## FIT-PILOT MANUAL

# SESSION 1: WEEK 0-1 (FACE-TO-FACE – 1HR)

## Item 1 [3 Minutes] - Session Overview

"Thanks for coming in today, and for volunteering to take part in this study.

If you have any questions or concerns during the session, please feel free to ask at any time"

"I would also like to let you know that you are free to stop the session at any time without comment or penalty. If there is anything that you are uncomfortable doing in this session, please let me know and we can skip that part of the session"

"I believe that you've decided to take part in the research to make a change to your snacking. Is that right?"

#### If incorrect:

Discuss purpose of research and re-consent participant

"Would it be OK if we have an open discussion today about your how you feel about snacking, and what you want to do?

"First of all, what would you like to change about your snacking?"

Write down answers about snacking changes into record sheet

IF PARTICIPANT MENTIONS ANY INFORMATION ABOUT CHANGING SNACKING THAT IS UNHEALTHY OR NOT RECOMMENDED, I.E. DECREASE ALL FOOD INTAKE BELOW HEALTHY LEVELS, THE RESEARCHER WILL DISCUSS THE ETHICAL CONCERNS WITH THIS GOAL AND RE-DISCUSS THE PURPOSE OF THE RESEARCH.

"The use of mental imagery and cognitive tasks are a key part of this new program, so if you feel open to it, I'd also like to introduce mental imagery and some cognitive tasks to you in today's session. I'd like to show you what it is and how it can be useful to help change your snacking"

"Does that sound OK to you?"

If participant expresses that agenda is not ok, explore which parts of the agenda concern them and discuss an agenda they feel comfortable with completing.

"This research study is a safe, non-judgmental and supportive place to discuss your snacking intake. In the study, we want to investigate how well the program works for you.

I would like to encourage you to let us know an accurate report of your snacking both today and throughout the study, even if there are days that are not so good for you. It's all very helpful information for us to know and we would really appreciate your honesty."

"How does that sound?"

If participant expresses that they are not comfortable with this arrangement, explore which parts of the arrangement concerns them and what would make them feel comfortable to report their snacking intake

## Item 2 [5 Minutes] - Assessment Feedback

Provide assessment feedback from the baseline snacking time line follow back with the participant.

"Let's have a look through your snacking time line follow back that you completed before coming here today."

Review results with participant

"Is that what you expected?"

"Is there anything that surprised you?"

"How do you feel about that?"

Write down anything that may be useful in the later discussion of motivation or plans

"Thanks for going through that with me just now. Let's move on to the next part of the session and talk a little bit more about mental imagery"

## Item 3 [8 Minutes] - Mental Imagery Psychoeducation

#### Introduce imagery

"First of all, before we move to discussing how you're feeling about your snacking, I'd like to talk to you about mental imagery.

"I'd like to suggest using mental imagery at various times throughout this session, so it would be helpful to show you what it's all about before we get to those parts later.

If they prefer to skip this step, move on to MI part of session and do mental imagery education when introducing the first mental imagery exercise during mi.

"Mental imagery is the ability to experience objects, activities and events by creating internal representations of the objects, activities or events in our mind. In other words, mental imagery is similar to experiencing the objects, activities and events in real life, but instead, we experience them in our minds."

"Have you noticed that when we think about something we have seen or done in the past, we can recreate the object or event in our imagination? We often use mental imagery in our day-to-day lives"

"Mental imagery is multi-sensory, which means that it can involve other senses too. Auditory mental imagery is the ability to hear different sounds in our mind without actually hearing the sounds with our ears. An example of auditory mental imagery could include being able to hear and 'play' your favourite song in your mind or having a song 'stuck in your head', without actually hearing the song with our ears. Has this ever happened to you before?

Mental imagery can also involve the senses of taste and smell. Mental imagery could include mentally experiencing the smell and taste of fruit or coffee, without actually eating a piece of fruit or drinking coffee".

"We can use mental imagery to imagine new things and experiences that we have not previously seen or done before. An example of this could be creating mental imagery of winning a championship medal for a sport or hobby we like to do, mental imagery for meeting a celebrity or mental imagery for visiting a city in a different state or country."

"Do you ever create a mental image of something that you would like to do in the future?"

If No: "Some people use mental images more than others. Let's try an image now, to see what it's like."

If Yes: "We've found that it can sometimes be more than just a picture or a movie. It often involves several senses."

Mental Imagery Training – Lemon Exercise

"Now, I'd like to go through a mental imagery exercise with you to further explain how mental imagery works and how we use it in everyday scenarios"

Read the Lemon Exercise - Imagery Practice script.

(If they close their eyes: ) "Focus your eyes on the wall, as you imagine the image."

We ask them to keep their eyes open for this practice image only, to allow them to get the effect of the lemon juice. Later images can be with eyes open or closed.

"Excellent, thank you for doing that exercise with me just now"

## **Item 4 [5 Minutes] - Pleasant Image Practice**

"Let's try another mental imagery exercise. This time, we will try an image of something that you will find enjoyable"

"For this exercise, some people like to imagine the smell of coffee or bread. What's something you enjoy that you would like to imagine now?"

Use participants idea in imagery exercise

"Ok, gaze off towards the wall, or close your eyes, and create that mental image now. Try to make it as vivid as you can, using all your senses like we just did in the lemon image exercise."

If bread or similar: "Imagine the smell as vividly as you can."

"Imagine what is happening—let the events unfold in your imagination.

"Focus on all your sensations—what you see, and hear, and feel.

If bread or similar: "Maybe your mouth is watering as you focus on the image."

For other prompts and questions for guiding imagery, refer to the FIT imagery guidance audio scripts.

For all mental imagery exercises, make sure the participant does the mental imagery exercise in their mind, and then describes it afterwards.

#### Discuss the participant's experience

"Ok - Thank you for giving the exercise a go just now. Let's talk a little bit about it"

## Write down answers into record sheet

"How vivid was the mental image, on a scale of 1 -10?"

"What sensations did you have?"

"What did you enjoy about it?"

"Have you noticed that you have this kind of mental image when you are really hungry, or you really want to eat a snack?"

## Item 5 [4 Minutes] - Mental Imagery Rationale

"We know from research we have been doing that mental imagery helps to drive how we feel, our desires and craving. There are four main things we've found about mental imagery:

The vividness of our mental imagery plays an important role in our desires, cravings and behaviour.

The more vivid or strong the mental images are that we create in our minds, the stronger our desire is for that object, event or activity that we are imagining. In other words, the stronger the image, the stronger our desire is for it.

The more vivid the mental images are that we create in our minds, the harder they are to resist the object, event or activity that we have imagined. In other words, the stronger the image, the harder it is to resist the desire for it.

There is a way in which we can interfere with mental imagery. For example, if we are doing something else that distracts us from the mental imagery about our desire, the craving is less intense. Therefore, it is possible to change mental imagery and reduce our desires/cravings.

Lastly, positive mental imagery, such as mental imagery yourself having fun and doing things that you really enjoy, can help people to stay on track for a healthy life goal. So, we can use positive mental imagery to help people make positive changes in their life. This should help us keep on track and stay away from negative mental imagery, such as desires for high sugar/fat snacks.

Mental imagery helps us make decisions, and plan how we are going to get the things we want.

In this session, we will be using the things we've learned about mental imagery to help reduce snacking".

"Is it ok with you if we continue to use mental imagery, to help you work out how you feel about your snacking, and what you want to do about your snacking intake?"

If the participant is reluctant to use mental imagery, explore any reasons for their reluctance and see if you can address any concerns they may have.

If they remain reluctant, acknowledge this and move on to mi. when you reach the parts where mental imagery would normally be done, mention this to the participant and why we usually use it there, but do not ask them to do it. In addition, remind participant that they are free to withdraw at any time without comment or penalty.

## Item 6 [20 Minutes Total] - Imagery-Based Review of Motivation

If the participant has any difficulties with engaging in imagery, let them know that I can sometimes be hard to use imagery, but that it gets more vivid with practice.

## Item 6.1 [10 Minutes] - Positive Aspects of Snacking

Note: DO NOT ELICIT IMAGERY at this stage.

#### Record All responses

"Can we start by talking about the things you like about snacking?"

"Is there anything else?"

"What about times when you can't have a snack?

"Are there any other things you miss?"

"What if you weren't snacking as much—anything else you would miss?"

Summarise good things about snacking.

# Item 6.2 [10 Minutes] - Downsides of Snacking/Reasons for Change Record All responses.

"Are there any things about your snacking that are not so good?"

(If they mention a generic issue, or if it sounds like they are repeating what others say: )

"Has that affected you?

In what way?"

#### About each one:

"Does that concern you? Why?" or

"Is [that downside] really so bad? Tell me more about that. Why is that?"

## Check if their concern may get better if they cut down their snacking

"Do you think that would improve if you weren't snacking so much?"

Note: Gloss over things that appear irreversible - Focus on things that are likely to improve if they reduce their snacking.

## Summarise reasons for change; Check for any more:

Is there anything else that isn't so good about your snacking?

## Summarise, then prioritise:

"So, on that list, which one is most important to you? Why?"

#### Give an overall summary and check accuracy, response:

Things they like

Downsides that may improve if they cut down; concern, reasons for concern

Most important reversible downside and reason.

"Does that summarise your ideas?"

"What do you think about that, overall?"

What part of you wants to make this change?

What are the three best reasons for you to do it?

"On a scale of 1-10, how important would you say that is for you to make this change?"

Follow up – "So why are you at xxx and not 0?"

## **Item 7 [15 Minutes] - Implementation Intentions**

#### Identify a hypothetical action goal:

"If you were to work on your snacking, what would you aim to do?"

How might you go about it in order to succeed?

If need be, assist them to make the hypothetical goal concrete. E.g. how much would they cut down by?

## Record responses on the Record Sheet.

## Imagine the goal in action:

"Let's make that more concrete, by playing it out in your imagination and by using mental imagery. Let's look at what would happen if you did it."

"Think about a particular time and imagine you have reached the goal on that occasion."

"Play it out using mental imagery, like a mini-movie or a TV ad. Imagine what happens, in the situation and after it. Imagine where you are, who is there, what you can see, and hear, what you feel like."

"Make it as real as you can. Put yourself in the movie."

## Elicit a description of what they imagined and their emotional responses.

Tell me what that was like."

"How vivid was the image, on that scale from 1 to 10?"

#### (Record rating on the Session Checklist.)

"How does it make you feel, when you think about that?"

## Check if the goal would help them get the changes they want

"How were things different in that picture from how they are now?"

Relate back to the not so good things and draw their attention to any that had improved in their image.

"Would that goal get you the changes you want in your life?"

Make sure that their goal will help them achieve their desired functional outcome. If it may not, raise this discrepancy with them and assist them to identify and consider another goal that will. Invite them to engage in further mental imagery with the new goal.

## Expand the timeframe of change further into the future.

"Now imagine what else will happen, as more time goes on and you have kept up with your goal."

"Imagine even further into the future, maybe a few months, or a year. Think of a particular occasion and create that as a movie in your mind using mental imagery."

"Put yourself in it and let it play through, using all of your senses and making it as vivid as you can."

#### Discuss the Participants experience

"How vivid was the image, on that scale of 1 -10?"

"Can you describe what you imagined?"

#### When it is apparent the participants goal matches their desired outcomes...

"So, it sounds like ...[your goal] will get you some of the important things you would like to see change."

If the hypothetical goal did not achieve their desired outcomes, see if they want to consider another goal and repeat the mental imagery again.

## Item 8 [13 Minutes] - Building Self-Efficacy

"So, is that goal one you'd like to think about some more?"

(If they say they couldn't reach that goal:) "What if we looked a bit more closely at how practical it would be?"

If it really is impractical, or they are unwilling to consider it further:) "Is there another goal you'd like to consider?"

## If participant is reluctant to discuss goals:

- Remind them this is a hypothetical discussion and they do not have to commit to any decisions.
- o Acknowledge their difficulty and do not press them.
- The purpose of this section is to help the participant recall similar successes in the past, and remember the strategies that helped them to achieve the goal.
- Remind participants that if they are very reluctant with discussing goals in the session, they
  are free to withdraw at any time or stop the session without comment or penalty.

## Do a baseline self-efficacy rating, recording responses on the Record Sheet.

"How confident are you that you can reach that goal, if you tried it now? Give me a number from 0 (I'm sure I can't do it) to 100 (I'm sure I can do it)."

(Record rating/ if lower than 40%:)

"People often feel a bit unsure at first."

(If higher than 40%:)

"Ok, so you are pretty confident already."

## Elicit relevant past successes, recording responses on the Record Sheet

"Have you ever tried this goal before?

Emphasise aspects of success, even if the performance was not perfect. Even temporary behaviour changes can be counted as a 'success' (e.g. even if they only stopped snacking once or twice).

"Let's look more closely at how you could address those challenges. For now, focus on the times it worked really well."

(If they have not tried to address their snacking before)

"Have you tried anything similar, like stopping smoking, waking up earlier or trying to increase your exercise?" "What about other things that involve giving things up, like studying, practising for a sport, learning a musical instrument?"

"What did you do then to make sure that it would happen?"

#### **Elicit success Mental imagery:**

"Let's recreate that memory in imagination. Take yourself back to a particular time when you successfully [achieved goal]. Remember how it felt when you did that. Play the memory out as if you were living it again using mental imagery. Remember to use all your senses."

## Elicit description and emotional response.

"How vivid was the image, on that scale from 1 to 10?"

#### (Record rating on the Session Checklist.)

#### Briefly elicit 1 or 2 strategies:

"Think back to that time when you ... [achieved past goal]. What did you do to achieve that?"

- Help the participant to focus on practical strategies (e.g., I got rid of all the cigarettes, lighters etc out of the house; I joined a gym).
- Ask if any of those strategies that were useful in the past, could be used now to achieve their current goal.

"Could any of those strategies be used now to help you ... [reach your goal]?"

"Let's choose one of those ideas and imagine using it next week, just to see if it could be helpful."

"Close your eyes and imagine yourself \_\_\_\_\_ [strategy] using mental imagery.

Imagine the first steps you need to take, and then all the steps that come after that. Imagine yourself doing each step as vividly as possible with mental imagery, using all of your senses."

#### Discuss the participant's experience

"How vivid was the image, on that scale of 1 -10?"

## (Record rating on the Session Checklist.)

"Can you describe what you imagined?"

"So is that something that might help you to achieve ...[goal] if you decided you wanted to do that?"

If strategy did not work with goal, repeat exercise with another.

## Redo the self-efficacy rating, recording responses on the Record Sheet

"So now, after thinking about those successes in the past, how confident are you that you can reach that goal, if you tried it now?

Give me a number from 0 (I'm sure I can't do it) to 100 (I'm sure I can do it).

## Contrast the rating with the baseline rating.

(Record rating/ if higher than earlier:)

"That's great! You are more confident than before. Just imagining past success and how you can use those ideas to succeed again helped you."

(If above or around 60%:)

"Wow- that's great. Sounds like you're pretty confident.

(If around 40-59%:)

"That's fine for getting started. You don't have to be 100% confident- you just need enough to take the first step."

(If under 40%:)

"Confidence often gets stronger once people see what they can do. Is that enough for you to at least take a first step?"

"So after just talking about it for a few minutes, your rating went up ... points."

"If you gave it some more thought, and came up with a plan, maybe it would rise even more."

"So now we have talked about your ideas for change and a hypothetical goal, and we have talked about the changes you feel you need to make to your snacking"

## Item 9 [5 Minutes] – Goal Setting

"So we've talked about your ideas for change and a hypothetical goal, and you were going to think some more about the changes you feel you need to make to your snacking to obtain the improvements you want in your life.

If they are still expressing ambivalence and are reluctant to discuss goals, roll with that resistance and spend 5-10 minutes repeating the motivational interviewing, focusing on the reasons for and against change. If the participant remains ambivalent, continue discussing change as hypothetical.

Remind participants that if they are very reluctant with discussing goals or the idea of change in the session, they are free to withdraw at any time or stop the session without comment or penalty. If the participant remains ambivalent, continue discussing change as hypothetical.

Assist them to make their goal specific, even if it is a hypothetical one (e.g., to cut down by 50%; to stop snacking altogether).

When it is apparent the participant's goal matches their desired outcomes...

"So, it sounds like ...[your goal] will get you some of the important things you would like to see change."

"Are you ready to commit to that goal now?"

If the participant is not ready to commit, ask what they would like to do.

- 1. Go back to any previous steps they want to review.
- 2. Ask what may be needed before they would be happy to get started.

See if they would like to continue with the remainder of this session, using their preferred goal. If so, reframe the following sections as hypothetical—e.g. "when would you get started, if you did decide to...?"

See if they want to return to the issue at a phone session, and negotiate when that will be.

"When are you planning to get started?"

Ask the participant to record the goal on the Goal Record sheet, along with their reasons for making this change.

## Item 10 [15 Minutes] – Strategy Building

"Do you remember that last time, you rated how confident you were that you could ... [whatever the previously discussed goal was].

So how about now. How confident are you that you can ... [current goal], if you tried it now?

Give me a number on this scale from 0 to 100."

(Hand participant Session Rating Scales and record rating on the Session Checklist.)

Ask about the ideas they have for how to achieve their current goal. If they cannot think of any, refer back to strategies from past success.

"Have you thought about how you might ...[reach your goal]?

What things do you think you can do to achieve this?"

#### Record the strategies identified on the Goal Record sheet.

"Let's choose one of those ideas and imagine using it over the next week.

Close your eyes now and imagine yourself \_\_\_\_\_ [strategy].

Imagine the first steps you need to take, and then all the steps that come after that. Imagine yourself doing each step as vividly as possible by mental imagery, using all of your senses. Play it through like a movie."

#### Discuss the participant's experience

"How vivid was the image, on that scale of 1 -10?" (Record rating on the Session Checklist.)

"Can you describe what you imagined?"

## Help the participant to identify any potential barriers to implementation of the strategy.

"As you were imagining that, were there any parts where something might get in the way that might stop you from reaching your goal?"

If they can't think of any, suggest an example based on what they just described.

For example, if their strategy is to visit the gym after work, ask if they might forget to pack their gym clothes. What if they had a late meeting, or things were busy at work?

Once a potential barrier has been identified, ask the participant how they could overcome or prevent it. Then suggest that they integrate this into their mental imagery plan.

"Now try imagining yourself \_\_\_\_\_ [engaging in strategy previously imagined] again, but this time, imagine using ... [the identified method] by mental imagery to make sure it happens."

## Discuss the participant's experience

"How vivid was the image, on that scale of 1 -10?"

(Record rating on the Session Checklist.)

"Can you describe what you imagined?"

Identify other strategies. If their goal varies on different days, examine the strategies that will be used on those different days (e.g., moderation days vs abstinence days; snacking at home vs snacking at parties).

Record additional strategies on the Goal Record sheet.

Invite the participant to pick another strategy and to imagine using it in the coming week.

"Just like last time, imagine yourself [strategy].

"Imagine the first steps you need to take, and then all the steps that come after that. Imagine yourself doing each step as vividly as possible by mental imagery, using all of your senses.

"Keep an eye out for things that may get in your way."

#### Discuss the participant's experience

"How vivid was the image, on that scale of 1 -10?"

(Record rating on the Session Checklist.)

"Can you describe what you imagined?"

Repeat barrier identification steps.

Review the things that they would miss and help the participant identify how they would manage this. Engage in imagery based on strategies to address the things they will miss, but this time, extend the imagery to include how things will be better and feelings of success.

"We talked about the things you might miss if you ....[reached your goal].

What will help you get through those times?

Let's create a mental image of that. Imagine yourself....[thing would miss] and then imagine yourself ...[strategy]. Imagine yourself going through those steps."

## Give participant 10 seconds to imagine implementing the strategy

"Now keep playing that image through to later that day or night. You've managed to get through ...[thing would miss] without having a snack/snacking too much. Focus on how you feel about that. Focus on your emotions, and physical sensations."

#### Give participant 10 seconds to imagine the success

"Now keep playing that image through to the next morning, and imagine how you feel the next day using mental imagery. Use all of your senses. Make it as vivid as possible. Focus on what you see, hear and feel."

Give participant 10 seconds to imagine positive effects the next day.

## Discuss the participant's experience

"How vivid was the image, on that scale of 1 -10?"

#### (Record rating on the Session Checklist.)

"Can you describe what you imagined?"

Redo the self-efficacy rating.

"So now, after thinking about those strategies, how confident are you that you can ... [reach your current goal], if you try it now?

"Give me a number from 0 to 100" (Refer them to Session Rating Scales).

#### Draw attention to a high level of confidence, and to any rises that occurred during this session

"The mental imagery we've been doing today has been around how things will be better after you make this change, how you are going to make this change, and other successes you have had in the past with similar goals.

For example, if your plan to not snack at a cinemas and you do not buy any snacks, you might take a mental imagery "photo" of your movie ticket, as a reminder that you stuck to your plan and succeeded with your goal. Be as creative as you like. Whatever helps you to remember those times—what got better, how you did it, and times you succeeded.

## Item 11 [10 Minutes] – How To Use Mental Imagery With Why, How And Wins

#### Guide participant through combining why, how and wins into a single image

Sometimes, you will want to play out in your imagination an event that is likely to come up in the next few minutes, to prepare yourself for it, like if you are feeling stressed and really want to snack on high sugar/fat snacks. In situations like that, it can be helpful to imagine how you will deal with that when it happens, the good things that will happen if you resist, and how you will feel about that success later. Remember how you felt in the past when you resisted and didn't snack, and recreate that feeling.

Let's try that now, putting together an image. We did one earlier when we were talking about how to you will manage ...[thing would miss].

Think of a situation that you find especially challenging, and then imagine it is coming up soon. Create in your mind a mental image of what you will do leading up to the situation, what you will do in it, how good you will feel afterwards when you have stuck to your goal, and what positive effects you will notice because of it

Close your eyes now and spend a few moments playing out that mental image."

## Allow participant 15 seconds for mental imagery

## Discuss the participant's experience

"How vivid was the image, on that scale of 1 -10?"

#### (Record rating on the Session Checklist.)

"Can you describe what you imagined?"

## Guide participant through using imagery while doing another task

"Mental imagery doesn't always have to be done like we've been practising it here. Most people use mental imagery every day when making decisions or remembering or planning things, it just happens so quickly we often aren't even aware of it.

Mental imagery can be done quickly, and when you are doing other things. It's a trick you can carry with you everywhere, to use whenever you need it.

Let's practise using mental imagery while you do something else. Here is some scrap paper. Try creating an image of ...[image already practised in session that was vivid and pleasurable] while you fold these papers in half and half again. You may find the image slips from your

mind from time to time, and that's ok. When you notice that, bring it back into your mind and keep playing it through."

## Allow participant 15 seconds to practice

#### Discuss the participant's experience

"How vivid was the image, on that scale of 1 -10?"

#### (Record rating on the Session Checklist.)

"Can you describe what you imagined?"

"Is there anything that would get better if you were to increase your physical activity?"

"Would you notice any changes even in the first week?"

"Would any improvements be likely to happen in, say, a month?"

"Is there anything else you might notice?"

If mental image was not as vivid as during other practise, point this out and explain that this is normal and nothing to worry about. The images will usually be less vivid if the mind is working on other tasks at the same time. That doesn't mean it's not working.

#### Recommend pairing mental imagery with an everyday task

"It will also help you to remember to use mental imagery and to get better at using it if you try to pair it with something you do everyday, like brushing your teeth or doing the dishes. The more you practise it, the stronger it will become and the easier you will find it to create vivid mental images when you need them.

Mental imagery is especially helpful for times when you might be feeling challenged with your goal, and when you are making decisions about having a snack or not. It can help you to weigh up your options and how you will really feel about the choice you make, rather than getting carried away in the moment."

## Item 12 [10 Minutes] – Elicit Craving

"Is there any food item or maybe drink that you find hard to resist and consume a lot?"

"Okay, try to imagine taking those first steps again to working towards your goal...(the nominated change action), but now you experience a strong desire for....(that thing they said)...."

"...imagine what it looks like...smells like...how it tastes..."

"Make the image as vivid as you can, using all your senses."

"Now, switch to imagining how you are actively working on your goal."

"Roll out your private movie in your mind."

"Imagine how good you feel when you succeed at that."

"See and feel the positive effects."

"How did that feel?"

"Did you notice a change there in how strongly you wanted the food/drink item?"

"Okay, great. Now try imagining yourself taking those first steps again to change (that about your eating/drinking), but also imagine doing those things you mentioned earlier, so it really happens."

"Keep an eye out for things that may get in your way and how you will overcome them."

Focus on how you feel about that. Focus on your emotions, and physical sensations."

"Now keep playing that image through to later that day or night. You've managed to stick to your goal of ... [goal]...."

"Imagine how good you feel."

"See the positive effects."

"How do you feel after giving that task a try?"

## Item 13 [10 Minutes] – Cognitive Competing Tasks

Introduce cognitive competing tasks

"Now I'd like to talk with you about cognitive competing tasks, and how they might change your snacking intake.

So far, we know that when you have a desire or a craving for something, such as a food craving, the desire or craving happens in the working memory area of your brain.

What we also know is that if you are doing a task that requires you to use the working memory area of your brain, you are less likely to be able to think about the food you desire because the task takes up space in the working memory area of your brain.

I would like to teach you a couple of tasks that you can do if you have a desire or craving for a snack food. How does that sound? I would like to encourage you to still use mental imagery to help stay on track with your goals. However, if a particular craving for a food or drink is quite strong or persistent, doing one of these tasks will help you to decrease the craving.

You can use any of these tasks. If you try at least one of the tasks when you do feel like having a high fat/sugar snack, the tasks should help to interfere with snacking cravings.

If you are happy to try out the task, let's try some of them together"

"We have called this task the colour tapping task. It requires you to tap your thumb to your index finger every time you see a certain colour.

Here's how it works:

#### **Colour Counting Task**

Ask the participant to pick one primary colour, either red, green, blue or yellow

Ask the participant to view their surroundings and to pick one primary colour, either red, green, blue or yellow

Ask participant to tap their index finger, either to their thumb or against anything they are holding, if the participant sees something that matches their chosen colour.

Ask participants not to tap their finger to the same object twice

Ask individual to tap their finger once for colours that are very widespread, i.e. carpet or walls

If the participant runs out of colours to tap, ask the participant to choose another primary colour and keep going with the sequence, i.e tapping on red turns into tapping on green

Note: Accuracy is not a high priority of this task, but simply trying your best to remember what everything looked like around you is the key point in the task.

Let the participant know there are other tasks if they do not like this task or they did not understand/perform this task well.

"There are other variations that can be done with this task. We can go through some more later in the study with you.

For now, we would like to encourage you to practice this task whenever you have a desire or craving to consume a high sugar/fat snack."

"There is another task that we think you will be very familiar with already that we would like you to try. We would like you to try Tetris on your mobile phone. Tetris is a good activity to do when you have a desire or craving to consume a high sugar/fat snack. Tetris helps to interfere with the desire and craving mental imagery of the snack food.

#### Here's how it works:

Tetris

Assist participant to download app

Demonstrate how to play the game if the participant is not familiar with the task

"We would like to encourage you to practice this task whenever you have a desire or craving to consume a high sugar/fat snack."

## **Finger Tapping task**

Ask the participant to tap a sequence of finger taps using their left hand

Ask participant to tap re-create the sequence of finger taps using the right hand

Ask participants to increase the number of taps every time they get the sequence right

"You aren't expected to all of the tasks on a regular basis. Please feel free to pick whichever one you feel more comfortable doing and experiment to see which one work for you"

"We would like to encourage you to try the task whenever you have a desire/craving for a snack food. Before going to get the snack, we would like to recommend using one of these tasks for 5-10 minutes and see how you feel afterwards".

## Item 13 [5 Minutes] – Introduce Apps

## Provide a rationale for use of the app.

"This treatment is based on using positive imagery to overcome thoughts and images about snacking, to help you stay motivated and resist urges to snack.

To help you get used to using imagery in this way, we have created an app to guide you and to help you remember to use your imagery."

Assist the participant to install the app on their device.

If you have trouble uploading the app, arrange to find a solution and then use your own phone to demonstrate.

Note: Allow the participant to perform all functions on the app while you guide them.

Ask the participant to open the app. Show them how to create a new goal, record imagery, un-record imagery, award medals, view the graph, access the photos and audios.

Discuss the kind of pictures that might remind them of their imagery.

If no picture is currently available in their own photos or the Discover library, help them make a plan to take a photo, and suggest that they put a reminder into their phone about it.

Show them the audio files. Explain their purpose.

"Each category has an audio file attached to it that will help you turn your picture into a mental image, like we've been practising in sessions."

Ask the participant to select one of their pictures and then ask them to engage in imagery based on that picture, using the audio file to guide them.

"The audio files in this folder teach you how to really focus on your sensations and the things around you, which will help you to make your imagery even more vivid, and to get the most out of your positive experiences. If you're feeling tense or stressed, you may find the relaxing file helpful. I'll let you check those out in your own time."

## Finish instruction in the app with:

"That's the app and how to use it. Remember, this is just something to help you remember to use the imagery to support your snacking goal.

You don't of course have to use the app every time you use imagery. However, the app will remind you to use it.

Don't restrict yourself to using the same images over and over again.

That would get boring pretty quickly, and the images would lose their impact when they become too rehearsed.

Besides, it's important that you notice more things that are getting better as you stay in control, that you think of new ways to do it, and that you notice your successes as they happen.

So, update your challenges and pictures as you progress with your goal.

For example, if your plan to not snack too much at the cinema, you might take a photo of your ticket as you're leaving, as a reminder that you stuck to your plan and succeeded with your goal. Be as creative as you like. Whatever helps you to remember those times—what got better, how you did it, and times you succeeded.

Ask participants to download the Tetris App. Run participants through the Tetris App.

#### Item 14 [5 Minutes] – Summarise and Homework

"Would you be able to practice what we've done today over the next week?"

"This is your first face-to-faces session for the research study. I would like to see you again later in the week, and three months' time to do a similar face-to-face session and catch up with how you have been doing. We would also like to do some short telephone calls with you that will take about 10 minutes to check in with you and ask you some questions about your

progress. I will give you a short 10 minute call at the end of the week to do some more practise with you, would that be okay?"

"Do you have any questions about what we have done today?"

"Just to finish up the session, when practicing mental imagery, try to really focus on the positive outcomes and how good you will feel from them, try to remember past successes to keep yourself motivated to decrease snacking. Try to run through some scenarios where you have obstacles to overcome and imagine how you will overcome these obstacles to get to your goal"

## Briefly summarise the session

- Goal
- Strategies and barriers

Ask how they are feeling about the session, and if there is anything else they would like to discuss before the session ends.

Book date and time for first phone session

## Lemon Exercise - Imagery Practice

"This exercise is to help you understand more about what mental imagery is. Sometimes we think in words, sometimes we think more in mental pictures or other sensations. By a mental image I mean when you 'see in your minds eye', 'hear with your minds ear' and so on. You can have an image in any sense—for example, some people say they can imagine the taste and smell of a beer, or how it would feel as they swallowed it." (check for understanding).

"I am now going to ask you to imagine a situation. Please imagine it happening to yourself, as if you were there, and it was happening right now. Imagine as vividly as possible".

#### ((In the script, pause for about 3s at each "..."))

"OK, Let's start.

I want you to look towards the wall, and imagine holding a lemon...

Picture it as vividly as you can, what it looks like, the texture of the skin, whether there is any stem...

Whether the colour is the same across the whole lemon...

Whether there is any light or shade on it...

Imagine holding it close up, so you can see every feature...

"Now I want you also to imagine what it feels like to hold it...

Imagine what the texture of the lemon would feel like...

The weight of the lemon in your hand...

Its shape...

What it would feel like if you threw it upwards and caught it...

Keep the picture of the lemon there in your imagination....

"Imagine holding the lemon next to your nose. That fresh, tangy smell...

Now, imagine cutting it with a knife. Think about how the knife feels, as you grip it and carefully cut the lemon in two. You hear a slight rasping sound as you do that...

Small drops of juice come out as you cut it...maybe your hand feels a little wet...

Imagine what the halves look like—the segments, the texture of the inside of the lemon, white pith...

You hold half of the lemon to you nose. Smell the juice...

Imagine wiping your finger across the surface, and putting a drop on your tongue. A fresh, acid taste. Imagine swallowing it, and feeling it going down your throat. A cool, refreshing sensation.

"Now, imagine taking one of the halves in your hand. You have a glass in your other hand, and you are going to squeeze the juice into the glass...Squeezing it now, and the juice is trickling out...You can hear it going into the glass...Take a sip of the juice, and swallow that...

Go back to squeezing the lemon into the glass...

((Speak quickly, more loudly)) Now it squirts into your eye! It is stinging you!

((Look for a reaction—do they wince? – if they do: "Did you notice that you winced then?"))
Tell me how all of that felt.

## (Pause for a response)

Now I'm going to ask how vivid that picture was. I want you to give me a number from 0, no image at all, to 10, extremely vivid, as if it were really happening.

## (Show the scale to them)

When the picture was most vivid, what was its rating?
When you imagined holding or cutting the lemon—how vividly did you imagine what the lemon or the knife would feel like?
When you smelt the lemon, how vivid was that?
The taste?
Imagining swallowing it?
The sounds of cutting it, or the juice in the glass?
Everyone has some senses that are more vivid than others when they do this.

Tell them about any observations of their behaviour you had...e.g.

Did they move their hands?

Did they move their tongue or swallow when tasting the lemon?

Did they wince or show any other startle reaction when the lemon squirted?

This is the sort of thing I mean, when I am asking you about your mental imagery.

Not just what pictures you see, but also any imagined taste, or smell, or feeling you have when you think about a situation.

## **Imagery-Based Review of Motivation**

## The interview implements the spirit of motivational interviewing (MI)

It emphasises collaboration, autonomy, choice and empathy, while having a clear, negotiated agenda.

It encourages them to think about and talk about their own reasons for change and ideas for how change could or should happen, with the goal of them considering change as a positive, feasible option.

It elicits their emotional response throughout and attempts to deepen their understanding of their emotions about snacking.

It does not focus on information-giving. Provide information only to reinforce their statements, answer questions, or (gently) correct misinformation.

It does not attempt to convince the participant to make any particular change and respects the participant's autonomy. 'Roll with resistance'. See what they want to do, and agree to support them.

## However, it is fundamentally different from MI:

Every step is conducted via mental imagery.

Regardless of whether the person is committed to change, a potential plan (hypothetical, or actual) is developed.

The primary focus is not on generating initial commitment: it is on laying the groundwork for rehearsal when they are deciding whether to consume snacks

## **Implementation Intentions**

This section gets the participants to think concretely about a particular action and its likely effects. At this stage, it is purely hypothetical—it puts no pressure on them to adopt the goal, but allows them to consider what life might be like if things were different.

At this point, the idea is to create a realistic context for the review of positive outcomes and of self-efficacy, and to generate a concrete focus for consideration between sessions.

## FIT-PILOT MANUAL

# TELEPHONE SESSIONS 2-6: WEEK 2, 3, 6, 8, 10 (TELEPHONE 15 MINUTES)

## Item 1 [1 Minute] - Session Overview

"Hi xxx, It's Nicole from QUT. How are you today?"

"That's wonderful. I'm calling in regards to the QUT research you are currently participating in to reduce your snacking intake. As part of the research study, we would like to complete the a short, 10 minute telephone call with you. Do you have the time available now to do the first telephone call? It shouldn't take any longer than 10 minutes of your time"

If Yes — "That's wonderful. Thank you for your time. I'd like to have an open discussion about your snacking intake and progress on the research program so far if that's okay with you. Would you be okay if I started the recording on this part of the phone call?"

If No - "I'm sorry that I've caught you at a bad/busy time. When would be a good time to give you a call back?

## Write down availabilities on spreadsheet

"Thank you, I'll give you a call at xxx on xxx. Have a great day"

## Item 2 [4 Minutes] - Review Snacking Intake

"This research study is a safe, non-judgmental and supportive place to discuss your snacking and we want to investigate how well the program works for you to change your snacking intake. All the information you can provide about your snacking and experience with the program is helpful for us to know and we would really appreciate your honesty, even if there were days that were not so good over the last week".

"First of all, I'd like to talk a bit about how your snacking has been going recently since you started the research study".

## Briefly review the participant's week and record of snack use since the last session

"How have you been going with your snacking intake recently?"

If participant has not submitted their snacking for the day - Do over the phone

Note down any comments about their progress so far

## Record on spreadsheet

"Is that what you expected?"

"Is there anything that surprised you?"

"How do you feel about that?"

## Write down anything that may be useful in the later discussion of motivation or plans

"Is there anything that's changed or that's different with your snacking intake since we last talked?"

"On [day] you achieved [reducing/not having] snacks".

"What positive effects did you notice from that?"

"What strategies did you use to achieve that?"

If no changes to snacking since first face-to-face session or since starting the study, identify any partial successes and focus on those (e.g., ATE less snacks than usual, delayed eating first SNACK, etc.)

If participant mentions any information about changes to their snacking that are unhealthy or not recommended, E.g. decrease all food intake below healthy levels, the researcher will discuss the ethical concerns with this goal and re-discuss the purpose of the research.

## Item 3 [3 Minutes] - Review and Engage in Imagery Practice

"I'd like to talk a bit more about the use of mental imagery now if that's okay with you"

## Record responses to questions below

"How have you been going with using mental imagery?"

"How many times since our last session have you used it?"

"What kind of situations are you using it in?"

## If doing well and meeting goal:

#### Identify relevant success and practise imagery

"It's great that things are going well and you've been meeting your goal. Well done!"

"What mental images have you been using to help with positive changes?

What are the strategies you've been using with mental imagery?

"You said there were several things you might try. Which one of those would you like to start with?"

"Would you notice any changes even in the first week?"

What are the successes you've been having with mental imagery?

"Let's do some mental imagery based on one of those pictures now? Which one would be useful for you to image?"

## After mental imagery task:

"How vivid was that mental image, on scale of 1 -10, with 1 being no image at all to 10 being an extremely vivid image?"

(Record rating on the Session Checklist.)
If NOT doing well and NOT meeting goal:

## Review original incentives (why), planned strategies (how) and past successes (wins)

"Sorry to hear that things haven't been going so well. Let's reflect back on some of the things we covered in our session together".

"You were thinking about making a change because [summarise reasons for change] and you thought you might do this by [summarise planned strategies] and you knew you could do this because [summarise past successes]".

"Have any of those things changed?"

Guide participant through doing mental imagery of one or more of those areas, based on participant's choice or which one may be most helpful based on the participant's circumstances.

## After mental imagery task:

"How vivid was that mental image, on scale of 1 -10, with 1 being no image at all to 10 being an extremely vivid image?"

(Record rating on the Session Checklist.)
Identify barriers to use of mental imagery

"Is there anything making it difficult for you to use mental imagery?"

(Record answer on the Session Checklist.)

If yes, identify barriers, problem solve for how they might be overcome and guide participant through imagining implementing plan.

## After mental imagery task:

"How vivid was that mental image, on scale of 1 -10, with 1 being no image at all to 10 being an extremely vivid image?"

(Record rating on the Session Checklist.)

## Item 4 [2 Minutes] - Identify Barriers and Risks

"Are there any risky situations coming up that might be challenging for sticking to your goal? Or have there been times you've been feeling more challenged with your goal than other times?"

- Guide the participant through problem solving for risky or difficult situations and guide them through using mental imagery in that situation.
- Advise participant to review the material from the face-to-face session and encourage them to engage support (e.g., GP, family members) if they haven't already done this.

## Item 5 [3 Minutes] - Review and Engage in Cognitive task Practice

"I'd like to talk a bit more about the use of cognitive tasks now if that's okay with you"

## Record responses to questions below

"How have you been going with using cognitive tasks?"

"How many times since our last session have you used it?"

"What kind of situations are you using it in?

"Is there anything making it difficult for you to use cognitive tasks?"

## If doing well and meeting goal:

"It's great that things are going well and you've been meeting your goal. Well done!"

"I'd like to encourage you to continue using the cognitive tasks whenever you have a desire or craving for a high sugar/fat snack"

## Item 6 [1 Minutes] - Summary and Homework

"Excellent. That's all I had to ask you today. Thank you very much for your time today".

"A quick summary of what we have discussed today, ...."

"Does that sound okay?"

If Yes: Thank for their time

If No: Adjust summary

## Check if participant wishes to raise or discuss any other issues

"Is there anything that you would like to discuss about the research study?"

#### Encourage ongoing use of mental imagery and cognitive tasks

'Thank you for your participation so far. We would like to encourage you to continue to use mental imagery and cognitive tasks in your own time. Please continue to record your snacking intake over the next week, so we can review your snacking intake again during your next telephone call"

## Book call with participant in one week's time

"Lastly, I would like to organise a time with you to complete the second telephone call for the study. Just a reminder that your second call shouldn't take any longer than 10-15 minutes and we will discuss similar things to what we have done today. When would be a good time to give you a call in one weeks' time?"

## Write down availabilities on spreadsheet

## FIT-PILOT MANUAL

# SESSION 2: WEEK 4 (FACE-TO-FACE – 1HR)

## Item 1 [3 Minutes] - Session Overview

"Thanks for coming in today. It's been over four weeks since we last met for the QUT snacking study. The second face-to-face study will build on what we talked about in the first session and also review what how you have been going with your snacking"

"If it's alright with you, I'd like to talk about your snacking over the past month and work with you to help you stay on track with your snacking goal"

"Just to let you know, this research study is a safe, non-judgmental and supportive place to discuss your snacking and we want to investigate how well the program works for you to change your snacking intake. All the information you can provide about your snacking and experience with the program is helpful for us to know and we would really appreciate your honesty, even if there were days that were not so good over the last month".

"How have you been going with your snacking intake recently?"

## Item 2 [5 Minutes] - Assessment Feedback

Provide assessment feedback from the baseline snacking time line follow back with the participant.

"Let's have a look through your snacking time line follow back that you completed before coming here today in the online survey."

## Review results with participant

"Is that what you expected?"

"Is there anything that surprised you?"

"How do you feel about that?"

"Is there anything that's changed or that's different with your snacking intake since we last talked?"

"On [day] you achieved [reducing/not having] snacks".

"What positive effects did you notice from that?"

"What strategies did you use to achieve that?"

## Write down anything that may be useful in the later discussion of motivation or plans

"Thanks for going through that with me just now. During the first face-to-face session, we talked about some of the things you liked about your snacking and some of the not so good things about your snacking"

"If it's alright with you, I'd like to review some of these ideas to see what your snacking has been like for you over the past month"

## Item 3 [20 Minutes Total] - Imagery-Based Review of Motivation

## Record all responses

"Can we start by talking about the things you have liked about snacking over the past month?"

"Is there anything else?"

"What about times when you can't have a snack? Are there any other things that you have missed?"

"What if you weren't snacking as much—anything else you have missed?"

## Summarise good things about snacking.

## Item 4 [10 Minutes] - Downsides of Snacking/Reasons for Change

#### **Elicit downsides:**

"Are there any things about your snacking that are not so good over the past month?"

(If they mention a generic issue, or if it sounds like they are repeating what others say: )

"Has that affected you? In what way?"

About each one - Elicit concern

"Does that concern you? Why?" or

"Is [that downside] really so bad? Tell me more about that. Why is that?"

## Check if their concern may get better if they cut down their snacking

"Do you think that would improve if you weren't snacking so much?"

Note: Gloss over things that appear irreversible - Focus on things that are likely to improve if they reduce their snacking.

## Summarise reasons for change; Check for any more:

Is there anything else that has not been good about your snacking over the past month?

#### Summarise, then prioritise:

"So, on that list, which one is most important to you? Why?"

On a scale of 1-10, how important would you say that is for you to make this change?"

Follow up – "So why are you at xxx and not 0?"

## Give an overall summary and check accuracy, response:

Things they like

Downsides that may improve if they cut down; concern, reasons for concern Most important reversible downside and reason

"Does that summarise your ideas?"

"What do you think about that, overall?"

## Item 5 [5 Minutes] – Imagery

"During the first session, we went through some information about imagery and showed you how it could be helpful for you to stay on track with your snacking goal."

"How have you been going with using mental imagery?"

"How many times since our last session have you used it?"

"What kind of situations are you using it in?"

"What mental images have you been using to help with positive changes?"

"Is there anything making it difficult for you to use mental imagery?"

If yes, identify barriers, problem solve for how they might be overcome and guide participant through imagining implementing plan.

"Do you have any questions about using imagery that you would like to ask?"

## Item 6 [5 Minutes] – Goal Setting

"During the last session, we talked about your ideas for change and a goal to help you get there"

"Your goal was to [xxxx]"

"What has it been like to work towards that goal?"

"How do you feel about your goal now?"

If achieving goal, discuss the possibility of making a new goal. Do not coerce participant to make new goal if they are happy to stay with their current goal.

If having difficulty with goal, discuss the possibility of changing the goal to something more obtainable.

If the strategy has not worked at all, use a past success for this section of the session

If NOT doing well and NOT meeting goal:

Review original incentives (why), planned strategies (how) and past successes (wins)

"Sorry to hear that things haven't been going so well. Let's reflect back on some of the things we covered in our session together".

"You were thinking about making a change because [summarise reasons for change] and you thought you might do this by [summarise planned strategies] and you knew you could do this because [summarise past successes]".

"Have any of those things changed?"

Guide participant through doing mental imagery of one or more of those areas, based on participant's choice or which one may be most helpful based on the participant's circumstances.

Record responses on the Record Sheet.

## Item 7 [5 Minutes] – Implementation Intentions

"Now I'd like to look at some of the times when the goal has helped you to make the changes that you wanted to your snacking"

What are the strategies you've been using with imagery?

Imagine the goal in action:

Elicit success imagery:

"Let's recreate that memory in imagination. Take yourself back to a particular time when you successfully [achieved goal]. Remember how it felt when you did that. Play the memory out as if you were living it again using mental imagery. Remember to use all your senses."

#### Elicit description and emotional response.

"How vivid was the image, on that scale from 1 to 10?"

(Record rating on the Session Checklist.)

## Elicit a description of what they imagined and their emotional responses.

Tell me what that was like."

"How vivid was the image, on that scale from 1 to 10?"

## (Record rating on the Session Checklist.)

"How does it make you feel, when you think about that?"

## Expand the timeframe of change further into the future.

"Now imagine what else will happen, as more time goes on and you have kept up with your goal."

"Imagine even further into the future, maybe a few months, or a year. Think of a particular occasion and create that as a movie in your mind using imagery."

"Put yourself in it and let it play through, using all of your senses and making it as vivid as you can."

#### Discuss the Participants experience

"How vivid was the image, on that scale of 1 -10?"

"Can you describe what you imagined?"

#### When it is apparent the participants goal matches their desired outcomes...

"So, it sounds like ...[your goal] will help you to get the important things you would like to see change that you mentioned in the first session"

If the goal did not achieve their desired outcomes, see if they want to consider another goal and repeat the imagery again.

## Item 8 [10 Minutes] - Building Self-Efficacy

## Do a baseline self-efficacy rating, recording responses on the Record Sheet.

"How confident are you that you can reach that goal, if you tried it now? Give me a number from 0 (I'm sure I can't do it) to 100 (I'm sure I can do it)."

(Record rating/ if lower than 40%:)

"People often feel a bit unsure at first."

(If higher than 40%: )

"Ok, so you are pretty confident already."

## Elicit relevant past successes

#### Briefly elicit 1 or 2 strategies:

"Think back to that time when you ... [achieved past goal]. What did you do to achieve that?"

- Help the participant to focus on practical strategies (e.g., I got rid of all the cigarettes, lighters etc out of the house; I joined a gym).
- Ask if any of those strategies that were useful in the past, could be used now to achieve their current goal.

"Did any of those strategies help you to ... [stick to your goal], or stay on track with your current goal?"

If no, review new strategies that will help participant to achieve their goal. If yes, use these strategies in imagery review.

"Let's choose one of those ideas and imagine using it next week"

"Close your eyes and imagine yourself [strategy] using imagery.

Imagine the first steps you need to take, and then all the steps that come after that. Imagine yourself doing each step as vividly as possible with imagery, using all of your senses."

#### Discuss the participant's experience

"How vivid was the image, on that scale of 1 -10?"

#### (Record rating on the Session Checklist.)

"Can you describe what you imagined?"

"So is that a strategy that could help you to stay on track ... [goal]"?

If strategy did not work with goal, repeat exercise with another.

#### Redo the self-efficacy rating, recording responses on the Record Sheet

"So now, after thinking about those successes in the past, how confident are you that you can reach that goal, if you tried it now?

Give me a number from 0 (I'm sure I can't do it) to 100 (I'm sure I can do it).

## Contrast the rating with the baseline rating.

(Record rating/ if higher than earlier:)

"That's great! You are more confident than before. Just imagining past success and how you can use those ideas to succeed again helped you."

(If above or around 60%:)

"Wow- that's great. Sounds like you're pretty confident.

(*If around 40-59%:*)

"That's fine for getting started. You don't have to be 100% confident- you just need enough to take the first step."

(If under 40%:)

"Confidence often gets stronger once people see what they can do. Is that enough for you to at least take a first step?"

"So after just talking about it for a few minutes, your rating went up ... points."

"If you gave it some more thought, and came up with a plan, maybe it would rise even more."

"So now we have talked about your ideas for change and a hypothetical goal, and we have talked about the changes you feel you need to make to your snacking"

## Item 9 [10 Minutes] – Strategy Building – RISKS AND BARRIERS

Help the participant to identify any potential barriers to implementation of the strategy.

"Over the past month, has there been any times where something has gotten in the way and stopped you from reaching your goal?"

If they can't think of any, suggest an example based on what they just described.

For example, if their strategy is to visit the gym after work, ask if they might forget to pack their gym clothes. What if they had a late meeting, or things were busy at work?

Once a potential barrier has been identified, ask the participant how they could overcome or prevent it. Then suggest that they integrate this into their imagery plan.

"Now try imagining yourself \_\_\_\_\_ [engaging in strategy previously imagined] again, but this time, imagine using ... [the identified method] by imagery to make sure it happens."

#### Discuss the participant's experience

"How vivid was the image, on that scale of 1-10?"

#### (Record rating on the Session Checklist.)

"Can you describe what you imagined?"

Identify other strategies. If their goal varies on different days, examine the strategies that will be used on those different days (e.g., moderation days vs abstinence days; snacking at home vs snacking at parties).

Record additional strategies on the Goal Record sheet.

Invite the participant to pick another strategy and to imagine using it in the coming week.

"Just like last time, imagine yourself \_\_\_\_\_ [strategy].

"Imagine the first steps you need to take, and then all the steps that come after that. Imagine yourself doing each step as vividly as possible by mental imagery, using all of your senses.

"Keep an eye out for things that may get in your way."

#### Discuss the participant's experience

"How vivid was the image, on that scale of 1-10?"

## (Record rating on the Session Checklist.)

"Can you describe what you imagined?"

Repeat barrier identification steps.

Review the things that they would miss and help the participant identify how they would manage this. Engage in imagery based on strategies to address the things they will miss, but this time, extend the imagery to include how things will be better and feelings of success.

"We talked about the things you might miss if you ....[reached your goal] in the last session.

"You mentioned (xxxxxx) would be something that you would miss."

"How have you managed those times?"

What did you do to help you get through those times?

## If participant doesn't mention any strategies that worked, come up with some new ones

Let's create a mental image of that. Imagine yourself....[thing would miss] and then imagine yourself ...[strategy]. Imagine yourself going through those steps."

#### Give participant 10 seconds to imagine implementing the strategy

"Now keep playing that image through to later that day or night. You've managed to get through ...[thing would miss] without having a snack/snacking too much. Focus on how you feel about that. Focus on your emotions, and physical sensations."

## Give participant 10 seconds to imagine the success

"Now keep playing that image through to the next morning, and imagine how you feel the next day using mental imagery. Use all of your senses. Make it as vivid as possible. Focus on what you see, hear and feel."

Give participant 10 seconds to imagine positive effects the next day.

#### Discuss the participant's experience

"How vivid was the image, on that scale of 1 -10?"

#### (Record rating on the Session Checklist.)

"Can you describe what you imagined?"

## Redo the self-efficacy rating.

"So now, after thinking about those strategies, how confident are you that you can ... [reach your current goal], if you try it now?

"Give me a number from 0 to 100" (Refer them to Session Rating Scales).

Draw attention to a high level of confidence, and to any rises that occurred during this session

# Item 10 [10 Minutes] – How To Use Mental Imagery With Why, How And Wins

## Guide participant through combining why, how and wins into a single image

Sometimes, you will want to play out in your imagination an event that is likely to come up in the next few minutes, to prepare yourself for it, like if you are feeling stressed and really want to snack on high sugar/fat snacks. In situations like that, it can be helpful to imagine how you will deal with that when it happens, the good things that will happen if you resist, and how you will feel about that success later. Remember how you felt in the past when you resisted and didn't snack, and recreate that feeling.

Let's try that now, putting together an image. We did one earlier when we were talking about how to you will manage ...[thing would miss].

Think of a situation that you find especially challenging, and then imagine it is coming up soon. Create in your mind a mental image of what you will do leading up to the situation, what you will do in it, how good you will feel afterwards when you have stuck to your goal, and what positive effects you will notice because of it

Close your eyes now and spend a few moments playing out that mental image."

#### Allow participant 15 seconds for mental imagery

## Discuss the participant's experience

"How vivid was the image, on that scale of 1 -10?"

#### (Record rating on the Session Checklist.)

"Can you describe what you imagined?"

## Guide participant through using imagery while doing another task

"Imagery doesn't always have to be done like we've been practising it here. Most people use imagery every day when making decisions or remembering or planning things, it just happens so quickly we often aren't even aware of it.

Imagery can be done quickly, and when you are doing other things. It's a trick you can carry with you everywhere, to use whenever you need it.

Let's practise using mental imagery while you do something else. Here is some scrap paper. Try creating an image of ...[image already practised in session that was vivid and pleasurable] while you fold these papers in half and half again. You may find the image slips from your mind from time to time, and that's ok. When you notice that, bring it back into your mind and keep playing it through."

#### Allow participant 15 seconds to practice

#### Discuss the participant's experience

"How vivid was the image, on that scale of 1 -10?"

## (Record rating on the Session Checklist.)

"Can you describe what you imagined?"

If image was not as vivid as during other practise, point this out and explain that this is normal and nothing to worry about. The images will usually be less vivid if the mind is working on other tasks at the same time. That doesn't mean it's not working.

#### Recommend pairing imagery with an everyday task

"It will also help you to remember to use imagery and to get better at using it if you try to pair it with something you do everyday, like brushing your teeth or doing the dishes. The more you practise it, the stronger it will become and the easier you will find it to create vivid mental images when you need them.

Mental imagery is especially helpful for times when you might be feeling challenged with your goal, and when you are making decisions about having a snack or not. It can help you to weigh up your options and how you will really feel about the choice you make, rather than getting carried away in the moment."

## Item 11 [5 Minutes] – Cognitive Competing Tasks

Introduce cognitive competing tasks

"Now I'd like to talk with you about cognitive competing tasks, and how they might change your snacking intake.

"During the first session, we introduced you to a short task that you could do in your spare time if there was a particular time that was overwhelming.

"How have you been going with using cognitive tasks?"

"How many times since our last session have you used it?"

"What kind of situations are you using it in?

"Is there anything making it difficult for you to use cognitive tasks?"

#### Teach participant different task compared to their first task

"We would like to encourage you to practice this task whenever you have a desire or craving to consume a high sugar/fat snack."

## Item 12 [5 Minutes] – APP

"During the first session, we introduced you to the Goal In Mind app to help you stay on track with your imagery practice"

"How have you been going with using cognitive tasks?"

"How many times since our last session have you used it?"

"What kind of situations are you using it in?

"Is there anything making it difficult for you to use cognitive tasks?"

## Item 13 [5 Minutes] - Summarise and Homework

"Would you be able to practice what we've done today over the next week?"

"This is your second face-to-faces session for the research study. I would like to see you again once more at three months' time to do a similar face-to-face session and catch up with how you have been doing. I would also like to have an open discussion with you about the program and ask you what its been like to go through the program. I would also like to continue to do the short telephone calls with you that will take about 10 minutes to check in with you and ask you some questions about your progress. Your next call will be in two weeks' time.

"Do you have any questions about what we have done today?"

"Just to finish up the session, when practicing imagery, try to really focus on the positive outcomes and how good you will feel from them, try to remember past successes to keep yourself motivated to decrease snacking. Try to run through some scenarios where you have obstacles to overcome and imagine how you will overcome these obstacles to get to your goal"

#### Briefly summarise the session

- Goal
- Strategies and barriers

Ask how they are feeling about the session, and if there is anything else they would like to discuss before the session ends.

## FIT-PILOT MANUAL

# SESSION 3: WEEK 12 (FACE-TO-FACE – 1HR)

## [3 Minutes] - Session Overview

"Thanks for coming in today. It's been over twelve weeks since you signed up for the QUT study. This last face-to-face study will build on what we talked about over the duration of the study and review how you have been going with your snacking. I would also like to conduct an open-ended interview with you to see what you thought about the program, what your experience was like with the program and how we could improve the program"

"If its all right with you, I'd also like to talk about your snacking intake over the duration of the study and work with you to talk about a future goal now that the research study is coming to an end"

"Just to remind you, anything you can tell us about your snacking and about your experience with the program will be helpful. We would really appreciate honest feedback, even if there were times when things didn't go so well, or aspects of what we did could be improved".

## Check In

"First of all -1'd like to do a quick check in with you to see how you have been going with the study over the three month period"

## [4 Minutes] – Imagery

"How have you been going with using mental imagery?"

"How many times since our last session did you use it?"

"What kind of situations did you use it in?

"Is there anything else we should know about the imagery?"

"Do you have any questions about using imagery that you would like to ask?"

## [4 Minutes] – Cognitive Competing Tasks

"During the first session, we introduced you to a short task that you could do in your spare time if there was a particular time that was overwhelming.

"How have you been going with using cognitive tasks?"

"How many times since our last session did you use it?"

"What kind of situations did you use it in?

"Is there anything else we should know about the cognitive task?"

"Do you have any questions about using the cognitive task that you would like to ask?"

## [4 Minutes] – APP

"How have you been going with using cognitive tasks?"

"How many times since our last session have you used it?"

"What kind of situations are you using it in?

"Is there anything else we should know about the app?"

"Do you have any questions about using the app that you would like to ask?"

## [4 Minutes] – Text Messages

"How have you been going with receiving the text messages?"

"How many times since our last session have you used it?"

"What kind of situations did you use them in?

"Is there anything else we should know about them?"

"Thank you for giving me some feedback about your engagement in the research study"

## [5 Minutes] - Assessment Feedback

Provide assessment feedback from the baseline snacking time line follow back with the participant.

"How have you been going with your snacking?"

"Shall we review your snacking time line that you completed before coming here today?."

## Review results with participant

"How do you feel about that?"

"Is there anything that's changed or that's different with your snacking intake since we last talked?"

"On [day] you achieved [reducing/not having] snacks".

"What positive effects did you notice from that?"

"What did you do to achieve that?"

"What has it been like for you to change your snacking intake over the duration of the study?"

Write down anything that may be useful in the later discussion of motivation or plans

## [5 Minutes] – Goal Selection

"Over the duration of the research study, we talked about your ideas and reason for change. During this experience, we came up with a goal to help you get there and reduce your snacking intake"

"Your goal was to [xxxx]"

"What has it been like to work towards that goal?"

#### \*IF ACHIEVING THEIR GOAL FOR SOME TIME

## \*[5 Minutes] – Potential New Goals

"It sounds like you've been achieving your goal for some time now. Well done. If you would like to do so, we could use this final session to help you work towards a new snacking goal that would be helpful for you. Is this something that you might like to consider?"

\*\*Use participant's new goal for the final session if they would like to use the new goal"

## [5 Minutes] - Past Successes

"Now can we look at some of the times when the goal has helped you to make the changes that you wanted to make to your snacking over the duration of the study? This will help you to use the imagery in the future for your snacking, or even other goals that you might like to achieve"

"Can you think of a time when you successfully achieved your goal over the study?"

#### Imagine the goal in action:

"Would you mind recreating that memory in your imagination? Take yourself back to a particular time last week when you successfully [achieved goal].

Try to imagine as vividly as you can what you did to prepare for that situation ...

Imagine all of the steps that you needed to take, and then all the steps that followed that ...

Remember how it felt when you did that. Play the memory out as if you were living it again using imagery. Remember to use all your senses."

## Elicit description and emotional response.

What was that like?"

"How does it make you feel, when you think about that?"

#### **Discuss the Participants experience**

"Using imagery to review past successes can be helpful to remind us of the past successes we've had and how good it felt to achieve that. It can also be a good motivational booster during times that we are uncertain if we can achieve our goal"

## [5 Minutes] – Strategies

"Would it be OK if we looked at some of the strategies you have used since you started working with us? Which strategies worked particularly well for you?"

#### Briefly elicit 1 or 2 strategies:

"Think back to that time when you ... [achieved past goal in the last month]. What did you do to achieve that?"

\*\*Only if not being used routinely already (an alternative is to elicit any potential new strategies, eliciting imagery about them):

"Would that strategy be a good one to keep using next week? Would you like to practise imagery about that now?"

"Close your eyes and imagine yourself\_\_\_\_\_ [strategy].

Imagine the first steps you need to take, and then all the steps that come after that. Imagine yourself doing each step as vividly as possible with imagery, using all of your senses."

## Discuss the participant's experience

## "Can you describe what you imagined?"

"Using imagery to imagine ourselves performing strategies that work well can be a good way to practise what we are going to do when that situation when it comes up again in the future.

It's also a good way to help us weight up short term temptations against long-term goals. It can help us feel more prepared and ready for any situation that comes our way. You can use imagery to rehearse strategies with other goals you might want to achieve".

## If NOT doing well and NOT meeting goal:

Review original incentives (why), planned strategies (how) and past successes (wins)

"Sorry to hear that things haven't been going so well. Let's reflect back on some of the things we covered in our session together".

"You were thinking about making a change because [summarise reasons for change] and you thought you might do this by [summarise planned strategies] and you knew you could do this because [summarise past successes]".

"Did any of those things change over the duration of the study?"

## [10 Minutes] - Strategy Building - RISKS AND BARRIERS

Help the participant to identify any potential barriers to implementation of the strategy.

"If it's alright with you, I'd like to look at some

"Over the past month, has there been any times where something has gotten in the way and stopped you from reaching your goal?"

"What happened in that situation?"

If they can't think of any, suggest an example based on what they just described.

For example, if their strategy is to visit the gym after work, ask if they might forget to pack their gym clothes. What if they had a late meeting, or things were busy at work?

Once a potential barrier has been identified, ask the participant how they could overcome or prevent it. Then suggest that they integrate this into their imagery plan.

"Now try imagining yourself	[engaging in strategy previously imagined] again, but
this time, imagine using [the ide	entified method] by imagery to make sure it happens."

#### Discuss the participant's experience

"Can you describe what you imagined?"

Identify other strategies. If their goal varies on different days, examine the strategies that will be used on those different days (e.g., moderation days vs abstinence days; snacking at home vs snacking at parties).

Record additional strategies on the Goal Record sheet.

Invite the participant to pick another strategy and to imagine using it in the coming week.

"Just like last time, imagine yourself \_\_\_\_\_ [strategy].

"Imagine the first steps you need to take, and then all the steps that come after that. Imagine yourself doing each step as vividly as possible by imagery, using all of your senses.

"Keep an eye out for things that may get in your way."

## Discuss the participant's experience

"Can you describe what you imagined?"

#### Strategies that were not so helpful

Were there any strategies that didn't work so well over the past month?

What happening during those times?

Is there any way that you could improve those strategies?

#### IF CAN IMPROVE STRATEGY

"Let's choose that idea and imagine using it over the next week.

Close your eyes now and imagine yourself [improved strategy].

Imagine the first steps you need to take, and then all the steps that come after that. Imagine yourself doing each step as vividly as possible by imagery, using all of your senses. Play it through like a movie."

#### Discuss the participant's experience

"Can you describe what you imagined?"

Do you think this new strategy might be more useful for you to stay on track with your goal?

## [5 Minutes] How To Use Mental Imagery With Why, How And Wins

#### Guide participant through combining why, how and wins into a single image

"Has there been any new situations that have come up in the past month that were particularly challenging for you?"

IF YES

"Could you describe what happened in that situation?"

"What did you do in that situation?"

"What was that like for you?"

"What do you think are some things you could do before a situation like this that could help you stay on track with your goal?"

Sometimes, you will want to play out in your imagination an event that is likely to come up in the next few minutes, to prepare yourself for it, like if you are feeling stressed and really want to snack on high sugar/fat snacks. In situations like that, it can be helpful to imagine how you will deal with that when it happens, the good things that will happen if you resist, and how you will feel about that success later. Remember how you felt in the past when you resisted and didn't snack, and recreate that feeling.

"Shall we go through a practice exercise together?"

Let's try that now, putting together an image. We did one earlier when we were talking about how to you will manage (risky situation or thing they said they missed).

Think of a situation that you find especially challenging, and then imagine it is coming up soon. Create in your mind a mental image of what you will do leading up to the situation, what you will do in it, how good you will feel afterwards when you have stuck to your goal, and what positive effects you will notice because of it

Close your eyes now and spend a few moments playing out that mental image."

#### Allow participant 15 seconds for mental imagery

#### Discuss the participant's experience

"Can you describe what you imagined?"

"Using imagery to imagine a potentially risky situation and how you will overcome that situation is good practice to prepare for the situation and rehearse what you will do in that situation. You can use imagery in continuing with your snacking goal, or if you had other goals that you would like to achieve in the future"

## [5 Minutes] – Alternative Task

#### Guide participant through using imagery while doing another task

"Imagery doesn't always have to be done like we've been practising it here. Most people use imagery every day when making decisions or remembering or planning things, it just happens so quickly we often aren't even aware of it.

Imagery can be done quickly, and when you are doing other things. It's a trick you can carry with you everywhere, to use whenever you need it.

Can we practise using imagery while you do something else? You may find the image slips from your mind from time to time, and that's ok. When you notice that, bring it back into your mind and keep playing it through."

#### Allow participant 15 seconds to practice

#### Discuss the participant's experience

"Can you describe what you imagined?"

If image was not as vivid as during other practise, point this out and explain that this is normal and nothing to worry about. The images will usually be less vivid if the mind is working on other tasks at the same time. That doesn't mean it's not working.

## Recommend pairing imagery with an everyday task

"It will also help you to remember to use imagery and to get better at using it if you try to pair it with something you do every day, like brushing your teeth or doing the dishes. The more you practise it, the stronger it will become and the easier you will find it to create vivid mental images when you need them.

Imagery is especially helpful for times when you might be feeling challenged with your goal, and when you are making decisions about having a snack or not. It can help you to weigh up your options and how you will really feel about the choice you make, rather than getting carried away in the moment."

## [30 Minutes] – Open ended Interview

"If it's alright with you, I'd like to have an open and honest discussion with you about your participation in the research study. It's important that you talk about your experience as honestly as you can because it will help to shape the program for other people in the future".

So first of all:

What did you think of the program? (Opinion)

What was your experience with the program? (Experience)

What do you think might improve the program? (Suggestions)

## [5 Minutes] - Conclusion

"This was your final face-to-face session for the research study.

"Do you have any questions about what we have done today or throughout the research study?"

"To finish up the session, when practicing imagery, try to really focus on the positive outcomes and how good you will feel from them, try to remember past successes to keep yourself motivated to decrease snacking. Try to run through some scenarios where you have obstacles to overcome and imagine how you will overcome these obstacles to get to your goal"

## Briefly summarise the session

Goal

## Strategies and barriers

"Thank you for your time and your participation in the research study. I wish you all the best in the future"