Statistical analysis

Statistical analyses are performed using IBM SPSS Statistics for Windows, Version 27.0. (Armonk, NY: IBM Corp) and GraphPad Prism version 9.0 for Windows (GraphPad Software, San Diego, California USA). All variables are shown as mean and standard deviation or standard error of the mean (for figures). The Kolmogorov-Smirnov test will be used to analyze the distribution of the data and, for variables without normal distribution, a non-parametric test will be used. To investigate the effects of each test diet on clinical variables and metabolomics, a paired t test will be used (before and after comparisons). To compare the effects of the four different test diets (two types of cheese, beef and pork) on clinical variables and metabolomics data, the percentage of change from baseline to the end of each intervention will be calculated and either a repeated-measures ANOVA or a mixed model for repeated measures will be employed to compare the percentage of changes. To analyze the associations between variables, we will use Spearman's or Pearson's correlation coefficient. For all analysis a p<0.05 is considered significant.