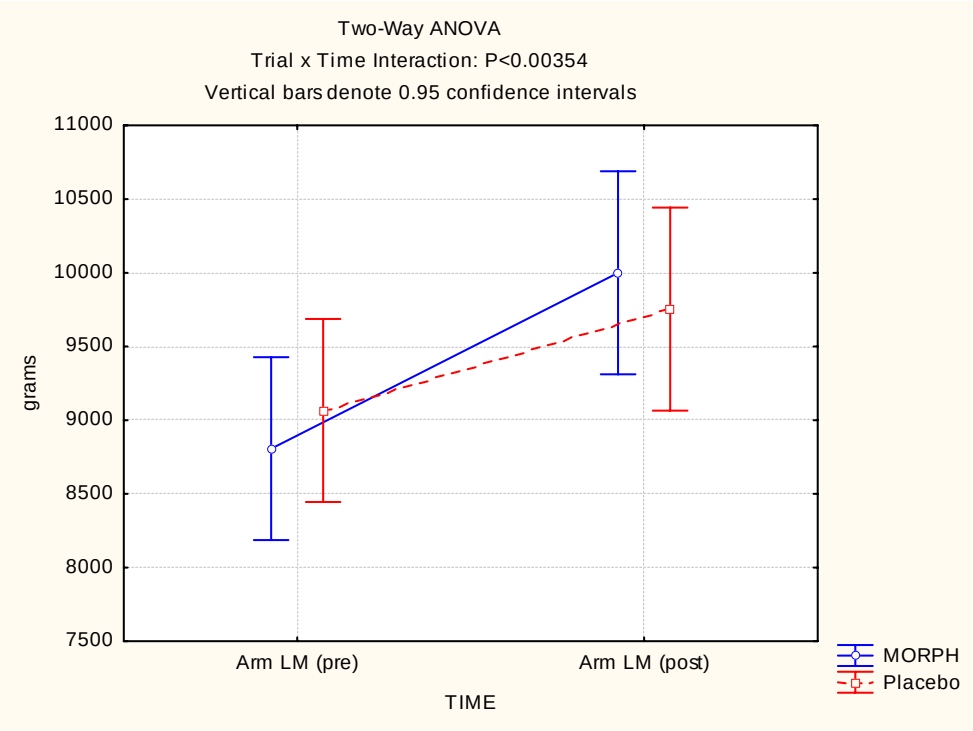
RESEARCH HIGHLIGHT

>> 1.77 Times Greater Increase in Lean Mass of the Arms <<

Interpretation: The blue line represents changes in arm lean mass during Trial A (MORPH™), while the red line represents changes during Trial B (Placebo). The analysis using a repeated-measures ANOVA was statistically significant (p=0.0354), indicating a difference between trials. Post-hoc analysis (i.e., one-way ANOVA on the change scores) indicated that during Trial A (MORPH™), subjects increased their Arm Lean Mass significantly more than during Trial B (Placebo). **Specifically, the change in Arm Lean Mass during Trial A was 13.5%, while the change was only 7.6% during Trial B (p<0.0276).** See graph below:



Summary: Relative to the arm lean mass translation, trial A was Morph, while trial B was placebo. Morph increased lean mass of the arms by 13.5% compared to pre-exercise, while the workout itself (placebo) increased lean mass of the arms by 7.6%. This translates into a 1.77 times greater increase in lean mass of the arms. Although this study was not designed to determine the mechanisms behind the observed differences, the greater increase in lean mass of the arms during the Morph trial is likely the result of the interplay between neurogenic, hormonal, and metabolic factors that increase blood flow to the small arteries and arterioles of the active muscles. In other words, during exercise the body makes physiological adjustments to accomplish a given task – in this case, biceps curls and lying triceps extensions. The nervous system coordinates the firing of electrical signals to the muscle fibers, which respond by contracting to move the weight. During this process, different sources of energy (called substrates) are used to regenerate ATP (adenosine triphosphate). As these substrates become depleted and their metabolites accumulate, it signals the body to call on additional energy reserves, and activates two key enzymes (AMP 5'-nucleotidase and nitric oxide [NO] synthase) that increase skeletal muscle blood flow. The ingredients in Morph apparently influence this process in a way that increases the vasodilatory responses within the active musculature.

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