Statistical Analysis Plan

This feasibility study aimed to explore trends and identify patterns rather than establish definitive conclusions. Data were analysed using SPSS version 29 (IBM Corp, 2022) with specialist statistician support. Categorical data were summarised as frequencies or percentages, while continuous variables were expressed as mean values (±SD) for normally distributed data. The Shapiro-Wilk test was used to assess normality and comparisons between independent groups (e.g., VAS scores for taste and palatability, physical measurements of HGS, BIA, BMI and TUGT across patient cohorts) were performed. Analysis of variance (ANOVA) was used to determine whether there were significant differences between three group means, and post hoc Tukey tests confirmed the distinction between experiences comparing the three groups whilst controlling for variation within groups. Relationships in physical assessments were analysed using Pearson's Correlation coefficient as the measurements are continuous variables and preliminary test performed were conducted first to ensure normal distributions.

For paired comparisons, particularly the crossover design in the elective group (n=6) where patients underwent both control and intervention conditions, paired t-tests were conducted for normally distributed data. This was necessary as each participant acted as their own control, reducing inter-individual variability. Area under the curve was calculated using the trapezoid method to assess impact over time of appetite perceptions between the 2 conditions with post hoc analysis using Tukey tests to determine which groups were significantly different whilst controlling for errors. Effect sizes were calculated to quantify the magnitude of differences. Cohen's d was reported for t-tests.