# "Now I Can Do Better": A Study of Obese Women's Experiences Following a Nonprescriptive Nutritional Intervention



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ABSTRACT: The present study analyzed obese women's experiences following a nonprescriptive nutritional intervention, implemented through a 1-year program based on the Health at Every Size® philosophy. We employed an action research method and conducted three focus groups during the intervention. We identified five interpretative axes across the focus groups, as follows: conflicts and perceptions; gaining motivation, perspective, and positioning; becoming autonomous eaters; acquiring tools; and the meetings between the nutritional therapist and participant. Our findings revealed varying levels of readiness among participants in adapting to the intervention and varying valuations of achievements related to eating and health, independent of body-weight changes. Participants reported benefiting from and expressed approval of the intervention. Participants reported positive behavioral and attitudinal changes to their diet and improvements to diet quality, diet structure, and consumption. Finally, participants seemed to show increased autonomy concerning diet and indicated increased confidence, comfort, flexibility, and positivity of attitude regarding eating.

KEYWORDS: obesity, nondieting intervention, Health at Every Size, qualitative inquiry, multidisciplinary intervention

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## Introduction

The World Health Organization classifies obesity as a global epidemic, and research shows that numerous serious health risks are associated with this chronic multifactorial condition.<sup>1</sup> Although obesity is defined as an excess of body adiposity, it is often detected using the body mass index (BMI, calculated as weight in kilograms/height<sup>2</sup> in meters), with a cutoff point of ≥30 kg/m<sup>2</sup>.<sup>2</sup> The global prevalence of obesity (assessed by BMI) doubled between 1980 and 2008. Reports show that the United States has experienced the greatest absolute increase in obesity incidence since 1980, followed in order by China, Brazil, and Mexico.<sup>3</sup> In Brazil, national surveys estimate that some 12.4% of men and 16.9% of women are obese.<sup>4</sup> Prescriptive interventions are the cornerstone of obesity treatment.<sup>5</sup> Prescriptive interventions focus on energy-restricted diets and physical activity and aim to achieve weight loss.<sup>6,7</sup> Such interventions are routinely considered successful if the participant intentionally maintains a weight loss of at least 10% of their starting body weight for at least 1 year.8 Although prescriptive interventions frequently result in short-term weight loss, maintenance of weight loss for a year or longer only occurs in approximately 20% of cases.<sup>8,9</sup> Prescriptive interventions may focus too exclusively on the nutritional value of foods and the risks of obesity and may disregard sociocultural facts about eating and negative psychosocial consequences of dieting, such as binge eating and eating disorders, body dissatisfaction, and low self-esteem. 10,11 Prescriptive diets also carry significant ethical considerations, as they may result in the culpability, stigmatization, and reduction of the personal freedom of those who follow them. 10 Taken together, these issues have stimulated a growing interest in nonprescriptive interventions, such as the Health at Every Size® (HAES®), Mindful Eating, and Intuitive Eating approaches, which aim to promote physical and mental health independent of body weight. 12,13 HAES® is a philosophy that aims to encourage healthy behavior in people of all body sizes, independent of whether weight loss is a consequence of those behavioral changes.<sup>14</sup> Its principles are as follows: (a) to recognize that health and well-being are multidimensional and that



they reflect facts about the physical, social, spiritual, emotional, and intellectual status of an individual; (b) to encourage construction of a positive self-image; (c) to accept and respect a wide range of body shapes and sizes; (d) to promote eating in a manner that balances individual nutritional needs, as well as hunger, satiety, appetite, and pleasure; and (e) to promote enjoyable and sustainable physical activities.<sup>14</sup> Researchers examining the effects of nonprescriptive interventions have observed improvements in self-esteem and reduced body dissatisfaction, despite modest or absent changes in body weight. In addition, weight loss appears to last longer when it is a consequence of nonprescriptive interventions compared to prescriptive ones.<sup>6,11</sup> Leske et al<sup>11</sup> investigated why overweight and obese adults adhere to or drop out of prescriptive and nonprescriptive interventions and found that the participants' adherence depended mainly on their evaluation of the similarity between their own objectives and that of the intervention, as well as on the duration and the effectiveness of the program. Their results also showed that adherence was influenced by participants' feelings of autonomy and personal identity. Greaney et al<sup>15</sup> evaluated attitudes toward HAES® concepts and found that participants who were unaware of the philosophy were curious about it and interested in applying its ideas to their own lives. However, properly applying HAES® principles requires a complex and multifaceted process of engagement. To the best of the author's knowledge, no qualitative studies have evaluated the experiences of obese individuals undergoing real-world interventions based on new, nonprescriptive paradigms like HAES®. Although quantitative studies have indicated that these interventions have positive effects, these studies do not describe the lived experiences of individuals who have taken part in nonprescriptive interventions. Fully evaluating nonprescriptive interventions is critical, since these interventions have only recently been developed and put into practice, and accordingly, they are largely unevaluated. Full evaluation needs to include analysis of the experiences of those who participate in these interventions, particularly the experiences of those who have previously taken part in prescriptive interventions. To evaluate the nonprescriptive interventions, it is necessary to gain a deep understanding of these aspects, especially because such interventions have been practiced only recently.

Some unexplored areas of investigation are as follows: the experience of discovering a new paradigm; the experience of understanding the proposal of the new paradigm; the acquisition, use, and evaluation of its tools; the experience of attending sessions with a nutritional therapist; and the question of which of a participants' initial expectations remain in place after the intervention. Qualitative methods are ideal for this type of research. They allow the collection of rich and descriptive data, which is well suited to exploring the complex details of human behavior and thought. Considering that nonprescriptive interventions may represent an important alternative for improving the health of obese individuals and facilitate the development of more effective management methods, we

aimed to analyze the experiences of obese participants of a nonprescriptive nutritional intervention, which was implemented through a multidisciplinary program based on the HAES® philosophy.

#### Methods

Participants. Participants were enrolled in the Health and Wellness in Obesity Study, a community development program offered at the largest university in Brazil. Participants were recruited via media advertisement. Interested individuals attended a lecture that introduced the objectives and procedures of the intervention. Eligible participants met the following criteria: (a) female, (b) aged 25–50 years, (c) a BMI higher than 30 kg/m², (d) literate, (e) not suffering from diabetes mellitus, (f) not engaged in other nutritional treatment or physical training programs, (g) not using any weight-loss medication, and (h) not being pregnant. Thirty participants were recruited and 14 completed the entire intervention (53.3% of the original sample dropped out of the intervention before its conclusion). Participants' reasons for dropouts are explained in Table 1.

The participants gave informed consent verified by signature, and all procedures were in accordance with the Helsinki Declaration as revised in 2008. The project was approved by the Ethics Committee of the Federal University of Sao Paulo. This trial was registered at clinicaltrials.gov as NCT02102061.

**Study design.** An action research method employing a qualitative and exploratory approach was used. The theoretical framework used was based on the HAES® philosophy and on the paradigm of nonprescriptive intervention. Action research progresses through cycles in which actions that aim to make specific changes to a given scenario are taken; it uses a reflexive method to track the evolution of the scenario from the perspective of those involved. The present study was thus characterized by an ongoing process involving implementation of separate focus groups (December 2012, April 2013, July 2013). Reflexivity was achieved by the maintenance of an ongoing exchange of ideas between professionals and participants. The study was dialectic, since the perspectives of the participants, expressed in the focus groups, guided the course of the intervention.

Before commencing the intervention, 60 hours of interdisciplinary meetings were conducted between physical education,

**Table 1.** Dropout reasons from a nonprescriptive intervention program (n = 16), São Paulo, Brazil, 2013.

	PROPORTION (%)
Moved to another city	12.4
Time unavailability	18.8
Pregnancy	6.3
Familial issues	25
Health issues	31.2
Travel	6.3



philosophy, and nutrition professionals, who discussed the principles of nonprescriptive interventions and how to apply them. Additionally, the nutritional therapists were provided with 30 hours of training in nutritional counseling principles and techniques. The duration of the intervention was 1 year. It aimed to improve participants' quality of health and life, based on the idea that obese individuals may experience health and wellness, and live fully, independent of any weight loss. Independence of aims from weight loss and nonprescriptivity ensured that the intervention coincided with the HAES® philosophy, and the professionals involved were committed to HAES® principles. The intervention lasted 1 year and consisted of a physical activity program, philosophical workshops, and individual nutritional sessions. Blood tests and anthropometric assessments were taken quarterly, questionnaires and scales were self-administered, and focus groups were conducted.

Characteristics of the intervention. Participants performed physical activities three times a week and participated in bimonthly individual nutritional sessions. Participants also attended five philosophical workshops throughout the intervention (October/2012, November/2012, December/2012, March/2013, and June/2013). Physical activities were aerobic and anaerobic exercises, noncompetitive sport, and strength training. Philosophical workshops applied basic philosophical concepts to the idea of desire and encouraged participants to reflect and form conclusions on their own. More specifically, teasing-themes related to desire and inner and outer expectations regarding weight, body, and appearance were introduced. These discussions aimed to provide the participants with tools that could help them gain new perspectives and change dysfunctional thoughts and allowed them to construct their own reflections about body, control, decisions, and choices. The nutritional intervention used supportive nutritional counseling to assist the management of food difficulties and to increase personal management resources via strategies that foster responsibility for self-care. 16 Nutritional counseling strategies focused on helping participants to (a) increase their sensitivity to hunger and satiety cues and decrease their vulnerability to inner or outer triggers that lead to automatic behaviors related to food; (b) neutralize food (ie, classify food nondichotomously), (c) build social support external to the intervention, and (d) identify enjoyable activities. These sessions lasted for 45 minutes.

Nutritional therapists were supervised via fortnightly meetings with a more experienced professional. This interaction aimed to improve the nutritionists' work with the participants. These meetings lasted for 2 hours, and information was exchanged between therapists and the supervisor concerning the individual sessions and the participants themselves.

**Data collection and analysis.** For comparing characteristics among participants who completed or dropped out of the study, we used independent samples T test.

An experienced anthropologist conducted three focus groups during the intervention. In addition, an observer

recorded participants' expressions, gestures, and other non-verbal behavior. Considering that the activities and concepts of the intervention were gradually developed along its course, it was not appropriate to follow a standard guiding question-naire for all the focus groups; hence, each focus group was guided by a separate questionnaire. Questionnaires were constructed collectively by all professionals involved in the intervention. The questionnaires were not pretested because they were specific to the characteristics of participants.

Although the focus group discussions covered issues relevant to all areas of the intervention, the present paper examines only those related to experiences of the nonprescriptive nutritional intervention. The focus groups explored participants' experience of participating in the intervention; their beliefs regarding about and attitudes toward the HAES® paradigm; and their experience of the techniques used, the eating changes they made, and the nature of the therapeutic process.

Liamputtong<sup>17</sup> argued that groups with fewer than four people might lose group characteristics, whereby active and interesting discussion will be difficult to maintain. On the other hand, groups with more than eight people are difficult for a coordinator to manage. Therefore, it was intended that 7 or 8 women would participate in each focus group; however, to account for possible attrition of participants, 10 were invited to each group. All three focus groups were attended on separate occasions by 12 different women: 2 participated in three of the focus groups, 5 in two, and 5 in one focus group. Each session lasted from 80 to 100 minutes. The sessions were audio-recorded and transcribed verbatim immediately following their conclusion. The data collected in the focus groups were returned to the participants at the end of the intervention.

The Collective Subject Discourse (CSD) technique was used for data analysis. It allows for the organization of qualitative data obtained by discursive means. 18 CSD uses methodological figures, expressed by the central idea and key expressions (ECH). ECHs are verbatim quotations of the most important ideas in a dialog. Once selected, each ECH is given a name, and that name is the central idea. The central idea describes its ECH synthetically and accurately. Later, central ideas that are similar or complementary are identified and their corresponding ECHs are gathered into a summarizing discourse, which is the CSD.<sup>18</sup> This technique aims to reconstruct, from parts of individual discourses, as many summarizing discourses are needed to express a given representation of a phenomenon.<sup>18</sup> Analysis was performed by an experienced researcher and was independently revised by another experienced researcher; the data were then discussed until a final consensus was reached. Nine CSDs were produced.

The tables resulting from the CSD analysis were analyzed. During this process, meaningful elements of each utterance were identified and reflected on. Meaningful elements were organized on interpretative axes such that similar elements were represented on a single axis. Axes were not predetermined, but rather identified during the CSD process.



The interpretive axes are presented in the Results and Discussion section.

### Results and Discussion

Participants' average age was 40.5 years (standard deviation [SD] = 7.1 years, ranging from 30 to 49 years). Of the 14 participants who completed the intervention, 5 began gaining weight in their childhood, 1 in her adolescence, and 8 in their adulthood. The initial average weight of the participants was 97.0 kg (SD = 16.4 kg, ranging from 75.3 to 139.0 kg) and the final average weight after 1 year was 93.4 (SD = 18.0 kg, ranging from 70.3 to 138.0 kg). Some participants (28.6%) listed high school completion as their highest level of education; the remaining 71.4% listed a higher level of education. The occupations of the participants were as follows: teacher (21.4%), housewife or retired (28.6%), student (7.1%), self-employed (14.3%), public employee (7.2%), and outsourced employee (21.4%). Marital statuses were as follows: five were single, six were married, two were divorced, and one was widowed. Regarding age, weight, and BMI, no statistically significant differences were observed among participants who completed or dropped out of the study.

Central ideas and their corresponding CSDs regarding nonprescriptive nutritional intervention are presented in

Tables 2, 3, and 4. The interpretative axes constructed from the CSDs arising from the focus groups are presented below.

Conflicts and perceptions. This interpretative axis analyzed participants' conflicts and perceptions about the nutritional intervention proposed in this study. Barberia et al<sup>19</sup> assessed the attitudes of overweight and obese women toward nutritional interventions. Some of the participants in that study reported that they had started a certain diet due to the encouragement of their family and friends, whereas others did so because they felt pressure to conform to external opinions related to acceptable body image. Participants in a nonprescriptive intervention initially expected to lose weight, although weight loss was usually not required for the sake of the participant's health. 11 The first focus group of the present study analyzed participants' impressions of the nonprescriptive intervention. Participants expected the intervention to aim to reduce bodyweight and were distrustful when they discovered that it did not (central idea 1B). However, central idea 1A (the body is beyond the lean ideal) identified well with the proposed intervention.

The same focus group explored participants' attitudes toward participating in the intervention for several months. Some participants stated that a conventional diet "would have never worked out" (central idea 2A), whereas others described

Table 2. Central ideas and collective subject discourse: first focus group.

CENTRAL IDEA	COLLECTIVE SUBJECT DISCOURSE
During the first nutritional meetings, it was s feel when you received that information?	tated that our intervention would not involve a prescriptive diet. What did you think/
1A: I was relieved; the proposal came in handy.	I was relieved; And it came in handy because the proposal was to care; the body is beyond that lean ideal. The first thing I thought was, "I cannot deprive myself of being with people, of not eating when I'm at a party." And I didn't want anybody demanding what I must eat, at the risk of not liking it.
1B: At first, it came as a shock; initially, vanity made me want to lose weight.	At first it came as a complete shock when the nutritionist said, "I'm not here promising to make anyone slimmer." I said, "Oh my God, what am I doing here?" We come impelled by the vanity as well.
2) How does it feel now; that is, what is it like to	be in a non-prescriptive intervention after about three months of treatment?
2A: For me a diet would never have worked out.	For me, an exact diet would never have worked out, because I'm just like anybody else. For me, it is unconceivable to deprive myself of the pleasure of eating. What I wanted was to know how to eat, how to choose, how to balance what I was eating, what effect that food had on my body. That's what I needed.
2B: I realized that the weight loss I had imagined is not possible. I know I won't lose weight quickly; it will be a process.	In this meantime, I haven't seen a big difference in the scale number, but I've realized that I feel more motivated to continue. Perhaps I can lose a few kilograms, but I'll never have the biotype of a slim person. I think it's a positive acceptance; that slimming that I've pictured doesn't exist anymore. I feel that it's happening, but slowly. Maybe because my body is working today a little bit slowly, and that's fine. And, also, because we live in a social context where people eat differently; that is another thing I like. I just mind not saying, "Oh, it didn't work today so let it go." My thought pattern now is like this: lose a little weight, mind my eating, and control the food record to watch what I'm eating. But, it's a process. Perhaps my unconscious is telling me you will succeed in losing weight, but you need to follow this approach and it won't happen so fast. And, a diet isn't necessary, because down the road, if we keep pace with it, we will achieve a lower weight too, right?
2C: I have changed with the intervention; now I don't want to simply lose weight.	I've changed with the intervention proposal. I've been changing my habits and I've realized that this is a matter of health, not only of losing weight. One day I told to the nutritionist, "I'm not losing weight." She told me, "Are you gaining weight?" I answered, "No," and she told me, "So, that's fine." She gave me food for thought. I haven't lost two kilograms in three months; if it had happened in the past, I would be losing my mind. Not now. My pants are fitting, I feel better about walking and now I can do better. I no longer worry about losing weight; I dismissed it from my mind. I feel confident that it will work and was excited to do so.



2D: I still want a diet; I need to be controlled.	In four months, losing just two kilograms came as a shock to me. I know it was the average, but it was such a huge effort. I took a backward step; I wanted a diet with [a list of] what I can't eat, with the quantity, [and] with a list of what I can eat, because I think I would have results. I'd rather it to be a more regulated diet; I need to be controlled. I still want to lose weight. I know the physical conditioning is important, I know they are giving us philosophical workshops to show us that we have got to accept
	our bodies, but I don't buy it. I keep thinking that I must lose 30 kilograms. I just don't know how.
	rd been? You are constantly encouraged to reflect on how, when, and with whom you so on. How has this experience been for you? Have you realized changes since the
3A: The food record was an important tool; I started to realize things that I had not before.	The food record was an important tool. I started to realize things that I hadn't before; that I ate instead of resolving things, or that I was sad and ate, or happy and ate. That's all it was about. I ate all day long and didn't realize I spent the whole day nibbling. Now, I don't nibble anymore. And, I can also think, for example, when I'm about to have lunch, "Well, what've I eaten?" At the beginning, it helped me to observe what I ate; I wrote down, and I said, "Wow, I'm doing it all wrong, that's why I'm hungry already."
3B: The food record is a very important tool for the nutritionist.	I think the food record is a very important tool for the nutritionist, because he'll be able to tell you what is right and what is wrong. Because I can't simply arrive and tell him what I ate, something is always missed out. It's a vital tool for me to change my habits.
3C: With the food record, I police myself much more.	I police myself much more when I have to fulfill the food record. However, when I don't. You make do with what you've got.
3D: Now it is not much use anymore; it is tiring and boring.	It's not very useful anymore because I can realize what I've eaten Initially, it was nice, then it gets tiring; it is boring now. As part of a daily routine, it is bothersome. I can't do that daily list; I don't have the patience. I feel that it's like a jail.
4) How have the meetings between you and the	nutritional therapist been?
4A: I feel that the nutritionist remembers our talks.	We talk about everything. She's like a psychologist to me; I don't remember what I said in the previous session, but she does. I mean. She's being extraordinary in this aspect, because she remembers what you said. That's really important.
4B: I feel that the nutritionist wants to understand me.	I think the nutritionist gives sufficient support, because she has to understand the reason why I eat wrong. She wants me to understand myself; she makes me feel comfortable following the goals. And, she also orientates me. I think our one-hour session isn't enough, unfortunately.
4C: It is frustrating not meeting the goals I set.	We set goals in our sessions and there are times that I say in the next session, "I couldn't accomplish the goals." So, it's a little frustrating not meeting the goals that I myself helped to set.
5) Have you noticed changes in your eating sine	ce the beginning of the intervention? If yes, what are these changes?
5A: I realize I have improved my food quality.	I'm learning to eat properly. For example, biscuits, French fries; those snacks—eliminated. A consciousness has awakened in me. For example, I made really tasty food: I picked potatoes and put some okra [in a pan], [and then] added olive oil, tomato, onions, and meat. I've adopted the natural tomato sauce and I buy the most expensive quality of olive oil. I used to use three [cans of oil] for two people and now I use one and a half. The rice, I've changed to 7-grain, or I make rice with broccoli, but not white rice. The whole one [brown rice], after you finish cooking it, if you toss it with olive oil, it tastes completely different. I've also started to make yogurt with kefir; I eat it every morning.
5B: I realize I am able to differentiate between hunger and wanting to eat.	As long as you start realizing how you eat and when you're actually hungry, you can say, "Now I'm not feeling hungry; I think I'm having a desire to eat something." Now, I can realize when I'm not hungry, but just desiring to eat. Willing to eat. Then, what'll I do, I'll wait a little bit, and I'll try
5C: I realize I changed my perception of hunger; I started to divide my meals and to lower the quantity I ate.	I've realized I never had a hunger grade of 10. So, having the habit of eating three times a day, I realized I didn't need to eat a lot. When you make the three basic meals, regardless of the snacks, the hungry feeling and the urge to eat unhealthy foods are lower.
5D: I realize I have not changed some things, because I think it is complicated to prepare what is healthy and I feel more tempted to eat what is not healthy.	Eating unhealthy products is much more practical. I know what is right and what is wrong: what I shouldn't eat is fat, and so forth; I'm aware of how much I'm supposed to eat of vegetables, legumes; who doesn't, right? But, it's not all the time that I'm available to prepare it. That brown rice is too difficult to cook. I bought it a month ago and I've prepared a cup up to now. And for the mid-afternoon snacks, I want to eat an appetizer, bread, a slice of pizza. I can't say, "I won't eat it; it will be harmful to me." No, I'll eat and then I'll say, "It was harmful to me."
5E: I realize I have difficulty with food portioning and timing.	To me it's been really hard to portion out food; to eat every three hours doesn't mesh with me. Earlier, I'm not hungry and in the afternoon, I'm never hungry. But, on the other hand, if I don't eat until dinner time, I'll feel really hungry, and if there's appetizing food [available before then], I'll eat a lot. My greatest issue too is the food timing: I eat too fast. I still haven't learned to chew slowly and to eat slowly. And with the quantity, I sin. The nutritionist told me, "The meat is this size," but when I buy food, they bring me a bigger piece, and I won't throw it away.



Table 3. Central ideas and collective subject discourse: second focus group.

CENTRAL IDEA	COLLECTIVE SUBJECT DISCOURSE	
6) Since the beginning of the interventio	n, what tools have you acquired regarding eating?	
6A: I realize I have not ceased eating what I like, but now I can handle it.	I've learned a lot. You don't have to cease eating what you like, just cut it down. Have this self-control, but not stop eating what you like; that's impossible. I've done this a lot, but not anymore. It's not worth doing just food restriction, because it [the weight management] is a combination of things.	
6B: I realized I have acquired knowledge.	I guess a lot of the knowledge gained. For instance, at Easter, I received a lot of Easter eggs and so on. I donated [most of] them, and this was easy to do. And I remarked, "last year, at Easter, I'd already finished them off after a week." I felt free. And, I can do what the nutritionist continuously tells me to do: enjoy it to the fullest, get pleasure from it, eat it until the end, and not with that greed for eating, because that's what happened [before]. So, when I think nowadays of something that supports me, I see that well; I can get rid of a great amount [of certain foods] and control myself. That was knowledge that I've gained here.	
6C: I realized I learned to eat during special occasions.	Going to parties is hard. I was comfortable, but not that much, and I didn't have seconds. But, I ate guiltlessly. And on the following day, I was already back to my regular habits. So, I wasn't hungry [and] I didn't overeat, but I also didn't not eat. It can't be radical, because on a daily basis, it's not radical, and you'll need to carry this for the rest of your life.	
7) Did you realize changes on your eating behavior since the beginning of the intervention until now? What would they be?		
7A: I realize I changed my food quantity and my hunger perception.	The biggest change in my food habits was breakfast: I have a lot of breakfasts in the bakery, so I used to eat bread with cream cheese, a large cup of coffee and milk; these kind of things. Now, I pick two spoons of fruit salad or smaller [piece of] bread or whole [wheat] bread with a slice of cottage cheese and a cup of coffee and milk, and it's perfect. I reduced a lot the amount of what I used to eat. I used to eat a lot of cereal bars, maybe two [or] three, and before, I picked, let's suppose, a chicken, a fish, and a sausage—just a slice of each, but in the end I had a huge plate in front of me. Not anymore. I have to choose only one and I put more legumes and vegetables on the plate than rice and beans. Before this intervention, I didn't feel hungry because I was eating huge amounts, so I couldn't feel hungry.	
7B: I realize I have learned to divide my meals.	Since I started here until today I've decreased [my consumption of] a lot of things by half. I did a lot of things wrong, such as eating a lot in over a long period of time, [or] eating during the morning and then only at lunch, [during which] I ate those huge amounts. Now I always try to portion out my food, because before I used to have breakfast at 7 am, lunch at noon, and I would eat again only at 5 o'clock. So now I make small snacks at 9 am and at 3 pm.	
7C: I realize I have improved the quality of my food choices.	It had the inclusion of brown rice, for example. And [I began trying] to include more salad [and] vegetables, [and] to eat the salad before, not with, the meal; [I also tried] to include more fruits, which I already ate, but now I eat more. I didn't eat beans, and now I have them every day, at least at lunch. Skinned tomatoes are great; they don't have any chemicals in them. And, also [I tried] to include yogurts, to change from the yellow cheese to the cottage cheese; to drink water, which I didn't drink before. I didn't have dinner; I had two breads with two glasses of milk and I cut it—now I'm including dinner.	
7D: I realize that some habits remain, though generally my behavior is different.	In my house, I used to have a lot of fattening things. Actually, it still has: well-seasoned beans with sausage and all that. Regarding making tomato sauce and not using the industrialized [sauce], I tried to make it and it was tasty, but the timing, you know. Like, I buy some junk food sometimes because you feel that urge, but I'm not going to overeat. So, I buy that chocolate bar, but I eat only a few pieces. Sweets are something that I've always enjoyed and I won't stop eating, but I won't buy a large amount, either. And I let myself make sweet recipes at the weekends.	
7E: I realize that my eating has not changed a lot, but now I am much more attentive.	About my eating habits, mine were pretty reasonable, but for a matter of taste, not of diet. I like to eat a plenty of vegetables, fruits, whole products; it's already a habit of mine. I don't make fried recipes; I've never enjoyed soda, juice. I've always preferred skinned tomatoes, considered the chemicals, the food additives. So, I haven't changed my diet to make an impact. We know it all, we just don't do it. So the nutritionist reinforces what you already know; we get more attentive.	

changing focus from weight loss to other areas of better health (eg, participants' focus shifted from weight loss to what they ate and to their health and body generally), although these remarks still reflected a degree of concern with the conventionally ideal body (central idea 2B). Kirk et al<sup>20</sup> aimed to examine the experiences of individuals living with obesity. All participants in that study had tried to manage their weight with limited or no success. Consequently, the participants blamed their obesity on themselves and expressed feeling ashamed and embarrassed because of their inability to control their weight. These feelings devastatingly affected participants' self-esteem and willingness to attempt novel weight managements. Further, participants felt discouraged regarding their ability to

make future changes. The discourse found in our study, that a diet "would have never worked out" (central idea 2A), seems to change the process described by Kirk et al.<sup>20</sup> Similarly to Chapman,<sup>21</sup> the nonprescriptive approach used in the present study made participants more attentive to their diet (central idea 2B) and increased their interest in their health (central idea 2C). Over the course of the intervention, participants in the present study seemed to show an increased interest in health versus losing weight alone.

Central idea 2D indicated that some participants were frustrated by the modest weight loss they achieved. This central idea suggests that, despite the intervention, these participants still held diet-focused and weight-loss-focused attitudes



Table 4. Central ideas and collective subject discourse: third focus group.

CENTRAL IDEA	COLLECTIVE SUBJECT DISCOURSE	
8) What would have been your experience if you had participated in an intervention with a diet prescription? What would be your weaknesses and strengths?		
8A: If I were on a diet, I would have dropped out.	I would have dropped out. I think the following: you do a one-month diet, then you give up, and everything is ruined; it doesn't work. I think it's beyond telling that you've got to eat this and that. For example, in my house there's a barbecue every weekend. I've had to learn how to manage that because people won't change their routine and I want to be with my family. So what I think is, okay, there's a barbecue, I like it, so why can't we do a salad? Or why not have some rice? Why can't I pick a little less food, like just one steak? I didn't want to include things that I eventually wouldn't like to eat. Eating to me is related with satisfaction, pleasure, so I don't want everything set for me. Life offers you a diversity of things and what will you say? You won't go out anymore, you won't visit places because there'll be different things?	
8B: I liked the intervention without a diet, but I think I would have adapted myself to other situations.	I think it was really nice the way it was proposed, but I also think I would have adapted myself to this other situation. I need control and I'm uncontrolled, so I can't think I'll be able to take the bull by the horns because I won't. But I don't see a diet as something that holds you back. I think that a little bit of control for someone who is uncontrolled is good. I guess in my case it would help because it's hard for me to organize myself.	
9) At the end of the intervention, which changes did you r	nake in your eating habits?	
9A: I could reduce the amount I ate.	I've learned that it's possible to reduce by half what I used to eat. Okay, sometimes you overeat; when it's something I really like, I end up eating it, but then I know I won't lack care later—I'm already satisfied. I can say: "that's my limit, I'm satisfied, I don't need this." So, what matters is the quantity. Because you'll never stop eating something that is pleasurable for you. It's not what you eat, but how much.	
9B: I could balance and divide my eating.	There're a lot of details we keep calling to mind. For example, today I choose pasta and I picked a salad too; I started to analyze the labeling better, to remove some things that were still there. It also changed to start eating every three hours.	
9C: I could manage emotional eating.	I haven't realized that sometimes food functioned as a compensation for certain frustrations or certain situations that weren't resolved and now I can realize and say "No, today I think I ate more than I needed and it wasn't because I was hungry, it was because of another reason, so now I need to watch myself and mind myself to not do it again."	

(such as the belief that weight might be changed any time),<sup>22</sup> which prevented them from valuing achievements made in areas other than weight loss. It may be that the intervention's duration was insufficient to effect the replacement of typical weight-loss-focused thoughts and expectations with those of a new paradigm.

Herriot et al<sup>23</sup> qualitatively evaluated the experiences of individuals who participated in weight-loss programs. Participants valued the rapid weight loss the programs brought about and the convenience of following a set diet. In the present study, a duality between the different approaches permeated the discourses. On one hand, there was an acceptance of the nonprescriptive approach (central idea 2A and 8A) and a certain rejection of diets (central ideas 2A, 1A, and 8A); on the other, the desire of some participants for dieting remained (central idea 2D), illustrated by their belief that they would have adapted to a prescriptive intervention. Participants reported wanting or needing some additional form of behavioral control despite indicating that they approved of the intervention and had benefited from it (central idea 8B). This may reflect expectations that the intervention would provide a simple way for participants to manage their diet or a belief

that external diet control would make the task of handling food choices less stressful. These observations agree with those of Herriot et al,<sup>23</sup> whose participants held the belief that diets provided ease and convenience. It is important to note, however, that the convenience and stress reduction effected by prescriptive diets is largely the consequence of the fact that individuals who adopt a prescriptive diet do not make their own food choices, which is neither sustainable nor ethical.<sup>10</sup> Although weight loss was not the goal of this intervention, the participants who focused on gains beyond weight loss seemed to be more empowered to maintain or even reduce their body weight. The results of the present study indicate that orienting the intervention toward goals other than weight loss resulted neither in weight gain among participants nor in the neglect of health concerns. Contrary to Kirk et al,<sup>20</sup> it appears that the intervention stimulated participants to find ways to take care of themselves independent of weight changes. Leske et al<sup>11</sup> suggested that personality traits may influence individuals' choice of a particular intervention; however, there is little information to be had-including from the present studyexplaining which traits are important to this process, and how they affect it. This presents an opportunity for future studies



to advance in this understanding. This needs to be evaluated in future studies. Understanding the role of beliefs and expectations will enable professionals to propose interventions suited to the individual, which will increase the benefit the intervention is able to confer.

Gaining motivation, perspectives, and positions. This section addresses the influence of the intervention on participants' behavior. One such factor was the motivational aspect. Herriot et al<sup>23</sup> observed that a desire for weight loss and for the good opinion of friends and family motivated individuals to adhere to prescriptive diets. In contrast, participants in the present study indicated an increasing motivation to continue with the intervention that was related to an increase in their self-confidence and well-being, as noted in the following statements: "I haven't seen a big difference in the scale number, but I've realized that I feel more motivated to continue" (central idea 2B) and "I've been changing my habits and I've realized that this is a matter of health. My pants are fitting, I feel better about walking and now I can do better" (central idea 2C). The excerpt "now I can do better" suggests that the intervention motivated participants by improving their confidence in their ability to change various aspects of their lives.

Another point refers to a new perspective acquired. The participants in the present study reported that they could realize when they were hungry and when they had a desire to eat (central idea 5B) and that were therefore able to respond to hunger in a considered way rather than reacting to it impulsively. Moreover, participants' improved ability to recognize hunger was connected to an important attitudinal change: participants indicated relinquishing the all or nothing thinking characteristic of people following a prescriptive diet in favor of a view that considered occasional moments of excess normal and acceptable (central idea 2B). Chapman<sup>21</sup> identified feelings of failure as important to an individual's choice to abandon a given attempt at weight management. In contrast to this result, participants in the present study indicated that they were able to get back into their routines quickly after a lapse, rather than feeling as if they had blown it—a difference which may be due to the more accepting attitude the intervention aimed to foster. Finally, our findings revealed different positions among participants. A qualitative study revealed that overweight people coped with stressful situations by responding negatively to considerations about their physical condition or by agreeing with negative considerations in order to be better accepted.<sup>24</sup> In contrast, when our participants said, "I eat as much as I want" (central idea 2A), they showed an opposite response to what was expected because of their overweight to reduce their intake. Their responses also showed a position of equality with people who had different body weights—"I'm just like anybody else" (central idea 2A)—suggesting that they did not change their behavior based on external expectations nor were they complacent about it. It seems that the approach helped them to position and strengthen themselves against the stigmas and stereotypes of being obese.

These results indicate that the intervention-related changes to participants' attitudes and beliefs had a beneficial impact on participants' motivation. Permanent changes in the motivational makeup of participants may allow the benefits of the intervention to persist indefinitely.

Becoming autonomous eaters. Throughout the intervention, participants reported dietary changes related to their eating consumption, structure, behavior, and attitudes. (According to Alvarenga et al,<sup>27</sup> food consumption refers to the food intake; eating structure refers to planning, type, and regularity of meals; eating behavior refers to actions related to eating; and eating attitudes refer to beliefs, thoughts, feelings, and behaviors concerning food, as well as the individual's relationship with food). In the first focus group, the changes reported reflected an increased concern with food quality, which was reflected in a decreased consumption of highly processed products and a corresponding increase in consumption of natural, less processed and whole grain foods and better quality fat (central ideas 5A, 7B, and 7C). As emerged from central idea 5A, an increased concern among participants with dietary planning and nutritional balance was observed. Participants reported improved awareness of hunger and satiety cues and indicated that this resulted in more conscious food choices (central idea 5B). Improved awareness of appetitive cues, together with improved meal planning (specifically involving consumption of small, frequent meals), was suggested by participants to explain the observed reduction in the quantity of food consumed (central idea 5C). Participants also reported changes in food-related attitudes and emotions (central idea 3A). Importantly, some difficulties participants emphasized in the first focus group, such as managing more frequent meals, time spent eating, or food intake volume (central ideas 5D and 5E), appeared to have been overcome by the time the second focus group was held. They said they could manage their meals via fractionating, which was reflected in the food quantity. They also expressed that there were changes in the food quality, such as the incorporation of whole grain products and the increased consumption of fruits and legumes (central ideas 7B and 7C). A novel change was related to a decrease of the restrictive behavior (central ideas 6A and 7D). These effects were still more apparent in the third focus group: participants again reported a decrease in the overall quantity of food consumed, along with an improved ability to plan and consume more frequent meals, and an improved ability to manage emotional eating (central ideas 9A, 9B, and 9C). None of the difficulties initially reported by participants were reported in the third focus group, suggesting that the reported improvements were the consequence of permanent changes. Importantly, participants indicated that changes to the consumed quantity of food and management ability they reported reflected internal changes to their desires and motivations and that they regarded the changes as positive. This is markedly different to the typical attitude of dieting individuals, according to which the requirements of the diet are viewed as negative and temporary.



According to Satter's<sup>25</sup> model of eating competence, competent eaters are positive, confident, comfortable, and flexible with regard to their eating practices. The present article agrees with this model; however the phrase *autonomous eaters* will be used in place of *competent eaters*, since the term *competent* may connote moral judgment.

The participants of the present study became more autonomous eaters, contradicting the assumption that without vigilance and food restriction, obese individuals will make poor nutritional choices and overeat. This supports the view that hunger and satiety cues, when properly attended to, can be trusted to assist in food selection.<sup>25</sup> Participants indicated increased positivity across a wide variety of food-related scenarios and improved comfort when exposed to a large amount of available food (central ideas 6B, 6C, and 8A). Further, participants reported an improved ability to manage the influence of their emotions on their food choices (central ideas 3A, 5B, and 9C) and an improved awareness of their eating habits (central ideas 3A, 5A, and 6B). Finally, participants stressed the importance of properly handling social situations (central ideas 8A and 6C) and that they could manage what they like to eat (central ideas 6A and 7D), showing that they had acquired flexibility and confidence.

Overall, participants indicated improved abilities to manage a wide variety of situations and to plan and modify their eating autonomously. This suggested that the nutritional intervention implemented by the present study had increased their independence. The observed decrease in participants' dependence on external behavioral controls suggests that behavioral changes will be more concrete and sustainable in the long term.

Acquiring tools. Food diary records corroborated participants' reports of increased autonomy and improved nutritional choices (central idea 8A). <sup>26</sup> In addition, participants reported improved awareness of emotional eating and *nibbling* (eg, continuously eating small amounts at a time), which aided the development of tools and strategies to manage these issues, like reflecting and planning before eating (central idea 3A). Some participants reported that the food diary tool was exhausting and not sustainable indefinitely, although they recognized the importance and gains that resulted from it (central idea 3D).

Burke et al<sup>27</sup> reported that individuals who had difficulty in maintaining a food diary were less organized, lacked social support outside the intervention, and did not appear to plan their eating in advance.<sup>27</sup> By contrast, participants in the present study reported that after some time, diet management strategies like attending to eating habits and planning ahead became routine (central ideas 3A and 3D) and that once these strategies were consolidated into behavioral habits, maintaining the food diary became tiresome. Importantly, even participants who did not maintain their food diary regularly reported that the diary encouraged them to make better food choices (central idea 3C). Unlike the results of Burke et al,<sup>27</sup> these results indicate that the participants of the present study benefited from keeping a food diary and used it to make dietary

changes. It may be that the diary is interesting, and therefore not tiresome, until attention and planning are consolidated, and that use of the diary should thereafter be decreased in lieu of the application of other self-monitoring strategies, with an allowance made for the resumption of the food diary if necessary. Continual maintenance may all the same be necessary for some individuals, since as reported in central idea 3C, some participants were less careful about their eating when they did not maintain the food record.

The food record seemed to have allowed our participants to properly manage a wide variety of situations and to take an active, central, and independent role during the intervention. The nutritional therapists involved in administering the intervention were thus facilitators and guides in the process of change, with the agents of change being the participants themselves. The food record was also involved in the observed change in dysfunctional eating attitudes (central idea 3A); such a change, according to Alvarenga et al,<sup>28</sup> predicts a better outcome in treatments. Considering the importance of the food record as an instrument of beneficial change, the paucity of studies addressing it is surprising.

Other tools aided management of other food contexts. Central ideas 6B and 6C describe participants' experiences of situations—typically social in nature—with high food availability. Individuals who are dieting often attempt to avoid or minimize eating before such occasions to minimize the impact of an anticipated high food intake. Characteristically, this attempt will fail, and the individual will then attempt further restrictions after the fact to compensate for their overconsumption. Participants in the present study were encouraged to not attempt to change their eating patterns, either before or after a social situation, and were instead advised to eat as normally as possible. Accordingly, participants did not report or describe attempting restrictive behavior in situations of high food availability and importantly were able to quickly and easily return to good eating habits thereafter (central idea 6C). Regarding the consumption of confectionery, nutritional therapists proposed tools and strategies intended to cause participants to consume them carefully and consciously; the positive effect of these measures was reflected in participants' increased enjoyment of those foods (central idea 6B). Overall, the strategies implemented by the intervention were effective in helping participants to manage properly a wide variety of eating contexts.

The meetings between nutritional therapists and participants. In the present study, the nutritional therapists helped participants to understand their eating in better ways, make food choices according to new criteria, and manage stress without turning toward food for refuge. The nutritional therapists used food-planning and goal-setting techniques to help participants achieve these aims. This approach contrasts with that which was analyzed by Hancock et al<sup>29</sup> in their investigation of participants' impressions of prescriptive and nonprescriptive interventions. Some participants in that study expressed the



view that since their input was not sought when prescriptive advice was given, the advice they were offered was not relevant to them. Others felt incapable of achieving the results they had expected due to insufficient support from the intervention.

In the present intervention, the open-ended nature of the goal-setting process helped participants to choose a course of action and, in so doing, to choose the amount of effort they would expend. This collaborative and inclusive approach fostered self-confidence, which led to participants making more comprehensive and sophisticated plans. Some participants reported feelings of satisfaction when meeting their goals (central idea 4B), while others expressed frustration with their inability to meet their goals, but importantly, both positive and negative reports reflected participants' identification with the goals they were aiming to achieve (central idea 4C). This identification with the program's goals underlines the central role participants' input played throughout the intervention and may partly explain participants' frustration when they were unable to achieve their goals. Contrary to Hancock et al,<sup>29</sup> this finding suggests that nonprescriptive intervention processes helped participants take responsibility, thereby resulting in their agreeing consensually to plans they saw as appropriate and relevant. If the participants did not feel responsible, they would not have expressed their frustration toward not achieving the goals.

Moreover, some characteristics of the nutritional therapists seemed to have aided participants in adhering to the treatment protocol: participants praised the therapists' listening skills, patience, empathy, and understanding (central ideas 4A and 4B). The statement "we talk about everything" (central idea 4A and 4B) suggests that the participants felt accepted by the nutritional therapists. Hence, the therapeutic component of the present intervention may also have assisted in participants' improvement (central ideas 4A and 4B).

Interestingly, some statements recorded earlier in the intervention reflected negative expectations among participants concerning the nutritionists, imagining them as slimming agents (central idea 1B) or determiners of food choices (central idea 1A). Given participants were unacquainted with the nutritional therapists prior to beginning the program, these preconceptions likely reflect the ubiquitous social and professional emphasis on weight loss and reduction of calorie consumption in connection with nutrition. Extant research offers reasons why such preconceptions might exist: Barr et al<sup>30</sup> found that 88% of nutritionists believed it to be part of their practice to encourage their patients to lose weight, and Chapman et al<sup>31</sup> found that many nutritionists were comfortable with their role as educators, but not as counselors. Harvey et al<sup>32</sup> assessed the attitudes of 187 nutritionists toward overweight and obese individuals. The nutritionists assessed generally saw obese individuals as less successful professionally and less able to relate to other people and generally did not believe overweight or obese individuals could lead a normal life. Kirk et al<sup>20</sup> found that some healthcare professionals felt ill equipped to offer the support that obese individuals require

and were skeptical about the weight-loss programs they had to offer. The poorly empathetic and relationally weak nutritional care<sup>33</sup> received by overweight and obese individuals is likely a reflection of these feelings and attitudes. Even if it is not, the low quality of care received by obese and overweight individuals makes it likely that the participants of the present study perceived the intervention as different from others they may have experienced. This may explain participants' comments on nutritional therapists as akin to psychologists—because of the nutritionists' commitment to HAES® principles, the additional counseling training they received before the intervention commenced, and the support they received while the intervention was ongoing; their attitudes toward the participants was likely more positive than is generally the case.

The present study aimed to understand obese women's experiences of a nonprescriptive nutritional intervention. A qualitative methodology allowed detailed data describing the participants' perspective to be collected and made possible the analysis of the effects of this type of approach and its elements on the participants. There is a dearth of published quantitative studies that provide an in-depth perspective on nonprescriptive programs, and those qualitative studies that have been published do not describe the personal experiences of participants encountering a nonprescriptive paradigm and its elements. The present study and its results help to fill this gap in the literature of nutritional intervention.

Strategies for ensuring analytical rigor were employed throughout the processes of data collection and analysis. First, each focus group was recorded, transcribed, analyzed, and discussed immediately after its conduction. This allowed the identification of critical ideas and gaps in the discussion, which were immediately corrected in the following focus group. This interaction between data collection and analysis is essential to attain reliability and validity in the data.<sup>34</sup>

Congruence was sought between the research question and the components of the method (eg, planning each focus group according to a given stage of the intervention); sample size was chosen to allow the collection of sufficient data to analyze all aspects of the phenomenon under investigation. Lastly, data saturation was obtained. According to Morse et al, <sup>34</sup> data are saturated when they indicate "aspects of the developing analysis that are initially less than obvious". Accordingly, the results showed a variety of attitudes and points of view, allowing a more sophisticated picture of participants' opinions to emerge than that of participants simply *accepting* or *rejecting* the intervention. Additionally, ideas raised in the focus groups were replicated and confirmed when the collected data were returned to the participants at the end of the intervention.

**Study limitations.** Sample size was reduced by attrition (53.3% of the original sample dropped out the intervention before its conclusion), though participants who dropped out gave reasons external to the intervention. Hence, the small sample size constitutes one of the main limitations of the present study, despite the final sample's sufficiency for in-depth data



collection. In addition, although the focus group moderator endeavored to provide a welcoming environment, the collective nature of the focus group as an investigative tool may have caused some participants to feel uncomfortable expressing their opinion on certain topics or providing in-depth explanation of their point of view. On the other hand, observer notes indicated that the focus groups were characterized by expressive participation of the participants and the discussion of a wide variety of ideas, suggesting that participants did indeed feel comfortable expressing their opinions. While participants were initially randomly selected, sampling after attrition may have been somewhat self-selective—it is possible that participants who were more engaged with the program and who felt that they were benefiting from the intervention participated more often in the focus groups or stayed involved in the study when others dropped out. To increase attendance and minimize attrition, participants were reminded about the focus groups through phone calls, messages, emails, and face-to-face conversations.

Implications for research and practice. More work needs to be done to investigate individual experiences of nonprescriptive interventions. Qualitative inquiries that include critical or extreme cases in their samples (eg, participants who adhered best and worst to the intervention protocol or participants who had most or least success according to changes in the parameters evaluated) may help to understand why people adapt differently to nonprescriptive interventions and how the strategies and tools applied in the intervention affect some subjects and cause the best and worst outcomes within it. The global effect of nonprescriptive interventions on individuals' daily lives and the local effect of interventions on food choices present good opportunities for in-depth ethnography. Given the observed effectiveness of the food diary, the relationship between different types of individuals and the food diary needs further analysis, since it is clear that different participants experience the use of this tool differently, but it is not clear why. The nature and extent of the benefit of the food diary, as well as the extent to which it represents or resembles an external behavioral control, also merits investigation.

It is interesting that nutritionists prefer not to prescribe a specific diet to their clients or patients. Instead, self-monitoring skills may help individuals to assess their eating habits and attitudes toward food. Together with goal-setting and mealplanning skills, the ability to self-monitor helps participants play a central, active, and independent role during their treatment and to assume responsibility for their decisions, unlike in the case of prescribed diets. It could also be interesting to explore the expectations, experiences, and perceptions characteristic of the most prominent discourses presented here, as well as the techniques and characteristics of this paradigm, while acknowledging the uniqueness of each patient. For instance, further analysis of hunger and satiety cues, responses to food-related external stimuli, and food neutralization (the de-dichotomization of food as good or bad) will open opportunities to help obese individuals better manage their eating.

## **Conclusions**

The participants of the present study adapted to the administered intervention in varying ways and with varying degrees of readiness. Overall, participants expressed approval of the intervention and awareness of having benefited from it. Focus group discussion highlighted the importance of valuing achievements related to eating and health independent of weight loss. Participants reported positive changes to their food habits and attitudes, citing improvements in the quality of food eaten and the planning of meals, and decreases in overall consumption. Participants indicated that intervention-related improvements in their perception of hunger and satiety cues aided them in making food choices. Finally, participants indicated having become more autonomous eaters and having become more positive, confident, comfortable, and flexible with regard to their eating practices.

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# **Authors' Contributions**

Conceived the study, analyzed the findings, and wrote the article: MDU, BG, FBB, RFU, FBS. Moderated the focus groups: RFU. Co-moderator: PMS. Contributed to the interpretation of the study: RFU and PMS. Data analysis and/or collection: PLC-F, OJR, BTM, BCB, KAM, MDT, ACCT. All authors read and reviewed the manuscript critically and approved the final version.

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