

Program to improve dietary habits through incentives report examples

[Education](#), [Discipline](#)



Abstract

Industrialization and globalization in developed countries have led to sedentary lifestyles, which have a dramatic effect on the health and energy levels of individuals living in these countries (Balko, 2004). Factors such as access to fast food, the existence of junk food and increasing levels of inactivity contribute to overall laziness in lifestyle, as well as a lack of proper nutrition. I used an excel file to keep track of my daily intake of fruits and vegetables and at the end of the day add up my total. The Program was successful in improving my diet however it was unsuccessful in reaching my target heart rate of 65 beats per minute. I believe a change in resting heart rate will require more than one week's worth of change in diet ad will require me to continue the program for a longer duration of time.

Introduction

Industrialization and globalization in developed countries have led to sedentary lifestyles, which have a dramatic effect on the health and energy levels of individuals living in these countries (Balko, 2004). Factors such as access to fast food, the existence of junk food and increasing levels of inactivity contribute to overall laziness in lifestyle, as well as a lack of proper nutrition. As a result, self-control incentives in order to increase nutrition and health habits of individuals must be found.

Self-control is cited as the most common and simplest method of limiting the negative effects of poor diet and exercise (Mahoney and Thoresen, 1972; Theobald, 2004; Schmeichel and Zell, 2007). Healthy eating must be

facilitated through a whole diet approach which emphasizes large amounts of fruit and vegetables, as well as starchy carbohydrates (Theobald, 2004). Self-control interventions for individuals, therefore, may have a positive net effect on resting heart rate and overall health. In the following, an intervention is performed in which the subject undergoes a self-control regimen of a whole diet of fruits, vegetables and starchy carbohydrates. The subject's resting heart rate is then evaluated to see if it reaches the goal of 65 beats per minute. The overall goal is to determine if exercising self-control interventions through a whole diet approach creates measurable benefits for those who attempt them.

Given the aforementioned obesity epidemic, various intervention plans are being put in place to address contributing factors to poor diet and lack of exercise. As it stands today, many people are fed on fast food multiple times a day (Zinczenko, 2002). While health and fitness is something that most Americans are tangentially aware of, many of them are not implementing proper diet and exercise methods. This stems from a number of factors, not the least of which is the prevalence of fast food restaurants in an urban setting. The visibility of these restaurants makes it far easier to find a hamburger than fruits or vegetables (Zinczenko, 2002). Toward that end, different interventions apart from governmental and economic incentives must be found to affect greater change at the individual level for improving diet.

Some argue that the choice to overeat, and the emphasis on unhealthy foods for diet choices, stems from a lack of behavioral self-control (Mahoney and

Thoresen, 1972). In order to exercise behavioral self control, three things must occur: becoming aware of one's environment, altering the environmental factors that lead to this lack of self-control, and altering the consequences of behavior to reprogram cues toward positive rewards for desired behavior. This can be accomplished through positive reinforcement; when positive sensory stimulation is provided to change behavior (Premack, 1959). Studies have shown that possessing higher trait self-control leads to greater tolerance of potentially painful or uncomfortable situations for the benefit of following through on a desired command; therefore, increasing an individual's self-control places an individual's wants within greater reach (Schmeichel and Zell, 2004).

Method

The subject of this program was myself, a 19 year old male. I used an excel file to keep track of my daily intake of fruits and vegetables and at the end of the day add up my total. At the beginning of each meal, I would ensure there is at least the minimum amount of required fruit and vegetables if not more. At the end of each meal I would record the number of fruits and vegetables I ate. Every morning I would record my resting heart rate to check if my diet has had any effect. When I met the criteria for each meal I would reward myself with one hour of leisure time as a reinforcer. The goal I set was to have my resting heart rate reach a healthier 65 beats per minute. I felt this was an appropriate goal as my resting heart rate was a bit too high.

Result

The Program was successful in improving my diet however it was unsuccessful in reaching my target heart rate of 65 beats per minute. I believe a change in resting heart rate will require more than one week's worth of change in diet and will require me to continue the program for a longer duration of time. Figure 1 shows my dietary habits during the baseline period, consuming little to no fruits and vegetables. Figure 2 shows my dietary habits during the program, consuming healthy amounts of fruits and vegetables for my age and fitness level during the program period. Figure 3 shows my resting heart rate during the baseline period and the program period seeing a slight decrease in resting heart rate but not enough to reach the goal.

Discussion

As I engaged in the baseline period, I engaged in typical behavior in diet and exercise as I normally would; most of my diet consisted of meats, starches and junk food, as well as some dairy; very few fruits and vegetables were consumed. My exercise regimen was also very sedentary, and my resting heart rate remained quite high.

During the course of the program period, my daily intake of fruits and vegetables was more or less on target; I had greater difficulty maintaining a high level of adherence to the diet plan earlier and later in the intervention than in the middle, when I was used to that level of self control. Near the end of the week, I could tell that I was starting to anticipate the end of the program period, and I would start to decrease my intake of fruits and

vegetables, and exercise slightly less (though I remained on target for the duration, more or less).

However, despite this, the use of an hour of leisure time to reward myself for successfully reaching these diet goals seemed to be effective; I would tend to look forward to that hour of leisure time, and that would provide a sufficient motivator to create meals to facilitate that goal. This increased my self-efficacy substantially, and I soon started to look forward to my own healthy meals which included fruits and vegetables. This was helped by some experimentation with fruits and vegetables I was normally not familiar with, and discovering that I enjoyed eating them - making the process itself enjoyable was beneficial to my own self-efficacy.

References

Balko, R. (2004 June 16). The terror of fat. National Post.

Mahoney, M. J., and Thoresen, C. E. (1972). Behavioral self control: power to the person.

Educational Researcher 1(10); 5-7.

Premack, D. (1959). Toward empirical behavior laws. Psychological Review 66(4): 219.

Schmeichel, B. J., and Zell, A. (2007). Trait self-control predicts performance on behavioral tests of self-control. Journal of Personality 75(4): 743.

Theobald, H. E. (2004). A whole diet approach to healthy eating. Nutrition Bulletin 29: 44-49.

Zincenko, D. (2002 Nov 3). Don't blame the eater. New York Times.