
Georgia Southern University Research Study

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STUDY DESIGN

This article is based on a case-control study, conducted to provide community residents with nutrition and exercise counseling. After proper permission from Georgia Southern University's Institutional Review Board (IRB), study participants were recruited using advertisement in the local news paper.

Other partners in the research: Candler County Hospital hosted the program, as well as performed all the lab work. Food Fitness First provided the Registered Dietitian for the counseling and class educational components.

Nutritional Intervention: Each participant received initial counseling at program start; all received the Food Fitness First, Inc.,[®] Healthy FOOD SPIRAL[®] and were educated on how to use the Food Spiral[®] and the accompanying material: ie: food diary, menus, fast food and grocery store literature.

Describe implementation of the intervention and collection of the blood samples:

- Blood samples, diet history, physical activity level, and anthropometric data were obtained to study the effect of omega-3 fatty acids and exercise on risk factors associated with cardio-metabolic risk markers.

Statistical methods: We used paired-sample t-tests, to assess the significance of the differences between pre- and post-intervention measures among the study participants.

RESULTS

The study shows substantial changes were observed in most of the cardio-metabolic indicators. The food intervention, paired with exercise, resulted in a statistically significant decline in body weight (mean decrease=7.2 lbs.; $p=0.000$). An average reduction of 3.9 inches in waist circumference and 2.9 inches in hip circumference demonstrates significant effect of diet and exercise intervention ($p<0.000$ for both measures).

Figure 1: Comparison of the average weight of participants at pre-and-post intervention times.

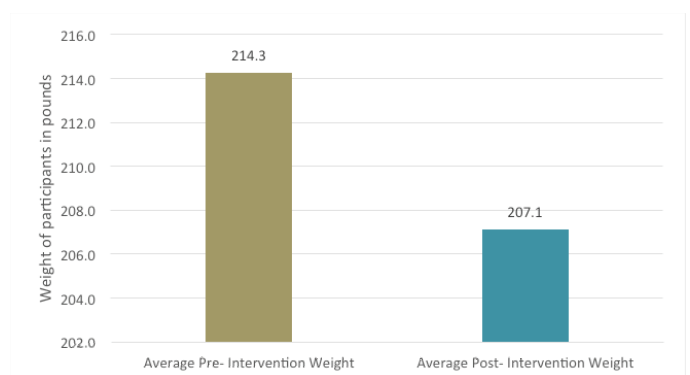
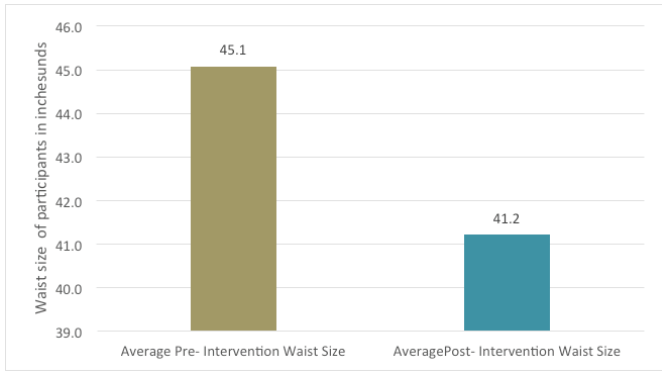


Figure 2: Comparison of the average waist size of participants at pre-and-post intervention times.



P<0.001 for significance of pre-post differences.

Figure 5: Average pre and post intervention Body Mass Index (BMI) of participants.

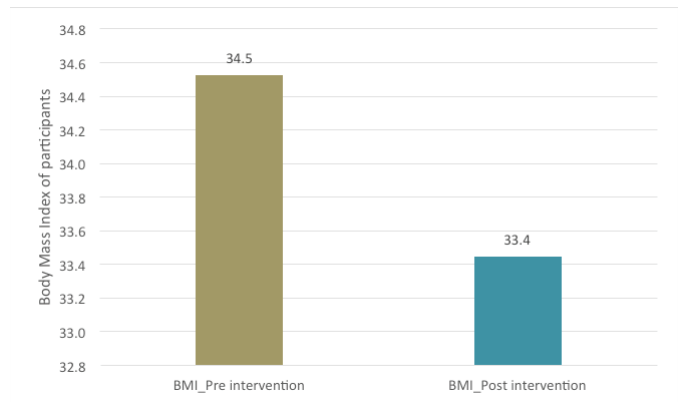
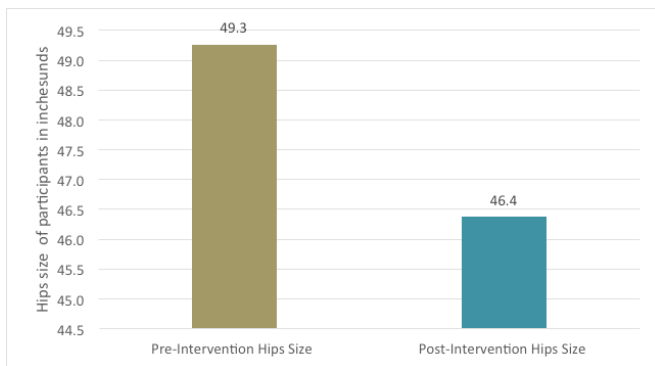
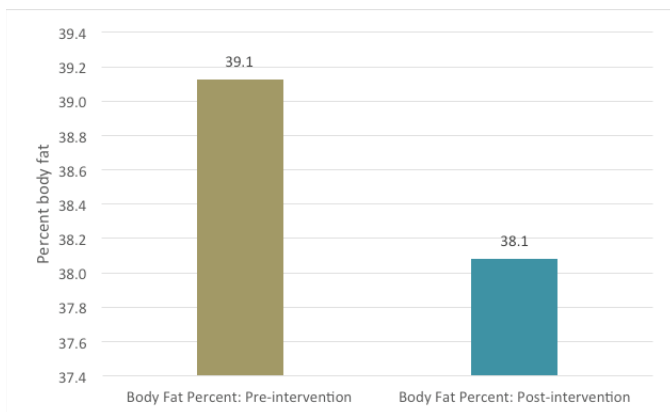


Figure 3: Comparison of the average hip size of participants at pre-and-post intervention times.



P<0.001 for significance of pre-post differences.

Figure 4: Average pre and post intervention percent body fat of participants.





Cornelius Dekle

Study Through Georgia Southern University Grant

Adult Male - Healthy FOOD SPIRAL[®] Program

About the Study: This was a grant through Georgia Southern University Grant with Padmini Shankar, RDN, PHD and Gulzar Shah, PhD, MStat, MS in association with Candler County Hospital's Physical Therapy Department, which was headed by Damien Scott, RPT, MS, OCS.

Before



Age: 43

Occupation:
Truck Driver

Program Duration:
12 week program

Beginning and ending
statistics recorded;
weekly activities/class.

Dietary Challenges:
High Blood Pressure,
Obesity, stated Poor Self-
Esteem and Depression.



After



HgbA1C:
-3.6%
Start: 5.5 - End: 5.3

BMI:
-11.6%
Start: 36.9 (Class III Obesity)
End: 32.6 (Class II Obesity)

Total Cholesterol:
-20.4%
Start: 245 - End: 195

Weight:
-29 lbs.
Start: 250lbs. - End: 221lbs.

Blood Pressure:
-15.4% / -12%
Start: 142/100 - End: 120/88

LDL Cholesterol:
-26.2%
Start: 160 - End: 118

Waist:
-6in.
Start: 44" - End: 38"

Heart Rate:
-24.2%
Start: 95 - End: 72

HDL Cholesterol:
+15.6%
Start: 38.9 - End: 45

Hips:
-6in.
Start: 48" - End: 42"

Blood Glucose:
-9%
Start: 110 - End: 100

Triglycerides:
-26%
Start: 176 - End: 130



“ When I joined the diet program, I was overweight and out of shape. My blood pressure was sky high and uncontrollable. Once I started eating healthy and exercising regularly my blood pressure began to stabilize and it was very controllable. I was eating with the green, yellow, and red chart that was provided by the program. It was easy to follow because following the program never let you become hungry. I began to lose weight and started to feel good about myself. People were complimenting the weight loss often, which lifted my emotional spirits. My lifestyle got better all around as I started enjoying life by getting out in public more and participating in activities with family and friends. My health was great and it became a natural habit to eat healthy and exercise regularly. Program was very much a success. ”

- Cornelius Dekle

ATTN: Pam Thompson

when I joined the diet program, I was overweight and out of shape. My blood pressure was sky high and uncontrollable. Once I started eating healthy and exercising regularly my blood pressure began to stabilize and now was very controllable. I was eating with the green, yellow, and red chart that was provided by the program. It was easy to follow because following the program never let you become hungry. I began to lose weight and started to feel good about myself. People were complimenting the weight loss often which lifted my emotional spirits. My life style got better all around as I started enjoying life by going out in public more and participating in activities with family and friends. My health was great and it became a natural habit to eat healthy and exercise regularly. Program was very much a success

@candis Delle

Please take a moment and answer the following questions:

1. Please circle your gender: Male or Female.
2. What medical conditions do you have? high blood pressure
3. How much weight have you lost? 29 lbs
4. How many inches around the waist have you lost? 8
5. What labs values have improved during this program? Please give before and after values if possible. Also was there a change in your blood pressure?
bp $\frac{142}{100}$ before $\frac{120}{88}$ after and getting better daily
6. What is the best part about this program in your opinion? the nutrient classes to help of get better understanding of a healthier way to eat
7. Do you give your permission to use these comments on our website?
yes or no

Please sign if yes: Cornelius DeMe

Date: 08/01/2013

Return to Pam Thompson RD

4x → 2x
waist 44 → 38

I really am thankful for this program. It helped me change my life and probably gone help me live longer. I feel so much better with this lifestyle change. I learned it's not really about dieting but learning, and maintaining better eating habits and exercising regularly. I learned to eat healthier and how to manage portion control. With my awareness now it really becomes easier and will be part of my lifetime routines. It only takes determination and discipline.
THANKS

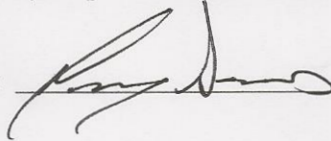
Please take a moment and answer the following questions:

1. Please circle your gender: Male or Female
2. What medical conditions do you have? None
3. How much weight have you lost? 34 lbs
4. How many inches around the waist have you lost? 6.5"
5. What labs values have improved during this program? Please give before and after values if possible

| | BEFORE | AFTER |
|-------------------|--------|-------|
| Total Cholesterol | 237 | 172 |
| LDL | 156.3 | 114.7 |
| HDL | 63.9 | 49.7 |
| Triglycerides | 84 | 38 |
| Blood Glucose | 100 | 86 |
| HgbA1C | 5.8 | 5.3 |

6. What is the best part about this program in your opinion? The tips of what to eat regardless of whether you are eating at home or eating out and eating low fat and high fiber. I have really learned that I need to read labels of food that I buy. I have also learned how important it is to measure food.
7. Do you give your permission to use these comments on our website?
 yes or no

Please sign if yes:



July 2013

Mary Screws