

Poster presentation

## The effects of Amped Up on hemodynamic function and energy expenditure at rest

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### Background

The purpose of this study was to examine the effects of MET-Rx® Xtreme Amped Up on resting energy expenditure and hemodynamic variables in a randomized double blind placebo controlled study.

### Methods

Eight male (23.0 ± 3.70 years, 210.69 ± 36.17 lbs, 71.81 ± 3.10 in) and ten female (23.6 ± 4.81 years, 147.95 ± 12.63 lbs, 67.88 ± 4.06 in) apparently healthy, physically active individuals participated in this study. Participants reported to the lab on a 10-hour fast and performed baseline testing on resting energy expenditure (REE), heart rate, and blood pressure. Subjects were then randomly assigned to ingest either Amped Up (3 capsules) or vitamin E (3 capsules). Criterion variables were then measured at 1-hour, 2-hour, and 3-hours post ingestion. Data was analyzed by two-factor (group × time point) ANOVA using SPSS version 16. Scheffe LSD post hoc was used to show differences in time points.

### Results

Amped Up supplementation resulted in a significant interaction ( $p < 0.01$ ) in resting energy expenditure (REE) when compared to placebo. Post Hoc analysis revealed that there was no significant difference ( $p > 0.05$ ) between groups at baseline, but Amped Up was significantly higher ( $p < 0.01$ ) than placebo at 1 hr post, 2 hr post, and 3 hr

post, with the 2 hr post time point seeing the greatest change. Amped Up group increased energy expenditure by 326 kcal at the two-hour time point. The Amped Up group experienced an overall increase in REE by 17.3%, 19.6%, and 15.3% at the 1, 2, and 3-hour time points respectively. Conversely, the placebo group experienced a reduction in REE by 2.5%, 1.8%, and 0.3% at the same time points. There was no significant change in heart rate ( $p = 0.88$ ), systolic blood pressure ( $p = 0.73$ ), or diastolic blood pressure ( $p = 0.44$ ).

### Conclusion

It is concluded that Amped Up has a significant impact on resting energy expenditure in an acute fashion. Taken on a daily basis this could increase overall energy expenditure. Caloric expenditure significantly increased at all three time points in the Amped Up group while placebo group demonstrated decreases in energy expenditure at each time point.

### Acknowledgements

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