

Regular Endurance Training Does Not Influence the Glycemic Index Determination in Women

Project: 344b

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Objective:

This study investigated the influence of regular endurance training on the glycemic index (GI) of a breakfast cereal in women as previous results from men indicate that endurance training may influence the GI.

Methods:

Subjects were 17 sedentary (SE) and 19 endurance trained (ET) healthy, young, adult women of normal body mass index. All subjects performed two tests with the reference food glucose and two tests with a breakfast cereal in a randomized order. Capillary and venous whole blood glucose as well as venous plasma insulin was measured.

Results:

The GI did not differ between SE and ET, irrespective of its calculation from the capillary (mean \pm standard error: 61.4 \pm 4.3 and 69.5 \pm 4.7 for SE and ET respectively, $p = 0.21$) or the venous blood glucose (60.8 \pm 8.1 and 64.4 \pm 6.2, $p = 0.72$). The insulinemic index did not differ between the SE and ET subjects ($p = 0.75$).

Conclusion:

The results come along with many other data, indicating that the GI seems to be independent of subject-specific factors, but are in contrast to previous results obtained with men where we found a GI dependence on the training state.

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