

## PARTICIPANT INFORMATION SHEET

Name of study: **FOOD SWAPS Study**

Name of Investigators: Magaly Aceves-Martins and Baukje de Roos

You are invited to take part in a research study. Before you decide whether to volunteer, you need to understand why the research is being done and what it will involve. Please take time to read the following information carefully. Talk to others about the study if you wish.

Please do not hesitate to contact us (see our contact details below) if anything is unclear or if you want more information.

### What is the purpose of this study?

We know that changing our daily diet might be challenging, and for this reason, this study aims to understand what factors, at an individual level, affect the adoption of food swaps aiming to make your food choices healthier but also more environmentally sustainable, like consuming less red meat and more fish or plant-based products.

### Why have I been chosen?

You have been chosen because you fulfil our inclusion and exclusion criteria:

- You have expressed an interest in participating in this study.
- You are healthy and aged 18-30 years.
- You consume meat regularly as part of your diet.
- You possess a computer, tablet, or smartphone that you can access regularly throughout any day of the week.
- You are not vegan or vegetarian
- You are not having a clinical diagnosis of hypertension or high cholesterol, and you are not taking blood pressure and/or cholesterol-lowering medication
- You are not having unstable or untreated thyroid disorder
- You are not having any food allergies, and you are not having a history of an eating disorder
- You have not been on a weight-loss diet or you have not lost >5kg in the last 6 months.

### Do I have to take part?

Participating in this study is completely voluntary. If you decide to participate, we will screen you to see whether you are eligible to take part and provide you with a consent form to sign. Should you change your mind later, you can withdraw at any time and without giving a reason. A decision to withdraw at any time or a decision not to take part will not affect the standard of care you receive.

### What does the study involve?

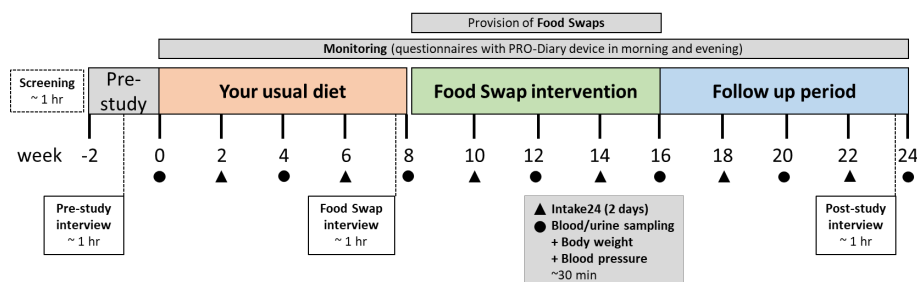
*Screening and interview*

We will ask you to complete a short health screening form to determine your eligibility for this study. This form will have a few personal questions about your overall health. We will also ask you about your red meat consumption.

If eligible, you will be asked to complete a series of short questionnaires about your general health, eating behaviour, activity levels, and sleep quality. This will take around 30 minutes to complete. We will then arrange a visit to the Rowett Institute before the start of the study, where we will conduct a short interview with you to learn more about your habits, which will take a maximum of 1 hour. The personalised questions you receive during the study (more information below) will depend on your responses to the questionnaires you complete at the start of the study, together with information you provide during the interview.

### Study schedule

The study will last 24 weeks, split into three, eight-week sections (see diagram below). For the first 8 weeks, you are requested to maintain your usual diet and physical activity habits. During the following 8 weeks, you will receive food swaps to include in your diet. For the final 8 weeks, we will stop providing you with these products.



### Self-monitoring

During the 24-week study, you will respond to a personalised survey twice a day that can be delivered to your smartphone through an app called m-Path or alternatively will ask you to wear a wrist-worn device called a PRO-Diary each day (see image). With either option, you will receive a personalised questionnaire to help identify what personal factors may affect your food choices. The questionnaires are answered using the touch-sensitive bottom slider to select responses and the top right button to confirm 'OK'.



You will answer two short questionnaires each day: one in the morning (taking ~2 minutes) and one in the evening (taking ~3 minutes), at times convenient to you – the device will alert you with a beep or buzz. The questions asked will remain the same throughout the entire study period.

Approximately 2 weeks into the study, you will receive an email link to complete two food intake questionnaires, covering two days of food intake. This will take approximately 20 minutes each time. This 2-day food intake questionnaire will be repeated every 4 weeks (at weeks 6, 10, 14, 18 and 22).

### Visits to Rowett Institute

The first visit (week 0) will be just before you start the study. During this visit, we ask you to arrive fasted so we can take a small finger prick blood sample to measure your cholesterol and glucose levels. This means we ask you not to eat or drink anything except water from 10 pm the night before.

You will be given instant feedback on your cholesterol and glucose levels. We will also ask for a small urine sample. We will measure your weight and blood pressure, and you will be provided with a light breakfast you can take away if you wish. We will then discuss the way you would like to answer the surveys throughout the study (m-Path or Pro-Diary). The whole visit should take no longer than an hour.

For the following 6 visits (at weeks 4, 8, 12, 16, 20 and 24) we will also ask you to arrive fasted so we can collect another finger prick blood sample and a urine sample. Each visit should take only half an hour. At each visit, your blood pressure and weight will be measured.

After your third visit (week 8) you will begin the 8-week intervention period. At the start, you will have a 1-hour session with the dietician to review your current diet and use an online 'food swap tool' to identify personalised food swaps based on your current diet. These food swaps are designed to reduce your red meat intake and to make your overall diet healthier and more environmentally sustainable. The tool will offer a range of food swaps, which you can accept or decline. We will record individual reasons for accepting and declining the swaps. Once accepted, you will receive the food, free of charge, for the duration of the intervention period (weeks 8-16). You will also receive advice on how best to incorporate these foods into your diet. From your fifth visit (week 16), we will stop providing you with the food swaps, but you will need to continue providing questionnaire responses on the m-Path app or PRO-Diary device.

At your final visit (week 24), you will return the PRO-Diary device (if you selected to use one) and complete the same questionnaires as at your screening visit after giving your final finger prick blood sample and urine sample. This visit will be no longer than one hour.

#### **What will happen to the responses I give?**

All responses to the questionnaires and activity data we receive from the m-Path app or PRO-Diary device you use will be coded to ensure anonymity. Urine samples will be processed and stored in secured designated freezers for a maximum of 5 years. Any original paper copies of questionnaires will be kept in the Rowett Institute for a maximum of 5 years after completion of the study. The analysed responses and data you provide will be stored on university servers for 10 years. Responses and device data will only be accessible by the University of Aberdeen research team.

#### **Expenses and payments**

You will receive £130 upon completion of the study as a contribution towards travel costs and your time spent on the study. You will also receive, free of charge, the personalised weekly food swaps you have been recommended to try by our dietician during the 8 weeks of the intervention.

#### **What are the possible benefits of taking part in the study?**

By participating in this study, you will learn about the healthiness and sustainability of your diet. The information we obtain from this study will increase our knowledge of how personalised factors can affect our dietary choices and health, and enable us to better tailor individual dietary interventions in the future.

**What are the possible disadvantages and risks of taking part in this study?**

The relatively long study duration and the high frequency of the questionnaires (e.g. twice a day) may sometimes feel inconvenient. Some people may experience some mild discomfort and bruising at the site of the blood sampling.

**What if there is a problem?**

If you have a complaint about your treatment during the study or any possible harm you might suffer, please contact one of the investigators (Magaly Aceves Martins or Baukje de Roos,) as soon as possible, and we will try to address the problem immediately. If you would prefer to speak to an independent person, please feel free to contact Dr Frank Thies at +44 (0)1224 437954 or at [f.thies@abdn.ac.uk](mailto:f.thies@abdn.ac.uk).

**Who has reviewed this study?**

This study has been reviewed and approved by the Rowett Ethics Committee.

**Who is organising and funding the research?**

The Rowett Institute organises this study. The research is funded by the Scottish Government Rural and Environment Science and Analytical Services Division (RESAS), and they will provide the food products for this study. RESAS will not be involved in the data analysis nor the interpretation of results.

**Will my taking part be kept confidential?**

Yes. Your data will be coded and stored in lockable cabinets or on University of Aberdeen password-protected computers and shared drives. The code that can link the data to you will be stored separately. Any publications arising from these data will not identify you as a participant. Any individualised questions or responses will be referred to using minimal non-identifiable characteristics such as age and gender only.

**STUDY CONTACTS****Study research manager****Magaly Aceves-Martins**

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