Weight Loss Study Using a High Antioxidant Cocoa Meal Replacement and Lifestyle Intervention

ABSTRACT

Context: Data supporting weight loss using a high anti-oxidant meal replacement and lifestyle intervention are sparse.

Objective: To evaluate the effectiveness of a high anti-oxidant meal replacement made from raw unprocessed cocoa and lifestyle intervention over a 12 week supervised weight loss program.

Design, Setting, and Participants: This was alifestyle intervention trial. Ahigh anti-oxidant meal replacement was designed using raw unprocessed cocoa with 8 grams of fiber, 21 grams of whey isolate protein, 3 grams of fat from chia oil, and 0.5 grams of sugar. The calories per meal replacement were 190 kcal, but the net calories were about 150 kcal. The participants were a broad cross sectional group ranging in age from 26 to 73 years of age. They were required to participate in a weekly support call with one of the physicians and consumed 2 meal replacements a day and for the third meal eat a sensible high protein low carbohydrate meal of their choice totaling 1,200 kcal per day for women and 1,500 kcal per day for men. Fifty participants of the 50 who started completed the study. Each was encouraged to exercise by at least walking. All participants had their meal replacements furnished by MXI Corporation and monetary rewards were given to the winners of the group. The fifty participants were divided into groups of five and each group self-monitored each other in addition to the monitoring from the physicians and MXI Corporation on a weekly phone call.

Main Outcome Measures: Changes in weight, BMI, waist circumference were evaluated. Some of the participants had blood studies from their primary care physicians, although these results were not uniformly monitored during the 12 week study. At the end of 12 week lifestyle intervention study, the percentage of weight loss ranged from 6.2% to 24.6% of starting weight. There were no drop outs in the program. Each participant exercised at their own pace, participated in a physician monitored telephone conference call each week, completed a food diary each week, and consumed at least 2 shakes of a high protein (21 grams per serving) high antioxidant(ORACfn score 56,500 and 1,128 mg flavonoids per serving certified by Brunswick Laboratories), and ate a sensible meal for their third meal. Snacks included unprocessed cocoa nuggets and squares for hunger along with a high protein snack if needed. It is interesting to note that a full serving decreased the inflammatory transcription factorNuclear Factor kappa Beta (NF-kB) by 34% in cell studies and increased SIRT1, the anti-aging marker by 15%conducted by Brunswick Labs.