Effect of the Ideal Protein Weight Loss Method on Weight Loss and Metabolic Parameters

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ABSTRACT

Background:
Obesity is a national health crisis. The Ideal Protein Weight Loss Method (IPWLM) is a 4 stage, low carbohydrate, ketogenic diet that promotes weight loss. Stage 1 of IPWLM is a partial meal replacement, low carbohydrate, low fat, normal protein diet of about 1,200 calories and 40 grams of carbohydrate daily, resulting in ketosis. This stage is continued until target weight is achieved. We sought to quantify the 12-week results of this program in a large population in terms of weight loss, and also its effect on metabolic parameters.

Methods:
272 patients enrolled in the IPWLM. Weekly meetings were encouraged with a health coach to review progress and compliance. Patients consume 3-5 Ideal Protein products per day based on their weight, vitamin and mineral supplements, 4 cups low carbohydrate vegetables, 8 oz of lean protein and lettuce. The patients' had weight, waist size, body mass index (BMI), blood pressure (BP), total cholesterol (TC), high-density lipoprotein (HDL), low-density lipoprotein (LDL), triglyceride, and glucose levels collected prior to starting the IPWLM and after 12 weeks on the diet. A statistical paired t-test was performed on all measurements.

Results:
233 patients completed the 12 weeks which is a compliancy rate of 85.7%. The results show a decrease in all categories except HDL. Males averaged a loss of 3.5 pounds per week (PPW) and females 2.5 PPW. Average weight went from 228.4±47.8 to 195.0±41.8 lbs. Average waist size decreased from 45.2±6.2 to 39.9±5.9 inches and BMI dropped from 36.5±6.3 to 31.1±5.7. The systolic BP decreased from 126.2±15.9 to 115.4±13.8 mmHg and diastolic was reduced from 80.0±9.4 to 73.3±9.7 mmHg. TC decreased 184.0±38.8 to 158.2±35.8 mg/dl, LDL from 106.2±33.9 to 91.6±29.9 mg/dl, triglycerides from 129.9±73.5 to 71.3±38.6 mg/dl, and glucose from 110.8±35.8 to 96.3±12.5 mg/dl (p<0.001 for all changes). HDL levels had no significant change (p<0.779).

Conclusion:
The IPWLM results in rapid weight loss and marked improvement in metabolic parameters in a short period of time. Further investigation of the IPWLM on individual and population health and long term results is indicated.
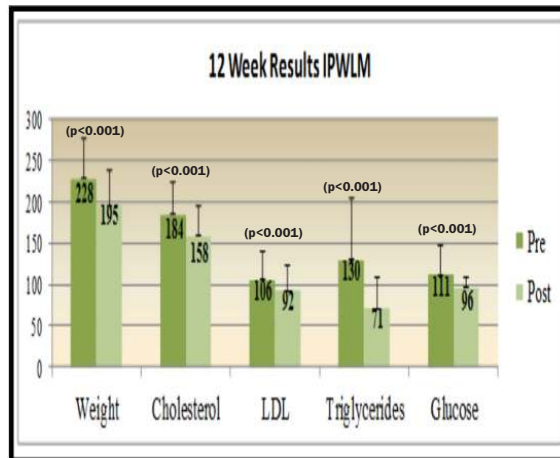
Introduction:

- Obesity has caused a national health crisis.
- Ideal Protein Weight Loss Management Method (IPWLM) is a 4-stage ketogenic diet with low carbohydrate, low fat and normal protein.
- IPWLM consist of about 1,200 calories and 40 grams of carbohydrates daily.
- We sought to quantify the 12-week results of IPWLM in a large population in terms of weight loss and its effect on metabolic parameters.

Methods:

1) 272 patients were enrolled into the IPWLM which included:
   - Weekly health coach meetings were encouraged to review compliance and progress
   - Meal replacement diet with 3-5 ideal protein products per day based on weight
   - Vitamin and mineral supplements
   - 4 cups of low carbohydrate vegetables
   - 8 ounces of lean protein and lettuce
2) Measurements were collected at the beginning of the program and at 12 weeks and included:
   - Weight, Waist size, Body Mass Index (BMI), Blood Pressure (BP), Total Cholesterol (TC), High-density lipoprotein (HDL), Low-density lipoprotein (LDL), Triglyceride, Glucose
3) Pre and post measurements were compared with all patients using the T-Test.

Results:

1) 233 patients completed at least 12 weeks of the diet with 86% compliance.

2) Average weekly weight loss was about 3.5 lbs for males and 2.5 lbs for females.

3) Mean weight decreased from 228.4±47.8 to 195.0±41.8 lbs (p<0.001).

4) Waist size average decreased from 45.2±6.2 to 39.9±5.9 inches (p<0.001).

5) BMI decreased from 36.5±6.3 to 31.1±5.7 (p<0.001).

6) The systolic BP decreased from 126.2±15.9 to 115.4±13.8 mmHg and diastolic was reduced from 80.0±9.4 to 73.3±9.7 mmHg (p<0.001).

- See graph below for metabolic parameter results.

Final Conclusions:

1) The IPWLM produces significant weight loss over a 12-week period with a high compliance rate.

2) Significant improvements in blood pressure, lipid profile, and fasting glucose levels suggest the method should decrease cardiovascular risk.

3) Further research is required to determine the long term compliance and the effect on cardiovascular risk factors.

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