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**IJBLS 2022; 1(3):188-188**



International Journal of  
BioLife Sciences

## Abstract

### Estimation of Energy Intake and Expenditure in Obese Women in Western Algeria

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*Received: 6 October 2022*

*Revised: 9 October 2022*

*Accepted: 15 October 2022*

#### Abstract

**Background and aim:** Obesity is defined as an abnormal or excessive accumulation of body fat that can be harmful to health. The objective of our study was to estimate energy intake and expenditure in obese women in western Algeria.

**Materials and methods:** 50 middle-aged women  $36 \pm 07$  with obesity were selected and gave their consent to participate in this study. The 50 women selected were divided into 3 groups (G1, G2 and G3) according to body mass index. The estimate of the food ration and the estimate of the energy expenditure were given individually based on specific questionnaires.

**Results:** The total energy intake did not vary significantly between the three groups; however, these values remained higher than the recommended intakes for obese people. Animal and vegetable protein intake did not vary significantly among the three groups. On the other hand, the qualitative intake of carbohydrates and the intake of AGS and AGMI showed a significant difference in the 3 groups compared to the recommended intake. In addition, there was a significant decrease in fiber intake in G2 and G3 compared to G1, while dietary cholesterol intake in G2 and G3 was significantly increased compared to G1. The survey of obese women showed that physical activity, characterized mainly by walking and household chores, leads to similar energy expenditure between the three groups.

**Conclusion:** A lifestyle based on a healthy and balanced diet, with the practice of regular physical activity is necessary for an ideal weight.

**Keywords:** *Obesity, Eating behavior, Intake and energy expenditure*

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