



CCDP: Improvement in Quality of Life

Monica Pruetz – University College

Mentor: Dr. Jay Sutcliffe - Department of Health Sciences



Abstract

Health interventions serve as a way to show the importance of changing dietary behaviors and lifestyle choices. A worksite nutrition intervention called Community Chronic Disease Prevention (CCDP) was performed to see if eating a Nutrient-Dense, Whole Food, Plant Based (NDWFPB) dietstyle had an effect on the overall health and wellness of individuals. The participants were recruited from the working adult population at Northern Arizona University (NAU), Flagstaff Medical Center (FMC) & Verde Valley Medical Center (VVMC). The intervention demonstrated effective improvement in quality of life.



Introduction

While the intervention focused on the overall health of the participants, this report will focus specifically on the effects of the NDWFPB dietstyle on quality of life, depression severity, sleep quality, and work productivity. To measure these qualities, the participants were given questionnaires to complete at the beginning of the intervention and again at the completion of the intervention. The intervention lasted 12 weeks, with weekly one hour meetings.

The questionnaires were: **Quality of Life Index** (to measure the person's satisfaction with life), **Patient Health Questionnaire- 9** (to measure the severity of depression), **Pittsburgh Sleep Quality Index** (to measure the person's quality of sleep and possible sleep disorders), and **Work Productivity and Activity Impairment** (to measure a person's work productivity based on their health).

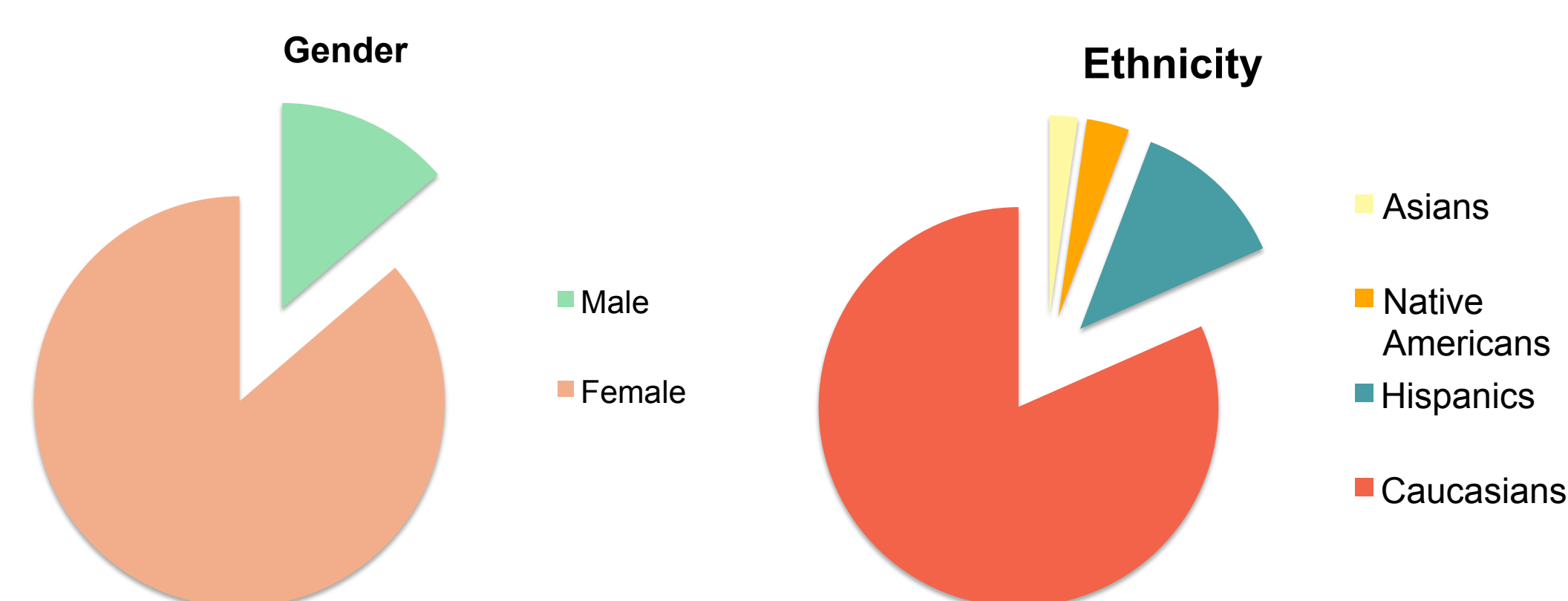
In this intervention, it was anticipated that there would be an improvement between the participant's pre and post intervention measures. This would show that a NDWFPB diet effectively improves a person's quality of life, reduces their depressive symptoms, improves quality of sleep, and increases work productivity.

Methods

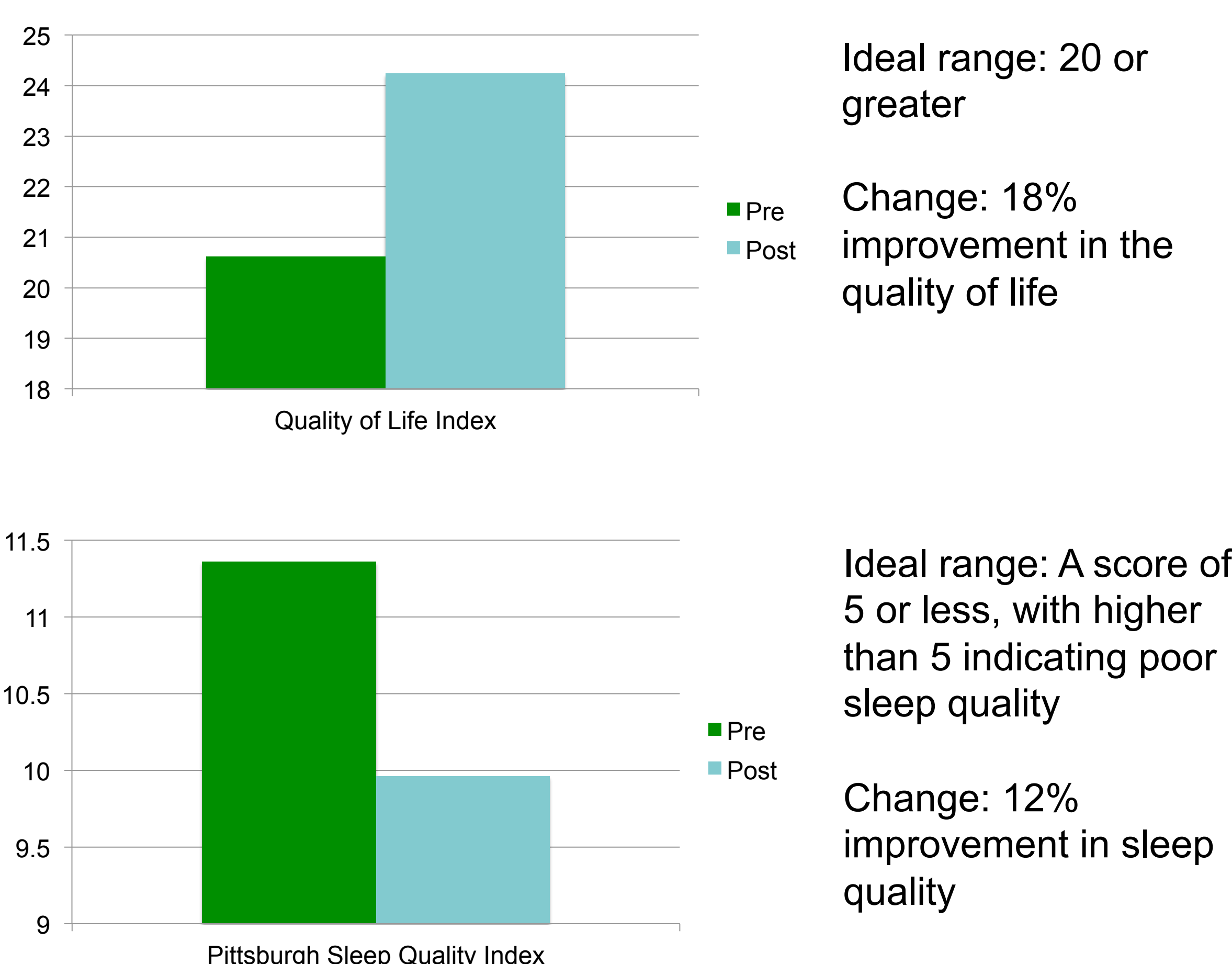
Participants: Seventy three participants of NAU, FMC, and VVMC, between the ages of 18 and 80 and the average being 48.11 years old. The participants had a waist circumference of >35" for females and >40" for males, and a BMI of 28 or greater.

Procedures: Participants were given a dietary protocol of plant based foods consisting of: vegetables, fruits, nuts, seeds, whole grains, and legumes and limiting processed foods and animal products. The participants were supported through the weekly one hour meetings that provided meal demonstrations and educational materials.

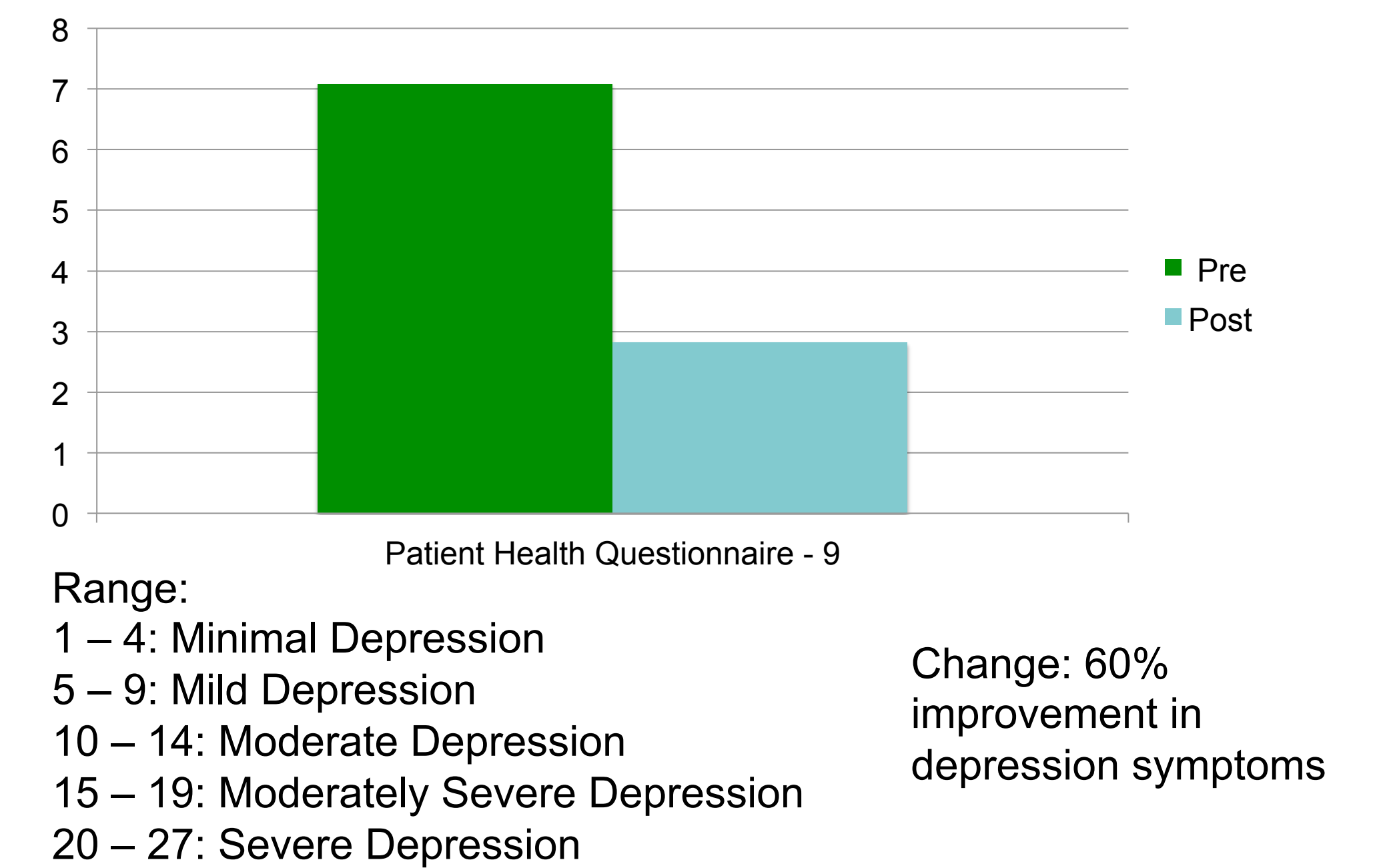
Data Collection: Pre and post measures were taken and consisted of: Quality of Life Index, Patient Health Questionnaire – 9, Pittsburgh Sleep Quality Index, and Work Productivity and Activity Impairment.



Results



Results - continued



Discussion & Conclusions

Overall the participants were able to improve their quality of life, depressive symptoms, sleep quality, and work productivity by adhering to the NDWFPB dietstyle. The most significant results were from the Patient Health Questionnaire - 9 which measures the participants depressive symptoms. There was a 60% improvement between the pre and post measurements and the participants went from being classified as mildly depressed to minimally depressed. Work productivity also saw a significant improvement in work time missed and impairment at work, with a change of 64% and 40% respectively. The participants also experienced no change in their work impairment during the intervention.

This intervention has proven that a NDWFPB dietstyle can improve a person's outlook on life, increase their energy, and provide more restful sleeping patterns. Widespread worksite implementation should be considered to increase the work productivity & overall wellness of the employees.

References

- Beezhold, B., Radnitz, C., Rinne, A., & Dimatteo, J. (2015). Vegans report less stress and anxiety than omnivores. *Nutritional Neuroscience*, 18(7), 289-296.
- Merrill, R. M., Aldana, S. G., Greenlaw, R. L., & Diehl, H. A. (2008). The Coronary Health Improvement Projects impact on lowering eating, sleep, stress, and depressive disorders. *American Journal of Health Education*, 39(6), 337-344.
- Sutcliffe, J.T., Fuhrman, J.W., Carnot, M.J., Beetham, R. & Peddy, M. (In Press). Nutrient-dense, plant-rich dietary intervention effective at reducing CVD risk factors for worksites: A pilot study. *Alternative Therapies in Health & Medicine*.

This project was supported through funding from Blue Cross Blue Shield of Arizona, NAU Employee Assistance and Wellness & NAH Life Path.