Re-embodying Eating: Patients’ Experiences 5 Years After Bariatric Surgery

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Abstract
Health experts advise and expect patients to eat healthily after bariatric surgery. For patients, difficulties with eating might have been a long-standing, problematic part of life—a part that is not necessarily healed by surgery. Empirical research on patients’ experiences of eating practices after bariatric surgery is lacking. Aiming to contribute to the development of clinical practice, we explored meanings attached to eating in the long term and sought descriptions of change and bodily sensations. We interviewed 14 patients at least 5 years after bariatric surgery. The surgical restriction forced changes in the way patients sensed their own body in eating, but the uncertainty related to maintaining weight loss in the long term remained. Meanings attached to eating transcended food as choices situated in a nourishment and health perspective, and were not necessarily changed. Eating was an existential and embodied practice, which remained an ambiguous and sensitive matter after surgery.

Keywords
eating disorders; embodiment / bodily experiences; Giorgi; health and well-being; lived body; Merleau-Ponty; obesity / overweight; phenomenology; surgery

When treating severe obesity, restriction and change of individuals’ eating practices are the targets, and especially when it comes to bariatric surgery. This aspect of controlling bodies is justified by a positive health outcome. The increasing numbers of obese individuals challenge public health globally, because obesity is associated with disease, impaired quality of life, increased mortality, social prejudice, and stigma (Ogden, Yanovski, Carroll, & Flegal, 2007; Puhl & Heuer, 2009). Severe obesity is described as a chronic and serious condition, defined by a body mass index (BMI) ≥ 40, or ≥35 with comorbidities (World Health Organization, 2000).¹

Bariatric surgery is currently the most effective treatment, providing sustained weight loss and improvements in comorbidities for the majority of severely obese patients (Aasprang, Andersen, Våge, Kolotkin, & Natvig, 2013; Colquitt, Picot, Loveman, & Clegg, 2009; Karlsson, Taft, Ryden, Sjöstrom, & Sullivan, 2007; Marceau et al., 2007; O’Brien, MacDonald, Anderson, Brennan, & Brown, 2013; Pata et al., 2013). Therefore, bariatric surgery is increasingly popular. In 2011, about 341,000 surgeries were performed worldwide (Buchwald & Oien, 2013).

Bariatric surgery affects eating practices immediately and radically, because of the anatomical and physiological changes to the digestive tract (Moshiri et al., 2013). Complications and late adverse effects often occur in response to eating, and are mostly expressed via the digestive tract, such as reflux, vomiting, diarrhea, dumping syndrome, or nutritional deficiencies (Bult, van Dalen, & Muller, 2008).² Bariatric surgery requires life-long medical follow up to avoid serious nutritional deficiencies and to manage comorbidities (Bult et al., 2008).

The bodily change after bariatric surgery is not entirely forced, meaning that the plasticity of the digestive tract eventually allows eating larger quantities and variations of food. Therefore, changing eating practices is considered critical for maintaining weight loss (Sarwer, Dilks, & West-Smith, 2011). Clinicians and researchers frame bariatric surgery as a “tool,” highlighting that surgically imposed change must be accompanied by patient-driven change; however, studies have shown that eating practices might not change as expected after bariatric surgery (Johnson et al., 2012; Kruseman, Leimgruber, Zumbach, & Golay, 2010). Johnson and colleagues found that

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severely obese persons who had a similar diet prior to two different weight-loss interventions (surgery and lifestyle changes) seemed to eat significantly differently at 1-year follow up; bariatric surgery patients tended to eat more fatty foods and sweets and fewer vegetables than those who had attended a lifestyle program.

Groven, Råheim, Braithwaite, and Engelsrud (2013) found that the framing of bariatric surgery as a tool implied that a changed lifestyle after surgery was not a choice, but a moral obligation. Ogden, Clementi, and Aylwin (2006) described the outcome of bariatric surgery as a paradox of control, meaning that the surgical restriction limits the patient’s choice, and thereby increases the sense of control over eating and feelings about food. Weight-loss processes after bariatric surgery have been described as either a battle for control, or handing over control from oneself to the surgical restriction (Ogden, Avenell, & Ellis, 2011). A variety of problematic and functional aspects of control as a central phenomenon have been thoroughly discussed in the literature on eating disorders.

The obesity guidelines of the National Institute for Health and Care Excellence (2006) highlight the importance of a comprehensive preoperative assessment, including a specialist assessment for eating disorder(s). In addition to dietetic and surgical monitoring, psychological support should be provided before and after bariatric surgery. Patients report problematic and psychologically distressing eating practices after bariatric surgery, although most of them do not meet the formal diagnostic criteria for eating disorders (Marino et al., 2012; Niego, Kofman, Weiss, & Geliebter, 2007; Sarwer et al., 2011). The eating practices that are reported as problematic are binge eating, stress-related and emotional eating, excessively restricted eating, and so forth (Rusch & Andris, 2007).

Reported rates of eating disorders among bariatric surgery patients are variable because of different assessment methods and definitions of eating disorders (Niego et al., 2007; Sarwer et al., 2011). The impact of binge eating on the outcome after bariatric surgery has been studied, but the reported findings are contradictory. In a prospective observational study, Wadden and colleagues (2011) found that preoperative binge eating did not impair weight loss or improvements in comorbidities at 1-year follow up, in line with past studies (Alger-Mayer, Rosati, Polimeni, & Malone, 2009; White, Masheb, Rothschild, Burke-Martindale, & Grilo, 2006). Other studies have shown that binge eating or postoperative loss of control over eating are related to poorer outcomes after surgery (Hsu et al., 1998; Kalarchian et al., 2002; Sallet et al., 2007; White, Kalarchian, Masheb, Marcus, & Grilo, 2010).

After bariatric surgery, patients are advised to follow particular diets, restrict intake of fat and sugar, have long-lasting and frequent small meals, and chew extensively, all of which are quite similar to problematic restrictive eating in eating disorders (Conceição et al., 2013; Marino et al., 2012). Some adverse but expected effects even seem similar to symptoms of eating disorders; for instance, exceeding the capacity of the gastric pouch and vomiting. Because of this, it might be challenging for bariatric patients to change, understand, and describe their own eating practices. Summing up, research has shown that eating practices seem related to the outcome of bariatric surgery, although the nature of this relationship is not fully understood.

Studies about long-term experiences (>5 years) after bariatric surgery from a first-person perspective are lacking; therefore, the understanding of how surgery might intervene in patients’ lives over time remains incomplete. In this phenomenological study, we wanted to explore how patients experience weight loss and embodied change in the long term after bariatric surgery. In phenomenology, the body is the foundation for existence, and is inseparable from the sociocultural world (Merleau-Ponty, 1945/2012). The body is the basis from which we perceive, interact, and are situated. The body is not only a physical object, but also an incarnated subject that embodies experiences and habits from the life lived. In the present study, the term embodiment points to this phenomenological understanding of the body as experiential, expressive, and relational.

In a previous article, we explored essential meanings of bariatric surgery patients’ lived experiences of weight loss and change for the long term (Natvik, Gjengedal, & Råheim, 2013). In the present article, we aim to explore meanings attached to eating after surgery. Our research questions were: How do patients experience eating and a change of eating practices in the long term after bariatric surgery? How do they describe the body in relation to eating?

**Methodology**

Phenomenology is a philosophical approach to human experience, a systematic approach to describing the internal meaning structures of experience (van Manen, 1997). The first-person perspective is essential, and human experience is perceived as active, intentional (targeted), and always situated in the immediate everyday life (lifeworld). Lifeworld points to the specific and meaningful context in which we live: a prereflexive social world which we trust, and from which we cannot escape (Bengtsson, 2006). As such, lived experience is connected to the lifeworld, in which phenomenological research always begins (van Manen).

Phenomenology also points to methodological strategies to achieve and explore empirical data, aiming to
provide new insight and comprehensive understanding (Dahlberg, Nyström, & Dahlberg, 2008; Giorgi, 1985; Giorgi & Giorgi, 2003). In phenomenology, openness is essential to allow a phenomenon and its meaning to display in ways that might be unexpected (Dahlberg et al., 2008). We understand openness to the research questions, the participants’ experiences, and oneself as a researcher as a phenomenological attitude. In this study, we aimed for a phenomenological attitude, and a scientific and systematic methodological approach (Dahlberg et al.; van Manen, 1997).

Participants and Recruitment

The participants were 7 men and 7 women, aged 28 to 53 years, who had volunteered to take part in the study. At the time of the interview, 12 participants were married/cohabitant, of whom 9 had children. Two lived alone without children, and 1 was single. Six were fully employed, 2 were partly employed/partly on disability leave, 4 were on disability leave, 1 was unemployed, and 1 was a student. The participants’ weight loss ranged from 34 to 106 kilograms; median weight loss was 78 kilograms; one participant’s weight loss was unknown. Five participants had maintained their weight loss (+/− 5 kilograms); 8 had gained less than 15 kilograms, and 1 had gained 25 kilograms. At the completion of the study most participants had a stable body weight, but 2 were gaining weight. Two had been weight cycling (20 to 30 kilograms) for several years. All of the descriptive data were collected during the interviews.

The participants were recruited from one hospital in Norway, and to be included they had to have undergone duodenal switch (DS) 5 to 7 years earlier. DS is not a common procedure, and seems to be preferred in patients with a BMI > 50 because it produces large and sustained weight loss. However, it also increases the risk of severe malnutrition and lasting diarrhea (Blackburn et al., 2009; Marceau et al., 2007). We did not invite persons who had met the first author as a physiotherapist, or who suffered from severe psychiatric illness or disability to participate. The recruitment was a step-wise procedure, meaning that one experienced nurse invited a few eligible participants at a time, and informed them about the study.

The participants who volunteered received a letter of invitation and an informed consent form, which they could return to the first author, who scheduled and conducted the interviews. If and when more interviews were needed, the first author contacted the nurse during the course of the process of analysis. The recruitment continued until the interviews yielded less new knowledge about the phenomenon under study. Accordingly, our sampling strategy was in line with well-established principles for designing qualitative studies (Polit & Beck, 2008).

Ethical Considerations

The study was approved by the Norwegian Committee of Ethics in Medicine and registered at the Norwegian Social Science Data Service. We informed the participants by letter and telephone about the aim of the study and what participation implied. We assured them that participation was voluntary, and guaranteed their anonymity.

Interviews

In-depth interviews within a phenomenological approach were our method of data gathering (Dahlberg et al., 2008). To allow for the establishment of safety for participants, the first author emphasized finding a suitable location in accordance with their preferences. In the interviews, she sought rich and varied descriptions of eating practices after bariatric surgery. She tried to facilitate a supportive dialogue by asking open questions, allowing time and space to speak without interruption, listening actively, and further exploring the participants’ descriptions when appropriate. To balance openness and focus during the interviews, the preparations included a thematic interview guide for support.

At the beginning of each interview, the first author repeated the main points from the letter of invitation and asked for demographic information and important information related to the bariatric surgery, such as additional surgeries (complications, removal of redundant skin) and preoperative, postoperative, and current body weight. The questions were related to four broad themes: (a) health; (b) the body; (c) habits and practices; and (d) participation and social relations. An example of an open question from our study is: “How do you experience satiety, hunger, and eating? What was it like before?”

Openness implied being attentively present in the interview situation, allowing for engagement with the phenomenon in the moment of listening (Dahlberg et al., 2008). This approach allowed the participants to elaborate on the themes that they found to be interesting and relevant to their own experiences after surgery. These were not necessarily the themes they found easy to talk about; rather, they were themes that they found meaningful to explore in the interview situation, or about which they were curious. Seeking precise and detailed descriptions of lived experiences, the first author asked follow-up questions such as, “Can you describe a concrete occasion when you experienced . . . ?” The interviews lasted between 60 and 100 minutes, and were recorded and transcribed verbatim by the interviewer. The interviewer noted her anticipations and thoughts before beginning the study, and short reflective notes after each interview, including observations and first impressions of the participant’s description.
Along with the transcriptions of the audiotapes, this yielded reflections and initial analysis.

Analysis

The aim of the analysis was to explore the participants’ experiences to make visible essential meanings attached to eating after surgery. To identify commonalities and differences in experiences and to show essential meanings at a more structural level than the original descriptions, our analysis was inspired by Giorgi and Giorgi’s (2003) phenomenological method and van Manen’s (1997) phenomenological writing. Phenomenological analysis is a scientific approach to data that is solidly grounded in phenomenology yet different from a philosophical analysis (Giorgi & Giorgi). Giorgi (1985) developed the phenomenological method for analyzing empirical data in research, to make it possible to describe the essential meaning structure of the phenomenon under study. As such, the phenomenological description is expressed at a more structural level than the participants’ original descriptions of their experiences.

In phenomenological research, writing, reading, and rewriting are at the core of reflection and thoughtfulness, and thus are part of the analytical process (van Manen, 1997). All authors participated in parts of the analysis, although the first author was responsible for the whole process. We began the procedure by first reading all of the interviews and interviewer’s notes to get an impression of the whole. Three of the authors read the entire material, and one author read interviews chosen on the basis of variation by the first author.

The first author wrote short reflective notes on her impression of the text after reading each interview. Next, she reread each interview and determined the meaning units of the text, and grouped the excerpts into subcategories related to the content. Third, she employed free imaginative variation, meaning that she posed different questions to the excerpts, asking, “What is this about? In which context do these meanings emerge?” She rewrote the meaning units into condensed descriptions in her own words. The meaning units were thus transformed, yet were kept close to the original descriptions. As the fourth step, she explored the condensed descriptions across the participants’ complex experiences by asking, “Which commonalities and differences stand out? What does eating mean for the participants after bariatric surgery?” All of the authors participated in these discussions and the writing of this article. The first author again went back and forth between the transcripts and the condensed descriptions to challenge and validate the analysis. Two essential themes emerged from our analysis.

Findings

We present our findings under two essential themes which we hold to be sound and to describe eating practices after surgery, across participants and in depth. We coined the themes “inhabiting healthy eating: negotiating flexibility within a forced structure,” and “beyond healthy eating: at the mercy of the altering body.” The headings communicate the core meaning of each theme on the structural level of analysis. The themes are intertwined, meaning that both highlight essential aspects of eating. The difference between the two themes displays two different situations from which the participants negotiated eating and its attached meanings. The first shows how eating practices were negotiated while focusing on health, the second shows health as an inadequate framework to account for eating practices after surgery. The difference between the themes captures both the variation in life circumstances and the ways that eating was negotiated. We introduce each theme with a condensed description of the content, and then present the participants’ rich descriptions in depth.

Inhabiting Healthy Eating: Negotiating Flexibility Within a Forced Structure

Bariatric surgery had an impact on the participants’ relationship to food and eating in the long term, implying forced and sudden changes and ongoing adjustment to the surgically altered digestive tract. The forced structure following surgery contributed to weight-loss maintenance and healthier eating. We found that the participants had gained an awareness of eating as an embodied practice; however, the opportunity to enjoy food and eating free of self-awareness seemed lost. They had realized that a more flexible approach to eating was an option, but were uncertain as to what extent this would be either a wise step forward or a threat to their long-term weight-loss process—a matter so vital to life after severe obesity.

Allowing as it does for only small amounts of food and for limiting nutritional uptake, bariatric surgery was described as a possible access to new eating practices. The participants perceived food and eating as means to nourish the body, satisfy hunger, and maintain weight loss. Accordingly, some of the participants’ descriptions were in line with the effects of bariatric surgery, as pointed out in the medical literature. Most participants still had to avoid rich or fatty meals to avoid vomiting, severe diarrhea, and heartburn more than 5 years after surgery. They had, however, responded differently to food and eating: Although some had no side effects related to eating and drinking, others had diarrhea after every meal. Some participants did not tolerate sugary foods/drinks, whereas others did not react to them at all.
The participants who feared that having surgery would not be enough to keep the weight off in the long term described a certain preoccupation with food. Their preoccupation had shifted from hunger, desire, and dieting to eating healthily. Eating healthily was now a means to control their body in two ways: first, they had to compensate for malnutrition following surgery, and second, they had to avoid weight regain as a result of consuming unhealthy food or drink or eating too much.

Some had experienced bariatric surgery as a turning point in their relationship with food and eating practices. One woman described the shift from problematic to healthy eating as follows:

> When he was working night shift I had great food orgies for myself. I baked a whole pizza and ate it. I tore apart the pizza box and hid it well in the garbage bin; removed all traces. And I felt so incredibly had afterwards. For a period of my life, I struggled a little with bulimia; I vomited. But the last years before surgery, it was just overeating without vomiting. I struggled a lot with guilt feelings, and at the same time . . . . I was never satisfied. . . . Before surgery, I struggled, thinking that I could never enjoy tasty food again or dine out, and that cooking would be no fun. But it has worked out just fine, because when my stomach is full, my eyes are satisfied as well. It is more . . . connected. For me, it has been a relief that my stomach and I are satisfied at the same time. . . . I never feel ravenous anymore, but I can sense when it is good for me to have a little to eat. . . . I nearly automatically make healthy choices, because I no longer crave the fat and the sweet and all of that. . . . It’s easier to stick to a healthy diet, because my desires are not as they used to be.

The ambiguous sensation of extreme hunger, craving food and eating beyond satiety, seemed to diminish. The participants were relieved to experience fullness and satisfaction together, and to in some cases recover from problematic eating such as binge eating. The physiological and emotional meanings of eating seemed to converge. Accordingly, some participants described bariatric surgery not only as an option for or comparable to surgical treatment, but also as an embodied reconnection. This means that the participants became sensitive to their own body and bodily expressions/impressions while eating.

Craving and eating unhealthy foods, snacks, and drinks were related to being isolated inside their own home and lacking a social life. Although some had hidden to eat in secrecy, others ate because of loneliness. One man still lived alone, but had expanded his social life, engaged in new activities on a daily basis, and had found a partner after weight loss. He said, “You know, when you spend most of the time alone, you struggle a bit, right? And then you have the crisps and the soda.”

A renewed relationship to food and eating included spending time differently and using the body in new ways, including during meals. New eating practices, such as eating small amounts of food and carefully selected food types, were described as a two way split: eating after bariatric surgery was both completely different from previous eating practices and quite unlike other people’s eating practices. One woman put it this way:

> I experienced the loss of putting food into my mouth; however, peeling shrimps and eating them one by one was okay, really. You learn to eat smaller bits of food, and to put down the cutlery. . . . So it’s kind of an adjustment to use—how shall I say this?—to use the hands differently, or do something else besides eating while sitting at the table.

The limited need, capacity, and tolerance for food left a sense of loss; quitting previous eating practices created a void in the participants’ everyday lives. This void was the time that was no longer filled by previous eating practices, and related meanings and activities. The gastric pouch was restricted and did not allow for enjoyment of a rich and tasty meal, although this was still desirable. The participants were ambivalent about the altered eating practices, which they described as both a loss and a gain. When the participants changed eating practices, eating was revealed as a deeply embodied habit; thus, the presence of their own body in eating emerged more strongly after bariatric surgery, which might have reinforced their preoccupation with food.

The participants had developed new eating habits through trial and error, because the advice from the hospital was general and too superficial for their individual needs. Although they were determined to adhere to healthy eating practices, they had realized that a restricted life might not be a viable strategy in the long term. One man said it like this:

> Rhythm is a must. . . . to eat less and more frequently. . . . It’s not like before, when you come home from work feeling that you could eat an ox. Now you notice rumbling and noises when it’s empty. And I feel dizzy if I don’t eat. . . . I try to think about how I eat in general . . . I became intolerant to alcohol, so I don’t drink. I’m careful with what I eat, avoiding fat and sugar; if not, I’m taken by the runs [diarrhea]. . . . I take the weekends off, without worrying about the consequences. . . . I eat the things which I shouldn’t and become ill the next morning, but after a few hours I’m fine. I’ve chosen to live like this.

Structuring and monitoring of their own eating practices were ongoing processes. Aiming to avoid weight regains in the long term but also to experience a good quality of life, the participants tried to find a balance between enjoyment and nutritional needs, structure and
flexibility. Most of the participants said that weight loss might be a transient success, an insight that gave rise to unrest and uncertainty about the future. When the participants probed the depth of their own existence, eating turned out to be an embodied practice that constituted a deadly serious matter.

**Beyond Healthy Eating: At the Mercy of the Altering Body**

We found that eating practices after bariatric surgery were entwined with previous embodied experiences and the current life situation. Not all participants strove for healthy eating; enjoyment of eating meant more than mere nutritional considerations. Also, they associated achieving major weight loss with current satisfaction and optimism about the future. Coupled with hunger and the desire for food, current satisfaction and optimism seemed to lead to repeatedly exceeding the restricted gastric pouch. For some, this was a resistance to giving themselves and their own well-being up to the health experts, whereas for others it was followed by severe adverse effects or relapse to problematic or pathological eating. Eating remained a complex and challenging matter, meaning that some participants’ health and well-being were still at risk.

Successful weight loss and surgical restriction had served as a protection against weight regain. Nevertheless, the tolerance of larger meals and a wider variety of food types increased progressively with time. The thought of weight regain was frightening, and flexibility in eating was too risky and demanding for some participants. Holding on to a highly structured eating practice seemed like the only strategy for weight loss maintenance. One man, who felt safest when avoiding temptations altogether, said,

> I have to admit that I struggle . . . it still lingers. Chocolate is my enemy . . . I sometimes buy chocolate and I enjoy eating it. But I know the outcome [short laugh], so I try to stay away. . . . Because if I’m stupid enough to buy a two-hundred-gram bar of chocolate, it’s gone by the end of the evening.

Having a chocolate meant taking a risk and was a threat to weight-loss maintenance, meaning that momentary loss of control implied a long and more personal history-bound trajectory. As such, the possibility for a relaxed attitude to food and eating after bariatric surgery seemed questionable.

Some participants said that the taste of and desire for certain food meant far more to them than the nutritional utility perspective that they had met within the health care services. These participants strongly related eating to pleasure and a relaxed way of being, and were not so preoccupied with their own diet; they trusted the successful weight loss to last. Nevertheless, they had accomplished changing their own eating habits in the long term, meaning that they ate considerably less and somewhat differently than before:

> My problem was always sugar, sweets and unhealthy stuff. . . . I can eat those things now, and unfortunately I still eat too much of it. It must be something click-click in my brain, because I really love candy. Wine gums and such. . . . I think if I hadn’t consumed all that sugar, I might reach the sixty kilograms mark. . . . I haven’t been sixty kilograms since I was [pause] a child!

All of the participants had initially achieved a satisfying weight loss. We have shown how changing eating practices could involve both a loss and a reinforced focus on the body, food, and eating after bariatric surgery. This insight makes it possible to understand that not all participants aimed to change their eating practices; rather, they made the adjustments that the body called for. Whether successful weight loss after bariatric surgery inspires changing one’s eating practices—beyond avoiding side effects—remains unclear.

Some participants kept failing to calculate the amount of food they were able to eat. They described feeling hungry, and did not express any distinction between hunger and a desire for food. Some continued to exceed the capacity of their limited gastric pouch, despite unpleasant bodily reactions. One woman was greatly satisfied with her weight loss and her body after the removal of excess skin; however, she had never focused particularly on her eating practices. She said,

> I don’t fancy cooking. I never [with emphasis] used to do it. Now, I do it anyway. . . . I feel so hungry, and I continue to cook a lot of dinner, far too much for us. I think I’ll manage to eat it all. But then I don’t. Before, I managed to eat it all [laugh]. . . . It’s a bit boring to dine out, not being able to eat all of it. And afterwards I become sick, and run to the toilet during the night.

Hunger and food desire were expressed as indistinguishable, understood as an embodied quest for food. According to the participants, eating after bariatric surgery did not satisfy their hunger, and when trying to satisfy their hunger they became ill. Thus, surgery altered the experiential dimension of eating, pointing to an absence of the enjoyment and satisfaction they normally related to food and eating, and the presence of a restricted pouch and bodily reactions to eating. The participant previously quoted had relied on her embodied responses to hunger, although she knew that this implied a risk, especially initially after surgery. She explained that the dietary regimen was impossible for her to follow:
It was awful [with emphasis] just eating soup. Initially we were only allowed liquid food. I just couldn’t do it when I came home. I started directly on meatballs and potatoes, which I mashed. . . . I couldn’t take the soup. It actually went well . . . I just had to chew it properly. Now, I just eat less than I used to. When I fancy chocolate, I eat chocolate.

Having surgery did not necessarily mean that the participants adopted all aspects of the recommended obesity treatment. They expressed ambivalence; aiming for long-term weight loss, they had surrendered to surgery, but still refused to give themselves up entirely to the health professionals’ care. Some participants described a dual relationship with eating. They appreciated healthy eating, including enjoying tasty food, dining and drinking with friends; however, problematic eating practices returned. Because of the small gastric pouch, the participants had expected binge eating to be impossible after surgery.

One woman had concealed binge eating episodes after surgery. She had been weight cycling (+/- 20 kilograms) continuously for 3 years, and had met with her primary physician for guidance. He had admonished her to stop this behavior because of her successful weight loss. This woman strongly emphasized her success after surgery, expressed as a slender body after major weight loss and several surgical removals of excess skin. Although she stressed the benefits, the recurrence of binging episodes had rekindled her uncertainty. She expressed the difficulty of having a problem neither she nor her doctor was expected. She expressed the difficulty of having a problem neither she nor her doctor was able to understand, and described her problematic eating:

They [binging episodes] occur [sighing], not regularly, just all of a sudden some days. Those days I’m very focused on food [pause], and I eat so much . . . and I don’t feel any pain in my stomach. It’s just like my body tolerates it. . . . I keep going to the kitchen, cooking for myself. I can’t [with emphasis] make myself stop. On those days it feels like I could walk over dead bodies to get food [takes a deep breath]. It’s like I’m steered in a straight line, that food is what I need. My reasoning tells me to say no, but I just can’t stop. I have this inner dialogue with myself, but I never win it. The food wins those days. And I can’t figure out what makes it happen. I can have a very good day, and when I’ve just finished off everything I have to do, and [takes a deep breath] we sit down for a rest, to watch TV, and all of a sudden, the craving for food starts.

The coexistence of enjoyment, satisfaction, and being at the mercy of one’s body and desires shows the ambivalence that permeated the descriptions of eating practices after surgery. Some participants struggled to make daily life work, and described the impossibility of finding the time, energy, and resources for self-care. They expressed guilt because they had not been able to grasp the opportunities that surgery and the lighter body had entailed. They described the failure to meet the expectations of change as a disappointment to themselves, the people around them, and their health care professionals. The participants expressed that feelings of disappointment and guilt challenged healthy eating practices.

Some participants had started to regain weight and wished for a revision surgery; one was a woman who described the desired weight loss as a painful embodied experience. The slimmer body unexpectedly inhabited uneasiness and distress, which grew stronger over the years. At her lowest weight she had experienced her body as being too weak and fragile, and eventually she relapsed into previous patterns of compulsive eating. She described how her experiences with violation of her body during childhood had progressively resurfaced with her weight loss:

When you remove half of your gastric pouch, you start a huge process in your body. In fact, you have your childhood replay. I actually did. I’ve had a childhood which involved being molested, sexually molested. . . . I thought it was so hard the year I lost weight. I could barely visit them [family]. Because he [molester] followed me with his eyes, and said, “Yes, I’m proud of you, now you’ve turned stunning again.” It was awful [with emphasis]. . . . We were, and we are no healthy family [laugh]. . . . It didn’t work out. You could count my ribs both at the back and front of my chest. I felt that I couldn’t be that weak. Because I’ve been molested, I need to feel that I have the power to defend myself, even if I’m no longer in a situation where I have to defend myself with my fists.

The participants’ possibilities and limitations were tightly interwoven with their life circumstances. As such, eating practices after surgery did not emerge in a vacuum, but were intertwined with the participants’ history and life situation. Eating practices were embodied and lived within their lifeworld. Some participants expressed fatigue and powerlessness as a consequence of surgery, along with severe complications. They wanted to avoid additional surgical interventions, and wondered whether they might have been better off without bariatric surgery. One man had lived with severe, long-term complications. Six years after surgery, he described his life as being on the border of what he could cope with:

I get those stressful [pause]. I panic sometimes, and have to sit down and think it over [takes a deep breath], if this life [pause], if it’s worth it. But what else can you do? You have those days when you sit down and really consider if you can be bothered anymore . . . . But then I think about what my son needs, and I try to sort it out. I want to improve my economy, and be on track with it for later. Then you might be able to do something for yourself as well. And then there is the question whether you will be alive long enough to benefit from it [laughing].
Some participants were constantly living in deeply embodied and existential tension, involving illness, pain, emotional distress, and insecurity about the future. These participants downplayed their eating practices; however, because they had an intense desire to avoid weight regain, food and eating did have existential meaning for them. The impact of bariatric surgery and changed eating practices involved existential questions for the participants, some of which remained unresolved.

**Discussion**

Bariatric surgery affected the participants’ eating practices in the long term. The changes were forced by physiological restriction, meaning that surgery bolstered satiety because the participants gained a new sense of fullness. However, our findings show a variation in how they related to this, and reveal satiety as neither a sole physiological/anatomical aspect nor the only meaningful dimension of eating after surgery. The lived body is the subject of experience and perception, and active because it moves and develops meaningfully with the environment (Merleau-Ponty, 1945/2012). In the words of philosopher Havi Carel (2008), “Human being is by definition embodied and enworlded, so trying to provide an account of a human being that lacks these elements will result in a deficient account” (p. 13). Thus, the perspective of the lived body is useful and might even be necessary to understand the complexity of and meanings attached to experiences with embodied change after bariatric surgery.

Eating is essential for being, and means nourishing oneself and relating to the world of objects and others; as such, eating is a bodily and social experience. We consume what we consider food according to our personal preferences, culture, and ethics. In digestion, the food becomes part of the body, it is used or stored and the remains are returned to the world in a transformed state (Leder, 1990). Eating is related to how we experience what we see, smell, chew, and swallow; it might be a sensual or a nearly mindless experience (Vandamme & Van de Vathorst, 2010). Being mindless about eating was no longer an option for the participants. Nor was eating described as a deep and sensual experience, as it had previously been for some. Bariatric surgery was more like being sentenced to inescapable awareness of their habits, sensations, emotions, and thoughts. Eating was framed as a means to access nutrition and maintain weight loss, with emphasis on restriction. Other meanings seemed abandoned, suppressed, or were nonissues.

Nevertheless, the participants expressed a renewed embodied awareness related to the imposed physiological change process they underwent. Eating implied inhabiting a new eating practice. This involved perceptual, bodily, and emotional experiences and thus reflections regarding past and present eating practices. We found that this comprehensive process was characterized by reconnecting to the body; that is, inhabiting new practices meant re-embodying them. The new eating practice could not be similar to other people’s eating; a history of severe obesity and bariatric surgery required a completely new and personal way of eating. Because the participants had a variety of backgrounds and experiences, and bariatric surgery had different consequences for each person, they were left to untangle and work out how to eat in everyday life mostly on their own.

Some participants described eating as being deeply problematic. Because they had initially achieved successful weight loss, the return of these problems was described as confusing and difficult to relate to. One example is the description of an episode of binge eating as a negotiation between rational choice and giving in to the urge for food, while bodily, sensual, or emotional expressions were absent. Practicing healthy eating while among others and binge eating in private reveals a split in the intimate and seamless relation between the body and the world; that is, between the eating person and the world of social and cultural eating practices (Merleau-Ponty, 1945/2012; Vandamme & Van de Vathorst, 2010). Not all participants managed to change eating habits, despite their efforts and wishes. They wanted to stay healthy, but described the cravings, desires for food, and previous eating disorders as powerful forces that they could not resist in the long term.

Our findings are in line with what Bocchieri, Meana, and Fisher (2002) described: comprehensive life changes after bariatric surgery are a huge challenge. They point to the increased tension in most areas of the patients’ lives, and suggest that how patients manage to negotiate tensions might affect the long-term weight loss and psychosocial adjustment. Accordingly, eating after surgery is a complex phenomenon with intense and existential meanings attached. Changed eating was described as a gain: a way of safeguarding the outcome of bariatric surgery and thus longevity. However, this presupposed forsaking previous eating practices or personal reasons to eat. This trade-off was negotiated differently by different participants.

Living a good life often implies eating well, and health is not the only consideration in choosing how, what, and how much to eat (Vandamme & Van de Vathorst, 2010). Enjoyment in eating was meaningful to the participants, yet risky because of the undefined boundary between healthy adaptations and sabotaging the process of weight-loss maintenance. In line with previous research, we found that eating healthily was embedded within a normative field; it was not just considered appropriate, but was also a moral obligation.
In our study, eating healthily was expressed as a kind of a return for what the participants had received, a justification of severe obesity as being worthy of treatment. This reflects emotions of shame and guilt attached to the severely obese body, which seemed associated with eating regardless of current body weight. Thus, taking pleasure in eating involved a sustained and quivering uncertainty. This uncertainty reflects the knowledge that in cultures in which high-density food is easily and cheaply accessible, those who make no effort to limit food intake and those who struggle to control their eating practices after bariatric surgery might risk weight gain (Sarwer et al., 2011). However, some participants did not express any relation to normative dimensions of eating. They did not emphasize forsaking personal values and meanings attached to eating; rather, they prioritized good taste and pleasure. Nevertheless, because they were strongly aware of the risk of weight gain or bothersome side effects, enjoyment in eating involved ambivalence. Regardless of success in changing eating practices, there was a loss of meaning attached to eating. This loss points to the ambiguity of the body, the double experience of being and having a body (Merleau-Ponty, 1945/2012).

In consideration of their health and in gratitude for receiving bariatric surgery, the participants had tried to downplay personal meanings attached to eating; however, because they were lived bodies, this sustained neglect of meanings attached to eating emerged as a major challenge: a struggle that both gave and demanded resistance. Some participants expressed exhaustion and fatigue related to hard life circumstances, psychosocial challenges, or severe illness, and for them changing eating practices was too demanding in the long run.

Methodological Considerations

There are some limitations to this study. Research was undertaken in Norway with Norwegian women and men; therefore, the cultural setting, including relevant differences in health care services, should be considered with regard to transferability of findings. However, we have shown some parallel findings to ours in previous studies, which indicate that the essential meanings highlighted might have relevance across cultural differences. Because we interviewed participants >5 years after surgery, the experiences we investigated were certainly influenced by the passage of time, as well as the present life situation. In a longitudinal design, we might have grasped other interesting aspects of the phenomenon; however, we were interested in long-term experiences because maintaining weight loss and a change of habits and practices is a challenge.

We consider our findings strong, because we had a varied sample and rich data, which we were able to analyze and describe at the level of the phenomenon. These aspects add strength to validity according to well-established criteria for validity in qualitative studies (Whittemore, Lewington, & Sherliker, 2009). The open interviews gave access to an exploration of meaningful experiences in a mutual dialogue, and thus the interviews served as a shared space for reflection and generation of knowledge.

Clinical Implications

This study shows the need for approaching eating after bariatric surgery within a broader framework than is the current practice. The major clinical implication of this study is the need to include exploration of the patients’ meanings attached to eating, and to acknowledge related sociocultural meanings, which seem necessary to support and reinforce change. This might also involve relational aspects, because the body is relational and eating is a part of social life. Based on our data and analysis, the focus on problematic eating practices needs to be more specific and systematic in preoperative assessment and during follow-up, and thus in line with the way monitoring of nutritional status and body weight is handled. Eating is embedded in a normative field, and knowledge about eating practices after bariatric surgery is scarce. Thus, there is a fine line between support and moralization. An open approach would contribute to an atmosphere for discussing eating, emotions, and the body.

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Notes

1. BMI expresses individual body weight (in kilograms) divided by the square of height (in meters) in adults. The World Health Organization (2000) classified weight...
according to the following BMI categories: BMI > 18.5-24.9 is the healthy range; 25-29.9 is overweight; and BMI > 30 is obesity, whereas BMI > 35 with obesity-related diseases and BMI > 40 is severe obesity, also called morbid obesity.

2. Dumping syndrome is a common adverse effect that mainly occurs after the most performed bariatric procedure worldwide: gastric bypass. The symptoms include rapid heart rate, nausea, tremor, a feeling of faintness, and diarrhea (Colquitt et al., 2009).

3. Binge eating disorder is defined as recurrent episodes of eating a “definitely larger” amount of food in a short period of time than most people would eat under similar circumstances, and has recently become a diagnostic label, according to the Diagnostic and Statistical Manual of Mental Disorders, 5th edition (American Psychiatric Association, 2013).

References

Aasprang, A., Andersen, J. R., Våge, V., Kolotkin, R. L., & Natvig, G. K. (2013). Five-year changes in health-related quality of life after biliopancreatic diversion with duodenal switch. Obesity Surgery, 23(10), 1662–1668. doi:10.1007/s11695-013-0994-z

Alger-Mayer, S., Rosati, C., Polimeni, J. M., & Malone, M. (2009). Preoperative binge eating status and gastric bypass surgery: A long-term outcome study. Obesity Surgery, 19(2), 139–145. doi:10.1007/s11695-008-9540-9

American Psychiatric Association. (2013). Diagnostic and statistical manual of mental disorders (5th ed.) Washington, DC: Author.

Bengtsson, J. (2006). En livsverdenstilnærming for helse- og vitskapelig forskning [A life world approach for health science research]. In J. Bengtsson (Ed.), Å forske i sykdoms og pleieerfaringer: Lissverdensfemomenologiske bidrag [Investigating illness and care experiences: The contribution of lifeworld phenomenology] (pp. 13–53). Kristiansand, Norway: Høyskoleforlaget.

Blackburn, G. L., Hutter, M. M., Harvey, A. M., Apovian, C. M., Boulton, H. R., Cummings, S., . . . Annas, C. L. (2009). Expert panel on weight loss surgery: Executive report update. Obesity (Silver Spring), 17(5), 842–862. doi:10.1038/oby.2008.578

Bocchieri, L. E., Meana, M., & Fisher, B. L. (2002). Perceived psychosocial outcomes of gastric bypass surgery: A qualitative study. Obesity Surgery, 12(6), 781–788. doi:10.1381/09608920232095556

Buchwald, H., & Oien, D. M. (2013). Metabolic/bariatric surgery worldwide 2011. Obesity Surgery, 23(4), 427–436. doi:10.1007/s11695-012-0864-0

Bult, M. J., van Dalen, T., & Muller, A. F. (2008). Surgical treatment of obesity. European Journal of Endocrinology/European Federation of Endocrine Societies, 158(2), 135–145. doi:10.1530/EJE-07-0145

Care, H. (2008). Illness: The cry of the flesh. Durham, United Kingdom: Acumen.

Colquitt, J. L., Picot, J., Loveman, E., & Clegg, A. J. (2009). Surgery for obesity. Cochrane Database for Systematic Reviews(2), 1–142. doi:10.1002/14651858.CD003641.pub3

Conceição, E., Orcutt, M., Mitchell, J., Engel, S., LaHairse, K., Jorgensen, M., . . . Wonderlich, S. (2013). Eating disorders after bariatric surgery: A case series. International Journal of Eating Disorders, 46(3), 274–279. doi:10.1002/eat.22074

Dahlgren, K., Nyström, M., & Dahlberg, H. (2008). Reflective lifeworld research (2nd ed.). Lund, Sweden: Studentlitteratur.

Giorgi, A. (1985). Sketch of a psychological phenomenological method. In A. Giorgi (Ed.), Phenomenology and psychological research (pp. 8–22). Pittsburgh, PA: Duquesne University Press.

Giorgi, A., & Giorgi, B. (2003). The descriptive phenomenological psychological method. In P. Camic, J. Rhodes, & L. Yardley (Eds.), Qualitative research in psychology (pp. 243–273). Washington, DC: American Psychological Association.

Groven, K. S., Råheim, M., Braithwaite, J., & Engelsrud, G. (2013). Weight loss surgery as a tool for changing lifestyle? Medicine, Health Care and Philosophy, 16, 699–708. doi:10.1007/s11019-013-9471-7

Hsu, L. K., Benotti, P. N., Dwyer, J., Roberts, S. B., Saltzman, E., Shikora, S., . . . Rand, W. (1998). Nonsurgical factors that influence the outcome of bariatric surgery: A review. Psychosomatic Medicine, 60(3), 338–346.

Johnson, L. K., Andersen, L. F., Hofso, D., Aasheim, E. T., Holven, K. B., Sandbu, R., . . . Hjelmesaeth, J. (2012). Dietary changes in obese patients undergoing gastric bypass or lifestyle intervention: A clinical trial. British Journal of Nutrition, 1–8. doi:10.1017/s0007114512004631

Kalarchian, M. A., Marcus, M. D., Wilson, G. T., Labouvie, E. W., Brolin, R. E., & LaMarca, L. B. (2002). Binge eating among gastric bypass patients at long-term follow-up. Obesity Surgery, 12(2), 270–275. doi:10.1007/978-0-387-28321-3_12

Karlsson, J., Taft, C., Ryden, A., Sjöström, L., & Sullivan, M. (2007). Ten-year trends in health-related quality of life after surgical and conventional treatment for severe obesity: The SOS intervention study. International Journal of Obesity, 31(8), 1248–1261. doi:10.1038/sj.ijo.0803573

Kruseman, M., Leimgruber, A., Zumbach, F., & Golay, A. (2010). Dietary, weight and psychological changes among patients with obesity, 8 years after gastric bypass. Journal of the American Dietetic Association, 110(4), 527–533.

Leder, D. (1990). The absent body. Chicago: University of Chicago Press.

Marceau, P., Biron, S., Hould, F. S., Lebel, S., Marceau, S., Lescelleur, O., . . . Simard, S. (2007). Duodenal switch: Long-term results. Obesity Surgery, 17(11), 1421–1430.

Marino, J. M., Ertelt, T. W., Lancaster, K., Steffen, K., Peterson, L., de Zwaan, M., & Mitchell, J. E. (2012). The emergence of eating pathology after bariatric surgery: A rare outcome with important clinical implications. International Journal of Eating Disorders, 45(2), 179–184. doi:10.1002/eat.20891

Merleau-Ponty, M. (1945/2012). Phenomenology of perception (2nd ed.). New York: Routledge.
