

A Popular Diets Project

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The popularity of various weight loss diet plans presents an interesting dilemma for health professionals. Despite Americans' interest in such diets and spending of > \$46 billion on diet plans, pills, and products,¹ > 60% of Americans are overweight.² The expanding American waistline, long a concern within the medical community, is now also a public health issue. Modest weight loss has benefits for people with diabetes as well as for those at risk for developing diabetes.³⁻⁵

A variety of popular diets promise easy weight loss solutions and improvements in health. Yet research indicates that popular diets are no more successful in long-term weight loss than traditional weight loss guidelines.⁶ What drives consumers to these plans? What is it like to follow a popular diet plan? What do our patients experience when they follow these plans? What can dietitians and other health professionals learn from the success these plans have had in creating widespread interest?

Because our patients ask questions about various diet plans and some follow them, the nutrition staff at the International Diabetes Center (IDC) initiated a project to explore and understand various popular diets in a unique way. This article describes our process and findings so that others might learn from our experience or undertake a similar project within their own organizations.

Background and Project Goals

The Popular Diets Project was initiated to meet the following objectives:

1. Experience learning and following a selected popular diet plan.
2. Analyze the experience and apply

what is learned to improve patient care and education.

3. Use the experience to develop a presentation on popular diets for our professional training programs.

The original project plan was to have three groups follow three different popular diets. There were to be two dietitians in each group, along with a nondietitian to balance the perspective. However, because it was initially difficult to find two dietitians willing to follow a very restrictive carbohydrate plan, a request for participants for this diet group was announced in a weekly IDC staff newsletter. This piqued the interest of other staff, and soon there were 24 participants and four diet plans. IDC staff embraced the project, and more would have participated had this not been considered a pilot project.

The Participants

Twenty-four IDC staff members participated, including nine dietitians, six nurses, six administrative support staff, a training manager, the executive director, and the president of the Park Nicollet Institute, of which IDC is one center.

Diet Choices and Methods

Three diet plans were selected at the beginning of the study based on interest expressed by patients and nutrition staff. A fourth plan was added at the request of several participants who felt that they wanted a more traditional approach to weight loss. The four plans were: Dr. Atkins' New Diet Revolution,⁷ the South Beach Diet,⁸ the Glucose Revolution (glycemic index),⁹ and Weight Watchers.¹⁰ Table

1 provides an overview of the diets.

Participants self-selected into a diet group and stayed with that group throughout the project. Eight chose South Beach, six Atkins, five glycemic index, and five Weight Watchers. The project kicked off right after New Year's Day 2004 and continued for 18 days. The duration was selected to meet the project goals; this was not meant to be a long-term weight loss study. The initial project deadline was a presentation on the popular diets that was scheduled for a February health professional training program.

A questionnaire was designed to capture key impressions about following the different plans and was completed by the project participants on designated days 2, 6, 12, and 18. Table 2 lists the questions asked.

Each group was assigned a dietitian leader who had resources related to the group's diet plan and served as facilitator. At the kick-off meeting, the entire group met, questionnaires were distributed, and then the four diet groups met to learn specifics about their diet plans. There were no individual education or counseling sessions because we wanted to approach the diets as most consumers do.

Although some of the claims made in the diet materials were questioned by the staff, all followed the plans to experience the process of understanding the plan, having the right foods available, preparing the foods, and making decisions while dining out or traveling. In addition to the kick-off meeting, a meeting room was reserved on day 10 over lunch so the small groups could meet face-to-face and discuss the experience and on day 18 to wrap up the project and reflect on the experience.

Table 1. Overview of the Four Diets in the IDC Popular Diets Project

Diet	Focus	Guidelines
Dr. Atkins' New Diet Revolution	Low carbohydrate, high protein and high fat. Four phases with progressive carbohydrate amounts	<ul style="list-style-type: none"> • Introduction: 2 weeks, 20 g/day of carbohydrate, liberal amounts of meat, fish, and poultry, limit vegetables to 3 cups/day • Ongoing weight loss: Each week add 5 g/day of carbohydrate until weight loss stops • Premaintenance: slowly add carbohydrate until 45–100 g/day when weight loss goal is achieved • Maintenance: as above
The Glucose Revolution	Carbohydrates with low glycemic indexes; moderate protein and fat intake	<ul style="list-style-type: none"> • Select foods with a glycemic index < 55 or that average ≤ 55 at a meal or snack • Avoid foods with glycemic index > 70, such as potatoes, white refined bread, and flake cereals • Use whole-grain breads and high-fiber cereals • Select fruits, low-glycemic-index vegetables, and dairy products
The South Beach Diet	Low-glycemic-index carbohydrates, moderate portions, healthy fats; three phases with progressive carbohydrate amounts	<ul style="list-style-type: none"> • Phase 1: 2 weeks, minimal carbohydrate • Phase 2: add certain fruits and low-fat dairy products until weight goal achieved • Phase 3: liberalized phase 2 avoiding refined carbohydrates
Weight Watchers	Healthful choices, balanced distribution of macronutrients, count points (1 point = ~ 50 calories), weekly meetings	<ul style="list-style-type: none"> • Establish point total for the day with 35 flexible points per week • Points reflect serving sizes • Encourages 5+ servings of fruits and vegetables and 2+ servings of dairy per day, and whole grains • Maintenance: find maintenance points to balance with activity; monthly meetings

Table 2. Diet Assessment Questions for IDC Popular Diets Project*

1. Over the last few days, I rate my hunger as:
2. Compared to my usual way of eating, I find planning meals is now:
3. Following this diet, eating with the family has been:
4. To what extent has the family followed the diet with me?
5. Following the diet when dining out has been:
6. When buying groceries, how easy is it to find foods that comply with the diet?
7. Due to the diet, the cost of buying groceries has become:
8. I refer to the diet-related materials:
9. Following the diet has been:
10. I am following the diet ____% of the time.
11. This diet plan has helped me manage difficult eating situations (temptations):
12. How many meals have you eaten in restaurants or the cafeteria since you last completed this form?
13. The strength(s) of this diet include:
14. Barrier(s) I'm experiencing with this diet include:
15. As of today, the most difficult part of the diet is:
16. My energy level has been: less than usual, usual, more than usual
17. I am very confident, not at all confident, unsure that I will be able to follow this diet for the next week.

*Items 1–9 had 5-point Likert response scales

To provide all IDC staff a glimpse of what the various diet plans included, specific diet-related snacks were offered as part of a staff appreciation function. Atkins snacks included hard boiled eggs, cheese sticks, and celery sticks with salad dressing. South Beach snacks included plain peanuts in the shell, tomato juice, and hummus with raw vegetables. Glycemic index snacks included celery with peanut butter, fresh fruit with yogurt, and hummus and raw vegetables. Those following the Weight Watchers plan could chose from any of the available snacks.

Table 3 summarizes steps necessary to plan a similar project at another organization.

Outcomes

All groups had participants who lost weight, although the goal for many participants was to experience the process of learning the diet and following it, not necessarily to lose weight. Many of the participants were

not overweight. There was initial excitement related to learning about the diet plans and the boundaries for food choices and being part of a staff project.

Those in the two very-low-carbohydrate groups had struggles with lack of variety in food choices and began to search for recipes and meal suggestions. They began to e-mail each other asking what they had for meals and began to share recipes. They also accessed the official and nonofficial websites of the diet plans for recipes, support, and other information. Those in the glycemic index and Weight Watchers plans, by contrast, felt that their food choices were quite extensive and offered sufficient variety. Staff reaction to the four plans is summarized below. Table 4 includes selected comments from the assessment questionnaires that all participants completed.

Very-low-carbohydrate plans

Because the official part of the project was limited to 18 days, the majority of the time was on the initial phases of the Atkins and South Beach plans. As seen in Table 1, both plans severely restrict carbohydrate in this phase. For this reason, both plans are addressed together. At the end of the project, those on South Beach were adding in more carbohydrate foods.

One of the most interesting findings was the mental response to a very-low-carbohydrate intake experienced by some, but not all, participants in these groups. Some began to avoid or limit afternoon meetings when possible because they felt cranky and irritable. One nonparticipant asked if she could complete a questionnaire about “working with someone on the diet” because she felt it was unduly influencing work activities and work relationships. One South Beach participant was inspired to write a letter to the editor of a local newspaper about the conundrum we all face in trying to find the right mix of nutrients to facilitate weight loss, even though the basic tenets (eat less and move more) are already well known and not disputed.¹¹

The initial phases of the very-low-carbohydrate plans were especially challenging for the dietitians to fol-

Table 3. Steps for Conducting a Popular Diets Project

Planning	Discuss why the project is taking place, determine objectives, select diets. Discuss what data, if any, should be collected. Decide a time frame and how many participants can be involved. Obtain approval for staff to attend meetings. Purchase ketone testing strips if required for the diet. Notify public relations department or local media about project.
Implementation	Invite or select participants. Provide clear guidelines and expectations to participants. Discuss safety and medical clearance. Hold kick-off meeting. Hold additional gatherings to connect as a group and to discuss and reflect on diets. Consider ways to integrate into other staff activities. Collect data. Consider engaging primary care physicians.
Evaluation	Review data. Hold small- and/or large-group discussions about the process. Reflect on the experience and insights.
Translation	Share experience with others.

Table 4. Selected Comments From Participants Throughout the IDC Popular Diets Project

Glycemic Index

- “I can make healthy choices.”
- “I don’t have to say NO to many of my favorite foods.”
- “The diet provides some limits.”
- “I can combine foods—a high GI with a low GI—to stay within the diet guidelines.”
- “It is difficult to find the GI value of many foods; frustrating.”

South Beach

- “I am not hungry on this diet.”
- “Sensible after the first phase; I can make healthy choices—lean meats, veg, low-fat cheese.”
- “No portions to measure.”
- “My brain needs more glucose.”
- “I have no energy, very tired.”
- “Limited breakfast—tired of eggs.”
- “Repetitious, lacks variety.”

Atkins

- “Very clear choices.” “No calorie counting.”
- “Positive urine ketones provided motivation.”
- “Quick weight loss.”
- “No appetite.” “Found myself less prejudiced against it because of the profound appetite-suppressing effect.”
- “Boredom!!!”
- “My grocery bill is much higher.”
- “I want carbs ... cereal, bread, sweets.”
- “It really helped to have group support to stay on this!”
- “Low energy, no ambition to go for a run.”

Weight Watchers

- “Food plan is very flexible.”
- “Can eat whatever I want, just need to watch portions.”
- “I can make healthy food choices.”
- “Takes time to plan meals and snacks.”
- “Weight loss seemed slow.”
- “Wanted snacks other than fruit and vegetables.”

low. “I have never bought so much meat in my life; my food bill has doubled,” wrote a dietitian who lived alone and was following the Atkins plan. This same person had recently completed a half marathon, yet stopped running because of low energy while on the diet.

A participant who has type 2 diabetes found that her diabetes medication needed to be decreased during the project and consulted her physician before and during the project. See “General Safety Guidelines” below. She liked the approach of the four groups and found her particular South Beach plan to be “sensible and healthy, but limiting.” She stayed on the plan after the project and lost more than a pound a week. But she reported gaining it back “almost overnight” once she stopped following the plan. She also noted that when

she went off the diet, “the daily craving for carbs grew intensely.”

Others noted similar responses in that they felt challenged in getting back to a normal eating pattern. This especially frustrated the dietitians, who felt they had healthy eating patterns, changed them for the low-carbohydrate diets, and then found it a struggle to get back to their usual healthy eating. One dietitian stated that she developed “portion distortion” while consuming large portions of protein on the plan. After following the diet, she found that standard portions looked small, and it required some effort to recalibrate her expectations for smaller servings. This participant also commented that she would be more aware of exploring this phenomenon with clients who have been on and off various diets.

One dietitian who continued on the Atkins diet and lost 20 lb commented that she could not wait to get through the first 3 weeks because she missed fruits and dairy products so much. She did find the diet boring, yet commented that perhaps “we tend to make diets too complex.”

Glycemic index

The glycemic index group identified the glycemic index values of the foods they most commonly ate and found foods to balance their intake to keep their glycemic index average < 55. They did not feel hungry because they were not restricted with the amount of food they could eat while avoiding food with a high glycemic index. They did report that it was frustrating to not know the glycemic index of all foods they wanted to eat and to find the glycemic index range so wide on some foods.

They also commented that glycemic index values are not intuitive. For example, one might think that fruits, being high in sucrose and fructose, would have a high glycemic index, yet many are low. Similarly, one might think that whole-grain breads or brown rice might have a lower glycemic index than the more refined breads or rice, but this is not so. Dark rye bread and white bread both have a glycemic index > 70. Many muffins, which are often high in fat, have glycemic index values < 55.

One dietitian hesitantly commented

that the easiest way to meet the glycemic index average of ≤ 55 was to consume extra fat or alcohol at a meal. Both have very low glycemic index values and thus would lower the average glycemic index of a meal if other foods with higher glycemic indexes were consumed. Overall, this group primarily chose healthful foods and found that they had a wide variety of choices.

Weight Watchers plan

Several members of the Weight Watchers group were past members of the plan, and another joined so she could continue after the project was over. They found the Weight Watchers’ point system easy to understand and flexible. One group member was especially pleased with this diet option because she had three young children and wanted to be a role model for balanced, healthful food choices.

One staff member who began on Weight Watchers switched to South Beach when her weight loss hit a plateau. She has continued losing weight, for a total of just over 25 lb in the past 1.5 years. She has eliminated white bread, pasta, potatoes, and most sweets and eats moderate portions of other foods. Although she has not made a direct comparison, she feels that she consumes more Weight Watchers points on the South Beach diet than were allowed for her weight category on the Weight Watchers plan.

Other Comments

After the project was over, the entire group gathered to reflect on the experience. Table 5 lists key points learned through the project: what the group felt was needed to be successful with a weight loss plan. This list includes what was helpful during the project and what would have been helpful. Some stated that additional information and guidance would have been helpful. Some wanted more structure, and others appreciated the level of structure that was provided.

All of the diet plans mentioned physical activity, yet none made it a requirement. The group felt there should have been a stronger emphasis on this. There were discussions about following up as a large group or as smaller groups. This did not materialize, yet one person who started out

General Safety Guidelines

Medical clearance was discussed at the beginning of the project, and those who had diabetes were in contact with their physicians about possible medication adjustments.

Our general safety guidelines specific to people with diabetes when considering whether to follow a particular popular diet include:

- Monitor blood glucose more frequently because of the risk for hypoglycemia with decreased calories or carbohydrate intake.
- Consider decreasing diabetes medication in anticipation of decreased calories or carbohydrate intake.
- Choose lean protein and unsaturated fat choices because of the risk of heart disease.
- Avoid very-high-protein diets if you are showing signs of early or chronic kidney disease.
- Continue to match insulin to carbohydrate intake if you did before.
- If you take insulin, assess your insulin needs for large protein portions.
- If you have type 1 diabetes or are on an insulin pump, avoid ketone-producing diets because they may mask other diabetes problems.

Table 5. Key Insights From the IDC Popular Diets Project**Plan for a new beginning: getting started**

Help clients prepare and decide if they are ready to take action. Capitalize on their energy and initial motivation. Help them initiate a plan and customize the plan to fit their personal needs.

- Determine the structure level a patient needs.
- Provide mental preparation time.
- Provide time to think through integration: what changes are involved.
- Plan menus.
- Develop shopping lists.
- Review budget planning.
- Show how to use forms: food, blood glucose, activity, medication records.
- Consider documenting feelings, level of hunger, where you eat, exposure to food.
- Anticipate issues.
- Plan for physical activity.
- Discuss family reactions.
- Identify support systems.
- Identify rewards.
- Discuss mental changes.
- Discuss and make necessary medication changes: diabetes safety issues.
- Discuss clear guidelines as to when to call a health professional.
- Discuss realistic goals.
- Help identify resources.
- Provide individualized, nonjudgmental support.
- Plan for “temptation adjustment.”

Plan transition: bringing closure to old habits

- Plan for boredom.
- Plan for low-energy days (depends on diet).
- Look ahead at work and activity schedules.
- Discuss replacement activities.
- Discuss variety or routine meals or food choices.
- Increase comfort with various situations.
- Evaluate nutritional quality.
- Discuss living with new choices.

with Weight Watchers did form a walking group that walks 1–2 miles two to four times a week during the lunch hour.

Our project focused on staff members, but as one participant noted, it would have been beneficial to include primary care physicians in the process in order to more actively engage them in discussions of how best to approach weight management with patients throughout the health system.

A number of dietitians felt that this experience helped them become more accepting of low-carbohydrate food plans and, consequently, more comfortable interacting with clients who were on or wanted to start such a plan. They also stated that they were more willing to suggest a lower carbohydrate intake that included healthier carbohydrate choices with lower glycemic indexes. They increased their

awareness of the need to review safety guidelines with their clients and found that they were able to review diabetes records with a broader perspective.

Other health professional staff members had similar reactions.

Some participants adapted their popular diet to meet their own needs, which is what we find many clients do. Clients may state that they are following a specific diet plan, yet on further exploration their adaptations are evident. All participants felt that it was important to remember this. Also, it is important to acknowledge any effort to make eating habit changes, even if the changes do not fit traditional advice. Most participants faced situations in which they needed to decide whether to adapt their plan for a meal or a day or to completely stop it because they could not precisely follow it at that time. One dietit-

ian’s husband who followed the South Beach plan with her called his adaptation the “North Beach Diet.”

One dietitian commented that she reacted to her diet as many of her patients do when initiating a food plan: “lots of motivation the first weeks, tapered off as the weeks passed ... food records were quite complete the first week and gradually slacked off.” She pondered whether this was complacency, competence, or confidence. She felt that the initial discussion of a food plan and a specific plan for follow-up are key influencers in providing and maintaining motivation and commitment to changing food choices.

Another participant felt that the timing of the project was key to the interest in participating. “We were in the midst of the low-carb versus low-fat controversy. . . . Interest was peaked by the confusion and passion around the micronutrient versus macronutrient debate and the consumers’ need for science-based input.” It was also the beginning of a year, when New Year’s resolutions were being developed and staff and clients were already thinking about weight loss goals.

Summary

The IDC Popular Diets Project was quite successful because of its uniqueness and the insights it provided. It was meant to increase our understanding of the research literature and to expand our perspective when interacting with patients. The experience helped us understand the enticement of the various popular diet plans as well as the specific requirements of each. As a result, we have broadened our thinking about the plans and are better equipped to address our patients’ questions and improve our interactions around discussions related to weight loss.

Key insights as a result of the project included the importance of being open to patients’ perspectives and desires, meeting each patient’s need for structure and simplicity (or complexity), and providing continued support to maintain momentum. Although these are well-founded educational principles, this experience allows us to have a deeper appreciation for them when we interact with our patients.

The nutrition journey can be complicated and confusing. We take responsibility for providing context so that patients can make food choices confidently and comfortably in a variety of situations. This experience helped us to better understand patients' perspectives as they relate to popular diets and to become better guides for patients using such plans.

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