling weight that led to success without a struggle.

Nevertheless, a certain awareness of eating and exercising was required. Internalized routines made it unnecessary to reflect every dietary choice, but they regulated their behavior over the long term. Notably, a few informants were unable to identify their behavior as successful weight management at all. However, this may be explained by their personal weight-management support environment in which successful weight management is not a random factor but a lifestyle. Equally, the value of future health, rather than the direct consequences of eating, guided food choices to a healthier direction in a previous study (Dassen, Houben, & Jansen, 2015). The same was also seen in our study: The informants appreciated their ideal weight and good physical performance more than short-term delight of feasting.

Limitations and advantages

This study aimed at providing a new and deeper understanding of successful weight management; therefore, qualitative approach was appropriate (Flick et al., 2004). As we studied the weight maintenance of normal weight individuals, we selected our participants deliberately from individuals whose experiences and history were expected to offer meaningful information for the research questions. We did not try to generalize our results, and for that reason, an elective sampling method was used. In this kind of a qualitative study, we do not think that the sample can be considered representative more than on a very basic and fundamental level, that is, all participants have succeeded in life-long weight maintenance. However, we improved our results' representativeness by excluding the systematic bias of selection. All those who met the study criteria and were willing to participate were selected. Therefore, the researchers were not involved in selection.

Semi-structured interviews served as the research method because the field is poorly explored and the direction of the answers was unpredictable. Further, we were interested in the informants' experiences, and opinions and theme interviews answered these demands. The informants' tendency to answer in a socially acceptable way is considered a weakness of interviews (Gosling, John, Craik, & Robins, 1998). However, informants discussed openly in the interviews and confidently revealed their unhealthy habits.

In terms of reliability, content analysis is vulnerable to the researcher's own opinions and emotions, which unwittingly may affect the results. Reliability is improved if more than one researcher independently analyzes the text. We had no resources for that. However, the research group discussed the coding and themes carefully, and Atlas.ti software facilitated the systematic analysis.

Our results highlighted the meaning of flexibility in successful weight management among normal weight individuals. However, comparing our results with qualitative studies among obese people (who have not lost weight) would have been interesting.

Conclusions

Our results provide new and important insights into weight maintenance from an individual's perspective. Successful weight management did not require starving or extreme exercise but more an enjoyable way of living and taking care of oneself. Moreover, weight management was a consequence of a certain lifestyle, not a definite period with hard work. This understanding of continuous yet flexible lifestyle-based weight management seems to be important for success. The obesity treatment programs should be inspired by these findings and concentrate on weight management in holistic way. Besides, weight maintenance is typically shown as challenging and elusive in public. In contrast, our results offer optimistic views for health communication and motivate to change dieting to long-lasting weight management. Finally, flexibility was the foundation of success and was present in each behavior of our informants. In the future, flexibility might need to play a major role in weight loss guidance and health education. Our informants had adopted weight management supporting lifestyles already in their childhood. As the formation of new routines takes time and strength our results encourage to invest resources in the prevention of obesity at an early stage. Additional research is needed to explore how to create these successful weight maintenance practices and how to convert them for overweight people.

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