Abstract

Background: The aim was to compare the differences in feelings of hunger and satiety in a group of overweight/obese women after eating a test meal with or without bread. Patients and methods: The study included 122 women (BMI 25 < 40 kg/m2) who were randomly assigned to consume one of the following test meals: NO BREAD meal (2.40 MJ, 46% carbohydrates, 26% protein, 28% fat; which included rice or pasta) and BREAD meal (2.39 MJ, with equal caloric distribution and the same foods except with bread instead of rice or pasta). A visual analogue scale (VAS) was used, with 5 questions to be answered at different times: 1) just before eating, 2) just after eating and exactly 3) 60 and 4) 90 minutes after eating the test meal. The test was performed at the start and after 16 weeks of following a lifestyle modification program based on a low-calorie diet (with or without bread). Results: 104 women completed the study (48.4 ± 9.0 years) with a baseline BMI of 29.8 ± 3.5 kg/m2. At the start of the study there were no significant differences in any of the VAS parameters measured between the groups. After 16 weeks, BREAD group obtained higher scores in question 3 (referring to the sensation of satiety) that were significant at time 3 (7 versus 5; p < 0.05) and time 4 (8 versus 4; p < 0.01). Conclusions: The inclusion of bread in a low-calorie meal may result in a greater sensation of satiety after eating. These results contradict the recommendation to exclude bread from a food plan aimed at weight loss.

Keywords

Obesity, Overweight, Satiety, Bread, Glycemic index, Hunger.