

**P1: Effects of one session of physical exercise associated to abdominal microcurrent in the global lipolytic rate**

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**Introduction:** During aerobic exercise lipid sources are global. Since the decrease of central obesity has more health gains, it's important to promote an increase in lipolysis from the abdominal region.

**Objectives:** Analyze the effect of one session of aerobic exercise associated to microcurrent in the adipose tissue of abdominal region in the global lipolytic rate through the values of glycerol in plasma.

**Materials and Methods:** 34 participants were distributed randomly by both groups, placebo group (9 men and 8 women) and experimental group (9 men and 8 women). Blood samples were drawn in the beginning and after the intervention for the determination of values of glycerol. Both groups were subject to the two protocols of the intervention, the microcurrent with two frequencies (25 e 10Hz), 20 minutes each, and the aerobic exercise at 50% of heart rate reserve. Though, in the placebo group the microcurrent was made without intensity.

**Results and Discussion:** Significant increases in the levels of glycerol at the end of exercise were observed, either in the placebo group ( $p=0.003$ ), or in the experimental group ( $p=0.001$ ). There were no significant differences in the values of variable difference of glycerol between groups, as well as in women and men ( $p>0.005$ ). Only one session of microcurrent may explain the differences between our results and other studies with long-lasting interventions.

**Conclusion:** The results of this study indicate that one session of aerobic exercise associated to microcurrent seems to be insufficient to influence the global lipolytic rate in individuals of both sexes.

### References

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