

# Effect of calorie restriction on energy expenditure in overweight and obese adult women Efecto de la restricción calórica sobre el gasto energético en mujeres adultas con sobrepeso u obesidad

Jaime, Teresa Jiménez

Balich, Laura Leiva

Acevedo, Gladys Barrera

de la Maza Cave, María Pía

Birn, Sandra Hirsch

Parada, Sandra Henríquez

Silva, Juan Rodríguez

Barnett, Daniel Bunout

© 2015, Grupo Aula Medica S.A. All rights reserved. Energy expenditure (EE) may decrease in subjects on hypocaloric diets, in amounts that exceed body mass loss, favoring weight regain.

Objective: to verify if a short-term caloric restriction lowers Resting Energy Expenditure (REE) and Total Energy Expenditure (TEE) more than predicted by changes in body composition, and if this reduction of EE is related with compliance to the diet. Methods: twenty-two women aged 23-44 years with a body mass index (BMI) of 25-32 kg/m<sup>2</sup>, underwent a three-month calorie restriction treatment (20 kcal/kg initial weight) and were encouraged to increase their physical activity. At the beginning and end of the intervention, body composition (DEXA), REE, Physical Activity Energy Expenditure (PAEE) and TEE were assessed, through a combination of indirect calorimetry and actigraphy. Participants, who lost more or equal than 5% of their initial weight were considered compliant with the diet. Results: