**Experiment Protocol**

**Recruit participants:**

1. Book time on the magnet using the TONI Calpendo system, under the study project “FoodRegFMRI.” Book 90 minutes at a time on the scanner. Book one hour prior in the testing room (if possible) and one hour after, to allow for behavioral testing.

2. Participants can be recruited through the following methods:

**[Facebook page – fill in**

**TONI subject list**

**SONA? Redcap?]**

Email potential participants with the following email:

**[fill in]**

3. **[DO WE RECRUIT 2 AT ONCE?]** Recruit primarily during the hours of 11:30-2:30, and 5-8pm, because these are times when people normally eat and are the most hungry.

**When a participant indicates interest:**

Email them with the following message:

**[FILL IN]**

**Day before the study:**

1. Email the participant with a reminder about the importance of showing up, and about the 4-hour fasting period. Use the following email:

Subject: Important details about fMRI study tomorrow at {time} at the Toronto Neuroimaging Facility

Dear {name},

This is a quick reminder that you have signed up to participate in an fMRI study tomorrow at {time}. This email contains IMPORTANT DETAILS about your participation.

1. For this study it is important that you arrive HUNGRY. Please **refrain from eating between {time – 4 hours} and the start of the session**. You will have a chance to eat a free snack at the end of the experiment.

2. Please take a look at the consent form attached to this email prior to arriving at the study. You will be given a chance to ask any questions about the research when you arrive, but it will facilitate the study if you have read this consent form ahead of time.

3. The study takes place at the Toronto Neuroimaging Facility ([**FILL IN LINK TO GOOGLE MAPS HERE}**.

4. **If for some reason you can no longer make it at the scheduled time, please let me know ASAP.**

Thanks, and see you soon!

[Experimenter name]

**Day of study:**

1. Make sure you have the following materials to bring to the scanner
   1. Stimulus laptop (reserve on Google calendar)
   2. Paper consent form and debriefing form
   3. Payment sheet & subject money

**During session**

1. Make sure you have the following materials
   1. Consent form
   2. Debriefing form
2. Determine the participant’s ID number
   1. Open up FoodRegFMRI\_ParticipationSheet.xlsx (password: \*\*\*\*\*\*) and check for the correct subject ID to use.
3. Set up scan table (sheet on table, etc.)
4. Set up the laptop computer before the participant arrives:
   1. Log in to the computer (user name: decisionlab, password: \*\*\*\*\*\*\*\*\*)
   2. Open up Chrome or Firefox and navigate to the questionnaire web page: [[**FILL IN]**](https://docs.google.com/forms/d/e/1FAIpQLSfzgqnD4p56BSmcICbfkbRf_6-Yl3h5wWIN2nVkQGFtgbvpvg/viewform)
   3. Enter the subject number and then minimize the webpage.
   4. Open MATLAB.
   5. Type:

cd C:/Users/lab/Desktop/Dropbox/Experiments/FoodRegFMRI/PTBscripts

runStudy

* 1. Enter subject number, and just hit enter for session id.

1. When subject arrives
   1. Give them the consent form to look over and sign
   2. Tell them:

*Before we can get started, I need you to read over and sign this consent form. This is the same consent form that I sent to you by email yesterday. The consent describes a little bit about the purpose of this research, as well as some of the specific tasks you may be asked to do.*

*If you have already read it, great, but if you have not, go ahead and read through the consent form. If you have any questions as you’re reading, please don’t hesitate to ask. When you’ve finished reading, sign and date on the last page, and then let me know you are finished.*

* 1. Have the participant look over MRI safety screening sheet and verify that they are safe to go in the magnet
  2. Get participant set up to go through the study. Have them go through the instructions:

*All of the instructions for the task you will be doing are presented on the computer screen, so go ahead and read through them now. You can use the right arrow to move forward through the instructions, and the left arrow to go back. If you have any questions as you’re reading, or want clarification on anything, please don’t hesitate to ask me. When you reach the end of this section of the study, the computer will let you know, and at that point you should let me know you are done.*

1. Type ‘co’ for continue. This will get the study tasks started on the computer, and the participant should be able simply to go through the study at their own pace.
2. While subject is completing the practice
   1. Enter participant number and name in the “FoodRegFMRI\_ParticipationSheet.xls” file.
   2. Enter information about time and date in the “FoodRegFMRI\_ParticipationInfo.xls” file. Use this file to make any notes about subjects as well (e.g. computer crashed, participant didn’t seem engaged, etc.)
3. When subject has completed the Matlab tasks for the practice, prepare the subject for scanning
   1. Make sure the participant has no metal, nothing in pockets, etc.
4. In the scanner
   1. Explain the importance of staying still during the scan
   2. Verify that subject is as comfortable as possible
5. In the control room
   1. Register participant
   2. Perform scout scan
      1. Tell subject “*Ok, we’re going to start scanning now. This first scan will be very short, and will give us a really quick snapshot of your brain. Please just lie still for a few seconds.”*
   3. Perform T1 anatomical scan (optional)
      1. Tell subject “*Great. We’re now going to take a more detailed picture of your brain. The scan should last about 7 minutes, and you don’t need to do anything other than lie back and relax.”*
   4. Perform T2 scan.
   5. While doing anatomical scans, set up fMRI computer
      1. Navigate to study folder
   6. Perform each round of the appropriate task
      1. Food task
         1. Type runSession in Matlab, enter subject, and ‘1’, ‘2’ etc. for session number (there should be 9 rounds total)
      2. Check order of Go-NoGo and Switching tasks in FoodRegFMRI\_ParticipationInfo.xls sheet.
      3. For Go-NoGo task: [**INSTRUCTIONS TO RUN GO HERE]**
      4. For switching task: [**INSTRUCTIONS TO RUN GO HERE]**
6. After scanning:
   1. Participant should complete post-task study portion on lab laptop:
   2. Make a note of the food outcome displayed on the screen. If the participant eats something, tell the participant:

*Okay, I will go and get the food now. While I’m gone, I’d like you to fill out this short set of questionnaires. Once I get back, you can eat the food while you finish up the questionnaires.*

* 1. Open up the questionnaire web page and let them get started.
  2. Get food for the subject, and bring it back for them to eat while the finish filling out the personality questionnaires.

1. When the participant has finished with the questionnaire
   1. Given them the debriefing form. Tell them:

*Okay, you are now finished with the study tasks. Here is a short form that explains the purpose of the study. After reading this form, we would like you to indicate whether we have your permission to use the data we just collected from you. You can indicate your permission by signing the bottom of this form. If you would prefer that we not use your data after having read this form, please do not sign the form, and let us know. In this case, we will delete all data associated with your participation.*

1. Fill out the study information sheet with pertinent information (e.g., didn’t complete all the tasks, seemed like they weren’t actually paying attention, was allergic to some food, refused to eat the food/withdrew, etc.)
2. Pay the participant and have them complete the participant payment sheet to record and verify the payment.
3. After subject has left, wash any dishes that were used during the study. Make sure to wash them thoroughly with hot water and soap.

Additional useful information

How to cancel out of a session:

1. Press Ctrl-C, hold it down for a few seconds to make sure it registers
2. You may need to press a key that PsychToolBox is expecting (e.g. arrow keys for instruction slides, 1-6 for rating slides)
3. Use Alt-tab to navigate to the main Matlab window
4. Press Ctrl-C and hold down for another second for good measure
5. Type ‘sca’ and press enter (sca stands for Screen Close All)
6. This should close the PsychToolBox window and give you full access to the Matlab command window

In case of a medical emergency (e.g. participant has an allergic response to a food), call the Emergency Medical Response Group at **416-287-7333**, or 911.

In case of any other questions or issues, you can call or text **Devin Bonk (ph: 647-637-9732, em: dnlabmanager@gmail.com)** or Cendri Hutcherson (ph: 647-774-5286, em: [c.hutcherson@utoronto.ca](mailto:c.hutcherson@utoronto.ca).