# Are people aware of social inhibition/facilitation effects on intake (study 1)

# 1. Aim

Research has demonstrated that people tend to eat more food when with friends and family than when eating alone. This is known as the social facilitation of eating. In a recent meta-analysis, we found that social facilitation effects on eating were observed in studies which had examined food intake when participants ate with friends or family, and were not observed across studies which had examined food intake when participants ate with strangers or acquaintances (Ruddock et al., 2019). It is unclear whether or not individuals are aware of the effect of other people on their own eating behaviour. This study examined whether people are aware of social facilitation effects on their eating behaviour. We predicted that participants will say they would tend to eat more in the company of friends and family, compared to when alone, thus demonstrating awareness of social facilitation. In contrast, we predict that participants will say they tend to eat less in the presence of strangers and acquaintances, compared to when alone.

# 2. Design

Participants completed an online study via the survey platform Qualtrics. Awareness of the effects of social context on intake was assessed using the following questions: “Compared to how much you'd eat when you're alone, please indicate how much you would eat when with [friends/family/strangers/acquaintances]”. Participants responded to each question on a 5-point Likert scale ranging from ‘Eat a lot less’ to Eat a lot more’.

# 3. Measures

Participants completed the following questionnaire measures:

* Appetite and mood ratings***.***Assessments of hunger and fullness were taken using 100-mm Visual Analogue Scales (VAS) with anchors *Not at all* (0) and *Extremely* (100). A composite ‘appetite’ score was calculated by taking the mean rating assigned to the ‘hunger’ VAS and the inverse rating assigned to the ‘fullness’ VAS (100-fullness).Mood assessments were taken using 100-mm VAS with anchors ‘Not at all’ (0) and ‘Very’ (100). A positive mood score was calculated by averaging scores assigned to each positive mood scale (i.e. Excited, Happy, Calm). A negative mood score was calculated by averaging across scores assigned to each negative mood scale (i.e. Angry, Sad, Subdued, Agitated, Anxious, Bored). A ‘Neutral’ mood score was also obtained. Mood scores were taken before and after participants completed the awareness questions.
  + [Before awareness questions: Appetite\_1; After awareness questions: Appetite\_2]
  + [Before awareness questions: Pos\_mood1, Neg\_mood1, Neut\_mood1; After awareness questions: Pos\_mood2; Neg\_mood2, Neut\_mood2]
* Demographics: Gender [**Gender],** Age in years[**Age**], Body Mass Index [**BMI**], Ethnicity [**Ethnicity],** Currently a student [**Student].**
* Three-Factor Eating Questionnaire-18***.***The Three-Factor Eating Questionnaire Revised 18-item version (TFEQ-18) was included to assess dietary restraint, uncontrolled eating, and emotional eating (Karlsson, Persson, Sjöström, & Sullivan, 2000).
  + [**TFEQ\_restraint, TFEQ\_Uncontrolled, TFEQ\_Emotional**]
* Social eating frequency. Participants were asked ‘in an average week, how often do you eat a meal with at least one other person’ **[Soc\_eat\_freq].**
* Two attention check questions were included within the questionnaires in which participants were asked to select specific responses (e.g. please select ‘rarely’). Participants who failed both attention check questions are listed as ‘FAIL’ under the variable [**Attention\_check].**
* Participants’ responses to each awareness question are coded from -2 (‘eat a lot less’ to 2 (‘eat a lot more’) under the following variables: [**Eat\_strangers, Eat\_friends, Eat\_acquaintances, Eat\_family, Eat\_anxious, Eat\_angry, Eat\_sad, Eat\_happy].**

Prior to analyses, responses to awareness questions were recoded into one of three categories (i.e. ‘Eat less’, ‘Eat the same’, or ‘Eat more’): **[Friends\_recode, Family\_recode, Strangers\_recode, Acquaintances\_recode].**

* Free-text responses to follow-up questions (i.e. Why participants answered the way they did to each awareness question) are provided under the variables: [**Why\_strangers, Why\_acquaint, Why\_fam, Why\_friends].** Participants who mentioned a special meal context, for friends and family questions, are identified under the variables [**Mentioned\_context\_friends, Mentioned\_context\_fam]**
* Demand awareness: participants were asked to write down what they thought were the aims of the study [**Study\_aim**] and what they thought we had predicted [**Predicted].** Participants who successfully guessed the aims/hypotheses of the study are identified under the **[guessed\_aim]** variable.
* Participants were grouped as either underweight/normal weight (BMI<24.99kg/m2) or Overweight/Obese (BMI>25.00kg/m2) [**Weight\_status].**
* Average scores on the Social Eating Scale (Spanos et al., 2014) are provided under the variable [**Socialeatinscale\_av].**
* Participants were identified as outliers if they completed the questionnaire unusually fast or slow (z score >=3 or z score <=3). These individuals are identified under the variable [**Duration\_Zoutlier].**
* Participants who failed both attention check questions, or who were identified as outliers with regards to the amount of time taken to complete the questionnaire were removed prior to analyses. These participants are coded as ‘0’ (‘Not selected’) under the **[Filter]** variable.

# 4. Procedure

The questionnaire was developed and distributed using Qualtrics software. After providing informed consent, participants completed questionnaires in the following order: 1) Appetite VAS 2) Mood VAS 3) Awareness assessment 4) Appetite VAS 5) Mood VAS 6) Social Eating Scale 7) Social eating frequency 8) TFEQ-18R. Participants then indicated their gender, height and weight (to calculate BMI), age, ethnicity, and stated whether or not they were currently a student. To check that participants were paying attention during the study, two ‘attention check’ items were incorporated within the questionnaires, in which participants were asked to select a specific response (e.g. ‘please select definitely true’). To assess the presence of demand characteristics, participants were asked to indicate what they thought were the aims of the study were, and what they believe we predicted. Participants were then presented with a debrief sheet which explained the true aims of the study.