This folder contains data and analysis conducted for the manuscript “Social interactions are impacted by food availability, food type, and group size”.

The folder “network data” contains csv files with edgelists of the interaction networks of each experimental group tested for this work. Edge lists were extracted using image analysis code provided in the parent folder.

The R script ‘calculate\_global\_network\_measures’ takes the networks in the ’network data’ folder and computes global network measures, it also compares different community clustering algorithms and plots the networks. These calculated measures are consolidated with metadata about the networks, that is in the csv file ‘ExperimentsMetadata’. The output of this script is saved and used in the ‘Data\_analysis\_and\_plots\_for\_paper\_final’ script.

The R script 'calculate\_individual\_level\_network\_measures' computes network measures at the individual level based on the networks extracted from the 'network data.' It calculates 'betweenness' and 'degree' for each node in the networks, alongside additional information such as group size, conditions, and the date of data collection. The output of this script is saved and subsequently utilized in the 'Data\_analysis\_and\_plots\_for\_paper\_final' script for further analysis and visualization.

‘ExperimentsMetadata.csv’ – information on the treatment (limited or unlimited food, carbohydrate or protein food, and group size) for each group in the experiment.

‘GlobalMeasureNetworks\_final.csv’ global network measures extracted using the script ‘calculate\_global\_network\_measures’

‘IndividualMeasureNetwroks.csv’ individual level network measures extracted when creating the networks in the network data folder – see image analysis folder in parent folder.

The script “Data\_analysis\_and\_plots\_for\_paper\_final” contains all the statistical analysis for the manuscript, as well as the plotting of the data figures in the manuscript. This script requires the two files ‘GlobalMeasureNetworks\_final.csv’ and ‘IndividualMeasureNetworks.csv’