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VPX Meltdown® significantly increases energy expenditure and fat oxidation without affecting hemodynamic variables in a randomized, double-blind, cross-over clinical research trial

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Background

The purpose of this study was to evaluate the effects of a thermogenic supplement, VPX Meltdown®, on energy expenditure, fat oxidation, and hemodynamics before and after maximal treadmill exercise.

Methods

In a double-blind, placebo-controlled, cross-over design, participants underwent two testing sessions after consuming either the VPX Meltdown® or placebo supplement. Healthy male participants (n = 12) aged 18–35 rested for one hour while energy expenditure (EE), respiratory exchange ratio (RER), heart rate (HR), and blood pressure (B) were assessed in a fasted state. Subsequently, participants orally ingested either supplement or placebo. Immediately following supplement administration, participants rested for another hour while EE, RER, HP, and BP were recorded. Thereafter, participants performed a maximal exercise test on a treadmill and then endured another hour of EE, RER, HR, and BP measurement.

Results

VPX Meltdown®, increased REE significantly more than placebo at 45 minutes (2,079 ± 373 vs. 1,847 ± 340 kcal/day; p = 0.003) and 60 minutes (2,153 ± 403 vs. 1877 ± 314 kcal/day; p = 0.025) post-ingestion. Furthermore, REE 60 minutes post-exercise (two to three hours following supplement administration) was higher in the Meltdown® group (2,179 ± 386 vs. 1,913 ± 400; p = 0.1440). Moreover, over the course of the three hour evaluation period, area under the curve assessment demonstrated that EE was significantly increased with VPX Meltdown® compared to placebo (area: 9,925 ± 1,331 vs. 8,951 ± 2,961; p = 0.043) while RER was significantly less than placebo (area: 5.55 ± 0.61 vs. 5.89 ± 0.44; p = 0.002) following ingestion. HR and BP were not significantly affected prior to exercise with either supplement (p > 0.05) and the exercise-induced increases observed in HR and BP that decreased into recovery were not different between supplements (p > 0.05).

Conclusion

These data suggest that VPX Meltdown® enhances EE and fat oxidation more than placebo for several hours after ingestion in fully rested and post-exercise states without any adverse hemodynamic responses.

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