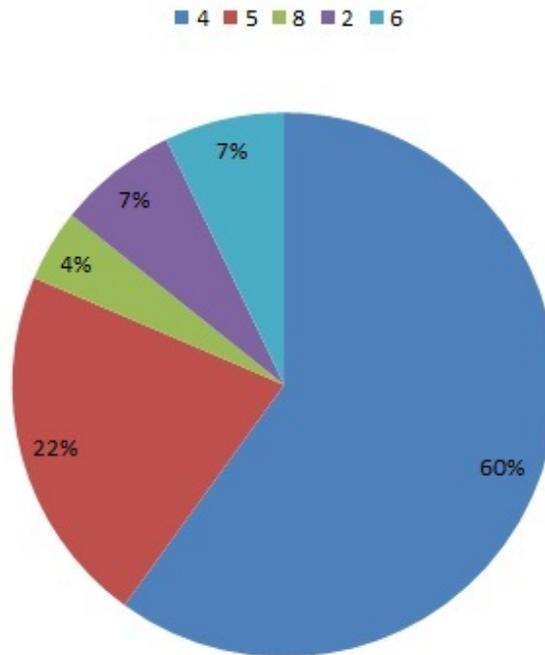


How Knowledgeable are you of the Glycemic Index?



The above pie graph illustrates our survey takers' knowledge of the Glycemic Index, on a scale of 1-10.

90% of the people interviewed have at one point tried restricting their fat intake. The remaining 10% did not feel that they needed to.

Of the 62 people who restricted their fat intake and on a scale of 1-10 in severity of fat intake restriction: 52% responded with a 5, 24% said 7, 8% put 8, 11% put 4, and 5% responded with 3. **Would have been clearer to list these by severity of decrease in fat intake (1-10) rather than percentage I think.**

The vast majority of those surveyed answered that the intake of carbohydrates is good in moderation. Many included that carbohydrates are a vital part of an individual's diet for energy. Some also stated that when they tried to lose weight, they thought about cutting out carbohydrates.

With regards to carbohydrates effect on personal well-being, 46% believed that carbohydrates were healthy and necessary, 36% believed that carbohydrates provided more energy than fats, only 19% believed that carbohydrates hindered weight loss, and nobody believed that carbohydrates are unhealthy and should be avoided.

Scientific Perspective

Nutrisystem is a company dedicated to provide a weight loss program based on products and services offered by the company. The program uses a home delivery service of quality foods and a nutritionally balanced meal plan. The goal of the program is to use a diet that is low in the glycemic index in order for men and women to lose weight. This is based on previous studies which indicate high-glycemic index diets have been associated with obesity (Rossi et al. 2010). The glycemic index measures the effects of carbohydrates on blood sugar levels including the glycemic response which represents the rise in blood glucose after food intake (Pal 2011). Thus, the diet of Nutrisystem relies on carbohydrates that break down more slowly, releasing glucose more gradually into the bloodstream. Nutrisystem's diet helps keep a person feeling full and allows them to burn calories more efficiently.

Becoming a member of the Nutrisystem diet is easily attainable and starts immediately. There are plans specific to men and women which fall under the categories of Core, Silver, Diabetic, and Vegetarian (Nutrisystem 2012). Within each of these categories are a month's worth of meals that can either be chosen by the participant or pre-selected by Nutrisystem. The daily calorie intake for participants is reduced in order for weight loss to occur. Generally, Nutrisystem diets support a weight loss of approximately two pounds per week (Hopwood 1995). After a participant reaches their target weight loss, Nutrisystem then provides diet plans to maintain that weight. Although the information and claims provided by Nutrisystem's company website represent the diet as the ultimate means to weight loss, there are other scientific sources which analyze the effectiveness of the Nutrisystem diet as compared to other common means to lose weight.

It was extremely difficult to find scholarly articles that pertained to the Nutrisystem diet. Fortunately, we were able to determine that Nutrisystem focuses on lowering the glycemic index of a person, which then results in weight loss and an easier maintenance of the lost weight (Rossi et al. 2010). The glycemic index is controlled by the intake of carbohydrates, so lowering this intake will effectively increase the amount of weight loss (Burton et al. 2011). There was a vast amount of scholarly research done on diets that are low in carbohydrates, and how effective these eating habits are in losing weight. There were also several articles that compared the effectiveness of low carbohydrate diets to ones that are low in fat, specifically "Weight Loss with a Low-Carbohydrate, Mediterranean, or Low-Fat Diet" and "The Effects of Low-Carbohydrate versus Conventional Weight Loss Diets in Severely Obese Adults". **These should be cited by author and year to make them easier to find in the References Cited.** These documents examine the weight loss experienced by people who have participated in each respective diet, and unfortunately, there was a small amount of ambiguity concerning which one generated the greatest amount of weight loss. Three documents claimed that after a prolonged period of time, there was little or no difference in weight loss between the low-fat and low-carbohydrate diets (Fabricatore et al. 2011, Pirozzo et al. 2003, Stern et al. 2004). However, several other articles claimed that a diet that is low in carbohydrates is much more effective in increasing weight loss (Blanco et al. 1999, Shai et al. 2008, Delas 2011). While there is still contention between which diet is more effective in losing weight, there is little disagreement that eating habits that promote a lower intake of carbohydrates are healthier for participants than low-fat ones. Studies have shown that these low-carbohydrate diets have significantly decreased the likelihood of Type 2 diabetes (Jenkins et al. 1992, Fabricatore 2011) and lowered blood glucose levels (Baldwin et al. 1981). It has also been shown that the low-carbohydrate diet had beneficial metabolic effects on the participants, and that "a diet with a healthful composition has benefits beyond weight reduction (Shai et al. 2008). Furthermore, "assignment to the low-carbohydrate group had a direct and more favorable effect on triglyceride level, HDL cholesterol level, and glycemic control..." (Stern 2004). It is important, however, to include a study that showed decreased health with a lesser carbohydrate intake. One **study** we found concluded that lowering the glycemic index in your diet may have negative effects on your mood and energy level (Ludwig 2002).

The overall trend of the research **conducted** promoted weight loss with a diet that is low on the glycemic index. The data collected from the survey indicated that the perception of the majority of participants did not match the science behind the healthiness of the low carbohydrate and low fat diet. Most of the individuals did not feel knowledgeable of the glycemic index even though ninety percent of them tried restricting their diets. Of those who restricted their diet, their primary focus was to lower their fat intake rather than reducing their carbohydrate consumption. In fact, the survey suggested that individuals believed carbohydrates are healthier and provide more energy than fats which is opposite of the biochemical properties they contain. Although the dieters had alternate beliefs than supported scientific facts, the majority did understand that carbohydrates are best taken in moderation and, when done so, can aid in weight loss. **Very interesting survey of the literature. Obviously this is a large and complex topic but you provided a good idea of some of the trends and disagreements.**

Conclusion

Diets such as nutrisystem, which are advertised as successful weight loss methods, have become an important aspect of our society. Nutrisystem focuses on lowering a person's glycemic index by restricting carbohydrate intake. Our research compared the effects of both a diet low in fat, as well as one low in carbohydrates. We concluded that **although** there is some contention between which diet is most effective in weight loss, the one thing that seems indisputable is that a low-carbohydrate diet is healthier than a low-fat one. It is very important to educate people about these findings. Physicians often play a role in overweight individual's choice to lose weight, because they are highly influential regarding individual health care practices and are also a primary resource for healthcare information (Smith et al. 2011). By educating physicians, they can then **proliferate** **spread this** the knowledge to their patients. There has been a shift over the last 30 or so years to a cultural ideal of a more "angular and lean" body type (Garner et al. 1980). This shift is due in large to the media and its influences and has **led to** people, especially women, to believe that dieting is expected of them, and **thus some take part in it** diet unnecessarily (Germov, Williams 1996). If people know about the research that has been done, these weight loss methods can be done in a much healthier, safer, and natural fashion.

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