

Seasonal variation in insulin sensitivity in healthy elderly people

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OBJECTIVE: There is a seasonal variation in the incidence of diabetes mellitus and cardiovascular diseases. However, there is very little information about the seasonal variation in insulin sensitivity.

We report the seasonal variation in insulin sensitivity in a group of elderly subjects followed for 1 y.

METHODS: Healthy elderly (>70 y) subjects living independently were included. Fifty percent of subjects received a daily nutritional supplement that provided 400 kcal, 15 g of protein, and 50% of vitamin daily reference values (DRVs). Those receiving and not receiving supplements were randomly assigned to a resistance exercise training program. Every 6 mo (winter, summer, and winter), body composition was measured by dual-energy x-ray absorptiometry and blood samples were used to measure serum lipids, fasting and postprandial glucose, and insulin levels. **RESULTS:** One hundred eight subjects (31 supplemented and trained, 28 supplemented, 16 trained, and 33 without supplementation or tr