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Nutrition Education Summaries

Type 2 diabetics have been having a hard time controlling their nutrient intakes and pertaining to the recommendations from the American Diabetes Association. To see if they could fix these issues, The New Mexico Cooperative Extension worked to help create a program called *Kitchen Creations: A Cooking School for People with Diabetes and Their Families*. The point of this new program was to see if they could give diabetics skills and knowledge that they need to live a healthy lifestyle.

To see if this hands-on cooking program could truly improve the nutrient intake of these type two diabetics, the New Mexico State University designed a study to see if there was a positive lifestyle change for those who took the class. The first part of looking at this study is to see what kind of theory that the class is using in order to determine what the class is trying to change in measurements. That theory in this program is the Social Cognitive Theory. The reasoning for this pertains to the fact that the Social Cognitive Theory focuses on the fact that people learn by their own experiences as well as through the actions of others. The thought for Kitchen Creations was that if type two diabetics learned how to make these meals that worked into the recommended nutrients, they would be able to put this into their daily lives and therefore maintain a more balanced and healthy diet.

The premise of this study was quite simple. Their main goal was to figure out whether these cooking classes were in fact helping to improve the nutrient intake in people who had type-two diabetes. In order to do this, the researchers took data in 2002 as well as 2006-2007. During both data sets, researchers had participants fill out three-day food records at two separate times during the study. The first time was when the participants signed up for the class where they were set up with a study coordinator to get all of the information needed. The second was a self-reported 3-day food record one month after where the participants were required to choose three consecutive days in a row including a weekend. From both years of data, there were 117 participants from diverse ethnic and socioeconomic backgrounds that were recorded.

After looking at the data, it is seen that there was a significant decrease in major nutrients like fat, saturated fat, cholesterol, carbohydrates, and sodium as well as an increase in the percentage from protein in their diets. With that the median average intake for those after the cooking class went down 142 kcals, which is a piratical amount for those with diabetes. Given this information it is suffice to say that the Kitchen Creation Hands on cooking class has created a positive change in the eating habits of type two diabetics. This article shows that nutrition education that focuses on hands-on work is effective in creating a behavior change. As the article states, the various studies done on this Kitchen Creation class has shown that a community-based education approach has been helpful in working to create change in the community behavior. This information can be very useful when trying to change the behavior and eating habits of those with similar issues. With that, the article has taught that in trying to change these behaviors, we must look into the

Social Cognitive Theory pertaining for self-efficacy. This means that if we can focus a program on showing the participants that they are able to help themselves and give them that confidence, it is more likely for them to want to change their behavior positively.

While this study was well put together, there were many limitations that both the article goes into as well as others. The most important limitation, which the article states, is obtaining correct food records. Since the participants are self-reporting their three-day recalls, there is a high chance of fabrication in either time frame. These issues could have potentially altered the results of the participants' nutrient intakes. In order to change this, I would have had the participants work with a dietitian who are trained in dietary analysis in order to get the proper amounts recorded. Another issue I see with the study is the amount of participants that were observed. There should have been more so that there was a variety in different genders and social groups. While there were only type two diabetics studied, they gave the questionnaires to the family members as well defeating the purpose of looking at a certain target group.

8 Terms:

1. Outlier- an observation that lies in an abnormal distance or range from the other variables
2. Quasi-experiment - An evaluation which aims to determine if a program has the appropriate intervention on the participants
3. Posits- To suggest something, such as an idea of theory, in order to start a discussion
4. Covariate- A variable that could be the what predicts that outcome of the study
5. Interquartile Range (IQR) - Difference between the 25th percentile and 75th percentile to find the spread of a set of data
6. Hemoglobin A1c- a minor component of hemoglobin to which glucose is bound
7. Wilcoxon Signed-Rank- A non-parametric statistical hypothesis test when comparing two related samples son a single sample to assess whether their population mean ranks differ
8. Log-transformed Ratio - Used to make highly skewed distributions less skewed in order to make patterns more understandable when helping to meet the assumption of inferential statistics

Summaries:

Summary 1: Perceived Barriers and Effective Strategies to Diabetes Self-Management

This article focused on a study to see what type two diabetics found the hardest in managing their diabetes. They wanted to see if the study of integration was in place meaning they wanted to test the theory of a person merging themselves and their diabetes. The study took 26 people for various study groups to be interviewed over the course of two days. From this, it was learned that the number one perceived barrier for those who struggled with diabetes management was the lack of knowledge and understanding of a specific diet plan. This article is very helpful in the study that I focused on in terms of knowing that the participants' lack of knowledge is what needs to be changed in order to reduce the unwanted nutrients in a type two diabetics lifestyle. This article also goes into looking at different ways of helping diabetics with their self-management, like social support and group education. ✓

Summary 2: Trends in Nutrient Intake Among Adults with Diabetes in the United States

This article is about a cross-sectional survey done in two phases. The goal was to see the dietary changes and nutrient intakes of type two diabetic adults between the years of 1988 and 2004. A 24-hour dietary recall was used on participants in two different phases in the time frame of 1988 to 2004. They looked at specific nutrients that diabetics would eat a day and calculated them through multiple linear regressions. What was found was that there was not a significant change in the total energy consumption even with the suggestion of changing their energy consumption. With that, there was an increase in carbohydrate consumption when looking at the years of 2003 to 2004. What this study shows us is that the energy consumption and carbohydrate intake were very important in diabetes management. This is important to the study of cooking classes to see what truly needed to be reduced in a type two diabetic's nutrient consumption for a more optimal self-management. What this also shows is that there needed to be something done in order to teach participants the importance in decreased energy consumption. ✓

Works Cited

Other authors? ✓
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