

The impact of a 12-week nutrition intervention on health and wellness in the workplace

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Abstract

The average person devotes over 90,000 hours in a lifetime to their employment. The workplace can be a very effective environment to incorporate healthy interventions to achieve and maintain a healthy lifestyle. The Community Chronic Disease Prevention intervention, focused on adopting a nutrient-dense, whole-food, plant-based (NDWFPB) dietstyle, to assess the effects on overall health and wellness of the participants. The participants were recruited from the working adult population at Northern Arizona University (NAU), Flagstaff Medical Center (FMC) & Verde Valley Medical Center (VVMC). This intervention demonstrated effective improvement of overall health and wellness.



Introduction

This study focused on how the overall health and wellness of participants was affected after receiving 12 weeks of nutrition education. Following 6 hours of introductory education weekly meetings took place for one hour, once per week. The education sessions informed the participants on how to implement a NDWFPB dietstyle.

Pre & post biometric screening tests were completed to measure Total Cholesterol (TC); Triglycerides (TRIG); High-Density Lipoprotein/Total Cholesterol (HDL/TC Ratio); High-Density Lipoprotein (HDL); Low-Density Lipoprotein (LDL); Systolic Blood Pressure (SBP); & Diastolic Blood Pressure (DBP).

Wellness factors were measured by the following tools: Quality of Life Index, Patient Health Questionnaire-9, Pittsburgh Sleep Quality Index, and Work Productivity and Activity Impairment.

Methods

Participants:

- Sixty six employees of NAU, FMC, and VVMC
- Over the age of 18, average age 47 years old
- Waist circumference of >35" for females and >40" for males and a BMI of 28 or greater

Procedures:

- The intervention was centered upon the health belief model:
- 20 hours of nutrition education on dietstyle consisting of NDWFPB such as: vegetables, fruits, nuts, seeds, whole grains, and legumes
 - Animal and processed food products were minimized

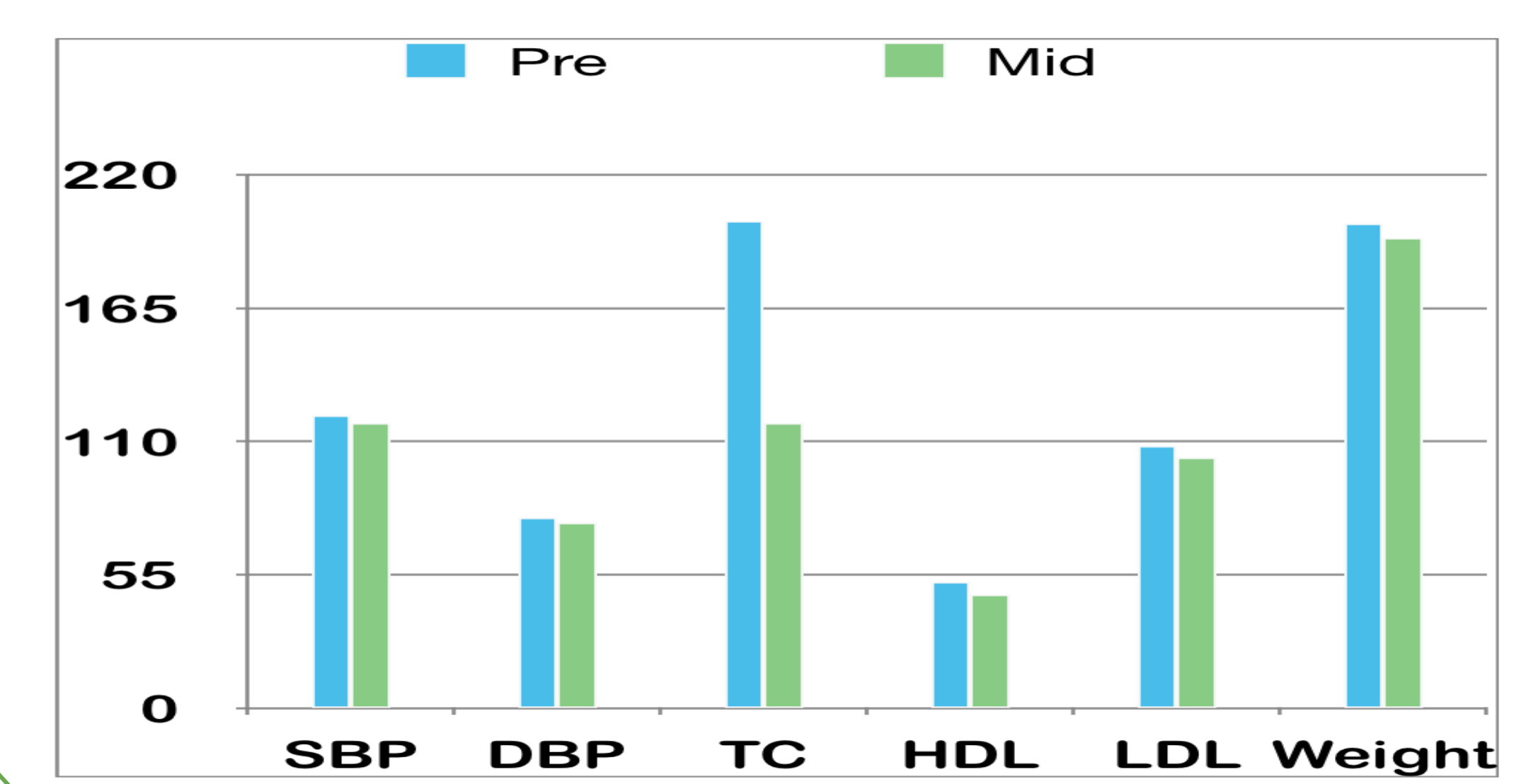
Data Collection:

- Wellness measures included: Quality of Life Index, Patient Health Questionnaire 9, Pittsburgh Sleep Quality Index, Work Productivity and Activity Impairment
- Biometric screenings were performed pre and post intervention

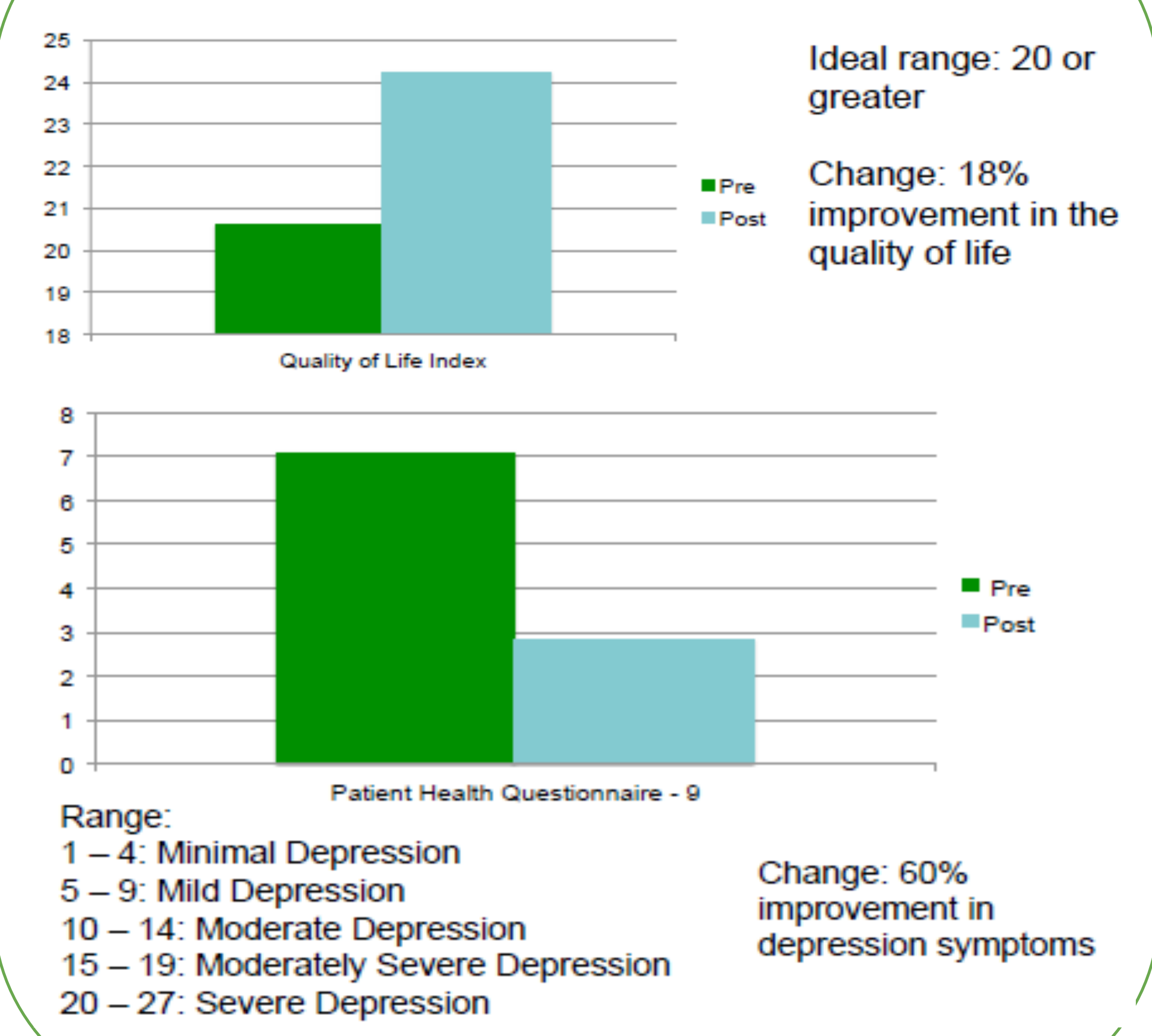
Results

Post-intervention participants showed a significant improvement in the majority of their measurements:

- Mean weight loss of 12.27 pounds, reduced waist by 2.64 inches and hip measurement by 1.50 inches
- Systolic blood pressure decreased on average 6.79 mmHg, diastolic on average by 9.81 mmHg
- GERD questionnaire scores decreased on average by 2.63 points (70.8% reduction)
- Total cholesterol decreased on average by 18.10 mg/dl (8.61% reduction)
 - LDL decreased by 12.81 mg/dl (10.11% reduction)
 - HDL decreased by 3.5 mg/dl (6.6% reduction)



Results - continued



Discussion & Conclusions

Overall, participants improved their quality of life and reduced their cardiovascular disease risk by adhering to the NDWFPB dietstyle. The most significant results were drawn from the Patient Health Questionnaire-9 as shown through a reduction in depressive symptoms by 60%, classifying the participants from mild depression to minimal depression. In addition, GERD symptoms were reduced by 70.8%. This intervention has proven to be effective at reducing CVD risk factors as well as improving participants overall quality of life. Widespread workplace implementation should be considered to increase work productivity and overall wellness of employees.

References

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