

3rd International Conference and Exhibition on **Obesity & Weight Management**

December 01-03, 2014 DoubleTree by Hilton Hotel San Francisco Airport, USA

Comparison of high protein vs. high carbohydrate diets on weight loss, cardiovascular factors, incretins and satiety

Frankie B Stentz

University of Tennessee Health Science Center, USA

Our studies comparing the effects of dietary macronutrients on metabolic parameters show that a High Protein (HP) diet (30% protein, 30% fat, 40% CHO) vs. a High Carbohydrate (HC) diet (15% protein, 30% fat, 55% CHO) results in greater reduction in insulin resistance and oxidative stress in the HP group than the HC group after 6 months (mo) on the diets. Since the incretin GLP-1 has an important role in insulin sensitivity we studied the effect of the diets on GLP-1. Studies have shown that HP diets can potentially induce satiety, therefore we studied diet effects on ghrelin levels. Additionally, since cardiovascular risk factors decreased more in the HP than the HC diet, we determined if the B-Type Natriuretic Peptide (BNP) released from the heart was affected by either diet. 24 Obese women were randomized to HP or HC diets. All food was provided for the 6 mo study. Ghrelin, GLP-1 and BNP levels were determined with MTT at baseline and after 6 mo on HP and HC diets. Results are shown in the Table. HP ghrelin results demonstrate that HP diet can induce satiety and is more effective than the HC diet. HP diet had a greater increase in GLP-1 than the HC diet. The BNP decrease in both groups demonstrates the improvement in heart tissue with the HP diet having a greater effect than the HC diet. Although weight loss was similar (9.8% in HP group and 9.3% in HC group) this study demonstrates that the HP diet has additional health benefits compared to the HC diet.

Biography

Frankie B Stentz completed her MS at Florida State University and PhD at the University of Tennessee and postdoctoral studies in the Department of Medicine at the University of Tennessee. She is an Associate Professor of Medicine at the University of Tennessee and Medical Lab Director of the University of Tennessee Endocrinology Lab. She has published more than 70 papers in peer reviewed journals and serves on editorial boards.

fstentz@uthsc.edu