

Statistical analysis plan

The normality of data will be tested using the Shapiro-Wilks test. Basal between-group differences will be tested using a one-way ANOVA with one within-group factor, e.g., age, height, lean body mass, and four groups for comparison. Significant interactions will be followed up by post-hoc testing using Tukey's correction applied to account for multiple comparisons. The primary outcome will be statistically evaluated using a two-way mixed ANOVA with factors for group (four different groups) and time (before and after resistance exercise and ingestion of EAA). In case the data does not align with the normal distribution, a non-parametric equivalent of the two-way ANOVA will be used, e.g., the Friedman test. Significant interactions will be followed up by post-hoc testing using Tukey's correction applied to account for multiple comparisons. The significance level will be set to $p < 0.05$ for all analyses.