

National Diet and Nutrition Survey (NDNS)

Interviewer Project Instructions

P12229.01



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1 Study Overview

1.1 Background

The National Diet and Nutrition Survey Rolling Programme (NDNS RP; for simplicity, referred to as “NDNS” in these instructions) is a survey of the food consumption, nutrient intakes and nutritional status of people aged 1.5 years and older living in private households. The survey is carried out in all four countries of the United Kingdom (UK) and is designed to be representative of the UK population. The study is jointly funded by Public Health England (PHE), an executive agency of the Department of Health, and the UK Food Standards Agency (FSA). A boost sample in Northern Ireland is commissioned by FSA in Northern Ireland and its funding partners.

The NDNS RP has been running since 2008 and will be entering its eleventh fieldwork year in 2018. NatCen have been leading the consortium running the study since the beginning of the RP. The study was previously carried out in conjunction with the Medical Research Council Elsie Widdowson Laboratory (MRC EWL; formerly MRC Human Nutrition Research) but due to the closure of MRC EWL at the end of 2018, the new NDNS contract (for Years 11-14/15) will be carried out in partnership with the MRC Epidemiology Unit (MRC Epi), University of Cambridge.

Interviewer fieldwork in Northern Ireland is carried out by the Northern Ireland Statistics and Research Agency (NISRA). Nurse fieldwork in Northern Ireland will be conducted by NatCen nurses. Haematological and biochemical analyses of blood samples are carried out at MRC Epidemiology Unit and NIHR BRC-MRC Biorepository, Cambridge.

1.2 NDNS in a nutshell

NDNS is a UK-wide study that aims to measure people’s nutritional health. It involves participants aged 1.5 years upwards. Pregnant and breastfeeding women are excluded because of their special nutritional needs. There are 3 main interviewer visits to each household covering face-to-face interviews, a physical activity self-completion questionnaire for those aged 16 years and over, a 4-day food diary and height & weight measurements. The interviewer visits are then followed by a nurse stage which will follow as soon as possible after the final interviewer visit. The nurse will usually make 1 visit to each household taking physical measurements (waist & hip, demispan, and infant length) and collecting a blood sample.

Purpose and Aims

NDNS provides the only source of high quality nationally representative data on the types and quantities of foods consumed by individuals, from which estimates of nutrient intake for the population are derived. Results are used by Government to develop policy and monitor progress on diet and nutrition objectives of UK Health Departments, for example those set out in the *Healthy Lives, Healthy People White Paper* in England and the *Supporting Healthy Choice Paper* which sets out the action required to shape and better support healthier diets in Scotland.

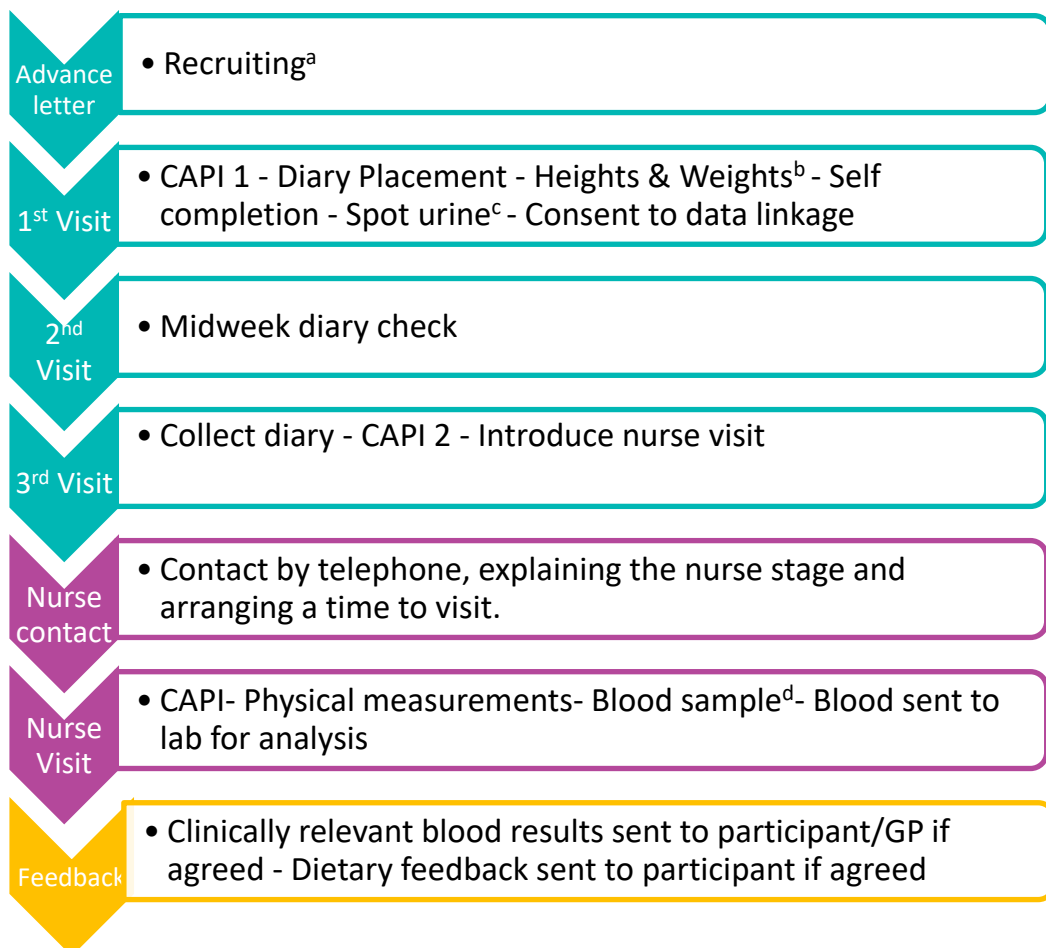
The food consumption data are also used by FSA to assess exposure to chemicals in food, as part of the risk assessment and communication process in response to a food emergency or to inform negotiations on setting regulatory limits for contaminants.

The specific aims of NDNS are to:

- provide quantitative data on the food and nutrient intakes, sources of nutrients and nutritional status of the UK population aged 1.5 years and above;
- provide information on trends in food consumption, nutrient intake and nutritional status in different age groups;
- describe the characteristics of individuals with intakes of specific nutrients above or below the national average;
- produce a database of food consumption which will be used to calculate intakes of natural toxicants, contaminants, additives and other food chemicals;
- measure blood and urine indices that provide evidence of nutritional status or dietary biomarkers, and to relate these to dietary, physiological and socio-demographic data;
- provide height, weight and other anthropometric measurements and examine their relationship to socio-demographic, dietary, biochemical and health data;
- monitor the diet of the population to establish the extent to which it is adequately nutritious and varied;
- monitor the extent to which the diets of population sub-groups vary from expert recommendations;
- assess total energy expenditure and physical activity levels and patterns in the study population; and
- provide information on oral health status in relation to diet and nutritional status.

Fieldwork

From Year 11 nurse fieldwork will follow directly after interviewer fieldwork (i.e. the 2-4 months gap in previous fieldwork years has been removed). Fieldwork will be issued in 12 monthly waves (April 2018 – March 2019). Below is a flowchart for NDNS, which you might find useful when mapping out your visits.



^a From Year 11, all advance letters will be sent from the NatGen office.

^b Heights and weights are included in the CAPI as a parallel block. This can be completed at any point after CAPI 1.

^c Spot urine is included in CAPI 1; however there will be an option to collect urine on visit 3 if it couldn't be collected at visit 1. (Urine samples cannot be collected at visit 2).

^d Nurses take a fasting blood sample. If the participant is unable/unwilling to fast but willing to provide a sample, then a non-fasting sample may be taken.

1.3 Website

We have a website specifically dedicated to NDNS, which provides information about what taking part in the study involves. It also explains why we need NDNS and what the data produced is used for. The website only provides basic information about what taking part involves as we want to leave the finer details to be explained by you, our expert interviewers!

The website can be found at:

www.natcen.ac.uk/taking-part/studies-in-field/national-diet-and-nutrition-survey

The website address is also on advance letters and leaflets. Please take time to familiarise yourself with the site and direct participants or potential participants towards it.

1.4 Changes for Year 11

Since Year 11 is the start of a new NDNS contract we have introduced a number of changes to reflect policy interests and to make the study run smoothly:

1.4.1 New collaborator

Working with a new collaborator, (MRC Epi) who will be responsible for leading the scientific and dietary elements of the study including the coding of food diaries, co-ordination of field laboratories, processing and analysing urine and blood samples and the management of the Nutrient Databank.

1.4.2 Fieldwork

The long gap between interviewer and nurse stages has been removed. NDNS will revert to the 'interviewer-nurse follow on' model for fieldwork (as for the Health Survey for England (HSE) currently and NDNS Year 1). This will reduce the number of participants who drop out between the interviewer and nurse stages. This model has been proven to work for HSE, but its success relies on the communication between interviewers and nurses. Therefore when you get your first assignment, please check who your nurse partner will be for your point.

1.4.3 Documents

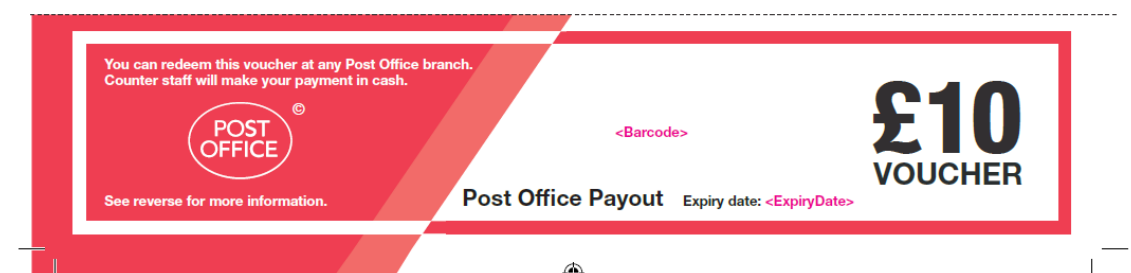
Most documents have been updated to reflect the consortium organisations and revised content/protocols. A list of documents that can be re-used from Year 10 is included in your work pack. Please refer to this list to ensure that you are using the correct documents.

To ensure NatCen complies with data security requirements, NDNS will come in line with all other NatCen projects and advance letters will be sent out from the office.

Advance letters and leaflets have been updated to reflect the changes to the survey.

1.4.4 Incentives

The advance letter sent to 'Basic' addresses will include an unconditional £10 Post Office voucher.



At Young Person 'screening' addresses, a £10 Love to Shop gift card will be given on completion of the Main Food Provider (MFP) section of the questionnaire.

Those completing at least three diary days will be given £25 gift card and those providing a spot urine sample will be given a £5 gift card.

Note: the £5 incentive for agreeing to see a nurse is no longer offered as the long gap between the interviewer and nurse stages has been removed.

Those providing a blood sample during the nurse visit will be given a £15 gift card.

See section 15 for information on administering gift cards.

1.4.5 Nurse visit

For Year 11, a number of changes have been made to the nurse visit:

- The long gap between interviewer and nurse stages removed. NDNS will revert to 'interviewer-nurse follow on model for fieldwork (as for HSE and NDNS Year 1).
- Emphasis of the nurse visit is on gaining a blood sample.
- Move from Starstedt Monovette venepuncture system to BD Vacutainer system to collect the blood sample.
- If a participant is willing to provide a blood sample but is unable/refuses to fast, a non-fasting sample can be taken.
- Changes to incentives offered to participants.
- Use of barcode scanners for labelling blood samples.
- Leaflets have been updated to reflect the changes to the project

Boost cases in Northern Ireland will not be eligible for a nurse visit (NI core cases only will be visited by a NatCen nurse).

1.5 NDNS report publications

1.5.1 NDNS UK Report

A number of reports for the UK as a whole and for each of the devolved countries (Scotland, Wales and Northern Ireland) are available on www.gov.uk. Links are also available via the NDNS website: www.natcen.ac.uk/taking-part/studies-in-field/national-diet-and-nutrition-survey.

Some key findings from the Years 5/6 report are shown below. (A further report from Years 7/8 will be published in March 2018 but unfortunately not in time to be included in these instructions);

Fruit and veg

Most people did not meet the 5 A Day' guideline:

- Eight per cent of children aged 11 to 18 years met the 5 A Day recommendation for fruit and vegetable consumption. The proportion of adults meeting the 5 A Day recommendation was 27% of those aged 19 to 64 years and 35% of those aged 65 years and over.
- There were no significant differences between Years 5 and 6 (combined) and Years 1 and 2 (combined) for any age/sex group either in terms of average number of portions consumed or the percentage meeting the recommendation.

Oily fish

Most people don't eat enough oily fish:

- Mean consumption of oily fish in all age groups was well below the recommended one portion per week. There was no evidence of any change in consumption over time.

Red meat

- Mean consumption of red and processed meat for women aged 19 to 64 years and 65 years and over met the current maximum recommendation for adults. However, mean consumption by men aged 19 to 64 years and 65 years and over exceeded the recommendation.

- For adults aged 19 to 64 years, mean consumption of red and processed meat was significantly lower in Years 5 and 6 (combined) and Years 3 and 4 (combined) than in Years 1 and 2 (combined) (65g, 68g and 74g, respectively).

Sugars

Non-Milk Extrinsic Sugars (NMES) are added to foods during manufacture and preparation and also include naturally occurring sugars in foods such as fruit juices. Mean NMES intake exceeded recommendations (no more than 11% food energy) for all age/sex groups:

- Children aged 4 to 10 years had a significantly lower percentage of food energy from non-milk extrinsic sugars (NMES) in Years 5 and 6 (combined) compared with Years 1 and 2 (combined). However, mean intakes of NMES continued to exceed recommendations for all age groups, with the exception of women aged 65 years and over. There were no statistically significant differences over time in other age groups.

1.5.2 Folate intakes

In November 2017 Public Health England republished a report on their website on blood folate levels using data from NDNS.

- The report showed that a substantial proportion of women of childbearing age (16-49 years) have low blood folate levels, in particular women under 25 years, and women living in Scotland and Northern Ireland.
- This is a concern, as low folate levels increase the risk of spina bifida and other neural tube defects during pregnancy.
- The government already recommends that women should take folic acid supplements daily during pregnancy, in order to minimise this risk. The Department of Health is now considering other expert advice that folic acid should be added to bread flour in the UK, in the light of these new results from NDNS.

1.6 NDNS Impact

NDNS data provides crucial evidence for major health campaigns and policy making. Some examples of these are the Public Health Responsibility Deal and the Change4Life campaign.

Sugar Reduction and Reformulation Programme

The sugar reduction and reformulation programme is a voluntary programme designed to encourage the food industry to take 20% of sugar out of their products by 2020, with a

target 5% reduction in its first year of implementation. This affects the retailing, manufacturing and 'eating out of home' sectors.

The main methods that businesses are using to reduce the amount of sugar in their products are:

- Product reformulation
- Reduction in the portion size of, and/or the number of calories in products that are likely to be consumed by an individual at one time
- A shift in consumer purchasing towards lower/no added sugar products

Soft Drinks Industry Levy

The introduction of a soft drink levy was announced in March 2016 and comes into law in April 2018. As we know from NDNS data, sugar-sweetened soft drinks are the primary source of sugar for children aged 4-18, and so reducing the sugar in these drinks will have a massive impact in sugar consumption for children.

The soft drinks industry levy will apply to manufacturers and importers of added-sugar soft drinks across the UK (pure fruit juices and milk-based drinks are exempt). It has been created to incentivise businesses to reformulate their products. There are two rates that industries will need to pay based on total sugar content:

- 18p per litre for the lower sugar products (5g/100ml and above)
- 24p per litre for the higher sugar products (8g/100ml and above)

Revenue created from the levy will be spent on school programmes and lessons such as physical activity and breakfast clubs, to encourage healthy eating and exercise.

Change4Life

The Change4Life campaign is a commitment for individuals, families and communities to live healthier lives. Their aim is to educate people on healthy eating and how to stay active, providing useful tips such as how to get your 5-a-day, how to reduce salt and how to cut back on fat. Their slogan, *Eat Well Move More Live Longer* encourages people to adopt simple behaviours that will help them to be healthier. For further information please refer to <https://www.nhs.uk/change4life>.

1.7 Media coverage

The data contained in the NDNS reports receives fantastic coverage; here are just a few of the articles that have referenced NDNS.



2 Planning and organising your time

2.1 Contact list

If you have a project specific query, you should first contact your Field Performance Manager (FPM) or Regional Manager. They will then pass you on to the appropriate colleague if they cannot answer your question.

The Equipment team, Logistics, IT support, Data Unit and the Freephone team are all based in Brentwood.

- The **Equipment Team** will assist you if you have any queries relating to documents or supplies.
- **Logistics** organise briefings, issue assignments, deal with incentives and help with translations.
- **IT support** will help you with any IT issues.
- The **Data Unit** should be contacted if you have any queries with the CAPI program
- The **Freephone Team** operates the participant helpline, so they will contact you if someone calls to cancel or reschedule their visit.

Contact list		
Project Number	P12229.01	Telephone
Brentwood	Switchboard – call and ask to speak to the relevant department	01277 200600
	Equipment Team Equipment@natcen.ac.uk – Subject: Stationery\Workpack on P12229.01	01277 690006
	Logistics Logistics@natcen.ac.uk – Subject: Incentives on P12229.01	Call switchboard and ask to speak to Logistics
	IT Support	01277 690200
	Data Unit DataUnit@natcen.ac.uk - Subject- Program query on P12229.01	Call switchboard and ask to speak to the Data Unit

2.2 NDNS Fieldwork dates

Fieldwork dates						
Quarter	Month	Work pack dispatch	CAPI LIVE Date	Fieldwork start	Interviewer deadline	<i>Nurse deadline</i>
Q1	1004: APR	Mon 26 Mar	Thurs 29 Mar	Sun 1 Apr	Sun 6 May	Sun 24 Jun
	1005: MAY	Tue 24 Apr	Fri 27 Apr	Tues 1 May	Tues 5 Jun	Tue 24 Jul
	1006: JUN	Fri 25 May	Tue 29 May	Fri 1 Jun	Fri 6 Jul	Fri 24 Aug
Q2	1007: JUL	Mon 25 Jun	Thurs 28 Jun	Sun 1 Jul	Sun 5 Aug	Sun 23 Sep
	1008: AUG	Wed 25 Jul	Mon 30 Jul	Wed 1 Aug	Wed 5 Sep	Wed 24 Oct
	1009: SEP	Fri 24 Aug	Wed 29 Aug	Sat 1 Sep	Sat 6 Oct	Sat 24 Nov
Q3	1010: OCT	Mon 24 Sep	Fri 28 Sep	Mon 1 Oct	Mon 5 Nov	Mon 24 Dec
	1011: NOV	Thurs 25 Oct	Mon 29 Oct	Thurs 1 Nov	Thurs 6 Dec	Thurs 24 Jan
	1012: DEC	Mon 12 Nov	Fri 16 Nov	Mon 19 Nov	Mon 24 Dec	Mon 11 Feb
Q4	1001: JAN	Wed 12 Dec	Wed 19 Dec	Wed 2 Jan	Wed 6 Feb	Wed 27 Mar
	1002: FEB	Fri 25 Jan	Tue 29 Jan	Fri 1 Feb	Fri 8 Mar	Fri 26 Apr
	1003: MAR	Fri 22 Feb	Tue 26 Feb	Fri 1 Mar	Fri 5 Apr	Fri 24 May

2.3 Documents and Equipment

Please see below for a list of documents and equipment you will need, in visit order. Before starting work, check that you have all supplies and contact Operations in Brentwood immediately if anything is missing (see contact list in section 2.1).

Pre Doorstep	
Project instructions	White
Doorstep	
Laminated advance letters	White
ARF (Basic addresses)	Blue
ARF (Young person addresses)	Cream
NatCen leaflet	White
Stage 1 leaflet – Adult	Turquoise
Stage 1 leaflet – Child	Turquoise
Visit 1	
Contact cards	Turquoise
CAPi show cards	Cream
Interviewer laminate pack	Various
Interviewer diary assessment schedule	White
Food diary – adult (A4)	White
Food diary – adult (A5)	White
Food diary – child (A4)	White
Food diary – toddler (A5 – parent fills in)	White
Diary instruction booklet – adult (A5)	White
Packaging cards (<i>in zipper bag</i>)	White
Extra diary pages	White
Food diary reminder card	Pumpkin
Carer leaflet	White
Carer food and drink recording sheet (<i>4 in each carer pack zipper bag</i>)	Blue

Pre Doorstep	
Measurement Record Card	White
BMI Leaflet (16+ years)	Turquoise
Scales	N/a
Stadiometers	N/a
£10 gift card for completion of MFP interview (if Young Person address)	N/a
Spot Urine (Can be done at visit 1 or visit 3)	
Spot urine leaflet – Adult	Turquoise
Spot urine leaflet – Child	Turquoise
Spot urine consent form - Adult (16 years+)	White
Spot urine parental/guardian consent form - Child (14-15 years)	Light Blue
Spot urine child assent form - Child (14-15 years)	Light Blue
Spot urine postal form	White
Spot urine tube and form barcodes	White
Interviewer laminate pack	Various
Spot urine kit <ul style="list-style-type: none"> • Universal tube • Rigid outer packaging • Padded envelope – Pre paid and pre-addressed 	N/A
Permanent marker pen	Black
Disposable gloves	N/A
Sealable plastic bag	N/A
Certificate for children	White with stars
Sticker for children	N/A
£5 gift card	N/A
Visit 2 (Midweek diary check)	
Interviewer diary assessment schedule	White
Green pen	N/A

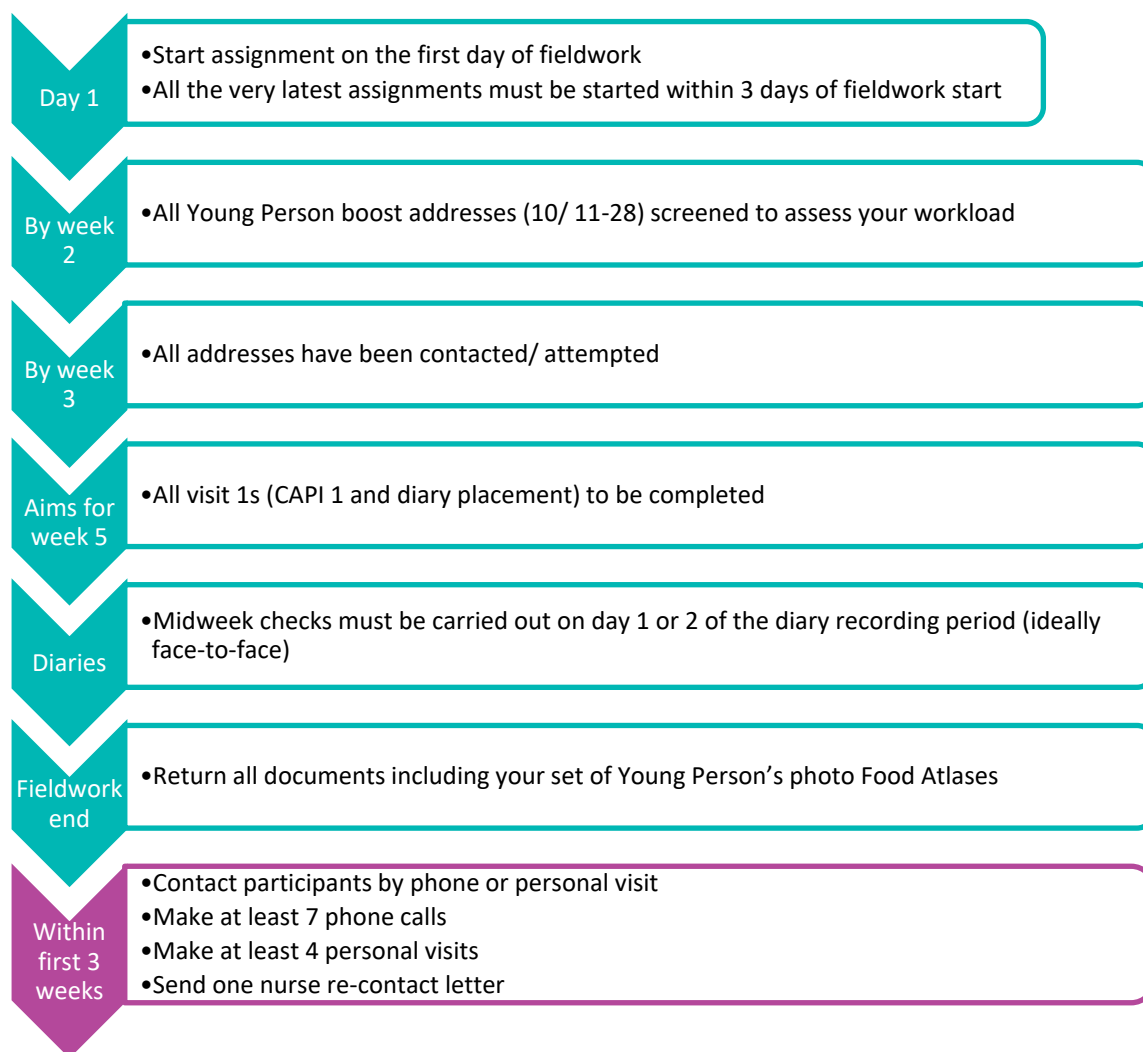
Pre Doorstep	
Laminate pack – IDAS prompt	White
Diary instruction booklet – adult (A5)	White
Young person food atlas – booklet (x3)	Purple
Visit 3	
CAPi show cards	Cream
Stage 2 leaflet – Adult	Turquoise
Stage 2 leaflet – Child	Turquoise
£25 Gift Card	N/A
Physical Activity self-completion (16+ years)	Lilac
Interviewer diary assessment schedule	White
Diary instruction booklet – adult (A5)	White
Laminate pack – IDAS prompt	White
Young person food atlas – booklet (x3)	Purple
Diary evaluation sheet	Light Green
NHSCR consent form (England, Scotland, Wales, Northern Ireland)	Pink

2.4 Interviewer calendar

You will receive an ‘Interviewer calendar’ in your workpack. These calendars outline start and end dates of fieldwork, as well as key deadlines for the very last day you can do CAPi 1, place diaries, and complete CAPi 2.

2.5 General milestone guidance

Below is a list of all key milestones for NDNS assignments. Field Performance Managers (FPMs) will contact you on a weekly basis to check progress against this information:



2.6 ARF Task list

Make use of the task list and section to record diary dates on page 3 of the ARF – this will help you keep track of dates household visits are needed and tasks that you will need to complete.

2.7 KPIs

- You should aim to visit all your addresses within the first 7 days of fieldwork
- Milestone 1 – by half way through the fieldwork period, 60% of your addresses should be covered
- Milestone 2 – by three quarters of the way through the fieldwork period, 80% of your addresses should be covered

3 Participant feedback

The research team recently conducted a series of qualitative interviews during which we asked past participants about their experience of NDNS.

Participants really enjoyed NDNS, and many of them highlighted you, the interviewer, as the driving factor that made them take part. Your work on the doorstep is so vital in convincing people to participate, so well done to those of you who have worked on NDNS previously. And if you are new to NDNS, we hope some of the quotes below motivate you to do your best on the doorstep!

(I would give NDNS) top marks...everyone was very nice and very good

(The interviewer) helped me fill it in at the end and reminded me about certain things so it was all ok

It was cool...the lady was very nice and really flexible. I run my own company so I'm here, there and everywhere so she was good at fitting around my time schedule. She was very nice and very professional.'

The nurse was very good and very nice. She was good at her job. I've had many blood tests in the past and people weren't as efficient as she was.

It's good for me to know what I actually have every day rather than just guessing

The interviewer who came to the door was lovely...she was so friendly

4 Definitions for selection



4.1 Dwelling Unit (DU)

A Dwelling Unit (DU) is an address or part of an address, which has its own front door. The front door does not have to be at street level, but it must separate one part of the address from other parts (i.e. only those who live behind the door have access to the area, it is not a communal part of the address).

A DU need not be fully self-contained - for example, an address may contain four bed-sitters, the inhabitants of whom share a bathroom. Each bed-sitter would count as a DU as long as it had its own front door.



4.2 Household

The standard definition of a household applies to NDNS: One person living alone or a group of people (not necessarily related) living at the same address (or the selected DU within the address) who share cooking facilities AND share a living room or sitting room or dining area.

Also see the Interviewers' Manual for further information on establishing who is resident at the address and on dividing residents into households.



4.3 Catering Unit (CU)

The Catering Unit (CU) is the primary grouping for this study. It is a "group of people who eat food that is bought and prepared for them (largely) as a group".

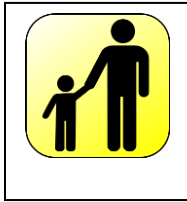
Occasionally a household will be found to consist of more than one CU. Although people may share accommodation and even be related, they may not be in the same CU. For example, young adults sharing a house with their parents may shop, cook and eat by themselves, in which case the parents would be in one CU and the children in another.



4.4 Main Food Provider (MFP)

The Main Food Provider (MFP) is the person in the CU with the main responsibility for shopping and preparing food. If these tasks are equally shared between two people for example if one person does all the shopping and another person does all the cooking, then either

resident can be classified as the MFP but, if possible, information should be obtained from both of them when the MFP interview is being completed.



4.5 Adult and young people age groups

For the purposes of participant selection:

- **adults** are aged **19 years and over**
- **young people** are aged **1.5 – 18 years**

So, for participant selection, those aged 16, 17 and 18 are counted as young people rather than adults but in the questionnaire and for all other purposes (e.g. diary administration, obtaining consents), they will usually follow the same routing and be treated the same as those aged 19+.

What to do if a participant is aged 18 at selection, but turns 19 before doing CAPI1?

The age at the time of participant selection (i.e. the date you administer the ARF) determines adult/young person status on NDNS, regardless of any imminent birthdays.

If during selection someone is currently 18 but will have their 19th birthday soon, they are still counted as a young person and should be included in the relevant person selection grid on the ARF.

If they are selected as the young person participant and turn 19 before you return to do CAPI 1, you will have to allocate the appropriate unproductive code for this individual. You should not do a re-selection.

5 Your sample

5.1 Who to interview

4480 addresses will be issued to interviewers in 160 points across the UK. This sample will include boost addresses in Northern Ireland. Scotland and Wales are included in the core UK sample but neither country has been boosted.

Selecting participants;

- There are 28 addresses in each assignment.
- There are 2 types of addresses: 'Basic' and 'Young Person Boost' addresses.
- Pregnant and breastfeeding women are excluded from taking part.

The overall assignment size remains at 28 addresses but to increase the number of selected young people, some points will have an additional young person boost address, and one less basic address. So, your assignment will contain either:

- 10 Basic addresses and 18 Young Person addresses **OR**
- 9 Basic addresses and 19 Young Person addresses

The split has been made at random, so please make sure to check your sample split before starting work.

Basic addresses

- Addresses 1-9/10 are basic
- Has a **blue ARF**
- Select up to 2 participants: one adult (aged 19+) and one young person (aged 1.5-18 years).
- The ARF will guide you through the procedures for participant selection (see section 6)

Young Person boost addresses

- Addresses 10/11-28 are young person boosts
- Has a **cream ARF**
- Select only one person aged between 1.5-18 years
- The ARF will guide you through the procedures for participant selection (see section 6)
- Screen out any households that don't contain anyone aged 1.5-18 years
- No adult will be selected at these addresses

5.2 Household visits

Interviewers make three main visits to a participating Catering Unit (CU).

- For CUs with an adult and a young person participant you should try to interview the adult and young person at the same visits, to avoid additional visits.
- Page 3 of the ARF has space for you to enter appointments made with participants and a checklist of tasks.

5.3 Consent for children aged under 16 years

For all **children under 16 you must get permission from the child's parent(s) before you interview** the child. Always give preference to the legal parent/guardian. If a child is not living with his/her legal parent/guardian, permission should be obtained from the person(s) in the CU who is *in loco parentis* for that child on a permanent/long-term basis (for example, a foster parent or a grandparent).

If the **parent(s) are temporarily away** from home and will be throughout your fieldwork period and have left them in the care of a close relative, then if that relative feels they can give permission for a child to be interviewed, this is acceptable. A non-relative must never be taken as the person *in loco parentis* in this type of situation.

You are asked to record the name of the parent/guardian who gave permission for their child to be interviewed on the ARF and in CAPI.

If there is any disagreement between parents, or between parent and child about taking part, you should respect the wishes of the non-cooperating person. You can interview a child under 16 if the adult selected doesn't want to take part but is happy for the child to be interviewed. Young people who are aged 16 or above and give consent to take part can do so without permission from their parents though it is good practice to check that the resident parent(s) is happy for the interview to go ahead

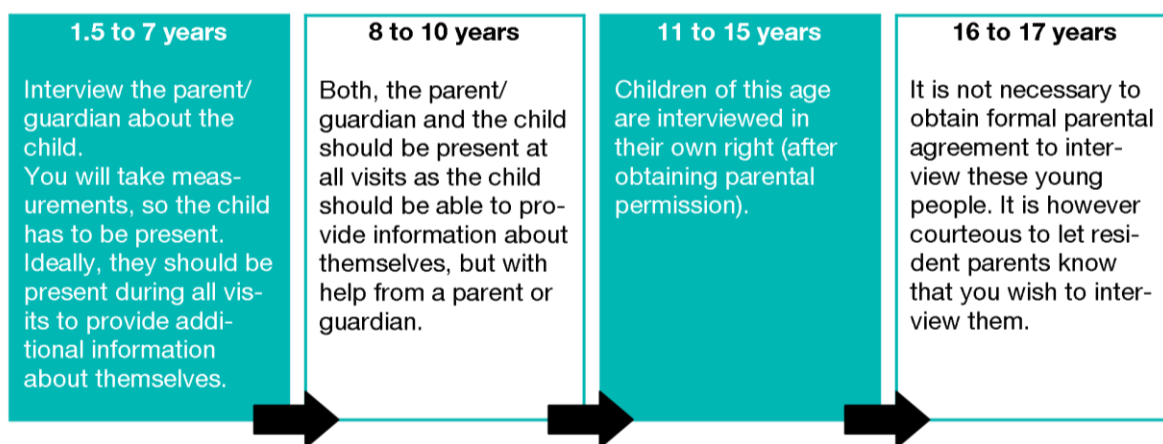
5.4 Interviewing children aged under 16 years

The parent or "guardian" of a child **must** be present at the time you carry out the interview.

For **children under 8**, the interview will be mainly completed by the parent/guardian about their child.

For **children aged 8-10**, the parent/guardian and the child should both be present whilst you carry out the interview, and the interview will be a "joint effort" between the child and their parent/guardian.

Older children (11-15 years) can complete the interview themselves. The parent/guardian need not necessarily be in the same room but they must be at home and be aware that you are carrying out the interview. This protects both the child and yourself.



5.5 Proxy interviews

Apart from interviews with young children (aged 1.5-7 years); you should **not** complete individual interviews by proxy. If a person is unable to complete the interview in person and no translator (within the household) is available then use the appropriate code (e.g. language difficulties).

You may conduct the **MFP interview** with the selected adult if the MFP is not – and will not – be available.

5.6 Use of translators & informed consent

If you have used a household member to translate for the participant while completing the interview, you must record this in the admin block as a note to the nurse. The nurse can only take a blood sample from participants who can provide informed and written consent. If you have concerns about a participant being able to do this please contact the office after your first visit to the household and they will advise whether it is appropriate for the participant to be offered a nurse visit.

5.7 Excluding pregnant/breastfeeding women

NDNS does not include pregnant nor breastfeeding women, because of their special nutritional needs.

- On the doorstep, before beginning the participant selection process, if possible find out whether anyone in the CU is pregnant/breastfeeding, and exclude them from the selection grid. The total number of people in the CU should not include a pregnant/breastfeeding person.
- If you select a woman between the ages of 16 and 50, you might want to check with her then that she is not pregnant/breastfeeding, before beginning the interview. If she is pregnant/breastfeeding, you will need to carry out another selection.
- CAPI includes an early question which double-checks that the selected participant(s) is not pregnant/breastfeeding. If you accidentally select a pregnant/breastfeeding woman you can reselect your participant. Note that this is the only opportunity/instance in which you can re-select participants.

-
- If it is a single adult (19+) CU with children and the adult is pregnant/ breastfeeding, then you will attempt to interview a young person (1.5-18 years) only.

6 Doorstep approach

6.1 Advance letters and survey leaflets

- An advance letter, printed on PHE and FSA headed paper, describing the purpose of NDNS is sent from the office to all sampled addresses a few days in advance of fieldwork. The letter briefly describes the study and states that you will be calling and is accompanied by a leaflet explaining more about NDNS.
- There are two versions of the letter – one for the ‘basic’ addresses (1-9/10) and another for the ‘young person’ addresses (10/11-28).
- You have been given a laminate copy of the advance letters to use as a reminder.
- There are adult and child versions of the stage 1 leaflet. The appropriate version of the leaflet should be given to the participants selected for full interview. Read the leaflets carefully - they will help you answer some of the questions people might have.
- If participants would like more information about the survey they can visit our website www.natcen.ac.uk/taking-part/studies-in-field/national-diet-and-nutrition-survey, contact NatCen by phone using the Freephone number 0800 652 4572, or emailing NDNS@natcen.ac.uk. All these details are found on the advance letter.

6.2 Doorstep introduction

The general rule is to keep your initial introduction short, clear and to the point. Keep your explanation as short as possible saying as little as you can get away with:

- Show your identity card
- Say who you are
- Say who you work for
- Say that you are carrying out an *‘important survey about the diet and nutrition of people (living in the UK)’*.

Only elaborate if you need to. Introduce one new idea at a time. Do **not** give a full explanation right away - you will not have learned what is most likely to convince that particular person to take part.

On the doorstep, concentrate on obtaining the interview. Do **not** mention measurements – this may put some people off. The interview and dietary data collection are very important, and we want them even if we do not get any measurements for a person.

What you might mention when introducing the survey

- Where possible, refer to NatCen by its full name; the National Centre for Social Research
- It is a national survey being carried out by the National Centre for Social Research on behalf of Public Health England (PHE) and the Food Standards Agency (FSA). NatCen are conducting the study in collaboration with the University of Cambridge Medical Research Council Epidemiology Unit.
- **For Scotland** The survey is being carried out by NatCen on behalf of Food Standards Scotland.
- **For Northern Ireland** The survey is being carried out by NISRA on behalf of the Food Standards Agency in Northern Ireland.
- **For Wales** The survey is being carried out by NatCen on behalf of the Welsh Government.
- Mention that they would have received a letter and, if a basic address (address number 1-9/10), a £10 post office voucher
- It is an extremely important survey; this is because it is the only way of collecting accurate information on the diet and nutrition of the UK population.
- It will provide PHE and FSA/FSS (and the Welsh Government if in Wales) with accurate and up-to-date information on the diet and nutrition of the population.
- The information will be needed by whichever government is in office. To get an accurate picture, we must talk to all the sorts of people who make up the population - the young and the old, those with varied and unvaried diets, and those who like the current government's policies and those who do not.
- Each person selected to take part in the survey is vital to the success of the survey. Their address has been selected - not the one next door. No one else can be substituted for them.
- No one outside the research team will know who has been interviewed, or will be able to identify an individual's results.
- The data will be an anonymised statistical summary of everyone's answers.
- Participants who complete at least three diary days can receive feedback based on their diet over the four days of recording.
- Use information from previous waves about how the results are used to inform policy and help people in society now and for future generations e.g. health issues in schools, childhood obesity, levels of salt in food.
- Highlight the benefits to the participants – incentives, dietary feedback, how they will help improve food standards.
- Be positive and keep smiling. Be polite and persistent.
- Avoid too much detail upfront on the doorstep.

- Highlight we want to do the study regardless of what participants eat (for those put off by the negative feedback on their bad diets).
- Highlight PHE and Food Standards (and the Welsh Government if in Wales) – they add authenticity.
- **THERE IS A £25 TOKEN OF APPRECIATION FOR EACH INDIVIDUAL TAKING PART (plus £5 for providing a urine sample)**

6.3 Doorstep introduction for the Young Person boost sample

At 'young person' addresses we are only looking for young persons aged 1.5 -18 years. We are therefore looking for people from what might be seen as a 'vulnerable' group. You need to think carefully about your doorstep approach in these cases and be ready with explanations if questioned by household members.

What you might mention when introducing the survey

- The main reason we are targeting people in this age group is to get an accurate picture of diet and nutrition from all different people, including those who are younger.
- The diet, nutrition and health of children and young people are very important to us so we need to interview more people of this age to get accurate data. This is why in some addresses we will be focusing our attention on young people.
- Make it clear to parents that you can only interview children under 16 if the parent or legal guardian is present.
- There is a Freephone number on the advance letter if the participants want further clarification. Brentwood operation staff and the research team would be happy to answer any questions they may have.
- There is a £25 incentive for each individual who provides a complete diary.
- There is a £10 token of appreciation if the Main Food Provider section of the interview is completed.

6.4 Dietary feedback example

In your laminate pack there is an example of the personalised dietary feedback that the participant can receive if they complete at least three diary days. You may wish to use this to encourage people to take part in the study.

7 The ARF

7.1 Basic and Young Person ARFs

You will receive a pre-labelled ARF for each of the addresses in your sample. Note that there are two versions of the ARF. The ARF header tells you whether the address is a basic address or a young person address.

BLUE - BASIC ADDRESS ARF

- for addresses 1-9/10 where you will aim to select one adult (19+ years) and one young person (1.5 -18 years)

CREAM - YOUNG PERSON ADDRESS ARF

- for addresses 10/11-28 which includes a screen for young people aged 1.5 - 18 years. (No adult is selected at these addresses)

Each ARF enables you to:

- record all attempts to make contact at the address
- select a DU
- select a CU (within the selected DU)
- at basic addresses: select an eligible adults (19+ years) within the selected CU
- at young person addresses: select an eligible young person (1.5-18 years) within the selected CU
- record the name of the legal guardian who gave consent for anyone under 16 years old
- record the final outcome for the selected participant(s)
- It also provides a checklist of the tasks

7.2 Address label

The Address Label at the top of the ARF gives, in addition to the full address, an eight-digit serial number plus a check letter. It is made up of:

- Two digits for the YEAR ('11' for year 11, 2018/19)
- Two digits for the MONTH (01=January; 04=April etc.)
- Two digits for the Point number, within month (01..12)
- Two digits for the Address number, within point (01..28)
- A check letter.
- **Country boost points** (for interviewers working in Northern Ireland), will be indicated by *CB* in the top right hand corner of the address and selection labels.

CHECK LETTER FIELDWORK MONTH

SERIAL
NO.

ADDRESS

→
SN: 110404-01-J RI1 FA: 2 ←
FIELD AREA

26 Bedford St
 Altrincham
 WA23 2PP

The **serial number** is the anonymised number assigned to that household. You will be asked to write it on a number of documents (e.g. self-completions). This enables the office to match all the documents from one household together. You also use this serial number to access the interview in the CAPI. When you open a CAPI questionnaire you should make sure that you select the address number that corresponds to the address number of the ARF label.

7.3 Selection label

The selection label on the front page should be used where there are two or more DUs or CUs and you have to select one at which to interview. This label is also used when the selected CU contains two or more persons and you have to select one as the participant. Further information on selection procedures and an example of the label is provided in section 6.7

7.4 Final outcome (top right corner of the ARF)

This is the outcome code for the **whole** CU. For addresses or CUs which are totally unproductive, this code will come from the ARF. For CUs which were productive (or partially productive) it is calculated within CAPI. It can only be coded when you have completed all your tasks for that CU and will be given in the Admin block.

7.5 Calls record

Keep a full record of all the **visits** you make to an address/CU on the bottom half of the front page and page 2 – include abortive visits as well as productive ones. Any notes about what happened at each call should be made in the notes box. Label the notes with the call number. There is also a grid (on the bottom half of page 2) where you can keep track of all **telephone calls** you make. You may need to phone participants, to check how they are doing and to remind them to start/keep going. All attempts and actual calls you make can be recorded here.

7.6 Task list and diary dates

On page 3 there is a task list, to remind you of the tasks that need to be completed and allows you to record details of the dates that the diary will cover and to keep track of what appointments you have made.

7.7 Basic address (1-9/10) ARF / blue ARF

SECTION A - DWELLING UNITS (DUs)

This section guides you through the process of establishing: whether the address is eligible for interview (i.e. traceable, residential and occupied as a main residence) and the number of DUs at an eligible address. You will need to follow the routing instructions carefully.

- A1** You first need to establish whether the address is **traceable, residential and occupied** as a main residence. If is not traceable, residential or occupied then you will proceed to Section G. If you are not sure, you are routed to section H. If it is residential and occupied, then proceed to A2.
- A2/A3** At this question you should establish the number of DUs at the address. NDNS only allows one DU within an address to be selected. You need to enter this information into the Admin block. If you are unable to establish the number of DUs, you will go to Section F to record why the address is unproductive. This information is needed to help assess eligibility for reissue so please give as much demographic information as possible, and any reason given for refusal.
- A4** If there are **2 or more DUs at your address**, list all of them in the grid in the order indicated. Then use the selection label on the front of the ARF to select one DU. Go along the first row ('DU/AD') until you reach the number of DUs at your address, and then look below for the selection code of the DU to include. Ring this code in the column headed *DU Code*. An example of a selection label is shown below.

GridRef: 238665/344822

DU/AD: 2 3 4 5 6 7 8 9 10 11 12

2 3 1 1 5 1 1 9 9 11 6

CU/CH: 2 3 4 5 6 7 8 9 10 11 12

1 2 3 5 6 6 1 4 8 7 7

If you have an address with 13 or more DUs, list the DUs on a separate sheet of paper in the order indicated at A4. Then use the look-up chart in Section I of the ARF. E.g. if you have 17 DUs, the DU to be included in the survey is the 13th. Pin the sheet on which you have listed these DUs to the back of your ARF.

An example of a completed DU selection is shown below. Given the selection label shown earlier, you can see that the basement flat was the selected DU:

A3. DU SUMMARY

ONLY 1 DU	A	<i>Go to A5</i>
2+ DUs	B	<i>Go to A4</i>

A4. DU SELECTION

List all DUs (in flat/room number order, or from bottom to top of building, left to right, front to back) **then select one using selection label on front of ARF.**

DESCRIPTION	DU CODE	DESCRIPTION	DU CODE
Basement Flat	01		07
Ground floor flat	02		08
First floor flat – front	03		09
First floor flat – back	04		10
	05		11
	06		12
IF 2-12 DUs: <ul style="list-style-type: none"> Look at the selection label on front page In 'DU' row: find number matching total number Look at 'Select' row directly beneath showing you which DU code to select Ring corresponding DU code in grid above Write in code number of selected DU at A5 		IF 13+ DUs: <ul style="list-style-type: none"> Continue list on separate sheet if necessary Make a selection using the lookup chart in section I. Write in at A5. 	

A5.

CODE NUMBER OF SELECTED DU:	0	1	<i>Go to Section B</i>
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Once you have selected a DU, make sure that the address label on the front of the ARF is updated so that if another interviewer needs to take over any of your work, they know which DU has been selected.

SECTION B -CATERING UNITS (CUs)

B1/B2 Here you will establish the number of CUs in the (selected) DU. Again; you will need to enter this information into the Admin block. If you are unable to establish the number of CUs, go to Section F and code why.

B3/B4 If there are 2 or more CUs, list all of them in the grid in alphabetical order of the name of the MFP in each CU. Then use the selection label on the front of the ARF to select the CUs to include in the survey. Go along the first row until you reach the number of CUs at your address, and then look below for the selection code of the CUs to include. Ring this code in the column headed *CU Code* and write it down at B4.

It is very unlikely that you will come across a DU with 13 or more CUs. If you do, list the CUs on a separate sheet of paper in the order indicated at B3. Then use the look-up chart in Section I. For example, if you have 13 CUs, the CU to be included in the survey is the 12th. Pin the sheet on which you have listed these CUs to the back of your ARF.

B5 Having selected the CU (or in most cases, having found that there is just one), you need to establish who the MFP is for that CU. The MFP is “the person with the main responsibility for shopping and preparing food”. As discussed in section 3 it is possible for these tasks to be equally shared, in which case put both names on the ARF (and try to ensure that both are present for the household questionnaire).

The following example shows the selection of a CU. Given the selection label shown earlier (section 6.3), you can see that the ‘Jill’ was the MFP in the selected CU. Enter the number of the selected CU at B4.

• B: Catering Units (CUs)

B1. NUMBER OF CATERING UNITS IN DU

A Catering Unit is a groups of people that eat food that is bought and prepared for them (largely) as a group.

ASK: *Do all the people who live together in this dwelling unit eat food that is bought and prepared for them (largely) as a group, or do any of them buy and prepare their food separately?*

NUMBER OF CUs:	0	2	Go to B2
Don't know	A		Go to SECTION F

B2. CU SUMMARY

ONLY 1 CU	A	Go to B5
2 + CUs	B	Go to B3

B3. CU SELECTION

List the name of the **Main Food Provider** (MFP) in each catering unit (i.e. the person with main responsibility for shopping and preparing food in each Catering Unit) **in alphabetical order**. Then select one using selection label on front of ARF.

DESCRIPTION	CU CODE	DESCRIPTION	CU CODE
Jill	01		07
John, Katie	02		08
	03		09
	04		10
	05		11
	06		12
IF 2-12 CUs: <ul style="list-style-type: none"> Look at the selection label on front of ARF In 'CU' row: find number matching total number of CUs In the 'Select' row: the number beneath total number of CUs is the 'selected CU' code. Ring on grid above and record at B4. 		IF 13+ CUs: <ul style="list-style-type: none"> Continue list on separate sheet if necessary. Make a selection using the lookup chart in section I. Write in at B4 below. 	

B4.

CODE NUMBER OF SELECTED CU:	0	1	Go to B5
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SECTION C - ADULT SELECTION (AGE 19+)

C1 Once you have made contact with the CU and introduced the study, you then need to **establish the number of eligible, non-pregnant or breastfeeding adults (aged 19+) in the CU**. As in most cases the CU will include all those living at the address, ask “I would like to ask you a few questions about the people who live here. Including yourself, how many adults aged 19 or over live here?” Then you will need to check if any of these adults are currently pregnant or breastfeeding, and exclude them. If the accommodation consists of more than one CU, you will need to be careful to establish that we are only interested in those who are part of the selected CU.

If there is no-one aged 19 years or over in the CU, but there is someone aged 16-18 (i.e. the eldest CU member is aged 16-18), you will go onto Section D to select a young person participant (Participant 2). If there is no-one aged at least 16 (i.e. the eldest CU member is aged 15 or younger) you will not make a selection / interview anyone. Ring code C at C3 and go to Section E. Select outcome 770 and record this on the front of the ARF.

C2 There are notes at C2 that remind you who is and is not eligible. **Record the number of eligible adults**. If you are unable to establish this, go to Section H to record the reason why.

C3 If the **CU comprises just one person aged 19+** (not pregnant nor breastfeeding) then they will be selected for interview.

C4 In **CUs containing two or more such adults** then one participant needs to be selected at random. Use the grid to select an adult participant for interview. Remember only non-pregnant/breastfeeding CU members are eligible. If at this stage you identify that there are no non-pregnant/breastfeeding adults in the household, use final outcome code 770 at section E for Adult then continue to section D (to ascertain whether there is an eligible young person).

All eligible adults (19+ years) should be listed in the grid at C4, in alphabetical order. Then use the selection label on the front of the ARF to select the adult to include in the survey. Go along the first row (DU/AD) until you reach the number of eligible adults in the CU, and then look below for the selection code of the adult to include. Ring this code in the column headed *Adult Code*.

C5/6 Enter the code number of the ADULT participant and record their full name on the front page of the ARF.

The following example shows an Adult participant selection in a CU comprising of three eligible adults. Following the protocol and the selection label, the third adult (Steve) has been selected as the participant.

ADULT (AGED 19+) SELECTION

List name or initials of each non-pregnant/breastfeeding person aged 19+ in **alphabetical order**. Then select one using selection label on front of ARF.

NAME/INITIAL	ADULT CODE	NAME/INITIAL	ADULT CODE
Katrina	01		07
Paul	02		08
Steve	03		09
	04		10
	05		11
	06		12
IF 2-12 NON-PREGNANT/BREASTFEEDING PERSONS AGED 19+: <ul style="list-style-type: none"> Look at the selection label on page 1 of the ARF In the 'DU/AD' row: find number matching total number of persons In 'Select' row: number beneath total number of persons is the 'selected person code'. Ring on grid above and record at C5. 		IF 13+ NON-PREGNANT/BREASTFEEDING PERSONS AGED 19+: <ul style="list-style-type: none"> Make a selection using the lookup chart in section I. Record selection code at C5 	
CODE OF SELECTED ADULT:		0	3
			<i>Go to C6</i>

SECTION D – YOUNG PERSON SELECTION (1.5-18 YRS)

D1 Here you will establish if there are any eligible young people in the CU, and if so, select one. Young people who live in that CU and are aged 1.5 -18 years are eligible. (Please exclude: teenagers who are pregnant or breastfeeding). Record the number of eligible young people at D1.

If you are unable to establish the number of young people, ring code A and record the reason at section H. You will then continue to interview/record the final outcome for the selected adult.

Note that if you are told that someone is currently (i.e. on the date you are doing the participant selection) 18 but will soon have their 19th birthday then you must include them in section D. It is their age at the time of selection that determines their eligibility for NDNS. If by the time you return to do the main interview they have turned 19 (i.e. are now an adult, according to the NDNS definition) then you would have to code them as “599 (**OFFICE APPROVAL ONLY**: Other unproductive)”. Please contact the office before using the code.

You would not carry out a reselection amongst those who are still classed as a young person.

D2 This summarises the number of eligible young people. If there are no eligible young people, code A, and continue to interview/record the final outcome for the selected adult. If there is one eligible young person, that young person will be selected. If there are two or more eligible young people, you will need to do a selection at D3.

D3 This grid enables you to select a young person. In CUs containing two or more eligible young people then one of them needs to be selected at random.

All eligible young people (aged 1.5-18 years) should be listed in the grid, in alphabetical order. Then use the selection label on the front of the ARF to select the young person to include in the survey. Go along the CU/CH row until you reach the number of eligible young people in the CU, and then look below for the selection code of the young person to include. Ring this code in the column headed *YP Code*.

D4/5 Enter the code number of the young person participant and record their full name on the front page of the ARF.

D6 If the selected participant is aged under 16 years, you will need parental consent to interview the child. Always check that the consent giver is the legal guardian of the child. If consent is given, write the name of the person agreeing. If consent is not given, go to section E and code 432 (proxy refusal). Remember to return to section E to record the outcome of the selected adult participant.

Now follows an example of participant selection in a CU comprising four eligible young people. Following the protocol and the selection label shown earlier, the third young person (Kitty) has been selected as the participant.

TOTAL NUMBER OF PERSONS AGED 18 MTHS – 18 YRS:	0	4	Go to D2
Don't know	A		Go to SECTION H

D2 YOUNG PERSON SUMMARY

No eligible persons aged 18 mths –18 yrs (pregnant or breastfeeding)	A	Go to SECTION E
1 person aged 18 mths –18 yrs	B	Go to D5
2 or more people aged 18 mths – 18 yrs	C	Go to D3

D3 YOUNG PERSON SELECTION

List name or initials of each non-pregnant/breastfeeding person aged 18 mths - 18 yrs in (selected) CU in **alphabetical order**. Then select one using selection label on front of ARF.

NAME/INITIAL	YP CODE	NAME/INITIAL	YP CODE
Felix	01		07
Gabriel	02		08
Kitty	03		09
Nell	04		10
	05		11
	06		12
IF 2-12 NON-PREGNANT/BREASTFEEDING PERSONS AGED 18 mths – 18 yrs: <ul style="list-style-type: none"> Look at the selection label on page 1 of the ARF In the 'CU/CH' row: find number matching total number of persons. In 'Select' row: number beneath total number of persons is the 'selected person code'. Ring on grid above and record at D4. 		IF 13+ NON-PREGNANT/BREASTFEEDING PERSONS AGED 18 mths – 18 yrs <ul style="list-style-type: none"> Make a selection using the lookup chart in section I. Record selection code at D4 	
D4 ENTER CODE NUMBER OF SELECTED YOUNG PERSON:		0	1
		<i>Go to D5</i>	

SECTION E- OUTCOME FOR PARTICIPANTS

This is where you record the outcome for each participant individually. The codes are standard.

SECTION F - UNPRODUCTIVE OUTCOME: ELIGIBLE ADDRESSES

Section F allows you to record an outcome code for any addresses that are eligible but unproductive. The codes are standard.

SECTION G - UNPRODUCTIVE OUTCOME DEADWOOD ADDRESSES

Section G allows you to record an outcome code for any addresses that are ineligible (deadwood). The codes are standard. Further information about the use of Deadwood codes should be recorded at H4.

SECTION H - UNPRODUCTIVE OUTCOME DEADWOOD ADDRESSES UNKNOWN ELIGIBILITY

These are cases where you are unable to ascertain whether the address contains eligible participants or not, for example where you are unable to locate an address. You should only code an address as unknown eligibility as a last resort. This means you have done everything possible to locate an address, or identify whether it is residential and occupied. The codes are standard. Further information about the use of Deadwood codes should be recorded at H4.

SECTION I

SECTION I is a **Look up chart** for 13+ DUs/CUs or eligible individuals

7.8 Young person address ARF (10/11-28) / CREAM ARF

Sections A and B, and most other sections of the YOUNG PERSON ADDRESS ARF are identical to the 'BASIC ADDRESS' ARF.

SECTION C – Young person selection

C1 If there is at least one young person aged 1.5-18 years, establish the number of persons within this age range. If you cannot establish the number code 'Don't know' and then select the appropriate outcome code in section G.

The remainder of section C is identical to Section D the 'BASIC ADDRESS' ARF – please refer to section 6.7 for instructions on how to complete this section.

Section D – Young person Outcome

This is where you record the outcome for the young person participant. The codes are standard.

8 Year 11 CAPI

8.1 Introduction

The CAPI questionnaire has **three main elements**:

- 'Household Structure' interview
- Main Food Provider (MFP) interview
- Individual interviews (including self-completions):

8.2 Household (CU) structure interview

The Household Structure interview must be completed before individual interview(s). It will be completed with the MFP or another adult participant. If other CU members are present at the time it is useful for obtaining correct dates of birth etc. If you are interviewing in a single-person CU, you must complete the Household/CU interview with that person. If that person is not capable of answering the questions, it is not permissible to collect the information by proxy from someone else.

8.3 Household (CU) grid

The information collected about the composition and structure of the CU is the basis for all subsequent questions and filtering. Please check that you have:

- ✓ not omitted any CU member (you need to enter **all members**, not just the selected participants)
- ✓ not included anyone who is not a member of the CU
- ✓ the correct date of birth/age for everyone.

The order in which you enter the participants is not crucial, but you may find it easier later on if they are entered roughly in age order, with the MFP first. At the very least, you should try to enter the details of parents before you enter those of young people.

8.4 Entering details of selected participants

At questions **AdNum1 – MFPNum** you will be prompted to record the names of the participants on the front page of the ARF. If the young person is under the age of 11 you will be prompted to record the name of the adult who will be answering questions alongside or on behalf of the young persons. Where there are two or more adults you will also be asked to enter the MFP name from the front of the ARF. If you have not already done so, you will need to ascertain who the MFP is at this point (see section 3.4 for definition).

8.5 The MFP interview

Once you have completed the Household (CU) Questionnaire, you will be routed to the start of the MFP questionnaire. The purpose of the MFP block is to gain information at CU-level about cooking facilities, food shopping and food preparation.

If the MFP is not one of your selected participants and is not currently available for interview, you have the option of doing the interview 'Later' rather than 'Now'. When you go back to carry out the MFP questionnaire later, you will need to re-open the same household (CU) interview. Press **<CTRL+ENTER>** to bring up the parallel blocks. Use the down arrow key until the module – '**Main Food Provider**' – is highlighted, then press enter. You will be taken straight to *MFPNow* where you can change the code from 2 (Later) to 1 (Now). See section 7.7 for more information about navigating via parallel blocks.

If the MFP is unlikely to be available during any of your visits, you can do the MFP questionnaire by proxy with any adult (aged 16 or older) member of the CU. The preference is for the person who has the best knowledge about the cooking facilities in the CU, shopping for food, food preparation, etc. To do this, select the 'Now' option at *MFPNow*, then code at the next question, *MFPProx* that the questionnaire is being completed by proxy.

Young Person boost addresses only: a £10 gift card is given on completion of the MFP interview CAPI will guide you through this.

8.6 Individual interviews

Once you have completed the Household (CU) Structure Questionnaire (and hopefully, the MFP questionnaire), you will conduct an individual interview with the selected participant(s). The CAPI program allows only one participant to be interviewed at a time.

Basic address

- maximum of 2 individual questionnaires:
- Participant 1 / Adult : first selected person (always an adult aged 19 years or older)
- Participant 2/ Young Person: second selected person (always young person aged 1.5-18 years)

Young person address

- 1 individual questionnaire
- Participant 2/ Young Person: ONLY selected person (always a young person aged 1.5-18 years)
- For consistency, the selected person in young person addresses will always be Participant 2

For each individual questionnaire (any age) there are **two main parts: CAPI 1** – completed at visit 1; and **CAPI 2** – completed at visit 3.

CAPI 1 (Visit 1)	Participant
Access to Food at school	All participants 1.5-18 years (except if 16-18 and in full time employment)
Usual Eating Habits	All participants
General Health	All participants
Oral/Dental Health	All participants 16+ years
Smoking & Drinking	All participants 8+ years. Questions will be administered in CASI for all participants
Education	All participants 16+ years
Job/Income	All participants 16+ years (except if 16+ and in full-time education)
Measurements (Height and weight)	All participants
Spot urine	All participants 4+ years

CAPI 2 (Visit 3)	Participant
Physical activity	All participants aged 2+ years Children (2-15 years) will be asked in CAPI. Adults aged 16+ years will be asked in a self-completion.
Dietary supplements	All participants
Wellbeing questions	All participants 16+ years
NHS Central Register & Cancer Registry	All participants 16+ years
Stable address	All CUs
Nurse introduction	All participants

8.7 CAPI modules/ parallel blocks

The computerised questionnaire consists of:

The household (CU) structure questionnaire
The admin block
The MFP questionnaire
The individual CAPI 1 interview(s)

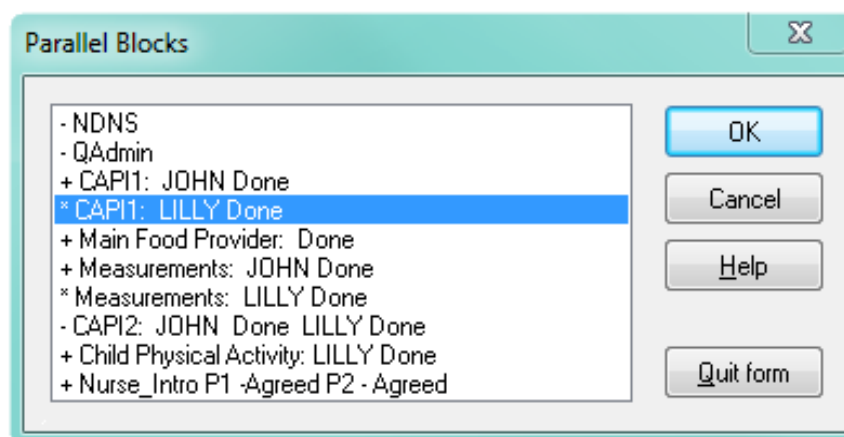
(NDNS)
(QAdmin)
(Main Food Provider)
(CAPI1)

The individual measurements
The individual CAPI 2 interview(s)
Nurse introduction

(Meas)
(CAPI2)
(Nurse_Intro)

Each component is a parallel block; this means that you can **enter any block at any time**, no matter where you are in the schedule. For example, you can enter the MFP block at any convenient moment.

Pressing **<Ctrl+Enter>**, brings up a screen called 'Parallel Blocks'. It lists all blocks, and looks like this:



8.8 Admin block

If the participant refuses to take part in the interview please record the reason why at **RefWhy**. CAPI will prompt you to do this after you have entered the outcome code.

9 The four-day food and drink diary

9.1 Overview

To get a detailed and accurate measure of people's diet and nutrition, each participant will need to write down everything they eat and drink for four days in their food and drink diary.

Here is a list of key points to give you an overview of what you will need to do:

- Go through the diary step by step and give the participant key instructions on how to complete the diary. Practice with your participant, giving them opportunity to demonstrate their understanding of the task
- Arrange a check-up visit for the 2nd day of recording. Visit the participants and check through the information recorded for day 1.
- Arrange to collect the diary within 3 days of completion. Check through the diary and add any missing information
- Review children's diaries (aged under 16 years) using the Young Person's Food Atlas
- Collect any additional information: packaging, carer sheets, school menus, extra pages. Fill in an evaluation sheet.

9.2 Interviewer Diary Assessment Schedule (IDAS)

The INTERVIEWER DIARY ASSESSMENT SCHEDULE (IDAS) provides a list of the documents you will need, instructions for placing the diary, what to look out for when checking the diary and other helpful reminders. **It is very important that you read through the IDAS before you start each assignment.** The IDAS PROMPT SHEET is a 2-sided abridged version of the IDAS to be used as a reference tool when going through the diary with the participant. It can be found in your laminate pack.

9.3 The food diaries

Types of food diary in NDNS

As NDNS covers such a wide range of ages, there are four types of diary:

- **Adult diary (A5)** – for participants aged 16+ years
- **Adult diary (A4)** – for participants aged 16+ years who wish to use a larger diary
- **Child diary (A4)** – for participants aged 4-15 years
- **Toddler diary (A5)** – for participants aged 1.5 to 3 years

Who completes these diaries?

- For children aged 12 years and under, ask the parent/carer to complete the diary with help from the child as appropriate
- Children aged 13 years and older can complete the diary themselves but will be expected to confirm details, where necessary, with the MFP. Additional detail and information may need to be obtained from the MFP if they are not completing the diary on behalf of the child.
- The parent/carer will be asked to keep the diary for all toddlers.

Due to the Young Person boost, in some CUs, a child or toddler might be the only person keeping a diary and an adult might be asked to help a young child or toddler to complete a diary without having to keep one themselves.

9.4 Placing the food diary

Introducing the food diary

Based on the day of the first individual CAPI interview, the laptop will select four consecutive days as the diary recording period. **If a CU contains two participants, both participants will be assigned the same diary days.** Please complete the details on the front cover of the diary with the participant's name, male or female, date of birth and serial number and enter the date of the day they should start recording. It may also help if you write in the day and dates of the diary days allocated by CAPI in the diary itself.

Generally participants should stick to their allocated days even if they think that on some days their food and drink intake will be untypical; we do not want participants to be picking "good" and "bad" weeks to keep their diary. However, if the participant will be on holiday at any point during the allocated 4 days, assign a new start date. This is because food and drink consumption on holiday is unlikely to represent the participant's typical diet. You should replace like-with-like so if the original days were Saturday – Tuesday, the new days should also be Saturday – Tuesday.

Please familiarise yourself with the important components of the food diary in order to explain these to your participants by reading through sections 1 and 2 of the IDAS. It is important that after you have placed the diary with the participant, they feel confident with what is expected of them and are aware of the information in the diary that will help them record what they have eaten as reliably as possible. Start by spending a few minutes working your way from the front to the back of the diary so that your participant gets an overview. Then go back through giving the participant more detailed instructions using the IDAS PROMPT SHEET (see laminate pack).

For adult participants, make sure you offer the choice of the A4 and A5 diaries so that they can choose which will be most convenient for them to use.

Proxies

Where there are language barriers or other difficulties, you may find that another member of the household can act as a proxy for the participant. For example, children could act as proxies if their parents do not speak English. If this is the case, please make a note in the Diary Evaluation (see section 8.6). Where proxies are used, you should still encourage the participant to contribute as much as possible to completing the diary.

Arranging check-up visit

After placing the diary, please arrange a check-up visit with the participant before you leave. The visit should be on the **second day** of the diary recording. CAPI will tell you which day to make the appointment. CAPI will also prompt you to make an appointment to collect the diary up to three days after the last diary day. **Please make a note of the participant's phone number if they are willing to give it to you.**

The check-up visit should be a home visit (i.e. personal).

You should check that the participant has started keeping their diary. You should look through the entries for the first day so that you can gauge their completeness. Ask them if they have any concerns or questions and encourage them to continue with the diary. If you are unable to make a personal visit, you must at least phone the participant and ask them to recite entries to you. In a few cases you may feel that more than one check-up visit is required and you should arrange to go back on the third or even the fourth day of recording, as appropriate. It is up to you to decide how much support each participant needs. If a proxy is completing the diary then, whenever possible, both the participant and the proxy should be present when you check it.

Reminder phone call

If there is a gap between diary placement and the start of the diary recording period, and you have concerns that the participant will forget to start their diary, please contact the participants to remind them. If the gap is seven days or more, you will need to make a reminder phone call, running through the main points of completing the diary. These can be found on the REMINDER PHONE CALL checklist on page 16 of the IDAS. Arrange a mutually convenient time for you to call the participant, a day or two before they are due to start, when they are at home so they can have the diary in front of them. Please cover everything on the document, referring participants to the various sections in the diary where necessary. Make sure you also speak to participant 2 if they are 12 years old or above. If this is not possible, ask participant 1 to pass on the information.

Restarting the diary

If when you arrive for your check-up visit and they have forgotten to start recording, they are allowed **ONE** restart. Ideally they would then start on **that day and complete four days from then**. For example, your participant is asked to keep their diary from Saturday to Tuesday but when you arrive for your check-up visit on the Sunday, the participant has not started recording. Allocate them four new diary recording days starting with that Sunday through to Wednesday. Ensure that the participant is in possession of their diary and write in the new dates in the diary. If you can, start them off by getting them to fill in the first thing they had that day. Arrange a new check-up visit for the next day (now the second day of diary recording).

On some occasions, a participant may not have started recording and may want to delay for some reason. Although we do not want participants to be picking “good” and “bad” weeks, the alternative could be that we would lose the participant. If this would be the case or it would be difficult to arrange subsequent visits, you can allocate them four new days. You should replace like-with-like so if the original days were Saturday – Tuesday, the new days should also be Saturday – Tuesday. Give your participant a new reminder card and write the new dates in the diary. Also arrange a new check-up visit for the second day of the diary recording period.

Checking the food diary

The reason why we require so much detail on the food and drink consumed by the participant is so that we can identify each food item correctly and allocate a corresponding food code from our NDNS nutrient databank as well as an appropriate portion code. Missing detail makes food and portion coding difficult and less likely to represent what the participant actually had to eat. For those participants who have requested dietary feedback (see section 5.4) inaccurate diaries result in misleading feedback. Therefore it is crucial that the diaries we receive from you are well completed with lots of detail and no missing information.

Missing information should be collected while you are at the participant’s home because this increases the chance of filling in any gaps. Please read through section 3 and 4 of the IDAS. The IDAS PROMPT SHEET provides help on what you should be looking out for when in the participant’s home. **Not everything that the participant has written (or not written) needs to be scrutinised. Priority should be given to missing portion sizes and inadequate descriptions of foods.**

If there are any omissions or ambiguities in the diary, you should clarify these with the participant. Please use a green pen (or at least a different colour from that used by the participant) when you write on the diaries so that we can see where you have needed to probe for additional information or made changes.

The Young Person's Food Atlas

The Young Person's Food Atlas is to be used when reviewing the diaries with children under 16. Most of the foods that appear in the atlases are shown as a series of seven photos of the 'food served' and seven photos of 'leftovers'. Children, especially toddlers, leave a large proportion of the foods served to them. Therefore being able to select a photo of leftovers increases accuracy and this is one of the many advantages of using the atlas over household measures. Further details are in section 3.2 of the IDAS

IMPORTANT: Please remember that the atlas is only to be used when reviewing the diary. It should not be left with participants under any circumstances. Participants must still record how much they ate at the time of eating **for every item they record** either in household measures or weights from labels. It does not matter how accurately participants have recorded what they ate; if the food is listed on the Equivalent Food List you should show them the photos in the atlas. Do not overwrite what the participant has originally recorded. The photos codes are in addition to what the participant has written. **Remember to return all 3 atlas booklets at the end of your assignments by Recorded Delivery.**

9.5 Pick-up visit

The pick-up visit should be no later than three days after the final day of recording. Again, you should check the diary for completeness, concentrating on the entries made since your last visit as described above for the check-up visit. If the participant has followed your guidance, checking the remainder of the diary should not take very long. You must also ensure that the participant has completed the **general questions about food/drink in the last 4 days** at the back of the diary. If not, please ask them to fill these in.

Remember to collect any additional items such as the plastic bag with labels, extra pages, school menus and carer packs.

9.6 Monitoring the quality of dietary data collection

In order to maintain a high standard of dietary data collection, we continually monitor and feedback to you the quality of the diaries you send in. Feedback comes in various forms and it is very important that you take note of any comments made.

Diary evaluation

A diary evaluation should be completed for each participant as soon as possible after collecting the diary. This form is for you to record any problems the participant might have had with keeping the diary and how well you thought it reflected on what they actually ate. For example, if a participant had language difficulties and their young son or daughter translated for them, you would note this in your evaluation.

It also asks who filled in the majority of the diary (the participant or another person e.g. their parent).

Early work feedback

This is based on your first completed diary and is sent to you and your Regional Manager. It is only sent out if we pick up on any obvious omissions or errors so that these are not carried through to the other diaries.

Please ensure that you send your first completed diary back to Brentwood as soon as you have collected it from the participant.

Pre-point feedback

This is based on all the diaries from your completed assignment and is sent to you before you start a subsequent assignment. It highlights where improvements could be made but also provides positive comments.

Other types of exercises/feedback

If you have any lengthy gaps between being briefed and your first assignment or between assignments you will be asked to complete an exercise to act as a refresher. You should return the exercise as instructed and you will then receive feedback.

10 Spot urine

10.1 Background

Spot urine samples are being collected in order to provide an assessment of iodine levels in the UK population. Iodine is an essential nutrient for being healthy and it is used by the body to make thyroid hormones. Thyroid hormones are important for growth and development and iodine deficiency can lead to an enlargement of the thyroid gland and an increase in the amount of thyroid stimulating hormone (TSH) produced by the pituitary gland.

The best way to determine iodine deficiency across a large population is to measure the amounts of iodine in urine samples. This will provide nationally representative information that will be sufficient to categorise the iodine status of the UK population by sex-age group. As we are only looking at iodine at a population level, no individual feedback will be given to participants.

10.2 Documents

Information leaflets

You have been provided with spot urine information leaflets for your participants. There is one version for adults and one version for children. These leaflets provide participants with background information, the collection method and contact details should they have any queries or concerns.

Participants **must** read the relevant leaflet before signing the consent forms. Encourage participants to read these as they provide information about the spot urine element.

In order for participants to provide a sample they must read the relevant information leaflet then provide written consent.

Consent forms

In order to collect a sample from a participant you must first of all obtain written consent. There are 3 spot urine consent forms.

- 1 Adult consent form for participants aged 16 years and over.
 - 2 Parental/Guardian consent form to be completed by parent(s) of participants aged 4 – 15 years.
 - 3 Child assent form should be completed where possible by participants aged 4 – 15 years.
- Participants **must** initial each statement that they agree to
 - Participants and interviewers should both sign and date the form

The top copy of the consent form will be returned to the Brentwood office and the bottom copy will be left with the participant.

Barcode labels

You will assign a set of barcode labels, through CAPI, for all participants consenting to give a spot urine sample.

Further details about assigning the labels can be found in section 10.4.

10.3 Equipment

You will have the following equipment:

- A spot urine sample pack containing:
 - A universal sample tube
 - a plastic sample despatch pack
 - A pre-addressed lab dispatch polylope
- Disposable gloves
- Leaflets
- Consent forms
- Child assent form
- Urine sample despatch form (for Addenbrookes BioRepository Lab)
- Set of 3 barcode labels for the sample tube, consent form and despatch form



10.4 Collecting a spot urine sample

When to collect the sample

Spot urine will be introduced during CAPI 1, however if the participant is unable or unwilling to provide a sample at visit 1, you can re-introduce it at visit 3.

Spot urine samples can only be collected at visits 1 or 3, as you will need CAPI open to get the correct sample labelling instructions.

Please **do not** leave the spot urine kit with the participant and allow them to collect the sample at a time when you are not in the household – any such samples (and any collected outside visits 1 or 3) will be deemed unusable and destroyed.

Eligibility

Participants are excluded from providing a sample if they are:

- Under 4 years old
- Children aged 4 and over who are not dry during the day
- Using a urinary catheter
- On their period (menstruating)

For participants aged 4 years and over, CAPI will prompt you to use a show card which will ask the participant if they fall into any of the other exclusionary categories. If the participant is unable to provide a sample at visit 1, because they fall into any of these categories CAPI will then prompt you to ask whether they are happy to provide a sample at visit 3.

Collection procedures

- 1 Once eligibility has been confirmed and written consent has been obtained you can proceed with the urine collection.
- 2 Enter into CAPI, the barcode number of the set of 3 barcode labels you will be using for that participant. **DO NOT MIX LABELS BETWEEN PARTICIPANTS, USE ONE SET PER PARTICIPANT.**
- 3 You will need to attach the barcode labels as follows:
 - a. UCON – affix to the Office Copy of the consent form
 - b. USAM – affix to the universal sample tube
 - c. UDESP – affix to the Addenbrookes BioRepository urine sample despatch note.
- 4 Provide the participant with the labelled universal sample tube and check that they have read the information leaflet.
- 5 **The spot urine sample should not be the first urine of the day.**

- 6 Ask the participant to pass a small amount of urine directly into the container being careful not to touch the inside. There is iodine in some cleaning and antiseptic products so people may have iodine on their fingers. We only want to measure the amount of iodine in their urine. The universal tube does not need to be filled to the top. Participants should aim to three quarters fill the tube. If they are having any difficulties then they should just try and catch what they can. This applies especially for young children.
- 7 Once the sample has been collected, the participant should screw the lid back on tightly. Participants can wipe the outside of the container dry using an ordinary piece of toilet paper or a tissue but should not use wet wipes or any cleaning products as these could contaminate the sample. Some participants may be using toilet paper or tissues that are enriched with aloe vera or shea butter for example. This is why it is particularly important for the lid to be screwed back on before the tube is wiped. If not the sample could get contaminated.
- 8 Put disposable gloves on to receive the sample back from the participant and check the lid is tight before packing the sample tube into the plastic despatch pack.

Checking that the lid is screwed on tightly

Parents/legal guardians may need to help young children screw on the lid tightly but you should also check the lid too. Elderly people in particular may need help tightening the lid.

After placing the completed sample securely into the plastic despatch pack, fill in the Addenbrookes BioRepository despatch form and place this together with the packed sample tube into the pre-addressed plastic posting polylope.

If you do not wish to handle the universal tube at all after the participant has collected the sample, you can verbally check to ensure the lid is tightly screwed on before asking the participant to place the sample tube into the plastic despatch pack.

Completing the despatch form

Spot Urine Form

Interviewer number:

Serial number:

Check
Letter:

Person
Number:
 (1 = adult
2 = child)

Please affix
UDesp
label here

Please note: Serial number, check letter, and person number **must** be completed.

Date urine sample taken:

DAY: MONTH: YEAR:

Time urine sample taken:

TIME:

Date urine despatched to BioRepository:

DAY: MONTH: YEAR:

NDNS Y11 Spot Urine Despatch Form_v4 Use from 04/05/18

A despatch form should be completed for every participant who provides a urine sample.

It is really important that the full serial number (including check letter and person number) is completed on the despatch form and on all documents.

The serial number is 8 digits long and therefore should fill up the 8 boxes underneath the Serial number title. Check letter and person number must be completed too.

The person number identifies the person in the HH (use a 1 for adults aged 19+ and 2 for child or young person under the age of 19).

For example, for a basic address - issued in April - with two participants, the serial number for person 1 (Adult 19 + years) might be 11041203X1 and the serial number for person 2 (Child or young person) within that same household would be 11041203X2 .

If the wrong serial numbers are entered on documents, data from one person will be matched with those of someone else.

Packaging and posting

Place the filled sample tube into the plastic despatch pack and secure by applying pressure to each side. Place in the pre-addressed polylope envelope, along with the completed urine sample despatch form and make sure it is posted on the same day that the sample is collected.

- The samples can be posted in a post box. There is no need to send via special or recorded delivery.
- Please ensure the post box you are using has a collection scheduled within 24 hours (or if collected on a Saturday / Sunday – make sure the post box has a collection scheduled for the Monday).
- The Office Copy of the Urine Sample Consent form (complete with the UCON label attached to it) should be posted separately to the Brentwood office.

Gift card

All participants who provide a spot urine sample will receive a £5 gift card as a token of appreciation.

11 Height and weight measurements

You will take height and weight measurements for your participants. The questions are in a parallel block so you can introduce the measurements on your first visit, after you've introduced the diary, or at the start of visit 3.

Height measurement

You will...

- take height measurements for all participants aged 2 years and over,
- use the Frankfort Plane method for all participants,
- include the child stretch for all children (aged 2-15 years),
- take and record two separate height measurements. If the two measurements differ by 0.05 centimetres, CAPI will prompt you to take a third,
- record measurements in centimetres and millimetres, e.g. 176.5cm. If a measurement falls between two millimetres, it should be recorded to the nearest even millimetre.

For the full height measurement protocol see Appendix D.

Weight measurement

You will...

- take weight measurements for all participants (all ages),
- need to take and record one weight measurement in CAPI.

For the full weight measurement protocol see Appendix E.

Measurement Record Card and BMI leaflet

The participant can have a record of their measurements but if they would prefer not to have them written down, then this is okay. Once you have entered the height and weight into the computer, it will calculate the person's Body Mass Index (BMI) if aged 16 or older. If the person would like to have their measurements, then fill in the measurement record card (which includes spaces for their height, weight and BMI (16+ only)). If the participant is aged 16+, hand over the BMI leaflet with the measurement record card, as this provides information about BMI and how to interpret the results.

12 The physical activity questionnaire (aged 16+)

Overview

The Recent Physical Activity Questionnaire (RPAQ) is used to measure physical activity.

It is to be completed...

- by all participants aged 16 years and over
- at the beginning of CAPI2 (Visit 3), while you are carrying out an initial check of the diary.

You will....

- check the questionnaire with participants to ensure they have filled in all relevant questions
- record in the admin block any problems the participant had with completing the questionnaire.

The questionnaire

Section A: Home activities - This section is about physical activity patterns in and around the house.

Section B: Activity at work / school or college - This section is about activities at work, school or college and travel to work, school or college. If the participant has two part-time jobs, is at school or college and also works part-time, they should think about their main activity and answer the questions about that activity or job.

Q7 Type of work while at work / school or college: If a participant's main activity is school or college, they should choose the answer option that best fits the type of activity they do while there.

Q10-Q13 Travel to and from your main place of work / school or college in the last 4 weeks: Below are some guidelines outlining how participants who don't have a 'usual' place of work, (e.g. a salesperson):

- If the participant drives/cycles/walks to one central location, e.g. an office, and then drives out from there, the standard questions apply. The commute would be the travel from home to and from that office, the type of work would then be driving around and whatever else their job involves.
- If the participant does a mixture of the above, i.e. works from home one week and drives out from a central location the next, they will need to estimate the average exposure over the last four weeks.

If all else fails – **write a note** on the self-completion explaining the participant's situation, so that we can decide what to do with it when it comes back to the office.

Section C: Leisure time activities - This section asks about physical activity that participants participated in during their leisure time.

Q14 *Grid about specific leisure time physical activities*

- Ensure that participants have completed each line. If participants have not done an activity, they should tick 'None'.
- If participants have done an activity, check that they have filled out the final two columns – 'Average time per episode – hours and minutes'.
- Check that participants have looked at Q15.

Q16-Q17 *Any other activities*

In particular, participants should record any other activity at these questions; such as: playing on the Nintendo Wii (e.g. Wii Sports such as golf, bowling, boxing etc.), any other computer use involving active movement and housework.

13 Consent to link NDNS answers to central administrative data

In CAPI 2 (visit 3) participants aged 16 and over are asked to consent to their survey answers being linked with central administrative data. This includes consent to link to information about in-patient and out-patient hospital episodes, civil registration mortality data and the Cancer Registry.

If somebody who has taken part in the survey dies, gets cancer or stays in/visits a hospital, the resulting data (i.e. the cause of death, type of cancer or reason for hospital stay) can be linked with their answers to the survey. This information could be extremely helpful to future medical research.

Participants are asked to provide consent separately for each type of data source and therefore can opt out of one whilst still consenting to linkage with another. The consents are all captured on the same (pink) form.

Note that there are no specific plans to link to these data sources; we request consent so that researchers are able to do so in the future (subject to the appropriate ethical approvals being in place). Administrative data would then be linked to the anonymised survey data using a unique ID.

Civil registration and mortality data

The NHS maintains a Central Register which lists all the people in the country and their NHS number. When the participant dies, the Register is updated with details from their Death Certificate.

Cancer Registry

The National Cancer Registry is held by the Office for National Statistics and collects details about all types of cancer. If a participant is diagnosed with cancer, a code indicating the sort of cancer is added to the Registry.

Hospital Episode Statistics (HES)

NHS Digital maintain data on in-patient and out-patient visits to hospital, length of stay and waiting times.

What are participants agreeing to?

- If participants agree to be linked on these lists, a request will be made to the appropriate governing body that hold this data to provide information on their health status. This is likely to happen at multiple time points going forward in the study to track participant's health status.

-
- The only information that the NatCen give to the governing body holding the data is the participant's full name, date of birth and address, and the fact that s/he has taken part in NDNS. In Wales, NHS number is also provided as this is a requirement for data linkage.
 - If a participant wishes to cancel this permission at any time in the future, they can do so by writing to us.

Once the participant has signed the consent form please return the top copy to the office. The bottom copy is for the participant to keep.

14 The nurse visit

Key information for interviewers:

- All participants completing at least three diary days will be eligible for a nurse visit, The only exception is participants in the NI boost who will not have a nurse visit (NI interviewers: country boost addresses will be indicated by *CB* in the top right hand corner of the address and selection labels – see section 6.2).
- Nurse fieldwork follows directly after the interviewer stage.
- Information about the participants who have agreed to the nurse visit will be fed through to the nurse after you have completed the household, fully signed off the case and transmitted the work back to NatCen
- Nurses will pick up the relevant participant and contact information through the e-NRF Nurse Link system.
- Nurses arrange their own appointments.
- Participants can ‘agree’, ‘disagree’ or say they are ‘unsure’ about the nurse visit.
- The admin details that you record in CAPI will help the nurse make contact with participants.
- You will need to contact your nurse partner to:
 - let him/her know when you are about to start work on the assignment
 - find out a bit about them (if you’ve not worked together before), as this information may help you to ‘sell’ the nurse visit
 - inform them of your progress through the assignment
 - let them know any specific information about a household / participant that is not appropriate to record into the CAPI admin block
 - let them know when you have finished the assignment.
- Also refer to section .6 for guidance on how to deal with participant’s you feel might not be able to give informed and written consent to a blood sample.

Introducing the nurse visit

The introduction to the nurse visit is at the end of CAPI2 and should be read exactly as worded. Sometimes you will need to provide further information in order to convince participants of the importance of this visit. Some may be nervous of seeing a nurse and you will need to allay their concerns. As well as the usual “yes/no” answer codes, there is an “unsure” code. Nurses will contact ‘unsure’ people to see if they are willing to be visited.

We will also ask you to give participants information about the blood sample element of the nurse visit. This information is contained in the Stage 2 – Nurse Visit leaflet that you will leave with any participants who agree (or are unsure) to be contacted by the nurse.

For Year 11 we will be monitoring how participants react to the focus of the nurse visit being the blood sample. You will therefore be asked to record the participant's reaction to the blood sample information that CAPI will present you to read (at question *BloodO*). This will be then be fed forward to the nurse so that they can tailor their introduction to the participant.

The measurements and blood sample carried out by the nurse are an integral part of the survey data and without them the interview and diary data, although very useful cannot be fully utilised. If your participant is reluctant to see the nurse, you can use the following arguments to encourage them to take part:

- ➔ The nurse is the best person to describe what (s)he does at their visit. The participants can always change his/her mind after hearing more about it.
- ➔ By agreeing to be contacted by the nurse, the person is not committing themselves to helping with all, or any, of the measurements.
- ➔ The nurse will ask for separate permission to carry out each measurement.

Do not call the nurse visit a 'health check' – it is not. We don't access the medical records of participants so the only way to obtain their current health status is to have a nurse visit. As with the doorstep introduction, say as little as possible in order to gain co-operation.

"(name of nurse) is lovely and is very professional"

"I'm not a nurse so I can't do the measurements, but the nurse is highly trained, and very experienced, and there is no need to worry about her visiting you"

"NatCen have a team of professional nurses who are highly qualified. They all have extensive experience working in hospitals, health centres etc. and have been specialised for this survey"

"The nurse is covered by the relevant data protection legislation and anything you say will be treated in the strictest confidence"

The Stage 2 (Nurse Visit) leaflet

You will have Stage 2 (Nurse Visit) leaflets to give to all participants so they can make an informed decision about whether to progress to the nurse stage. The leaflet provides information that participants might need to know before the nurse arrives, e.g. what measurements are taken. Note that there are **two versions** of the Stage 2 leaflet (one for adults and one for children). The Stage 2 leaflets have been redesigned for Year 11 to give more detail about the blood sample.

The nurse will go through the measurements in more detail when making an appointment with the participant.

Nurse role

Nurses will take, appropriate consents, a number of age-dependent measurements: infant length (ages 18-23 months); waist and hip circumferences (ages 11+ years); demispan (ages 65+ years or if a valid height measurement was not taken at the interviewer stage) and a blood sample (all ages). If a blood sample is obtained, details on prescribed medications will also be taken. Before the nurse carries out any measurements they will ensure the participant has a copy of the Stage 2 leaflet and will have check that they understand the information given. With the participant's permission, the results of the blood tests most relevant to their health will be sent to their GP. This information will also be sent to the participant, if they so wish.

You can reassure parents of younger children that we use specially trained paediatric phlebotomists. The nurses are also able to provide a gel or spray to numb the area in their arm where the child might feel the blood sample being taken. Parents often feel that if a child has had a bad experience having their vaccination injections, this will be the same for having a blood sample taken. This is not usually the case and the nurse will be able to reassure parents and children.

It is important to stress that the nurse will be the best person to discuss any concerns or worries. However, reassurance from you will be vital to gain initial agreement for the nurse to contact the participant.

15 Administering gift cards

The gift cards/incentives offered to NDNS participants are detailed in section 1.4.4.

You will receive a float of gift cards. They are not of any monetary value until activated by Love2reward upon receipt of your transmission. If you anticipate needing more gift cards, contact Logistics in Brentwood (see Contacts list in section 2.1), who will arrange for you to be sent some more. Do this as soon as you have done your selections so that the cards will reach you before your final visit to the address.

The CAPI program will prompt you when a gift card should be given. It will automatically prompt you to enter the last **8 digits** (shown in bold) of the gift card number that is shown on the front of the card, for each participant.

When prompted by CAPI you should write the relevant amount in the area on the top right hand side of the card, give to your participant and inform them that the card will be activated and live to use after approximately 48 hours. Please note that this is dependent on you transmitting the case promptly and may take up to 72 hours if the case is transmitted on a Friday.

There is no need to get the participant to sign a receipt unless you are a NISRA interviewer, in which case you will issue a promissory note to the participant that states they will receive their gift card shortly in the post. Gift cards will then be sent from the Brentwood office to the participant.

Tell the participant that they can check the value of the card by either going to the Love2Shop website and looking at the card account, or by using a QRL code scanner (e.g. through an app on a smart phone or tablet). The QRL code is usually on the back of the card.

16 Returning work to the office

Transmitting CAPI work

Transmit CAPI work at the end of each day. The NurseLink will not display a serial number/address for the nurse until you have completed all visits/work at a household (including the admin block) and have transmitted the case back.

Do therefore complete cases and transmit as soon as possible after all work at an address has been completed so your nurse partner can see which addresses she will need to visit and which are ineligible/have refused.

Returning documents

- The following items must be returned to the office via Recorded Delivery (the post office often refers to this as Signed for Delivery).
 1. Diaries
 2. Zip-lock bag with food packaging
 3. Self-completions

It is really important these items are returned by recorded delivery, as we do not want to lose one diary after all the effort you have put into obtaining it.

- The following items can be returned to the office in the normal pre-paid small brown envelopes or plastic polylopes. (They do not need to be sent by recorded delivery).
 1. Spot Urine consent forms
 2. NHSCR consent forms

These consent forms **must be** sent separately from any other documents as they contain personal information.

Returning diaries, self-completions & food packaging

- Diaries and associated documents (zip-lock bag with food packaging and self-completions) must be returned to the office via Recorded Delivery (the post office often refers to this as Signed for Delivery).
- Return your first completed diary back to the office as soon as you have collected it from the participant – please don't wait until you have several. We will provide early work feedback based on this diary.
- Remaining diaries and associated documents should be returned in small batches. We would suggest no more than two diaries per polylope, to ensure the envelopes do not tear.

Returning spot urine samples

- Spot urine samples must be sent as soon as possible to the NIHR BRC-MRC Biorepository, Cambridge in the Lab despatch polylope (see section 10.4).
- Spot urine samples can be posted via a post box – you do not need to go to the post office.
- Completed consent forms for spot urine should be sent separately to Brentwood

Expenses for postage

To claim for your expenses for sending the diaries back via Recorded Delivery please claim via 'special claims' and send receipts to Pay. Your fee for visiting the post office will be generated in the CAPI. You should only make a **maximum of three** visits to the Post Office to send diaries back per assignment.

17 Working mobile

Here are a few tips to help plan your limited time if you have to work mobile.

Address visits

Schedule at least 4 visits to the address:

- Visit 1 for screening;
- Visit 2 for CAPI 1 / first appointments;
- Visit 3 for CAPI 2 and diary pick-ups;
- Visit 4 for a general mop up.

Placing diaries

Don't use the CAPI diary dates. Always make use of the self-selection diary dates when working mobile, to make sure you can complete work within the limited time. Make reminder phone calls to ensure your participants do start on the given date. Consider calling them on the start date to just to make sure.

Midweek diary checks

Midweek diary checks should be done face to face, but if unable to do this, you have the option to make midweek diary checks by phone.

Collecting diaries

If possible do arrange diary pick-ups within 3 days of the last diary date, if this isn't possible make a note about why on the diary evaluation form. You should also record the fact that you were working mobile in this form.

18 APPENDIX A: Practice interview check-letters

The following check letters will be needed to access the NDNS practice interviews (P12229.01 PRACTICE):

Serial
99999901
99999902
99999903
99999904
99999905
99999906
99999907
99999908
99999909
99999910

19 APPENDIX B: Example Interviewer Calendar

P12229.01 NDNS Year 11 - April (1104) fieldwork dates						
APRIL						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1 1104 FW STARTS	2 BANK HOLIDAY	3	4 Assignment MUST be started	5	6	7
Start assignment						
8	9	10	11	12	13	14
15 Addresses 10/ 11 to 28 (Young Person Boost) should be screened	16	17	18	19	20	21
22 All addressees should have been attempted	23	24	25	26	27	28
29	30					
MAY						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Notes *All Young person boost addresses (addresses 10/ 11 - 28) should be screened in first 2 weeks. *Diary pick ups should be no later than 3 days after the last diary recording day. *Please send back the first completed diary immediately - for early work feedback						
		1 Last CAPI 1 day	2 Last 4-day diary start date	3	4	5
6 FW CLOSED	7 BANK HOLIDAY	8	9	10	11	12
Last CAPI 2 day	SEND BACK PAPERWORK					
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28 BANK HOLIDAY	29	30	31		

20 APPENDIX C: Height measurement protocol

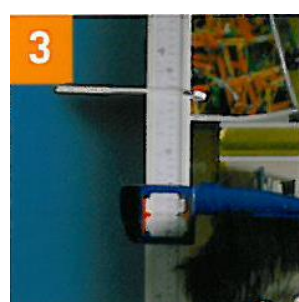
Assembling the stadiometer



Unlock the blue measuring arm from its secure carrying position in the base plate by sliding it forward (see illustration 1).



Remove the two stabilisers from their storage in the ends of the white uprights. Slot the white uprights firmly together and check that the bottom section (marked with an arrow) sits firmly in the base plate slot.



You need only assemble 2 or 3 sections when measuring young children; use all 4 sections for older children and adults. Slide one of the two white stabilisers onto the upright, then the blue measuring arm and then slide the second white stabiliser above it. Position the stabilisers so that they are clear of the joins on the upright sections.

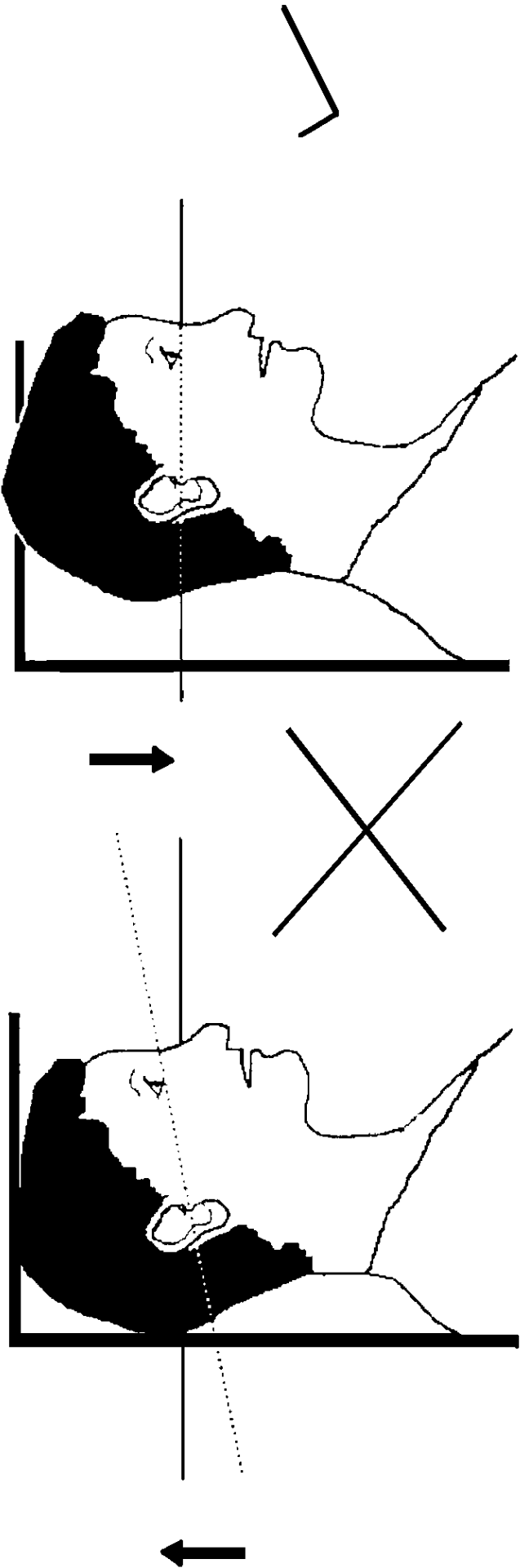


Place the base plate on a firm, level surface.

Adult height protocol (aged 16+)

- 1 Ask the participant to remove their shoes in order to obtain a measurement that is as accurate as possible.
- 2 Assemble the stadiometer and raise the headplate to allow sufficient room for the participant to stand underneath it. Double check that you have assembled the stadiometer correctly.
- 3 The participant should stand with their feet flat on the centre of the base plate, feet together and heels against the rod. The participant's back should be as straight as possible, preferably against the rod but NOT leaning on it. They should have their arms hanging loosely by their sides. They should be facing forwards.
- 4 Move the participant's head so that the Frankfort Plane is in a horizontal position (i.e. parallel to the floor). The Frankfort Plane is an imaginary line passing through the external ear canal and across the top of the lower bone of the eye socket, immediately under the eye (see diagram). This position is important if an accurate reading is to be obtained. An additional check is to ensure that the measuring arm rests on the crown of the head, i.e. the top back half. To make sure that the Frankfort Plane is horizontal, you can use the Frankfort Plane Card to line up the bottom of the eye socket with the flap of skin on the ear. The Frankfort Plane is horizontal when the card is parallel to the stadiometer arm.
- 5 Instruct the participant to keep their eyes focused on a point straight ahead, to breathe in deeply and to stretch to their fullest height. If, after stretching up, the participant's head is no longer horizontal, repeat the procedure. It can be difficult to determine whether the stadiometer headplate is resting on the participant's head. If so, ask the participant to tell you when s/he feels it touching their head.
- 6 Ask the participant to step forwards. If the measurement has been done correctly the participant will be able to step off the stadiometer without ducking their head. Make sure that the head plate does not move when the participant does this.
- 7 Look at the bottom edge of the head plate cuff. There is a green arrowhead pointing to the measuring scale. Take the reading from this point and record the participant's height in centimetres and millimetres that is in the form 123.4, at the question Height. You may at this time record the participant's height onto their Measurement Record Card and at the question *MbookHt* you will be asked to check that you have done so. At that point the computer will display the recorded height in both centimetres and in feet and inches. At *RelHiteB* you will be asked to code whether the measurement you obtained was reliable or unreliable.
- 8 Height must be recorded in centimetres and millimetres, e.g. 176.5 cm. If a measurement falls between two millimetres, it should be recorded to the nearest even millimetre. E.g., if participant's height is between 176.4 and 176.5 cm, you should round it down to 176.4. Likewise, if a participant's height is between 176.5 and 176.6 cm, you should round it up to 176.6 cm.
- 9 Push the head plate high enough to avoid any member of the household hitting their head against it when getting ready to be measured.

FRANKFORT PLANE



Child protocol (aged 2-15 years)

The protocol for measuring children differs slightly to that for adults. You must get the co-operation of an adult household member. You will need their assistance in order to carry out the protocol, and children are much more likely to be co-operative themselves if another household member is involved in the measurement. If possible measure children last so that they can see what is going on before they are measured themselves.

Children's bodies are much more elastic than those of adults. Unlike adults they will need your help in order to stretch to their fullest height. This is done by stretching them. This is essential in order to get an accurate measurement. It causes no pain and simply helps support the child while they stretch to their tallest height.

It is important that you practice these measurement techniques on any young children among your family or friends. The more practice you get before going into the field the better your technique will be.

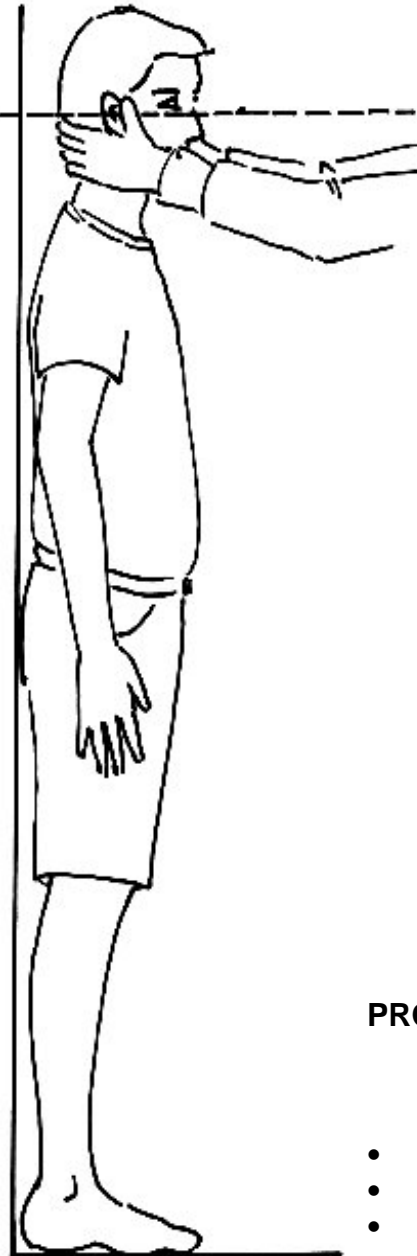
1. In addition to removing their shoes, children should remove their socks as well. This is not because the socks affect the measurement. It is so that you can make sure that children don't lift their heels off of the base plate. (See 3 below).
2. Assemble the stadiometer and raise the head plate to allow sufficient room for the child to stand underneath it.
3. The child should stand with their feet flat on the centre of the base plate, feet together and heels against the rod. The child's back should be as straight as possible, preferably against the rod, and their arms hanging loosely by their sides. They should be facing forwards.
4. Place the measuring arm just above the child's head.
5. Move the child's head so that the Frankfort Plane is in a horizontal position (see diagram). This position is as important when measuring children as it is when measuring adults if the measurements are to be accurate. To make sure that the Frankfort Plane is horizontal, you can use the Frankfort Plane Card to line up the bottom of the eye socket with the flap of skin on the ear. The Frankfort Plane is horizontal when the card is parallel to the stadiometer arm.
6. Cup the child's head in your hands, placing the heels of your palms either side of the chin, with your thumbs just in front of the ears, and your fingers going round towards the back of the neck. (See diagram).
7. Firmly but gently, apply upward pressure lifting the child's head upwards towards the stadiometer headplate and thus stretching the child to their maximum height. Avoid jerky movements, perform the procedure smoothly and take care not to tilt the head at an angle: you must keep it in the Frankfort plane. Explain what you are doing and tell the child that you want them to stand up straight and tall but not to move their head or stand on their tip-toes.

-
8. Ask the household member who is helping you to lower the headplate down gently onto the child's head. Make sure that the plate touches the skull and that it is not pressing down too hard.
 9. Still holding the child's head, relieve traction and allow the child to stand relaxed. If the measurement has been done properly the child should be able to step off the stadiometer without ducking their head. Make sure that the child does not knock the head plate as they step off.
 10. Read the height value in metric units to the nearest millimetre and enter the reading into the computer at the question *Height*. At the question *MbookHt* you will be asked to check that you have entered the child's height onto their Measurement Record Card. At that point the computer will display the recorded height in both centimetres and in feet and inches.
 11. Push the head plate high enough to avoid any member of the household hitting their head against it when getting ready to be measured.

REMEMBER YOU ARE NOT TAKING A HEIGHT MEASUREMENT FOR CHILDREN UNDER 2 YEARS OLD.

Cup the child's head in your hands, placing the heels of your palms either side of the chin, with your thumbs just in front of the ears, and your fingers going round towards the back of the neck.

↑
STRETCH



HORIZONTAL

**APPLY GENTLE UPWARDS
PRESSURE**

PROTOCOL

- SHOES OFF
- CHILDREN – SOCKS OFF
- FEET TO THE BACK
- BACK STRAIGHT
- HANDS BY THE SIDE
- FRANKFORT PLANE
- LOOK AT A FIXED POINT
- CHILDREN – STRETCH & BREATHE IN
- ADULTS - BREATHE IN
- LOWER HEADPLATE
- BREATHE OUT
- STEP OFF
- READ MEASUREMENT

Additional points all participants

1. If the participant cannot stand upright with their back against the stadiometer and have their heels against the rod (e.g. those with protruding bottoms) then give priority to standing upright.
2. If the participant has a hair style which stands well above the top of their head, (or is wearing a turban), bring the headplate down until it touches the hair/turban. With some hairstyles you can compress the hair to touch the head. If you cannot lower the headplate to touch the head, and think that this will lead to an unreliable measure, record this at question *RelHite*. If it is a hairstyle that can be altered, e.g. a bun, if possible ask the participant to change/undo it.
3. If the participant is tall, it can be difficult to line up the Frankfort Plane in the way described. When you think that the plane is horizontal, take one step back to check from a short distance that this is the case.

Height refused, not attempted or attempted but not obtained

At *RespHts* you are asked to code whether the measurement was taken, refused, attempted but not obtained or not attempted. If for any reason you cannot get a height measurement, enter the appropriate code at this question and you will automatically be routed to the relevant follow up questions (*ResNHt* and *NoHtBC*) which will allow you to say why no measurement was obtained.

21 APPENDIX D: Weight measurement protocol

The equipment

All interviewers working on NDNS will be issued with Seca 877 scales.

- These scales are accurate up to 200kg (31½ stone).

IMPORTANT

Although the scales are only accurate up to 200kg, we would like you to attempt to measure the weight of ALL participants. If the scales show a figure greater than 200kg, record the weight in CAPI as usual. This figure will then be automatically coded as inaccurate by CAPI.

- These scales display the weight in a window on the scales.
- The Seca 877 is switched on by pressing the surface of the scales (e.g. with your foot). There is no switch to turn the scales off, they turn off automatically.
- The scales take 6 x 1.5v AA batteries.
- The scales have a fixed battery which cannot be removed.

When you are storing the scales or sending them through the post please make sure you remove the battery to stop the scales turning themselves on.

It should not be necessary to have to replace the batteries, but always ensure that you have some spare batteries with you in case this happens. If you need to change the battery, please buy one and claim for it. The batteries used are commonly available.

The battery compartment is on the bottom of the scales. When you receive your scales you will need to reconnect the battery. Before going out to work, reconnect the battery and check that the scales work. If they do not, check that the battery is connected properly and try new batteries. If they do still not work, report the fault to your FPM/Regional Manager or directly to Brentwood.

The reading is only in metric units, but as for height, the computer provides a conversion. If the participant would like to know their weight in stones and pounds you will be able to tell them when the computer has done the calculation. You also have a conversion chart on the back of the coding booklet.

The protocol

1. Turn the display on by using the appropriate method for the scales. The readout should display 888.8 momentarily. If this is not displayed check the batteries, if this is not the cause you will need to report the problem to Brentwood. While the scales read 888.8 do not attempt to weigh anyone.

2. Ask the participant to remove shoes, heavy outer garments such as jackets and cardigans, heavy jewellery, loose change and keys. If necessary, turn the scales on again. Wait for a display of 0.0 before the participant stands on the scales.
3. Ask the participant to stand with their feet together in the centre and their heels against the back edge of the scales. Arms should be hanging loosely at their sides and head facing forward. Ensure that they keep looking ahead - it may be tempting for the participant to look down at their weight reading. Ask them not to do this and assure them that you will tell them their weight afterwards if they want to know.
4. The posture of the participant is important. If they stand to one side, look down, or do not otherwise have their weight evenly spread, it can affect the reading.
5. The scales will take a short while to stabilise and will read 'C' until they have done so. (The Seca 870 displays alternate flashing lines in the display window. With the Tanita scales the weight will flash on and off when stabilised). If the participant moves excessively while the scales are stabilising you may get a false reading. If you think this is the case reweigh, but first ensure that you have erased the memory.
6. The scales have been calibrated in kilograms and 100 gram units (0.1 kg). Record the reading into the computer at the question *XWt1* before the participant steps off the scales. At question *MBookWt* you will be asked to check that you have entered the participant's weight into their Measurement Record Card. At that point the computer will display the measured weight in both kilos and in stones and pounds.

Weighing Children

You must get the co-operation of an adult household member. This will help the child to relax and children, especially small children are much more likely to be co-operative themselves if an adult known to them is involved in the procedure.

Children wearing nappies should be wearing a dry disposable. If the nappy is wet, please ask the parent to change it for a dry one and explain that the wetness of the nappy will affect the weight measurement.

In most cases it will be possible to measure children's weight following the protocol set out for adults. However, if accurate readings are to be obtained, it is very important that participants stand still. Ask the child to stand perfectly still - "Be a statue." For very young children who are unable to stand unaided or small children who find this difficult you will need to alter the protocol and first weigh an adult then weigh that adult holding the child as follows:-

1. Code as "Weight obtained (child held by adult)" at *RespWts*
2. Weigh the adult as normal following the protocol as set out above. Enter this weight into the computer at *WtAd1*.
3. Weigh the adult and child together and enter this into the computer at *WtChA1*.

The computer will then calculate the weight of the child and you will be asked to check that you have recorded the weight onto the child's Measurement Record Card at *MBookWt*. Again the computer will give the weight in both kilos and in stones and pounds.

Weight refused, not attempted or attempted but not obtained

At *RespWts* you are asked to code whether the measurement was taken, refused, attempted but not obtained or not attempted. If for any reason you cannot get a height measurement, enter the appropriate code at this question and you will automatically be routed to the relevant follow up questions (*ResNWt* and *NoWtBC*) which will allow you to say why no measurement was obtained.



NATIONAL DIET AND NUTRITION SURVEY

PROMPT CARDS

CARD A

- | | |
|---|----------------|
| 1 | English |
| 2 | Scottish |
| 3 | Welsh |
| 4 | Northern Irish |
| 5 | British |
| 6 | Other |

White:**CARD B**

- 1 White - English/ Welsh/ Scottish/ Northern Irish / British
- 2 White - Irish
- 3 White - Gypsy or Irish Traveller
- 4 Any other white background (please describe....)

Mixed/multiple ethnic groups:

- 5 Mixed – White and Black Caribbean
- 6 Mixed – White and Black African
- 7 Mixed – White and Asian
- 8 Any other mixed background (please describe....)

Asian/Asian British:

- 9 Asian or Asian British – Indian
- 10 Asian or Asian British – Pakistani
- 11 Asian or Asian British – Bangladeshi
- 12 Any other Asian/Asian British background (Please describe...)

Black/African/Caribbean/Black British:

- 13 Black or Black British – Caribbean
- 14 Black or Black British – African
- 15 Any other Black/Black British background (Please describe...)

Other ethnic group:

- 16 Chinese
- 17 Arab
- 18 Any other (Please describe...)

CARD C

- 1 Husband/Wife
- 2 Civil partner
- 3 Partner/Cohabitee
- 4 Natural son/daughter
- 5 Adopted son/daughter
- 6 Foster child
- 7 Stepson/stepdaughter
- 8 Son-in-law/daughter-in-law
- 9 Natural parent
- 10 Adoptive parent
- 11 Foster parent
- 12 Step-parent
- 13 Parent-in-law
- 14 Natural brother/sister
- 15 Half-brother/sister
- 16 Step-brother/sister
- 17 Adopted brother/sister
- 18 Foster brother/sister
- 19 Brother/sister-in-law
- 20 Grand-child
- 21 Grand-parent
- 22 Other relative
- 23 Other non-relative

CARD D

- 1 Own outright
- 2 Buying it with the help of a mortgage or loan
- 3 Pay part rent and part mortgage (shared ownership)
- 4 Rent it
- 5 Live here rent-free (including rent-free in relative's or friend's property; excluding squatting)
- 6 Squatting

CARD E

- 1 Large supermarket
- 2 Mini supermarket, e.g. Tesco Metro
- 3 Local/Corner shop (including newsagents)
- 4 Garage forecourt
- 5 Independent greengrocer
- 6 Independent butcher
- 7 Independent baker
- 8 Independent fishmonger
- 9 Market (including stalls)
- 10 Farm
- 11 Home delivery (including co-operatives, community schemes/ local initiatives)
- 12 Other shop

CARD F

- | | |
|---|--------------------------------|
| 1 | More than once a day |
| 2 | Once a day |
| 3 | 2 or 3 times a week |
| 4 | Weekly |
| 5 | 2 or 3 times a month |
| 6 | Monthly |
| 7 | Every 2 months |
| 8 | Less often than every 2 months |

CARD G

- 1 Freshly made from old potatoes
- 2 Freshly made from new potatoes
- 3 Frozen, fried
- 4 Oven ready chips
- 5 Microwave chips (e.g. McCain Microchips)
- 6 Make chips another way
- 7 Do not prepare/eat chips

CARD H

1	Higher degree, e.g. MSc, MA, MBA, PGCE, PhD
2	Level 5 NVQ / SVQ
3	BTEC Advanced Professional Diploma/Certificate
4	First degree, e.g. BSc, BA, BEd, MA at first degree level
5	Level 4 NVQ / SVQ
6	HNC / HND
7	BTEC Higher National or Professional Diploma/Certificate
8	RSA or OCR Higher
9	GCE 'A'-level
10	A2
11	AVCE
12	SCE Advanced Higher Grades
13	SCE Higher Grades (A-C)
14	CSYS
15	Key Skills Level 3
16	Level 3 NVQ / SVQ
17	ONC / OND
18	BTEC Advanced or National Diploma/Certificate
19	RSA or OCR Advanced Diploma
20	City & Guilds Advanced Craft / Part 3
21	Advanced GNVQ; Vocational A Level
22	Advanced Modern Apprenticeship
23	GCSE grade A*-C

see over for more codes

CARD H continued....

CARD H

24	GCE 'O'-level passes
25	CSE grade 1
26	SCE O Grades (A-C)
27	SCE Standard Grades (1-3)
28	School Certificate / Matriculation
29	Key Skills Level 2
30	Level 2 NVQ / SVQ
31	Level 2 Essential Skills Qualifications
32	BTEC Intermediate or First Diploma/Certificate
33	RSA Diploma
34	City & Guilds Craft / Part 2
35	Intermediate GNVQ
36	Foundation Modern Apprenticeship
37	GCSE grade D-G
38	CSE grade 2-5
39	SCE O Grades (D-E)
40	SCE Standard Grades (4-7)
41	SCOTVEC National Certificate Modules
42	Key Skills Level 1
43	Level 1 NVQ / SVQ
44	Level 1 Essential Skills Qualifications
45	BTEC Foundation or Introductory Diploma/Certificate
46	RSA Stage 1-3
47	City & Guilds Part 1
48	Foundation GNVQ; Foundation VCE
49	Entry level Essential Skills Qualifications
97	Other qualifications

CARD I

- 1 Earnings from employment or self-employment
- 2 State retirement pension
- 3 Pension from former employer
- 4 Personal Pensions
- 5 Job-Seekers Allowance
- 6 Employment and Support Allowance
- 7 Income Support
- 8 Pension Credit
- 9 Working Tax Credit
- 10 Child Tax Credit
- 11 Child Benefit
- 12 Housing Benefit
- 13 Council Tax Benefit
- 14 Other state benefits
- 15 Interest from savings and investments (e.g. stocks & shares)
- 16 Other kinds of regular allowance from outside your
household (e.g. maintenance, student's grants, rent)
- 17 No source of income

CARD J

A	£15,000 - £19,999
B	£30,000 - £34,999
C	Under £5,000
D	£45,000 - £49,999
E	£25,000 - £29,999
F	£5,000 - £9,999
G	£20,000 - £24,999
H	£10,000 - £14,999
I	£75,000 - £99,999
J	£35,000 - £39,999
K	£50,000 - £74,999
L	£100,000 or more
M	£40,000 - £44,999

CARD K

- 1 Every day or nearly every day
- 2 2 or 3 times a week
- 3 Once a week
- 4 2 or 3 times a month
- 5 Once a month or less

CARD L

- | | |
|---|--------------------------|
| 1 | 5 or more times per week |
| 2 | 3 to 4 times per week |
| 3 | 1 to 2 times per week |
| 4 | 1 to 2 times per month |
| 5 | Rarely or never |

CARD M

- | | |
|---|-----------------------------|
| 1 | Never |
| 2 | Less than once per month |
| 3 | On 1 to 3 days per month |
| 4 | On 1 to 2 days per week |
| 5 | On 3 to 4 days per week |
| 6 | On 5 to 6 days per week |
| 7 | Every day in the last month |

CARD N

- 1 Sprats
- 2 Seeds as a snack (e.g. sunflower seeds, pumpkin seeds, sesame seeds, melon seeds (also known as egusi))
- 3 Cassava chips/Cassava crisps
- 4 Seaweed (includes hijiki, wakame)
- 5 Sushi (includes purchased sushi)
- 6 Papaya (includes fresh and canned)
- 7 Dried papaya
- 8 Game (includes venison, rabbit, pheasant, partridge, wood pigeon, hare or wild boar)
- 9 Non cow's milk (includes rice milk, soya milk, sheep's milk, goat's milk, oat milk , almond milk or coconut milk)
- 10 Fish eggs (e.g. caviar, cod's roe)
- 11 Smoked sausages
- 12 Goji berries
- 13 Fish liver (not oil)
- 14 Dark chocolate i.e. 50% or higher cocoa solids
- 15 Okra
- 16 Brown crab meat

CARD O

- 1 Less than once per month
- 2 On 1 to 3 days per month
- 3 On 1 to 2 days per week
- 4 On 3 or more days per week

CARD P

- | | |
|----|-------------|
| 1 | Pheasant |
| 2 | Partridge |
| 3 | Quail |
| 4 | Wood pigeon |
| 5 | Rabbit |
| 6 | Venison |
| 7 | Hare |
| 8 | Grouse |
| 9 | Wild Boar |
| 10 | Other |

CARD Q

- 1 Rice milk
- 2 Soya milk
- 3 Sheep's milk
- 4 Goat's milk
- 5 Oat milk
- 6 Almond Milk
- 7 Coconut Milk
- 8 Other

CARD R

- 1 Kabanos
- 2 Kielbasa
- 3 Bratwurst
- 4 Cervelat or Summer Sausage
- 5 Andouille
- 6 Knackwurst
- 7 Linguica
- 8 Chorizo
- 9 Mortadella
- 10 Hot Dogs
- 11 Bologna
- 12 Other

CARD S

- 1 Meat or meat products (not including poultry)
- 2 Chicken or other poultry and dishes containing them
- 3 Fish and/or seafood dishes
- 4 Eggs
- 5 Milk (including yoghurt)
- 6 Cheese
- 7 Salad vegetables (e.g. lettuce, cucumber, tomato)
- 8 Cooked green vegetables (e.g. spinach, cabbage, peas, broccoli)
- 9 Root vegetables (e.g. carrots, parsnips)
- 10 Fresh fruit
- 11 Nuts
- 12 Offal
- 13 Other

CARD T

- 1 Orange
- 2 Lemon
- 3 Kiwi fruit
- 4 Grapefruit
- 5 Mango
- 6 Banana
- 7 Lime
- 8 Pineapple
- 9 Soft citrus fruit (satsumas / mandarins / clementines)
- 10 Melon

CARD U

- 1 Every day / most days
- 2 Once or twice a week
- 3 Once or twice a month
- 4 Less than once a month

CARD V

- 1 All of the peel or skin
- 2 Most of the peel or skin
- 3 Around half of the peel or skin
- 4 Around a quarter of the peel or skin
- 5 Less than a quarter of the peel or skin

CARD W

1. Vision (e.g. due to blindness or partial sight).
2. Hearing (e.g. due to deafness or partial hearing).
3. Mobility, such as difficulty walking short distances, climbing stairs, lifting & carrying objects.
4. Dexterity (for example lifting and carrying objects, using a keyboard)
5. Learning or concentrating or remembering.
6. Memory
7. Mental health
8. Stamina or breathing difficulty
9. Socially or behaviourally (for example with Autism, Attention Deficit Disorder or Asperger's Syndrome)
10. Other impairment

CARD X

- | | |
|---|------------------------------|
| 1 | No difficulty |
| 2 | A little difficulty |
| 3 | A fair amount of difficulty |
| 4 | A great amount of difficulty |

CARD Y

- 1 Sliced bread
- 2 Crusty bread
- 3 Cheese
- 4 Tomatoes
- 5 Raw carrots
- 6 Cooked green vegetables
- 7 Lettuce
- 8 Sliced cooked meats
- 9 Well-cooked steaks
- 10 Apples
- 11 Oranges
- 12 Nuts

CARD Z

- 1 A nursery school
- 2 A primary school (including infant school, junior school)
- 3 A secondary school (including sixth form in a school) /
High school
- 4 A middle school
- 5 A sixth form college / Higher Education college
- 6 Other
- 7 Home-educated

CARD AA

- 1 Cooked school meal
- 2 Cold school meal (including sandwiches, salads)
- 3 Packed lunch (from home)
- 4 Buy lunch from shop / café outside of school
- 5 Go home
- 6 Do not eat lunch

CARD BB

- 1 Free school meal (at lunchtime) as part of universal infant free school meals
- 2 Free school meal (at lunchtime) NOT as part of universal infant free school
- 3 Reduced price or subsidised school meal (at lunchtime)
- 4 Free school milk
- 5 Subsidised school milk
- 6 Free fruit
- 7 Free food BEFORE school
- 8 Free food AFTER school
- 9 Other

CARD CC

- Vitamin D (single or with other vitamins or minerals e.g. calcium and vitamin D)
- Folic acid (single or with other vitamins or minerals)
- Multivitamins containing vitamin D and/or folic acid

CARD DD

- | | |
|---|------------------------|
| 1 | Less than once a month |
| 2 | 1 to 3 times a month |
| 3 | Once a week |
| 4 | 2 to 4 times a week |
| 5 | Once a day |
| 6 | 2 to 3 times a day |
| 7 | 4 or more times a day |

Supplement examples

- Multivitamins with/without Iron or other Minerals
- Vitamin C
- Vitamin B complex
- Selenium
- Calcium
- Cod liver oil
- Omega 3 fish oil
- Flaxseed oil
- Oil of Evening Primrose
- Menopause formulas
- Echinacea
- L – Arginine capsules
- Glucosamine with/without chondroitin
- Garlic
- Ginkgo Biloba

CARD FF

- 1 Sitting down
- 2 Hanging around
- 3 Walking
- 4 Running around or playing games for example skipping, hide and seek, football or netball

Informal activities

- 1 Cycling (but not to or from school)
- 2 Any walking (but not to or from school / nursery / playgroup)
- 3 Hoovering, cleaning car, gardening, etc.
- 4 Hopscotch
- 5 Bouncing on trampoline
- 6 Playing around, e.g. kicking a ball around, catch, hide and seek
- 7 Skating / Skateboarding / using a scooter
- 8 Dancing, including any dance lessons
- 9 Skipping with a skipping rope

Sports, games and other organised activities

- 1 Football / Rugby / Hockey / Lacrosse
- 2 Netball / Basketball / Handball
- 3 Cricket / Rounders
- 4 Running / jogging / athletics
- 5 Swimming laps / lengths
- 6 Swimming (splashing about)
- 7 Gymnastics
- 8 Workout with gym machines / Weight training
- 9 Aerobics
- 10 Tennis / Badminton / Squash

CARD II

PLEASE ANSWER YES OR NO

YOU DO NOT NEED TO PROVIDE ANY FURTHER DETAILS

I am on a period day

I use a urinary catheter

My child is aged 4 and older but is NOT dry during the day

My child is under 4 years old

I am pregnant

I am breastfeeding

National Diet and Nutrition Survey (NDNS) – Year 11

Nurse Project Instructions
N12229.01



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1 Study overview

1.1 Background

The National Diet and Nutrition Survey Rolling Programme (NDNS RP; for simplicity, referred to as “NDNS” in these instructions) is a survey of the food consumption, nutrient intakes and nutritional status of people aged 1.5 years and older living in private households. The survey is carried out in all four countries of the United Kingdom (UK) and is designed to be representative of the UK population. The study is jointly funded by Public Health England (PHE), an executive agency of the Department of Health, and the UK Food Standards Agency (FSA). A boost sample in Northern Ireland is commissioned by FSA in Northern Ireland and its funding partners. The NDNS RP has been running since 2008 and will be entering its eleventh fieldwork year in 2018. NatCen have been leading the consortium running the study since the beginning of the RP. The study was previously carried out in conjunction with the Medical Research Council Elsie Widdowson Laboratory (MRC EWL; formerly MRC Human Nutrition Research) but due to the closure of MRC EWL at the end of 2018, the new NDNS contract (for years 11-14/15) will be carried out in partnership with the MRC Epidemiology Unit (MRC Epi), University of Cambridge.

Interviewer fieldwork in Northern Ireland is carried out by the Northern Ireland Statistics and Research Agency (NISRA). Nurse fieldwork in Northern Ireland will be conducted by NatCen nurses.

Haematological and biochemical analyses of blood samples are carried out at MRC Epi and Addenbrooke's Hospital NHS Trust, Cambridge (Addenbrooke's).

1.2 NDNS in a nutshell

NDNS is a UK-wide study that aims to measure people's nutritional health. It involves adults and young people (aged 1.5 years and older). NDNS has two stages; the interviewer stage and the nurse stage. Pregnant and breastfeeding women are excluded from every stage of NDNS because of their special nutritional needs.

There are 3 main interviewer visits to each household covering face-to-face interviews, a physical activity self-completion questionnaire for those aged 16 and over, a 4-day food diary, a spot urine sample and height & weight measurements.

The nurse visit will follow as soon as possible after the interviewer visit. The nurse will usually make 1 visit to each household taking physical measurements (waist & hip, demispan, and infant length) and collecting a blood sample.

1.3 Website

We have a website specifically dedicated to NDNS, which provides information about what taking part in NDNS involves. It also explains why we need NDNS and what the data produced is used for. We have only provided the basic information about what taking part involves as we want to leave the finer details to be explained by you. The website can be found at: www.natcen.ac.uk/taking-part/studies-in-field/national-diet-and-nutrition-survey

The website address is also on advance letters. Please take time to familiarise yourself with the site and direct participants or potential participants towards it.

1.4 NDNS report publications

A number of reports for the UK as a whole and for each of the devolved countries (Scotland, Wales and Northern Ireland) are available on www.gov.uk. Links are also available via the NDNS website: www.natcen.ac.uk/taking-part/studies-in-field/national-diet-and-nutrition-survey

The latest report on results from Years 7/8 will be published on 16 March 2018: See laminate (included in your work pack) to find out more information on reports in the UK, Scotland and Northern Ireland.

1.5 NDNS Impact

NDNS data provides crucial evidence for major health campaigns and policy making. Some examples of these are the Public Health Responsibility Deal and the Change4Life campaign.

Public Health Responsibility Deal

The Responsibility Deal challenges businesses and other organisations to lead the way in positively shaping and creating an environment that supports people to make informed, balanced choices and help them live healthier lives.

Organisations sign up to the Responsibility Deal and commit to taking action to improve public health. These actions come from pledges that are issued by the Department of Health.

Examples of these pledges include;

- Reducing the amount of salt in foods;
- Eliminating artificial trans-fat from foods;
- **Out of Home Calorie Labelling** providing calorie information for customers on menus and menu boards.

More information on the Responsibility Deal can be found here:

<https://www.gov.uk/government/news/public-health-responsibility-deal-partners-help-people-reduce-calories>

Change4Life

The Change4Life campaign is a commitment for individuals, families and communities to live healthier lives. Their aim is to educate people on healthy eating and how to stay active, providing useful tips such as how to get your 5 A Day, how to reduce salt and how to cut back on fat. Their slogan, *Eat Well, Move More, Live Longer* encourages people to adopt simple behaviours that will help them to be healthier.

More information on the Change4Life campaign can be found here:

<https://www.nhs.uk/change4life>

Sugar Reduction and Reformulation Programme

The sugar reduction and reformulation programme is a voluntary programme designed to encourage the food industry to take 20% of sugar out of their products by 2020, with a target 5% reduction in its first year of implementation. This affects the retailing, manufacturing and 'eating out of home' sectors.

The main methods that businesses are using to reduce the amount of sugar in their products are:

- Product reformulation;
- Reduction in the portion size of, and/or the number of calories in products that are likely to be consumed by an individual at one time;
- A shift in consumer purchasing towards lower/no added sugar products.

Soft Drinks Industry Levy

The introduction of a soft drink levy was announced in March 2016 and comes into law in April 2018. As we know from NDNS data, sugar-sweetened soft drinks are the primary source of sugar for children aged 4-18 years, and so reducing the sugar in these drinks will have a massive impact in sugar consumption for children.

The soft drinks industry levy will apply to manufacturers and importers of added-sugar soft drinks across the UK (pure fruit juices and milk-based drinks are exempt). It has been created to incentivise businesses to reformulate their products. There are two rates that industries will need to pay based on total sugar content:

- 18p per litre for the lower sugar products (5g/100ml and above);
- 24p per litre for the higher sugar products (8g/100ml and above).

Revenue created from the levy will be spent on school programmes and lessons such as physical activity and breakfast clubs, to encourage healthy eating and exercise.

1.6 Media coverage

NDNS provides the main representative data source for diet and nutrient intake for the UK population. Below are a couple of quotes from the press, but keep your eyes open for more media coverage.



1.7 Participant feedback

We recently contacted participants who had taken part in NDNS to ask about their experience of the study. They all enjoyed taking part and unsurprisingly, it was the interaction with interviewers and nurses that they enjoyed most! Below are some quotes from participants that highlight how important your effort and hard work is to the study. We will be including the quotes on the NDNS website so please point the participant towards this if you feel they need some re-assurance about taking part in the study.

'The nurse was very good and very nice. She was good at her job. I've had many blood tests in the past and people weren't as efficient as she was.'

'Blood test didn't hurt one little bit'

'It wasn't really that time consuming... You're trying to do something for the greater good'

'I was just pleased to know that people are doing this kind of research'

'I liked the physical element of NDNS like the height and weight measurements which were interesting to see'

'It was a pleasure. The people who came to the house (the interviewer and nurse) were very nice'

2 New since Year 10

Since Year 11 is the start of a new NDNS contract we have introduced a number of changes to reflect policy interests and to make the study run smoothly:

- Working with a new collaborator, the MRC Epidemiology Unit (MRC Epi). MRC Epi will be responsible for providing the scientific and dietary leadership; the scientific and nutritional analysis and the engagement and liaison with the Field Labs.
- The long gap between interviewer and nurse stages removed. NDNS will revert to 'interviewer-nurse follow on' model for fieldwork (as for the Health Survey for England currently and NDNS Year 1).
- Emphasis of the nurse visit is on gaining a blood sample.
- Move from Sarstedt Monovette venepuncture system to BD Vacutainer system to collect the blood sample.
- If a participant is willing to provide a blood sample but is unable/refuses to fast, a non-fasting sample can be taken.
- Changes to incentives offered to participants.
- Use of barcode scanners and barcoded labels for blood samples.
- Advance letters and leaflets have been updated to reflect the changes to the project.
- Boost cases in Northern Ireland will not be eligible for a nurse visit (NI core cases only will be visited by a NatCen nurse).

3 Planning and organising your time

3.1 Contact list

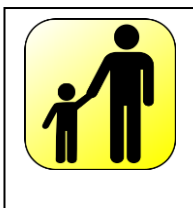
Contact list		
Project No:	N12229.01	
Operations:	NatCen Freephone for Participants only:	0800 652 4572
	Nurse Centre:	01277 690135
	Email: nursecentre@natcen.ac.uk	01277 690061
	For ordering further voucher cards: Email: IncentiveTeam@natcen.ac.uk	
MRC Epi:	For Equipment (including work pack and stationary requests/returns): Email : Equipment@natcen.ac.uk	
	Clinicians/NDNS Survey co-ordinator (available Monday – Friday, 9am – 5pm)	01223 330315

3.2 NDNS fieldwork dates

Month	Interviewer start	Interviewer deadline	Nurse fieldwork start day	Nurse fieldwork deadline
1104	Sun 1 st April 2018	Sun 13 th May 2018	Sun 1 st April 2018	Sun 24 th June 2018
1105	Tues 1 st May 2018	Tues 12 th June 2018	Tues 1 st May 2018	Tues 24 th July 2018
1106	Fri 1 st June 2018	Fri 13 th July 2018	Fri 1 st June 2018	Fri 24 th Aug 2018
1107	Sun 1 st July 2018	Sun 12 th Aug 2018	Sun 1 st July 2018	Sun 23 rd Sept 2018
1108	Weds 1 st Aug 2018	Weds 12 th Sept 2018	Weds 1 st Aug 2018	Weds 24 th Oct 2018
1109	Sat 1 st Sept 2018	Sat 13 th Oct 2018	Sat 1 st Sept 2018	Sat 24 th Nov 2018
1110	Mon 1 st Oct 2018	Mon 12 th Nov 2018	Mon 1 st Oct 2018	Mon 24 th Dec 2018
1111	Thurs 1 st Nov 2018	Thurs 13 th Dec 2018	Thurs 1 st Nov 2018	Thurs 24 th Jan 2019
1112	Mon 19 th Nov 2018	Mon 31 st Dec 2018	Mon 19 th Nov 2018	Mon 11 th Feb 2019
1101	Weds 2 nd Jan 2019	Weds 13 th Feb 2019	Weds 2 nd Jan 2019	Weds 27 th Mar 2019
1102	Fri 1 st Feb 2019	Fri 15 th Mar 2019	Fri 1 st Feb 2019	Fri 26 th Apr 2019
1103	Fri 1 st Mar 2019	Fri 12 th Apr 2019	Fri 1 st Mar 2019	Fri 24 th May 2019

4 Summary of survey design

4.1 Sampling



In year 11 a total of 4,340 addresses have been drawn from 155 points across each country of the United Kingdom. This sample will include boost addresses in Northern Ireland. (Scotland and Wales are included in the core UK sample but there is not an additional boost in these countries).

Addresses are issued to interviewers on a monthly basis over the year. Each interviewer assignment contains 28 addresses. The 28 addresses will include 9 or 10 'basic' addresses and the remaining 18 or 19 will be 'young person boost' addresses

A description of these types of addresses is included on the following page. This split is to ensure we have (as far as possible) even numbers of adults and children in the sample.

Basic Addresses: For addresses 1 – 9 or 10, one adult (aged 19+) and one child or young person (aged 1.5 years-18 years) is selected at random. In households with no such children, just one adult will be selected.

Young Person Boost Addresses: The remaining addresses (addresses 10-28 or 11-28) are for a “young person” boost – here, the interviewer will select one person aged between 1.5-18 years and *no* adults; and any households containing people aged 19+ only (i.e. no-one aged 1.5-18 years) are screened out.

Please note that pregnant and breastfeeding women are excluded from taking part in NDNS. CAPI includes a check question at the interviewer stage and again at the nurse stage.

4.2 Nurse assignments

You will be provided, on an E-NRF, with full details of participants to be seen at each address in your sample. This will consist of all participants who ***agreed*** to be contacted by a nurse. This includes individuals who are unsure about having a nurse visit but who are willing to be contacted by a nurse to discuss further. To be eligible for a nurse visit a participant must have been interviewed by the interviewer AND must have provided 3-4 days of diary data.

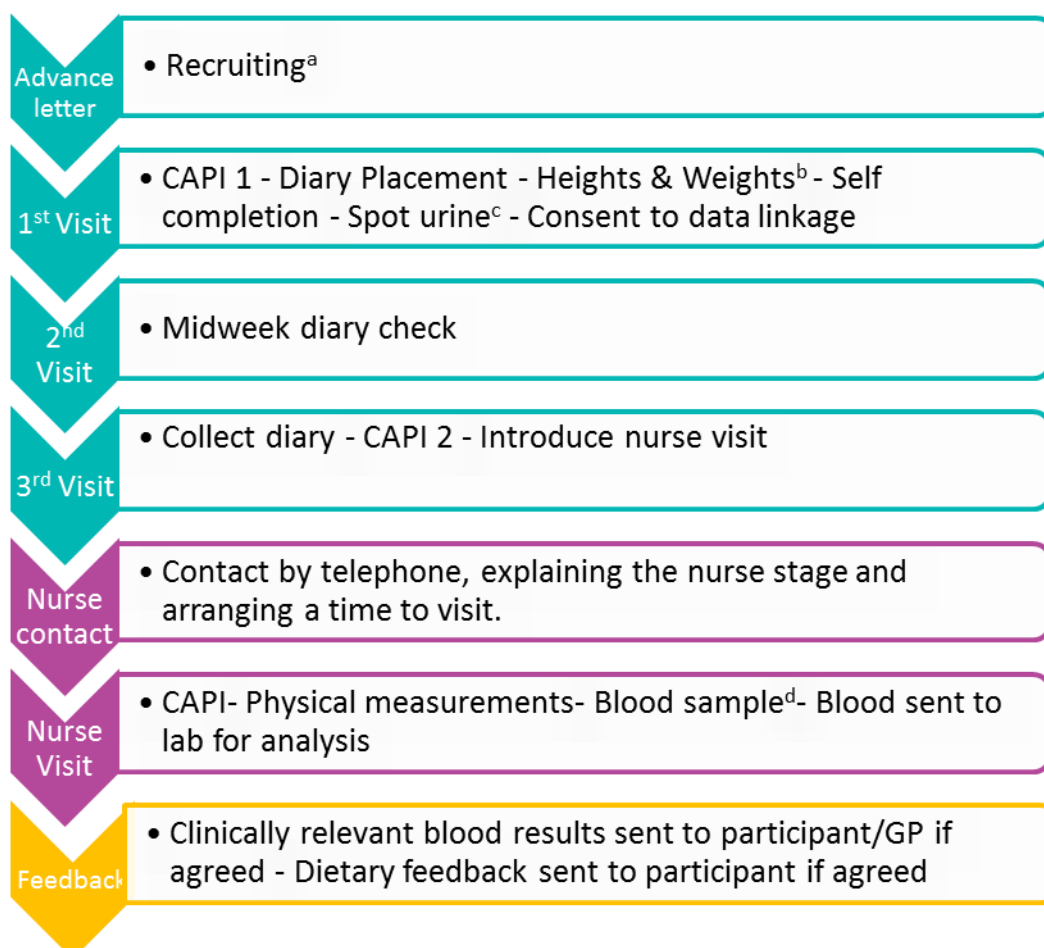
Please note that:

- People who have not provided at least 3 days of diary data are not eligible to see the nurse, and will not be issued to you. This is because we do not have enough nutritional information with which to correlate the findings of the nurse measurements.
- You won't receive any information about unproductive households or households where no-one agreed to be contacted by the nurse except for receiving a 930 – 'No Nurse Visit' in the Blaise slot on the laptop. **Note:** for any two-person households, where one person agrees to be contacted by a nurse but the other doesn't, you will need to code out the second person's schedule if they still refuse the nurse visit when you visit the other willing participant.
- **The age is set at the interviewer visit.** This means that if a participant has had a birthday **since** they were visited by the interviewer, CAPI will direct you to conduct measurements for the age they were **on the day when they were seen by the interviewer**.

4.3 Child birthdays between interviewer & nurse visit

- The age of the participant is ‘frozen’ at the time the interviewer made her/his visit and administered the household questionnaire. The age that is shown on the E-NRF is the age you must therefore use for the nurse visit measurements.
- For example, if a participant was 10 years old at interview but becomes 11 years by your visit, **do not** measure their waist & hip even though (s)he is 11 years old when you see him/her. If participants query this or ask you to perform the measurement/test you must explain to them that you are not able to because the age of the individual is based on the age at interview. The computer will automatically calculate which measurements you should take in this situation.
- The exception to this rule is for who has the **blood-taking responsibility for children**. For this element only, the age of the individual will be based on the age at time of the blood visit. For example:
 - if a child is 10 at the interviewer visit but has turned 11 by the time you see them, you as an NDNS nurse, can take the blood from the child.
 - Likewise, if you are an ‘extended role’ nurse visiting a child who was 5 at the interviewer visit but has turned 6 by the time you see them, you can take blood from the child.
 - If a child is less than 6 years old then a Paediatric Phlebotomy nurse must be booked to take the sample (unless you are one of the Paediatric Phlebotomy / Extended Role nurses authorised to do this for year 11). With regards to the blood sample tubes pack, you should **always** use the relevant pack for the age the participant was at the interviewer visit. (See section 14.4 for more detail).

5 Fieldwork overview



^a From Year 11, all advance letters will be sent from the NatCen office.

^b Heights and weights are included in the CAPI as a parallel block. This can be completed at any point after CAPI 1.

^c Spot urine is included in CAPI 1; however there will be an option to collect urine on visit 3 if it couldn't be collected at visit 1. (Urine samples cannot be collected at visit 2).

^d Nurses take a fasting blood sample. If the participant is unable/unwilling to fast but willing to provide a sample, then a non-fasting sample may be taken.

5.1 Interviewer – first stage

Interviewer fieldwork is issued in 12 monthly waves (April 2018 – March 2019) and will run until early May 2019. Interviewers make 3 main visits.

5.2 Nurse – second stage

- The second stage of the survey follows on immediately from the interviewer fieldwork. Interviewers will have introduced the nurse visit and told participants what taking part will involve, along with leaving them the Stage 2 leaflet.
- You will be asked to introduce the nurse visit by making a telephone call to the participant. During this call you will provide further information about what participation will involve and make an appointment with the participant to collect a fasting blood sample. Further information about the contact requirements and telephone introduction can be found in Sections 8 and 9
- In most cases you will make **one visit** to the participant to collect a blood sample and the other physical measurements that they agree to. Rules around when a second visit can be made are found in Appendix D.
- Participants can seek further reassurance by visiting our website www.natcen.ac.uk/taking-part/studies-in-field/national-diet-and-nutrition-survey using the NatCen Freephone number 0800 652 4572, or emailing NDNS@natcen.ac.uk. All these details are found on the advance letter.
- The interviewer will have given the participant the Stage 2 Nurse Visit leaflet that describes the measurements to be taken at the nurse visit and their purpose. Before you carry out any measurements, check whether they have read this leaflet. If they haven't, give them another copy to read through. They must have read and understood this leaflet before you continue. Before you take the blood sample, you will obtain agreement in writing.
- Blood **can only** be taken from the antecubital fossa of either arm, which is generally less painful than the back of the hand; two attempts (one on each arm) are allowed in **adults and children**. With the participant's permission, clinically relevant blood results will be sent to their GP. This information will also be sent to the participant, if they so wish. See Appendix B – Blood Analytes for further detail.

5.3 Nurse content summary

Nurse visit	18-23 mths	2-3	4-10	11-15	16-64	65+
Infant length measurements	●					
Prescribed medicines	●	●	●	●	●	●
Waist and hip circumference				●	●	●
Demispan ^a					●	●
Fasting Blood Sample (include venepuncture check list) ^b			●	●	●	●
Non-fasting blood sample	●	●				

^a Only to be taken where valid weight measurement but not valid height measurement was collected (19-64 years)).

^b Those unable or unwilling to fast can provide a non-fasting sample.

For more information on nurse measurements and samples, see Appendix A.

6 Paperwork

6.1 Nurse record forms (e-NRFs)

You will receive a pad of blank paper Nurse Record Forms (NRF). Please record on these the e-NRF information for cases that come through from the interviewer for Nurse Contact.

You will also receive:

- a Sample Cover Sheet for the assignment listing all 28 addresses issued to the interviewer;
- a sheet of address labels, with one label for each address in the assignment;
- an Int-Nurse detail sheet, showing the name and contact telephone numbers for the interviewer working on the point / assignment with you.

6.2 NRF labels/serial numbers

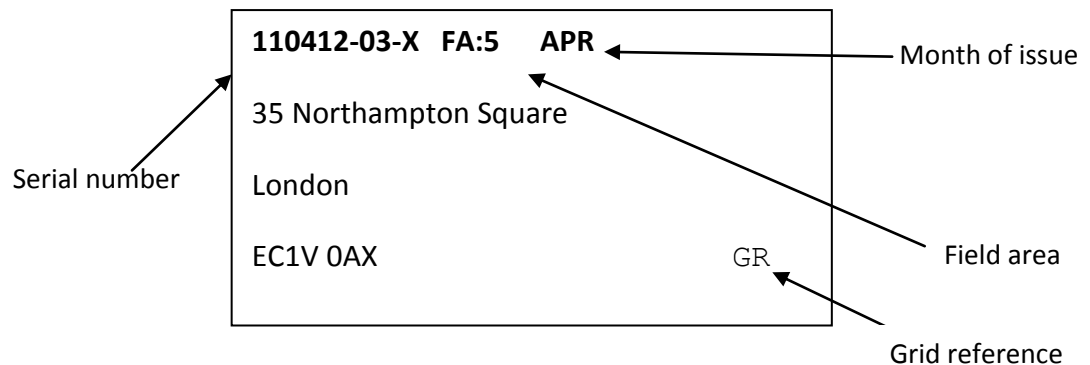
Each address/household/person in the survey has been assigned a unique identity number – the serial number. It allows us to distinguish which documents relate to which person.

The Address Labels will also have the 8 digit serial number (plus check letter) in addition to the full address. The serial number is made up of:

- Two digits for the YEAR ('11' for year 11, 2018/19)
- Two digits for the MONTH (01=January; 04=April etc)
- Two digits for the Point number, within month (01..12)
- Two digits for the Address number, within point (01..28)
- A check letter
- Person number (identifies the person in the HH (1 for 19+ and 2 for child or young person). The person number is only included in the personal serial number after the HH serial number).

For example, for a basic address - issued in April - with two participants, the serial number for person 1 might be 11041203X1 and the serial number for person 2 within that same household would be 11041203X2.

The NRF address label looks like this:



Serial Numbers: It's crucial that the correct serial number for a particular person is used on all documents for that participant. It is vital that the information the interviewer collects about someone is matched to the information you collect about him or her. If the wrong serial numbers are entered on documents, data from one person will be matched with that of someone else.

Household location: GR is the Ordnance Survey grid reference for the address. This is to help those in rural areas to locate addresses. You will be sent a map with all the addresses selected for the assignment you are working in marked on it. If this is not clear, the postcode can also be used to locate addresses and to obtain a map using one of the following web pages: www.multimap.co.uk or www.streetmap.co.uk. If you cannot search these yourself, please contact Brentwood who will be happy to help.

If the address has been hard to find or is particularly remote, we have asked the interviewer to add notes that will be fed forward through the e-NRF to help you find it.

6.3 Participant information

The e-NRF is separated into a number of sections. The first section will provide you with the following information:

- The household's main telephone contact number;
- Date of first interview (with the interviewer);
- Whether each participant answered 'yes' 'no' or 'unsure' when asked for agreement to be contacted by the nurse. This will help you to gauge how to pitch your initial contact with each participant*;
- Participant name;
- Parent(s) name (for participants under the age of 16);
- Which parent is legal parent / guardian and has given consent for child to be involved;
- Participant age;
- Participant date of birth;
- Sex of participant.

Please note: for core addresses containing two selected individuals, you will receive addresses where one or both said 'yes' or 'unsure' when asked if they were willing to be contacted by a nurse. This means that you might receive the details of someone who said 'no' if the other participant was willing to be contacted. If both participants refused the nurse visit, their address will not be issued to you.

For young person boost addresses (i.e. where the interviewer has only recruited one participant – a young person – for the survey) then only those that say 'yes' or 'unsure' will be issued to you.

We encourage interviewers to provide as much information as possible on:

- Detail relating to the location of the household within the address;
- Unusual circumstances – e.g. best times to call, information about the household occupants etc;
- Other information that might be of relevance to you.

Please note: Any sensitive information will be phoned through from the interviewer rather than being included on the e-NRF.

6.4 The 'NurseLink'

All the information you need for each address is recorded by the interviewers in their admin block and is then transmitted to you via the 'NurseLink'. This is the electronic method used to pass information between the interviewer laptop and nurse laptop. Your address menu is updated via the NurseLink each time you connect to the host.

You should use your sample cover sheet to log your progress for each address. Updated information about each address will come through to you via the NurseLink and will show up in your address menu.

At the start of fieldwork your address menu will be blank. When the interviewer has fully completed work at a household **and** transmitted it back to the office, the address will be transferred to your laptop, usually within 24 – 48 hours. This means that at the start of your assignment you will not see a slot for that point on your laptop **until** the interviewer transmits the first household to you. Further addresses will then appear as fieldwork goes on and the interviewer transmits more completed households.

When you connect to the host machine, all the information you need about the household will automatically be picked up by your laptop. You will not be required to carry out a nurse visit at some addresses, for example, empty properties or households who refused to take part. You should monitor your address menu closely and use your sample cover sheet to map your progress.

It is essential to pick up the 'NurseLink' prior to going out on a visit as it 'brings forward' information from the interviewer CAPI to the nurse CAPI. In order to access the 'NurseLink' and the most up-to-date information, you must connect to the host regularly to pick up your work. We recommend that you do this every 2-3 days. This should help you to plan your work effectively and inform you as soon as possible if there is any work to do at the addresses on your sample cover sheet.

Once you have received the slot and the first case for a Nurse Visit, you should view the case details contained in the e-NRF and transfer these to a paper NRF page from the pad you will be sent within the work pack. This will then become your working document to log down the methods of contact you have attempted and when you have visited the address. This document will then be shredded, as usual, after the case is completed and fully transmitted.

7 What do participants know about your visit?

7.1 The interviewer introduction

The interviewer introduces your visit at the end of their interview by reading out the following:

“We would like you to help us with the second stage of this study. This is a visit by a qualified nurse to collect a small amount of further health information and, if you agree, carry out some measurements. The nurse would like to contact you to explain some more about what is involved and answer any questions you have.
May I have your permission for him/her to contact you?”

Participants have three options at this question: **‘Yes’**, **‘Unsure’** and **‘No’**. All participants who answered **‘yes’** or **‘unsure’** will be included in your sample. The e-NRF will contain this information.

Interviewers provide the following information to potential questions about the nurse visit:

- It is an integral part of the survey - the information the nurse collects will make the survey even more valuable.
- The nurse is highly qualified. They have all had extensive experience, working in hospitals, health centres etc. and have also been specially trained for this survey.
- If the participant wants, he/she will be given the results of any measurements carried out by the nurse. If he/she likes, clinically relevant blood sample results will also be sent onto them and/or their GP.
- Participants are not committing themselves in advance to agreeing to everything the nurse wants to do. The nurse will ask separately for permission to do each part - so the participant can decide at the time if he/she does not want to help with a particular one.
- A Multi-Centre Research Ethics Committee has approved this study.

At the end of the interviewer stage each participant is given a “Nurse visit information” (stage 2) leaflet by the interviewer which describes the purpose of your visit. You will have copies of the same (Stage 2) leaflet, which explains the measurements and samples in more detail. You should check that the participant has read this both when

making arrangements to visit and when you arrive for your appointment. You should then explain in detail the measurements and samples involved in your visit (N.B. there are different requirements of the visit for different age groups).

You will be provided with the interviewer's details in your work pack and you should contact the interviewer to ascertain when they have started work on the assignment and how they are getting on. Likewise, the interviewer will be provided with your details so that he/she can contact you for the same reason. There may also be a note on the e-NRF from the interviewer asking you to call them to discuss a particular aspect of that case.

8 Achieving high response rates

In most cases participants will be looking forward to your visit. Having completed stage 1, including the diary, they have already invested time in our survey, and most will be willing to complete the second stage. However, some participants may need persuading – especially those participants who said they were ‘unsure’ about being contacted by a nurse.

The interviewer will also have gauged how ‘willing’ the participant seems regarding having a blood sample taken at the nurse visit and will have provided this information on the e-NRF.

Please think carefully about what to say to participants, and check the e-NRF so that you know whether they said ‘yes’ or ‘unsure’ before making contact, so that you can pitch your introductions appropriately.

8.1 The importance of high response

Our target response rate for year 11 is: **85%**. This is 85% of those who, at the interviewer stage, agreed to be contacted for the second stage – the nurse visit.

Past experience shows that achieving high nurse response rates requires continuous hard effort. A high response rate at both stages of the survey is crucial if the data collected are to be worthwhile. Otherwise, we run the risk of getting findings that are biased and unrepresentative, as people who do not take part are likely to have different characteristics from those who do. Keeping participant co-operation through to this important second stage of the survey is therefore vital to its success. Contacting participants quickly, as soon as you receive the information via the e-NRF, is key to this.

8.2 The importance of the blood sample

The blood sample as an objective measurement ‘validates’ the rest of the nutrition information collected in the food diary. It is through the addition of the blood sample data that NDNS delivers comprehensive and robust nutrition data to be included as a National Statistic and contributes to population data.

The blood sample is the focus of the nurse visit. Therefore, we aim to achieve an overall response rate of 85% (of those who agree to contact by the nurse *and* who are eligible for a blood sample).

We understand that some participants may not like the idea of/be nervous about the blood sample itself, but it is absolutely crucial that we ‘persuade’ as many participants as possible to agree to give a blood sample. **A fasting sample is the preferred type of sample to gain co-operation for.** However, to ensure we maximise the number of

blood samples gained, we are (in some defined situations only) able to take non-fasting samples where a participant:

- agrees to a fasting sample and then forgets to fast on the day of the appointment;
- agrees to a blood sample but does not want to fast for it;
- initially refuses a blood sample over the phone, but then changes their mind when you visit them to gather the rest of the Stage 2 data.

Note: See Appendix D for a guide to what you can / can't do in order to manage these sorts of situations.

9 Contacting participants

9.1 Number of ‘attempts to contact’ you must make

You must make at least **7 telephone contact attempts per household**. Each of these attempts should be at different times of the day and on different days of the week, including evenings and weekends. See Appendix E for a list of suggested points to cover when making first contact with the household.

Personal visits are preferable to making telephone calls. However, we recognise that it is not always possible to make as many personal visits as you might like (e.g. if you live a long way from a participant’s home). As with telephone calls, each of these personal visits must be at different times of the day and on different days of the week, including evenings and weekends. If you are unable to make contact initially by phone, you should make a minimum of **4 personal visits per household**. It may be helpful to fit these in when you are in the area undertaking the appointment visit to another address on the assignment. You can then plan to drop round to the others, to make contact, even if you haven’t phoned them first.

The telephone contact attempts and personal visits should be interspersed to maximise chance of contact.

You are asked to keep a full account of each contact attempt you make at a household on the paper **Nurse Record Form**. Note the exact time (using the 24-hour clock) and date you made contact. In the notes section keep a record of the outcome of each call and visit.

Throughout the fieldwork period you will be expected to update the contact situation for each address on the point, with your Nurse Field Performance Manager (NFPM). If you fail to make contact with a household, your NFPM is the only person who can authorise coding it out as an unproductive. However, we know that you will often succeed in contacting participants quickly and early into the fieldwork period and that you will pull out all the stops to get participants that are difficult to contact.

Summary of Contact Expectations:

- Within the first 3 weeks of receiving the case from the interviewer:
 - Contact participants by phone or personal visit;
 - Make at least 7 phone calls (on each of the telephone contact numbers given on the participant contact sheet). You should also try texting the participant if there is a mobile phone contact number available – see below for approved style of text message;

- Make at least 4 personal visits to the door of an address if there is no response to telephone contact. Intersperse your phone calls (as above) with personal visits;
- During week 3 - send one nurse re-contact letter with your name and telephone contact number.
- Weeks 3 – 6 after receiving the case from the interviewer:
 - Continue to take opportunity to make personal visits when you are in the area conducting other fieldwork on the point (or even if you are in the area when working on another project e.g. HSE). You should achieve a minimum of 4 personal visits to the address in the face of no contact by any other means.
 - Try texting the participant again:
 - *Message for (insert participant name). I am trying to contact you regarding the National Diet and Nutrition Study. Please let me know by text or phone message when you might be free to talk to me. Regards. (Insert your name) – Survey Nurse.*
 - If you have made the minimum 4 face-to-face visits to the address and are also no longer travelling to / working near the area because the point of work was small, your work is finished, or the point is considered 'out of area', you should speak with your NFPM. They may advise you to contact the original interviewer to see if they are currently working in or near the area. If they are, they could carry out a personal call informing the participant that you wish to make contact. If you are able to give a couple of appointment dates and times, then the interviewer may be able to make an appointment for you and then confirm the details with you. The original interviewer contact number is listed on the participant details sheet.
 - During week 5 - send a second (and final) nurse re-contact letter with nurse name and telephone contact number. You may wish to highlight the Freephone number for them to see clearly.
 - Your NFPM will advise you whether there is any flexibility for an extension beyond the set deadline for an individual case.

9.2 Notifying appointments

Once an appointment date is made you must enter this into the Blaise slot and transmit the appointment back to the Host. To do this you need to select:

Admin – Enter/Edit Calls – Select the Project Slot – Highlight (don't enter) the serial number – press Alt+A – complete the date and time of appointment and save.

You should then see the appointment date appear in the comments section next to the serial number in the Project Assignment Slot. Make sure you 'Connect to NatCen'

to transmit the appointment detail back and update the reports. If the appointment changes – just go back in and update the date and time. **Note: you cannot delete any cancelled appointments, you can only enter forward appointments.**

9.3 Broken appointments

If someone is out when you arrive for an appointment, make every effort to re-contact the person and fix another appointment. Start by leaving a **Sorry we missed you Card** at the house saying that you will call back when you are next in the area. Add a personal note and the mobile telephone number you are using for NatCen work. You should also telephone them while still at the address in case they are delayed getting home for your appointment.

See Appendix D for further detail about whether a second appointment is permissible in a given situation.

9.4 ‘Selling’ the nurse stage

The year 11 fieldwork model is built around a single visit to participants for the majority of cases, where the emphasis on the visit is for gaining a blood sample. This is to provide the objective measurement that complements the nutritional analysis from the food diary and the other nutritionally relevant health measures (like height, weight and waist and hip circumference). Gaining as many productive nurse visits, with blood samples, is therefore crucial to the research. However, we know this is one of the most challenging areas to overcome.

It is also well known that even though participants may initially refuse a blood sample when first contacting them (say on the phone), once a Nurse is able to talk face-to-face, the participant sometimes changes their mind after the nurse has given them some reassurance and further information on the benefits of taking part fully (for both the participant and the research).

You will therefore still be able to visit participants, who initially refuse a blood sample over the phone and who are aged 18-23 months and 11 years and older. This is because there will be another measurement data to be collected and being face-to-face with participants may help in enabling them to reconsider their initial refusal.

For participants aged 2-10 years in young person boost addresses (i.e. where they are the only participant in the household to be contacted (through their parent / guardian)), the blood sample is the only measurement / data collection procedure. Thus, if these participants / their parents refuse the blood sample on the phone, you **will not** be visiting them at all. See Appendix D for some further information.

Note that if the 2-10 year old is in a basic address and there is an adult participant agreeing to your visit, you will take the opportunity to talk to the child and their parent(s) face-to-face, while attending for the adult's nurse interview, and hopefully 'persuade' the child / parent to provide a blood sample.

Some of the tips below may help in securing an appointment:

- **Be careful to avoid calling your visit a "health check".** One of the most common reasons given for participants refusing to see the nurse is "I don't need a medical check / blood sample - I have just had one". Avoid getting yourself into this situation. You are asking the participant to help with a survey and unfortunately the researchers are not able to access any medical record data held by their GP for example.
- **Diet and nutrition is interesting and important.** People are interested in diet and nutrition and are concerned about it. This is a high profile survey on topical issues, such as diet, obesity, smoking, drinking, how nutritional habits affect these. Survey reports receive wide press coverage. It is also of immense interest in the media BUT take care in emphasising this too much, we need to get complete representation from those with good and poor dietary habits. Remind them that they spent a lot of time and effort on completing the food diary and the nurse visit data helps to complete the picture.
- **Tokens of appreciation.** Remember that participants will receive a token of appreciation for providing a blood sample (a £15 gift card). This should **not** be seen as 'payment', but as a way of saying thank you for taking part in this element of the study.
- **Tailor your visit to specific needs.** Sometimes a participant may want the nurse visit carried out in a particular way. For example, an older person may want a family member to be present during the nurse visit, or they may prefer a male nurse or female a nurse to take their measurements. We want our participants to take part in the nurse visit, so as far as possible please try to meet the requests of the participant. Usually a bit of reassurance from you is all that is needed, but if there is something else you need, for example a chaperone, please call your NFPM. Also be sure to remind them that every measure is voluntary and you will ask their permission before taking any measurement / sample.
- **"You won't want to test me...".** Some people think that they are not typical (they are old, they are ill, they are young and healthy, and so on) and that it is therefore not worthwhile (from both your and their point of view) to take part in the survey. You will have to explain how important they are. The survey must reflect the whole population, young and old, well and ill. We need information from all types of people, whatever their situation. If someone suggests that you see someone else instead of them, explain that you cannot do this as it would distort the results. Our target is to interview and measure all eligible participants. The measurements carried out by the nurse are an integral part of

the survey data and without them the interview data, although very useful, cannot be fully utilised.

10 Carrying out the interview

Make sure you fully understand the differences in the protocols for children and adults.

10.1 Feed-forward data

Information recorded by the interviewer is transmitted back to the office by the interviewer. From the first date of your fieldwork period, the relevant information from the interviewer is available as feed-forward data to load onto your laptop through the Nurse Link once cases start being fed through to you.

IMPORTANT

- The person number assigned to someone **by the interviewer** is the number that **must be used on the consent booklet for that person**.
- Connect to the host machine at the start of, and regularly throughout your assignment to pick up your work.
- Before you go to a household check that the feed-forward data **for each participant** is on your laptop, by entering the household serial number through: Main menu – View Loaded Work – select project slot – enter each serial that is for a Nurse Visit. If the interviewer's information has been successfully transferred, the computer will show you the e-NRF information about the members of that household, and the schedules (in the parallel blocks) – then you can go ahead with that household.
- If you cannot access the feed-forward data because of a technical problem you will need to contact the help desk for assistance on 01277 690200.

10.2 The nurse interview documents

The nurse questionnaire is on your computer (CAPI). As well as the computer schedule, you will use other documents during the interview itself. The CAPI program will prompt you when to use certain information leaflets and sections of the consent form.

Nurse interview documents include:

- Nurse recontact letter;
- the Stage 2 - Nurse visit information leaflets;
- the Consent booklet;
- the Ametop®/ Cryogesisic® information leaflet;
- the 'Giving a blood sample' leaflet;
- Measurement record card;

-
- Nurse broken appointment card;
 - Nurse second appointment card;
 - Blood bravery certificate;
 - Laminated infant Frankfurt plane card;
 - Pre-nurse card (NI only);
 - A sheet of barcoded labels to assign during the visit.

10.3 The Stage 2 leaflet

The interviewer will give the participant a Stage 2 leaflet or “nurse visit information leaflet” at the interview stage. This will tell participants about the nurse visit and content before you call. After you have explained what you are going to do and the order in which you wish to see the participants, you should ask participants if they have read their copy of the interviewer Stage 2 leaflet. Remember to also give participants ‘The Nurse Visit’ leaflets which provide participants with more detailed information than the interviewer versions. Participants **must** read the **nurse version** of the leaflet before you start doing any measurements. It describes what you will be doing and advises them about information being sent to their GP. This will give them something to do whilst you are sorting yourself out, so make sure to allow them time to read it. Be prepared to answer any questions they may have at this point.

Note: there are 2 versions of ‘The Nurse Visit’ leaflet: one version for those aged 11+ (including adults and parents/guardians of children) and one leaflet for children aged 10 years and under.

11 The consent booklet

Written consent is required of participants to continue to take part in the nurse visit and must be gathered after participants have had chance to read this information and make an informed decision.

11.1 Completing the consent booklet

Complete a consent booklet for **all** individuals who you make a nurse visit to **regardless of age** as the first two written consents required are about continuing to take part in the study.

Immediately before you start to carry out measurements on a participant, complete the first half of page 1 of the consent booklet while still in the company of the participant. **Never do this before your visit to the household (you need to check that the details recorded are correct).**

The consent booklet contains the forms the participant/parent of participant has to sign to give written consent for:

- Continuing in the study (having read the information and had chance to ask any questions).
- Acknowledging they can withdraw at any time.
- A sample of blood to be taken.
- Clinically relevant results from the blood sample to be sent to the participant and/or their GP.
- Storing of the blood sample.
- Clinically relevant blood results not being sent to participant **NOR** their GP.

Consent booklet format

The consent booklet includes all the age-specific consents required and the office copy for dispatch of any blood sample. The participant-facing consent sections are carbonised. Therefore when filling out the consent sections, please ensure that the participant presses hard enough so that the information transfers properly to the office copy. The participant copy, which is perforated, will need to be torn out and left with the participant as a record of their consent. Please ensure the participant serial number is completed on each of the copies and that the participant is aware that this is their reference should they need to contact the office / call the Freephone number.

The procedure for obtaining consent is unchanged for year 11. The participant must:

- **Initial** beside each procedure they give consent to. (A tick is also acceptable but initials are preferred).
- Print and sign their name at the bottom of the relevant section of the consent booklet. As soon as they have initialled (or ticked) for one consent, ask them to complete their full signature, just in case they don't agree to any further samples or measurements.

Always make sure participants **initial (or tick) the relevant boxes AND print and sign on each relevant section of** the consent form/s. Without these there is no evidence of express consent and we are limited on how the data can be used and whether samples can be stored.

If a Blood sample is taken you must also ensure that you affix label NCON on the front of the consent booklet, and affix label OFFDESP to the Office Despatch Note (last page of consent booklet). When affixing the NCON label for those providing a blood sample, you must use your barcode scanner to assign those labels to that particular respondent. CAPI will prompt you to do so. This is discussed in more detail in section 14.10.

The carbonised copy of the consent booklet page/s they have signed is the participant's legal copy of their written consent and should be left with them at the end of the visit.

The front cover of the booklet **must be completed for every** participant visited regardless of whether measurements requiring consents are to be taken. This is because it provides an important check in the office of who has been seen by a field nurse. Every piece of information on the front is important. It will form the basis of any blood result letters which are sent to GPs. You are asked to record the date of birth again. This is an important identity check, along with your nurse number and the date of interview.

Please note: that we will not send clinical results letters if the participant has not given written consent. However, for children under the age of 16, if consent has not been given to feedback clinically relevant blood results to the parent(s) or the GP, **AND** if consent has not been given for the survey doctor to be able to contact the parent/GP in the case of a clinically relevant result, you will NOT be able to take a blood sample from that child. This is to protect the safety of the child and ensure that consent and our legal obligations remain intact.

Fill in the full name, complete address **and** telephone number of the GP on every consent booklet for a household, even when both members have the same GP based at the same surgery. Each individual is treated separately once the booklet reaches the office so we cannot cross-reference booklets.

Throughout your visit you will need to record the outcome of the participant's consent for the following samples or measurements:

8. SUMMARY OF CONSENTS - RING CODE FOR EACH ITEM	YES	NO
a) Read and understood stage 2 information sheet	01	02
b) Understand right to withdraw	03	04
c) Sample of blood to be taken	05	06
d) Blood sample for storage	07	08
e) Blood sample result to participant	09	10
f) Blood sample result to GP	11	12
g) Does not wish to receive results or have them sent to GP	13	14
h) Agrees survey doctor can contact to discuss results if necessary – children aged 1.5-15 years	15	16

By the end of your visit, the participant must have **8** codes ringed at Item 8 (either a 'yes' or a 'no' for each of items a-h).

The last few pages of the consent booklet are despatch notes for blood samples. These are to be sent to the BioRepository at Addenbrooke's and the local field laboratory. There is also an office despatch record (on the back page) for you to record blood sampling details for the office. Again, it is essential that the information on these despatch notes is accurate. The blood postal form must be included with the sample sent to the BioRepository.

11.2 Age relevant consent forms

Within the consent booklet, there are four age-relevant consent forms you will need to be familiar with:

1. Adult consent form for participants aged 16 years and over.
 2. Parental/Guardian consent form for participants aged 4 – 15 years.
 3. Child assent form for participants aged 5-15 years.
 4. Parental/Guardian consent form for participants aged 1.5 - 3 years.
- Participants **must** initial or tick each statement that they agree to.
 - Participants and nurses should **both** sign and print their name and date the form.

Leave the participant copy with the participant, as this is their legal record of what they have consented to.

11.3 Participant signatures

Use a black pen when completing the booklets, and ensure that signatures are always in pen, not pencil. Each participant must ideally **initial (but can tick)** each box if they have consented to the measurement or sample to be taken. While ticking is now allowed, initials are preferred as this suggests that the participant has carefully read through the consent booklet. The participant **must also sign and print their name** on each consent form. Do not erase any of the personal information. If necessary, cross out errors and rewrite so that any corrections can be seen.

Without signed and initialled/ticked consents we cannot fully utilise the samples.

12 Obtaining consent to interview minors

The rules to follow depend on whether the minor is aged 16/17 years or is aged between 1.5 and 15 years. **Never break any of these rules.**

12.1 Participants aged 16/17 years

You need to get consent from the participant but you do not need parental consent to interview or take samples from someone of this age. If the participant lives with their parent(s), out of courtesy advise the parents what you will be doing.

12.2 Participants aged 1.1-15 years

It is only the person(s) listed on the e-NRF as being a parent/having legal parental responsibility that can give verbal consent to interview and verbal/written consent to measure a child aged 1.5 to 15 years. So, if for example, a grandparent, other relative or childminder is looking after the child participant when you call (and is acting in 'loco parentis' while providing child care) they **cannot** give consent to interview or for any of the measurements.

- You must **always** ensure that a parent/person with legal responsibility for the child (named on the e-NRF) is present during your interview. This is to protect both the child and you. You will also require their presence in order to obtain written consents during the interview.
- Written consent is required from the parent/legal guardian to take blood, to have clinically relevant blood results sent to themselves and/or to their child's GP and to store blood. This is essential – without it we cannot fully utilise their data.

- The agreement of the child should of course also be sought. **If disagreement arises between parents and/or parent and child about whether or not to co-operate, always respect the wishes of the non-co-operator.** This is especially important where blood samples in children are concerned.
- The child should read the consent form before signing. They must initial each statement they agree to, and sign/print their name and date the bottom of the form. You must also sign/print your name and date the bottom of each form.
- For children aged **5-15 years**, the child assent form should also be completed. In the case of children who cannot sign their assent, provided they do not appear to verbally disagree with the procedure, the written assent can be provided by the parent/guardian only.

13 Nurse protocols

For several of the measurements you will take on NDNS you should refer to your NatCen Nurse Surveys protocols manual:

- Infant length measurement (aged 18- 23 months)
- Waist and hip measurement (aged 11+)
- Demispan (aged 65+ or 19-64 if height was not taken or deemed to be unreliable during interviewer stage)
- Fasting blood sample (aged 4+)
- Non-fasting blood sample (aged 1.5-3 years and those aged 4+ who are not willing to fast)
- Use of Ametop HRP
- Use of Cryogesic HRP
- Venepuncture CPG

Further NDNS-specific information is provided in the following chapters about the blood samples. Information is also provided about the despatch of these samples.

14 Blood sampling protocol

14.1 Introduction

Blood sample donation and subsequent correct sample distribution is a very important part of NDNS. One of the main objectives of the survey is to measure indicators of blood function, nutrition and other measures of health to relate these to dietary and social data.

The blood will be analysed for a large number of analytes including haematology measures (white blood cell count, haemoglobin, platelets etc.), serum lipids (cholesterol, triglycerides), markers of inflammatory status and markers of mineral and vitamin status.

For the purposes of NDNS, the samples will not be tested for any viruses, such as HIV, or for bacterial infections, nor will they be used for genetic testing.

14.2 Eligibility criteria

Participants aged 4 years and over will be asked to give a fasting blood sample wherever possible (if not excluded from fasting). Participants who are aged under 4 years old will be asked to give a non-fasting sample. Those aged 4+ who are unwilling to fast may give a non-fasting sample, although **wherever possible fasting samples should be sought**.

Note - the option of providing a non-fasting sample is available to participants aged 4 and over who are willing to provide a sample but are not prepared to fast.

Anticoagulant medication:

Participants are not eligible to provide a blood sample if they are taking any anticoagulant medication. However, if they are taking antiplatelet medication then they can still provide a blood sample. When that question is reached in CAPI, press the F9 key for more information on the names of anticoagulant and antiplatelet medication to assist in coding related exclusion criteria.

Fitting, convulsions or febrile fits:

Participants are not eligible to provide a blood sample if they have had a fit or convulsion or convulsion associated with high fever in the previous 2 years. For children under 16yrs further questions will be asked regarding the type of fit/convulsion experienced if they answered yes to the first screening question. This will differentiate febrile related fits from any other fit/convulsion and will enable more children who experienced febrile fits only to take give a blood sample, if they wish to. CAPI will guide you through the screening questions.

Obtaining blood samples from diabetics:

Most diabetics can provide a fasting blood sample, but there are some precautions to take into account (outlined below). The preference is to obtain a fasting sample, if possible. You will provide reassurance about this, but if the participant remains anxious, a non-fasting sample can be taken. CAPI will take you through the relevant questions.

Acceptable procedures according to diabetic medication:

- Participants on oral hypoglycaemic medication should be able to fast without complications.
- Participants on a combination of night time insulin and daytime tablets should also be able to fast unless they are known to have low blood sugar levels first thing in the morning. If they do have low blood sugar levels in the morning, they could still fast but should reduce their night-time insulin by a small amount and have breakfast as soon as possible after the blood is taken.
- Participants on insulin alone can also provide a fasting sample, but should be given special consideration. They should postpone their morning insulin and should be seen as early in the day as possible.

In every case, diabetics who have fasted should have breakfast as soon as possible after blood is taken.

14.3 Overview of blood collection

CAPI includes questions about whether the participant has had something to eat or drink that morning, to ascertain whether it is a fasting or non-fasting sample. However, fasting participants should be encouraged to drink plenty of water upon waking, while waiting for your visit.

A maximum of two attempts at blood taking, one on each arm, are permitted with both adults and children.

The volume of blood taken will vary according to the age of the participant, as follows:

Age	Volume	No. of blood tubes to be filled
Adult 16+yrs	30 mL	6
Child 7-15yrs	20 mL	4
Child 1.5-6yrs	12 mL	3

The volume differs to ensure that we abide by guidelines for taking blood from children for research purposes. To keep children's blood sample volume as low as possible, some analytes will not be measured in younger children.

Please see Appendix B for a list of the analytes that will be measured and which analytes participants/their GP will obtain feedback on if they consent to receive their results.

14.4 Who should take the sample?

Age group	Considerations
Age 1.5– 5 years	For these participants, nurses will need to be accompanied by a paediatric phlebotomist .
Aged 6 – 10 years	For participants aged 6-10years, nurses will need to be accompanied by a paediatric phlebotomist or an extended role nurse .
Age 11 years and over	For those aged 11 years and over nurses can take the blood sample.

Please note: that if the child has turned 11 since the interviewer visit and is 11 years when you are gaining agreement for blood sampling, you, the nurse, should take the blood from this child. Likewise, if the child has turned 6 since the interviewer visit, if you're an extended role nurse you should take the blood from this child. This is the **only** scenario where you should base age on actual, current age rather than the age set at the interviewer visit. CAPI will prompt you to arrange to take blood if the child has turned 11 years since the interviewer stage.

With regards to the blood tube pack, you should use the relevant pack for the age the participant was at the interviewer visit.

14.5 Where are samples taken to?

The first drawn (EDTA) blood tube will be posted to the BioRepository at Addenbrooke's for analysis of routine analytes. The remaining blood tubes will be taken to a local field laboratory where samples will be centrifuged and aliquots of blood, serum, plasma and red blood cells will be frozen for temporary storage.

Note: should the first EDTA tube (i.e. the first of the draw) fail to fill, use a spare second EDTA to replace this one before drawing the rest. Make sure your spare tubes are handy.

14.6 Taking blood from children

NDNS nurses will be taking blood samples from all willing participants aged 11 years and over. Extended role nurses can take bloods from those aged 6-10 years; a paediatric phlebotomist will take bloods from those aged 1.5 to 5 years. It is important to make the child feel as comfortable and as at ease as possible. Smiling, making eye contact and speaking so that the child can understand easily are ways to facilitate this. Also, ask the child for permission to do something rather than insisting or telling. This can encourage a sense of control in the child and minimises fear.

Precautionary Restraint (A.K.A. Cuddle Restraint)

If the parent/guardian is willing (note this is optional), they can help you to gently restrain the child to reduce any accidents due to pulling away at the pin prick or panicked movements. Ask the child to sit on the parent's lap. The child should be sitting so that their legs are between the parent's legs. The child should have their arm wrapped around the parent's back and vice versa for the parent. This exposes the chosen sampling arm to the nurse while restraining the child's other arm and legs.

We have ethical approval for up to two attempts at taking a child's blood, one on each arm if required. The second venepuncture attempt should only take place if the parent is comfortable and agrees with the procedure, the child agrees (if old enough to give assent) and the child is not distressed in any way.

14.7 Scheduling appointments

Due to restrictions on when laboratories can process samples and the fact that the vast majority of participants will be asked to provide a fasting sample, **blood sampling can only take place on Monday-Thursday during the times when the allocated Field Lab can receive the samples. This is usually between 8.30am and 12 noon for most labs.**

In cases where you have made an 'in-visit' conversion of a participant / parent of a child, who has initially refused the blood sample you may need to make a second visit to the household to collect the sample (e.g. where you had made an evening visit to collect the relevant measurements except the blood sample).

In order to minimise the number of visits (i.e. usually it will be 1 visit to each household), if a household contains two participants you should, wherever possible, schedule appointments for when both participants are available at the same time.

When a household contains a participant aged 1.5-10 years, you also need to schedule the blood taking appointment to fit in with the availability of your extended role nurse (if this isn't you) or paediatric phlebotomist.

The rules around dealing with situations when a blood sample is not initially agreed to, on first contact can be found in Appendix D.

14.8 Liaison with the extended role nurse or paediatric phlebotomist

Blood from young children aged 10 years or younger will be taken from someone with the necessary and relevant phlebotomy skills. If this is not you, you will be allocated an extended role nurse (for children aged 6-10 years) or a paediatric phlebotomist (for children aged 1.5- 5 years), who will accompany you on visits to take blood from young children.

As soon as you know you have a child aged 1.5 - 10 years to contact, you should contact the Nurse Centre, to tell them you will need an extended role nurse or paediatric nurse to be available for you:

The Nurse Centre: 01277 690061 or email nursecentre@natcen.ac.uk

The Nurse Centre holds the list of extended role nurses / phlebotomists authorised to work on NDNS. They will be able to tell you the name, phone number and address of the best placed phlebotomist or extended role nurse.

You should then call the phlebotomist or extended role nurse to make them aware that you potentially have an address where there might be some work for them to do. At this initial contact, you should ascertain the nurse/phlebotomist's general availability during the fieldwork period (e.g. any days when they are on holiday or otherwise engaged). This will help when arranging blood-taking visits.

When you have an agreed time and date, please let the Nurse Centre know so they have a record of the visit taking place and can deal with the relevant paperwork.

Important points when working with a phlebotomist or extended role nurse:

- You, the NDNS nurse, are responsible for:
 - Providing and taking all equipment, including tubes, labels and needles to the participant's address.
 - Obtaining written consent and making sure signed consents are obtained in the consent booklet.
 - Following the CAPI questions and entering information into the laptop.
 - All labelling, despatch and delivery of samples.
- The phlebotomist or extended role nurse will be asked to complete and sign a paper version of the venepuncture checklist. You will need to enter this information into the CAPI and post the paper version to the office.

In essence – the phlebotomist or extended role nurse will take the blood sample only – you, the NDNS nurse does everything else.

14.9 Liaison with the local field laboratory

You will receive a 'field laboratory information sheet' ahead of your work pack prior to the start of the assignment detailing contact names, telephone numbers and availability.

You must contact the allocated field laboratory at the beginning of your assignment to:

- introduce yourself;
- discuss your workload and any changes to the laboratory's availability from that originally notified on the sheet (e.g. any particular days they cannot accept samples);
- discuss any additional details that could help you deliver the samples quickly and with ease e.g. parking details, road closures or building works that might affect sample delivery.

You will need to maintain good contact with the field laboratory throughout the assignment period as cases are fed through to you from the interviewer.

Once you have scheduled a blood sampling visit with the participant, confirm the date/time with your local field laboratory. This is to ensure that the field laboratory will be ready and able to accept the sample for processing. If for any exceptional reason they can't accept the sample, you will need to rearrange your appointment. Please also endeavour to put the field laboratory on standby, for any appointments where participants are initially declining the blood sample element of the visit. You may be able to convert these cases during your visit and take a sample there and then. You

will need to build in capacity for the time to do this when scheduling the appointments. See Appendix D for the rules around these situations.

Remember, blood samples need to be delivered to the field laboratory **within 2 hours of venepuncture. Therefore, you should not visit more than 2 households back to back if you cannot deliver the samples to the field laboratory within 2 hours of the first of the samples being taken.**

Discuss with the field laboratory whether they can accept any samples later in the morning, if another blood sampling appointment can be made at another household. This will also enable you to schedule more appointments potentially.

If you experience any difficulties with the designated field laboratory's availability, or you are concerned that you will not be able to deliver a blood sample to the field laboratory within the 2 hour deadline then please contact the Nurse Centre as soon as possible, so that information can be fed back to MRC Epi.

In some circumstances the Nurse Centre will have agreed with MRC Epi that a courier will be used to deliver the blood sample to the field laboratory. If appropriate, this will be discussed with you prior to you starting work on your assignment and the logistics will be co-ordinated by the Nurse Centre once you have started contacting participants for visits.

14.10 Labels : assigning into CAPI

You will be provided with generic/non-personalised sets of barcoded labels sheets for labelling blood tubes and despatch notes. If the participant agrees to provide a blood sample, you will assign a labels sheet to them. If an individual refuses or is ineligible to provide a blood sample, do not assign a sheet of labels to them.

You will also be supplied with a wireless barcode scanner to use on NDNS work. The scanner will be used to assign a labels sheet to the participant by scanning into CAPI the first barcode label on the sheet. CAPI will prompt you to do this. Should the barcode scanner not work for any reason CAPI will instruct you to enter the barcode sheet number manually (you will be prompted to enter the sheet number twice to ensure the correct number is recorded).

You will be supplied with labels sheets in two colours – white and yellow. At basic addresses where you have two participants, please ensure you have a sheet in each colour so you can **allocate adults (those aged 19+) with a white labels sheet and children (those aged 1.5-18 years) a yellow labels sheet**. Using different coloured sheets within the same household will minimise the risk of wrongly labelling samples and despatch notes,

It is very important that the labels sheet you assign in CAPI to a participant is the same labels sheet you use for that participant's blood sample tubes. If you don't use the same labels (e.g. because you mix up sheets between participants in a household

or you start a new sheet for tube labelling after having assigned a sheet in CAPI) then there is a real risk that blood results will be matched to the wrong participant. The participant's GP could therefore be sent the wrong results, possibly leading to unnecessary worry or a problem not being picked up.

Each label on the sheet will contain the following information:

- The label purpose code (which tells you where the barcode label should be placed);
- The barcode;
- A sheet ID number (each label on the sheet has the same ID number; numbers are unique to that sheet).



Please ensure you have a sheet of labels for each participant you are going to see **before** you leave your home (and one of each colour where your household contains two participants). Spare labels sheets can be requested by email from the Equipment Unit (equipment@natcen.ac.uk). CAPI will guide you through how the labels are to be used for each participant, and which should be affixed to which tube or despatch note. The table in section 14.11 also outlines which label should be used for each blood tube.

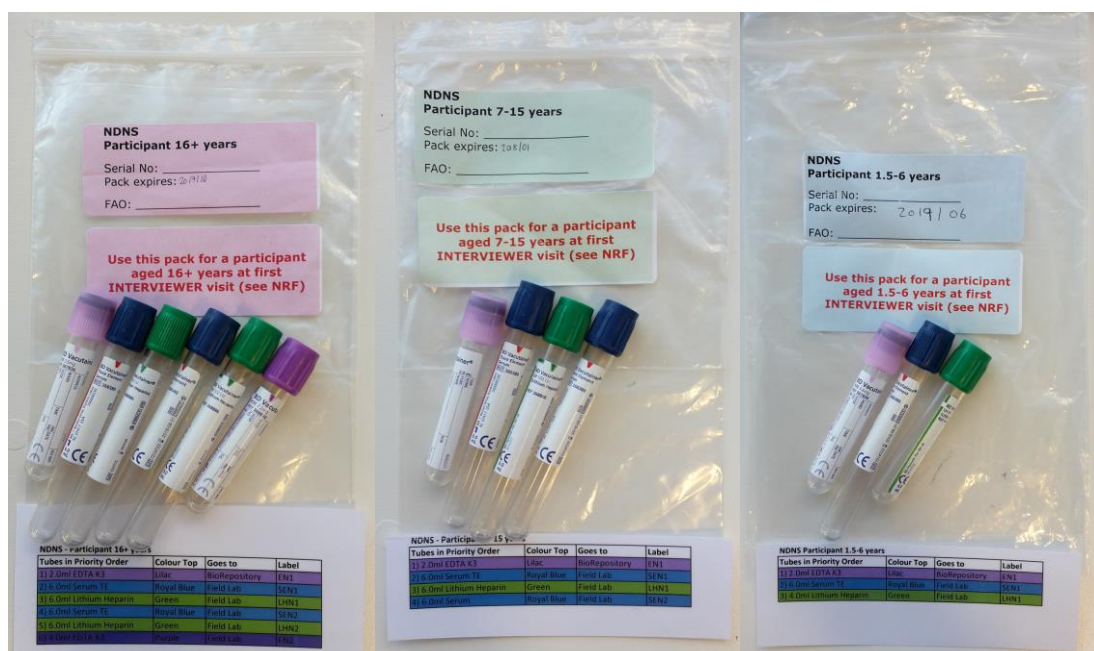
Also, please note that it is your responsibility to label blood tubes for all participants, even when blood is being taken from young children by a paediatric phlebotomist or extended role nurse.

14.11 Blood tubes

Blood will be collected using the BD Vacutainer blood collection system. The following table details the type of blood tubes that must be used for each age group, the destination for each tube and which label should be used. It also shows the priority order in which the tubes should be taken:

Blood Tube:	Goes to:	Label:
<i>Participants aged 16+ years</i>		
<ol style="list-style-type: none"> 2mL EDTA (lilac top) 6mL Silica Serum Trace Element (royal blue top) 6mL Lithium Heparin (green top) 6mL Silica Serum Trace Element (royal blue top) 6mL Lithium Heparin (green top) 4mL EDTA (purple top) 	BioRepository Field Lab Field Lab Field Lab Field Lab Field Lab	EN1 SEN1 LHN1 SEN2 LHN2 EN2
<i>Participants aged 7-15 years</i>		
<ol style="list-style-type: none"> 2mL EDTA (lilac top) 6mL Silica Serum Trace Element (royal blue top) 6mL Lithium Heparin (green top) 6mL Silica Serum Trace Element (royal blue top) 	BioRepository Field Lab Field Lab Field Lab	EN1 SEN1 LHN1 SEN2
<i>Participants aged 1.5 to 6 years</i>		
<ol style="list-style-type: none"> 2mL EDTA (lilac top) 6mL Silica Serum Trace Element (royal blue top) 4mL Lithium Heparin (green top) 	BioRepository Field Lab Field Lab	EN1 SEN1 LHN1

Note: should the first EDTA tube (i.e. the first of the draw) fail to fill, use a spare second EDTA to replace this one **before** drawing the rest. Make sure your spare tubes are handy for this reason.



14.12 Blood consent

Written consents are needed for the following:

- Giving a blood sample;
- Notifying GP of clinically relevant blood results;
- Providing clinically relevant blood results to the participant (or parent/guardian of child participants);
- Storage of blood sample.

The appropriate blood consent or assent forms must be signed **at the visit** at which blood is taken, **before** blood is taken.

The different sections of the consent forms should be pointed out to the participant and the form should be given to the participant to read. After the participant (parent/guardian) has read the consent form please encourage him/her to ask any questions they may have with regards to the procedure. Once they are content to sign, please ensure the participant (or parent/guardian) **ideally initials (or ticks)** all those boxes (procedures) they would like to consent to. Children aged 5-15 years should complete the assent form where able.

You must check that all appropriate boxes are **ideally initialled (or ticked)** and signatures collected. If a participant is aged 1.5-15 years, you must make sure that you obtain the signature of their parent or the person who has parental responsibility.

If the participant (or parent/guardian of a child participant) does not wish to receive their (or their child's) clinically relevant blood results nor do they want results to be sent to the GP, they must provide written consent to the statement in the grey box at the bottom of the consent form (to allow the Survey Doctor to contact them with any significant results). **If this box is not initialled or ticked consent is not obtained then you should NOT proceed with the blood sample.** This is to ensure that they understand that if there are any findings outside the normal range, we will not be able to notify their GP or anyone else as we do not have their permission to do so. For children, it is an ethical requirement for us to be able to inform someone of any clinically relevant blood results that may fall outside of the normal range. Thus we would not take the sample.

Always return consent forms to the office, even if no blood sample has been obtained.

Summary of Blood Sample Consent Processes for Child Participants:

- Parent / Guardian agrees to feedback, and to GP – **YES** can take sample
- Parent / Guardian agrees to feedback, but not GP – **YES** can take sample
- Parent / Guardian refuses feedback, but agrees to GP – **YES** can take sample
- Parent/ Guardian refuses feedback, *and* refuses copy to GP, but agrees survey doctor can contact them if necessary – **YES** can take sample
- Parent / Guardian refuses feedback, *and* refuses copy to GP, and refuses allowing survey doctor to contact them – **NO** - **DO NOT** proceed with taking sample.

14.13 Despatching blood tubes

Most blood tubes will be taken by you to the local field laboratory for the blood to be processed, but one will need to be sent in the post to the BioRepository at Addenbrooke's. **It is absolutely crucial that tubes are delivered to the correct destination.**

Despatching blood tubes to NIHR BRC-MRC BioRepository

1. The blood tube to be posted to NIHR BRC-MRC BioRepository must be the first tube filled - the 2 mL EDTA blood tube (lilac top) with the label EN1. The same blood tube is used for all participants, regardless of age.
2. The consent booklet contains a tear-out NIHR BRC-MRC BioRepository EN1 Postal Blood Form. You must complete the top 'Nurse' section only and post the form with the EDTA blood tube the **yellow** lab dispatch polylope.
3. You should attach the EN1-POST barcode label (from the labels sheet assigned to the participant) in the space provided and clearly and legibly complete the following information on the EN1 Postal Blood Form:
 - The date the sample was taken.
 - The time the sample was taken.
 - The date the sample was despatched/posted to NIHR BRC-MRC Biorepository.
4. The labelled lilac-topped EDTA tube should be placed in the single slot plastic dispatch pack, snapped shut and then placed inside the **yellow** polylope lab envelope. (Please note: only one participant sample per dispatch polylope!).
5. Include the labelled and completed EN1 Postal Blood Form in the yellow lab polylope.
6. The postal pack containing the blood tube should be posted on the way to the local laboratory. Be sure to check that the post box has a same day collection.

Despatching the blood samples to the local field laboratory

The remaining blood tubes must be taken by you to reach the local field laboratory **within 2 hours of venepuncture taking place**. The number of blood tubes to be taken to the local laboratory depends on the age of the participant.

1. The consent booklet contains three different types of field laboratory despatch note, one for adults 16+ (with Pink checklist box), 7-15 year olds (with Green checklist box) and 1.5-6 year olds (with Blue checklist box). The relevant form/s should be delivered to the local field laboratory along with the appropriate age group samples.
2. You should label the appropriate field lab despatch note for the age of your participant, using label **FL** and clearly and legibly complete all parts of the nurse section with the following information:
 - The number of the barcode label set (appears underneath the barcodes).
 - Participant's serial number.
 - Whether the participant provided a fasting or non-fasting blood sample.
 - The date the sample was taken.
 - The time the sample was taken.
 - The time the sample was delivered to the field laboratory.
 - Whether you have delivered all the items on the checklist to the field laboratory (i.e. the samples; remainder of the labels the field laboratory will use; the microtubes for the right age group; the despatch note)

The remainder of the form will be completed by the local field laboratory staff.

3. After the blood samples have been taken **and** when transporting them to the field laboratory it is important that they are kept in the yellow lidded secondary container inside the carrying cool box provided. You should also have 2 pre-frozen ice/cold packs in the box to keep the samples cool during transit.
4. The blood tubes for the participant should be put back in to the plastic bag they came in and placed in the yellow secondary container so they stay upright (colour tops upwards) during transportation. The plastic bag has a document pouch where the field laboratory despatch note and field laboratory labels can be placed and there is also space on the label on the plastic bag for you to write the name of your field laboratory contact if you wish. If two participants (from the same or different households) have given blood samples in a morning, their samples can be transported together in the cool box; in this case it is particularly important that the samples are labelled and bagged correctly. In this case – the time limit for getting to the lab is from the time of the first sample drawn.
5. Upon arriving at the field laboratory reception, ask for your named lab contact and hand the **blood tubes, field laboratory dispatch note, microtube pack and remaining assigned barcoded labels** over to them. If you forget to give the laboratory any of the items listed above, you will be asked by the NatCen office to go back to the lab as they do not have any spares.

Please remember to fill in the time of delivery on the field laboratory dispatch note before handing it over to the laboratory staff.

You must also complete a Field Lab Delivery Receipt and obtain the name and signature of the person accepting the blood samples from you. This receipt must then be returned to the Nurse Centre (see Appendix C).

14.14 Blood sampling token of appreciation

All participants will receive a **£15 gift card** as a thank you for providing a blood sample or for at least one attempt at providing a blood sample. This is in recognition of their time and commitment to giving a blood sample which is very important to the study. Remember this should **not** be presented as 'payment' but as a token of appreciation. Whilst you're still in the household, you need to activate the gift card in CAPI.

The CAPI program will automatically prompt you to enter the last **8 digits** of the gift card number that is shown on the front of the card, for each participant.

When prompted by CAPI you should write the relevant voucher amount on the front of the card, give the card to the participant and inform them that the card will be activated and live to use after approximately 48 hours. Please note that this is dependent on you transmitting the case promptly and may take up to 72 hours if the case is transmitted on a Friday.

Point out to the participant that they can check the value of the card by either going to the Love2Shop website and looking at the card account, or by using a QRL code scanner (e.g. through an app on a smart phone or tablet). The QRL code is usually on the back of the card.

Further supplies of gift cards can be requested from the Incentives team (IncentiveTeam@natcen.ac.uk). Gift cards are supplied direct from the issuing company (Love2Shop) and cannot be sent automatically with each work pack.

If you have left over gift cards at the end of an assignment, **you can use them for subsequent NDNS assignments as long as they are valid for at least 6 months prior to the expiry date**. They are not of any monetary value until activated by Love2shop upon receipt of your transmission of the completed case.

14.15 Cancellation of blood sampling appointments

If you have made a blood sampling appointment (fasting / non fasting) which doesn't go ahead due to the participant not being available, then **only one** further reappointment for the blood sample may be made. You will need to code this information into CAPI so that the programme will generate a further blood sampling schedule (i.e. Nurse Schedule 2) to use on the rescheduled visit.

If you visit a participant for a fasting blood sampling appointment and they haven't fasted, then you should take a non-fasting sample.

If a participant agrees to give a blood sample, but the appointment is subsequently cancelled for whatever reason (**and not rearranged**), you **must** do the following to ensure the case is signed off properly:

1. Using **'Enter / Edit Calls'** enter the CAPI program for the relevant address.
2. Using the parallel blocks, select the Nurse visit schedule 2.
3. Confirm the date given by CAPI.
4. At SumV2/SumV3, enter code 1 – that you are to take the blood sample.
5. Code 'No' at TBSWill.
6. At TRefBSC, code the relevant reason for the blood sampling appointment not taking place – e.g. if the participant says they've changed their mind because they no longer have time, code 8 'Too busy'; if the participant is under the age of 11 and it wasn't possible to arrange for a paediatric phlebotomist to take the sample, code 6 'No paediatric phlebotomist available'.
7. Circle the relevant codes on the front of the consent booklet, as specified at TBSSStop.
8. Press 1+enter at ThankV2/ThankV3.
9. If there is no more work to do at the address, complete the Admin block as normal and transmit back to the office.

Please note: the above instructions should only be used if you had an appointment JUST to take the blood sample. If you are in any doubt about what to do when a blood taking appointment is cancelled (and **not** rearranged), please contact the Nurse Centre.

It is equally important to let your local field laboratory know when an appointment has been rearranged or cancelled. Even if a participant agrees to give blood but, for any reason, the blood sample could not be obtained on the day, please let your contact at the field laboratory know immediately so they are not waiting to process your sample. This should be done when you are out of the house, having finished that visit.

15 Return of work

15.1 CAPI Admin

Recording the outcome of your attempts to interview and measure

When completing CAPI admin, once the household is complete, you should allocate the individual person code and household code appropriate to how the CAPI

schedules have been completed during the interviews. However, you will need to determine the appropriate unproductive code to use, as per the rules below:

- Use **code 810** if you went through the whole schedule with the participant and completed all the relevant questions. This code applies even if the participant refused any of the measurements.
- If someone breaks an appointment and you never manage to make contact with them again, **use code 850**, not code 820.
- A proxy refusal (**use code 840**) is used when someone refuses on behalf of someone else - for example, a husband who says he will not allow his wife to be seen by a nurse. Obviously you should do your best to try and see the person yourself but sometimes this is not possible.
- Codes **860-880** should be used only if the participant is unavailable for interview for these reasons throughout the whole of your fieldwork period. If they are likely to return, and be fit to be seen, during that time, then try again later.

You cannot code someone as a non-contact without NFPM approval.

15.2 Returning the consent booklet

You should return a consent booklet for each person with an Outcome Code of 810.

Post the completed consent booklet back to the office as soon as possible, but **only after** completing the CAPI admin and transmitting the schedules back through connecting to the host. Transmit the nurse schedules on the same day you complete the last visit to the household. Make sure the participant has their copy of consents before sending the consent booklet to the office.

If you do need to make more than one visit to the household (e.g. if you need to visit two participants separately) and there is a gap between visits, keep all the work to be returned together for that household. But post it back as soon as you have completed your last task there. Referral back to GPs and participants, in the event of any serious abnormalities, can be seriously delayed if work and consent booklets are not returned in time.

Before returning work, check that you have all the documents you should have and that they are properly completed and serial numbered. Check that they match with your CAPI entries.

15.3 Returning unused documents and equipment

As soon as you have finished an assignment, **and if you are not working on another NDNS assignment immediately following**, please return all left over unused documents and equipment to the office in Brentwood so that we can re-use them for other work packs. This is particularly important for blood packs, which have a use-by

date so it is much better if we can re-use them for subsequent work packs, where at all possible.

The only exception to this is gift cards. Please keep hold of your gift cards (unless there is less than 6 months left on the expiry date) as these are assigned to you and can be used on other studies.

APPENDIX A: SUMMARY OF NURSE MEASUREMENTS & SAMPLES

Measure	What the measurement is testing	Consent forms	Exclusion criteria	Eligibility criteria	Equipment
Infant length	Measure of infant height	None	None	Infants aged 18-23 months	Rollameter baby measure mat. Infant Frankfort place card. Kitchen roll.
Waist & hip	Measure of distribution of body fat. Important indicator of CVD risk	None	If participant: <ul style="list-style-type: none"> • is chair bound • has a colostomy / ileostomy • is pregnant (should have been screened out early on) 	Aged 11 and over	Insertion tape (with metal buckle at one end if used).
Demispan	Proxy measure of participant's height	None	If participant is unable to straighten either arm	All participants 65+ Participants 19-64 if interviewer obtained valid weight but not valid height	Thin retractable demispan tape with hook at one end. Skin marker pen.
Fasting Blood sample	For example: Total cholesterol HDL cholesterol Glycated haemoglobin (see Appendix B for full list of analytes)	<ul style="list-style-type: none"> • Taking blood sample • Storing blood for future analysis • Sending clinically relevant blood results to GP • Sending clinically relevant blood results to participant 	If participant: <ul style="list-style-type: none"> • has a clotting or bleeding disorder • is taking anticoagulant drugs • has had a fit in the last 2 years • is not willing to give written consent • is aged 4 and over, not diabetic and not willing to fast. 	Aged 4 and over	Blood collection materials – see Nurse Protocols Manual + CPG

Non-Fasting Blood sample	For example: Total cholesterol HDL cholesterol Glycated haemoglobin (see Appendix B for full list of analytes)	<ul style="list-style-type: none"> • Taking blood sample • Storing blood for future analysis • Sending clinically relevant blood results to GP • Sending clinically relevant blood results to participant 	If participant: <ul style="list-style-type: none"> • has a clotting or bleeding disorder • is taking anticoagulant drugs • has had a fit in the last 2 years • is not willing to give written consent 	<ul style="list-style-type: none"> • Aged 1.5-3 • Aged 4+, not willing to fast 	Blood collection materials – see Nurse Protocols Manual + CPG
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APPENDIX B: BLOOD ANALYTES

The list below shows what the blood samples will be analysed for.

Analyte	What it measures	Whether Results are given
Total, LDL and HDL cholesterol (fasting)	Total cholesterol and LDL cholesterol are being measured because raised levels are associated with higher risks of heart attacks, while HDL cholesterol has a protective role.	Yes
Triglycerides (fasting)	Together with total and HDL cholesterol, triglycerides provide a lipid (fat) profile which can give information on the risk of cardiovascular disease.	Yes
Haemoglobin and ferritin	Haemoglobin and ferritin are being measured because they are indicators of iron status. Frequently, an inadequate iron supply can imply a more general nutritional problem.	Yes
C-reactive protein	The level of C-reactive protein in the blood gives information on inflammatory activity in the body, and it is also associated with risk of heart disease.	No
White blood cells	White blood cells are made by bone marrow and help the body fight infection and other diseases. There are many different types of white blood cells all performing different functions.	Yes
Folic acid (folate)	Folic acid is a B vitamin. It is used in our bodies to make new cells and helps prevent birth defects of the brain or spine.	Yes
Vitamin B ₁₂ (cyanocobalamin)	Vitamin B ₁₂ is required to make new cells as well as for normal blood formation and function. It is also needed for the normal structure and function of nerves. Dietary intake is exclusively from animal sources e.g. eggs, milk, meat and fortified foods.	Yes
Vitamin B ₁ (Thiamin)	Vitamin B ₁ is required for energy production and carbohydrate metabolism. It is also involved in the normal function of the nervous system and the heart.	No
Vitamin B ₂ (Riboflavin)	Vitamin B ₂ is needed for the release of energy from fats, carbohydrates and protein and the production of red blood cells. It is also needed for the normal structure and function of mucous membranes and skin.	No

Vitamin B ₆ (Pyridoxine)	Vitamin B ₆ is essential for the metabolism of protein. It is also involved in iron metabolism and transport.	No
Vitamin A and carotenoids	<p>Vitamin A is essential to the normal structure and function of the skin and mucous membranes (<i>e.g.</i> lining the digestive system and lungs). It is also required for cell differentiation and therefore for normal growth and development, and for normal vision and for the immune system.</p> <p>Some carotenoids have provitamin A activity. Others don't but most carotenoids act as antioxidants to protect cells against oxidative damage.</p>	No
Vitamin C	Vitamin C is required for normal structure and function of skin, cartilage and bone as it is involved in the production of collagen - the protein in connective tissue. It is therefore involved in the healing process. It is also involved in the normal structure and function of blood vessels and neurological function. Vitamin C also contributes to the absorption of iron from some food sources, in particular plant foods.	No
Vitamin D	Vitamin D is formed by the action of ultra violet rays (sun shine) on the skin and this is the most important source for the majority of people as few foods contain significant amounts of vitamin D, <i>e.g.</i> oily fish, eggs and meat. Vitamin D is converted into another (active) form in the liver and then undergoes further changes in the kidney. In this form it works as a hormone in controlling the amount of calcium absorbed by the intestine. It is also essential for the absorption of phosphorus and for normal bone mineralization and structure. Vitamin D is also involved in the process of cell division in many other body tissues.	Yes
Vitamin E	Vitamin E is a group of compounds called tocopherols, of which alpha tocopherol is the most active. It acts as an antioxidant and is required to protect cells against oxidative damage by free radicals, for example oxidation of the lipids in the cell membranes.	No
Minerals Se and Zn	<p>Selenium is a component of some of the enzymes which protect the body against damage due to oxidation (free radical mediated damage). It is also necessary for the use of iodine in thyroid hormone production and for immune system function.</p> <p>Zinc is present in many enzymes and is essential for cell division and, therefore, for growth and tissue repair. It is also necessary for normal reproductive development. Zinc is also</p>	No

	required for the functioning of the immune system and in the structure and function of the skin and, therefore, in wound healing.	
Fatty acids	The profile of fatty acids in fasting plasma is an indicator of whether the individual's dietary fat comes mainly from meat, dairy products, fish etc. This can contribute information about long-term dietary habits.	No



APPENDIX C: FIELD LAB DELIVERY RECEIPT

Field Lab Sample Delivery Receipt***			
Sample Serial Number:		No. of blood tubes in sample pack:	
Barcode Number:			
Nurse Name:		Nurse ID:	
Date delivered to Field lab:		Time delivered to Field lab:	
Name of Lab representative receiving Sample:		Lab Representative Signature:	
<p>*** Nurse – please ensure this form is completed; with samples signed for on delivery to the Field Lab. Then return this completed form to the NatCen Nurse Centre, Brentwood Office. If you have any comments / information you wish to make NatCen / NIHR BRC-MRC BioRepository aware of regarding the Field Lab please comment below.</p> <p>Nurse Comments for Office / NIHR BRC-MRC BioRepository (continue overleaf if required):</p>			

APPENDIX D: Appointment Trouble Shooting - Scenarios

Participant Age	Situation	Problem	Solution
11yrs +	Participant agreed to a fasting sample over phone (not excluded) & appt. was booked.	Participant forgot to fast when you turned up for appt.	Continue with appt. and take non-fasting sample. Identify on Dispatch notes non fasting sample taken, document in CAPI as per questionnaire what participant had to eat / drink and when.
		Participant told you as sample being taken they had eaten / drunk something other than water.	Continue with gaining full sample as non-fasted. Identify on Dispatch notes non fasting sample taken, back space in in CAPI and document as per questionnaire what participant had to eat / drink and when.
	Participant would only agree to non-fasting sample over phone (not excluded)	Adamant for non-fasting sample only.	Book appt. for non-fasting blood sample visit. If this appt. broken at the door – do not rebook
	Participant would only agree to non-fasting sample over phone (not excluded) and would only agree to an evening / weekend visit	Participant changes their mind during your evening / weekend visit (you convert them to agree a blood sample – fasting / non-fasting)	Make one more appt. for a fasting / non fasting (ideally fasting) sample during lab receipt times. Code as appropriate in CAPI. If this 2nd appt. broken at the door – do not rebook. If fasting was booked on 2 nd appt. and participant forgot to fast, continue to take non-fasting sample.
	Participant would not agree to Blood sample over phone, appt made to complete rest of Nurse Schedule.	Participant eligible for Blood sample and changed mind while in you are in the house.	Make one more appt. for a fasting / non fasting (ideally fasting) sample during lab receipt times. Code as appropriate in CAPI. If this 2nd appt. broken at the door – do not rebook. If fasting was booked on 2 nd appt. and participant forgot to fast, continue to take non-fasting sample.

Participant Age	Situation	Problem	Solution
4-10yrs	Parent of child agreed to fasting sample over phone (not excluded) & extended role nurse / paed phleb in attendance	Child / Parent forgot to fast when you turned up for appt.	Continue with appt. and take non fasting sample. Identify on Dispatch notes non fasting sample taken, document in CAPI as per questionnaire what participant had to eat / drink and when.
		Child / Parent told you as sample being taken they had eaten / drunk something other than water.	Continue with gaining full sample as non-fasted. Identify on Dispatch notes non fasting sample taken, back space in in CAPI and document as per questionnaire what participant had to eat / drink and when.
	Parent of child would only agree over the phone, to non-fasting sample for child (not excluded)	Adamant for non-fasting sample only.	Book appt. for a non- fasting sample during lab receipt times. Arrange for extended role nurse / paed phleb to attend. If this appt. broken at the door – do not rebook.
	Parent of child would only agree over the phone, to non-fasting sample for child (not excluded) and would only agree to an evening / weekend visit.	Only measure required is blood sample. Cannot visit unless within lab availability times.	Advise any blood sample must be done during times. If still refuses to have appt during lab availability times, then code out as unproductive due to refusal. Otherwise – make appt for blood sample within lab times. If this appt. broken at the door – do not rebook.
	Parent of child would not agree to blood sample at all, over the phone	Only measure required is Blood Sample. No other data to be gathered.	Advise – no further visits required. Code out as unproductive due to refusal.

Participant Age	Situation	Problem	Solution
2-3yrs	Parent of child would only agree over the phone, to non-fasting sample for child (not excluded) and would only agree to an evening / weekend visit.	Only measure required is blood sample. Cannot visit unless within lab availability times.	<p>Advise any blood sample must be done during times.</p> <p>If still refuses to have appt during lab availability times, then code out as unproductive due to refusal.</p> <p>Otherwise – make appt for blood sample within lab times.</p> <p>If this appt. broken at the door – do not rebook.</p>
	Parent of child would not agree to blood sample over phone.	No other data to be gathered.	<p>Advise – no further visits required.</p> <p>Code out as unproductive due to refusal.</p>

Participant Age	Situation	Problem	Solution
18m – 23m	Parent of child would only agree over the phone, to non-fasting sample for child (not excluded) and would only agree to an evening / weekend visit.	Rest of schedule is for consent to continue, and Infant Length only.	<p>Advise any blood sample must be done during certain times only.</p> <p>Book appt. to complete rest of schedule at time to suit Parent.</p> <p>If Parent changes their mind while you are in the house, then make one more appt. for a non- fasting sample during lab receipt times. Code as appropriate in CAPI. Arrange for extended role nurse / paed phleb to attend.</p> <p>If this 2nd appt. broken at the door – do not rebook.</p>
	Parent of child would not agree to blood sample over phone.	Rest of schedule is for consent to continue and Infant Length only	<p>Book appt. to complete rest of schedule.</p> <p>If Parent changes their mind while you are in the house, then make one more appt. for a non- fasting sample during lab receipt times. Code as appropriate in CAPI. Arrange for</p>

			<p>extended role nurse / paed phleb to attend.</p> <p>If this 2nd appt. broken at the door – do not rebook.</p>
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APPENDIX E: Suggested telephone script

Here are some suggested points to cover when first speaking to your participant/participant's parent or guardian over the phone.

- Introduce self - Name (and the National Centre for Social Research)
- Explain that you are following up from the interviewer visit that would have happened a few days ago- nurse visit is short and final stage of NDNS
- Ask if they remember reading the leaflet given to them by the interviewer
- Talk about the measurements that are applicable to their age group (e.g. waist and hip, demispan)
- Ask if the interviewer mentioned the blood sample
 - If they do, follow up on how they feel about it
 - If not, provide information (as detailed below)
- Introduce the blood sample
 - Establish eligibility (do they take anti-coagulants, have they had a fit etc)
 - Explain that we would like a fasting sample
 - Why it is important ('helps complete the information you've already given us')
 - Mention feedback and incentive
 - Time frame ('will only take a few minutes')
 - Pain relief available
 - IF RELUCTANT- You can decide if you'd like to do it on the day (when other measures / data being gathered for nurse visit); don't have to decide now
- Make appointment to get as much or as little done as able
- Put appointment into CAPI & connect to office