What if I have concerns about the way the study was carried out?

Please contact Michaela Benzeval, the Director of Understanding Society

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01206 876320 ms21994@essex.ac.uk

Any questions?

If you would like to contact us at any point please use the contact information below:

0800 252 853 contact@understandingsociety.ac.uk

If you are interviewed face-to-face, the interviewer will try to answer any questions









Who is carrying out the research study?

Researchers at the Institute for Social and Economic Research (ISER) at the University of Essex are running the study. Verian (formerly Kantar Public) and National Centre for Social Research (NatCen) will be working with us to conduct fieldwork and collect the measurements. Ethical approval for the study has been provided by the NHS Health Research Authority, East of England - Essex Research Ethics Committee, reference: 22/EE/0260.

Do I have to take part?

Like every other part of Understanding Society, this part of the project is completely voluntary. You do not need to have any measurements (e.g., blood pressure, height, weight, waist and hips circumference) taken or a blood sample collected if you do not wish to, but we hope you will agree to them as they are a very important part of this survey. If the survey results are to be useful to us, it is important that we obtain information from different people in all states of health. If you are happy to take part in some measurements and sample collections but not others, this is absolutely fine.

Are there any risks involved in participating?

There are **no risks associated** measuring your blood pressure, waist and hip, height and weight. Your finger may be a bit sore from the finger prick used to collect the blood sample. As with any small cut, the area should be kept clean to avoid infection. The blood collection kit is sterile and following the instructions provided in the kit will minimise the risk of infection.



How will we keep your information safe?

In this research study we will use information from you. We will only use information that we need for the research study. Verian (formerly Kantar Public) and NatCen, our fieldwork partners, will use your name and contact details so they can invite you to the study and carry out fieldwork. If you take part in the blood sample collection, Thriva, the lab carrying out the analysis, will use your contact details and your date of birth and sex so that they can send you a collection kit and analyse your blood sample. Verian will send you the results of your blood analysis, if you wish to

If you agree to have your blood stored for future research, your name and address will not be attached to the sample and so your sample will remain confidential. Before being used in future research, some of the information we have collected in this survey (but not any details which would identify you) may be attached to the sample.

Everyone involved in this study will keep your data safe and secure. The results of the study will never include any names or addresses. The information collected is used for research purposes only and will be dealt with according to the principles of the Data Protection Act and General Data Protection Regulation (GDPR).

At the end of the study, anonymised data are made available from the UK Data Archive, the European Genome-Phenome Archive, other secure data repositories, or by the Study team to trusted researchers. All research reports are written in a way that no-one can work out that you took part in the study.

What if I change my mind during the study?

Your participation is entirely voluntary. You have the right to change your mind about any measurement or withdraw from the study at any time without explanation. You can withdraw your consent to store your blood at any time, without giving a reason, by asking us in writing for your blood to be removed from storage and destroyed.











We would like to collect:

- your blood pressure
- your waist and hip measurements
- your height and weight
- a blood sample

Before you decide whether to take part it is important for you to understand why the research is being done and what it will involve.



What health measurements do you want to collect?

We would like to collect:

- Your blood pressure
- Your waist and hip measurements
- Your height and weight
- A blood sample

We would like you to take a measurement of your blood pressure before the interview. If you complete your interview with an interviewer, they will also ask to measure your blood pressure.

With your consent, we would also like you to take a measurement around your waist and hips using the tape measure included with this letter.

If you complete your interview with an interviewer, they will ask to measure your blood pressure, waist and hip measurement, and your height and weight. They will only collect these measurements with your consent.

We will also ask you for some measures that look at memory and numeracy.

Why are we collecting health measurements?

Physical measurements, such as height, weight, waist and hips circumference, and blood pressure, are important factors in our health.

Taking these measurements in a large number of people can help to predict certain health patterns within a population. Changes in these measures within a population reflect the changes in the society's diet and lifestyle. We are interested in the relationship between height, weight, waist and hip measurements and other health outcomes.



Waist and hip measurements

The waist and hip circumferences are measures of the distribution of our body fat (both subcutaneous and intra-abdominal). There has been increasing interest in the distribution of body fat as an important indicator of increased risk of cardiovascular disease. Research suggests that waist circumference is a predictor of health risk like the body mass index (BMI).

Blood pressure

Changes in blood pressure can tell us about someone's health and any risk factors for future health issues. A person's blood pressure is influenced by their age. It can also vary from day to day with our emotions, the food we eat, the temperature around us, whether we smoke, drink alcohol, take medication, or whether we are in pain.

What do I have to do if I agree to provide the health measurements?

Taking measurements before your interview

Before your interview, we would like you to measure your **blood pressure** and write the results on the measurement card provided. This can be done at home, at a local pharmacy or a GP surgery that offers this service. If you are willing to get your blood pressure measured, you will be asked to provide the measurements in your interview.

As a token of appreciation for measuring your own blood pressure we will send you a £5 gift card when you provide the measurements.

If you are pregnant we are not asking you to get your blood pressure measured.

We would also like you to **measure your waist and hips**, using the tape measure provided and the instructions given below. You will be asked to provide the measurements in your interview, if you are able to do this.

If you are pregnant, unable to stand up, and/or have a colostomy or ileostomy which would make measuring your waist and hips difficult, we are not asking you to provide the measurements.



The waist measurement is best taken against bare skin or light clothing. The hip measurement should be taken wearing light clothing.

Before taking your measurements, if possible, please remove:

- Outer layers of clothing, such as jackets, heavy or baggy jumpers, cardigans and waistcoats
- Belts
- Items from your pockets
- Tight garments which may change the shape of your body, such as corsets.

Measuring your waist

Stand up straight.

Find, on the side of your body, the bottom of your ribs and the top of your hips.

Place the tape measure around your middle at a point halfway between them, just above your belly button. The tape should be snug but not too tight. You should be able to fit your little finger under the tape comfortably.

Breath out and do not suck in your stomach. Then take the measurement.

Write the measurement on the health measures card provided. Please write in the centimetres (cm) and millimetres (mm). If your measurement falls between two millimetres, please write in the nearest millimetre.

Measuring your hips

Stand up straight.

Place the tape measure around the widest part of your buttocks. Make sure that the tape is not around your waistband, or where your hands fall when you "put your hands on your hips".

The tape should be snug but not too tight. You should be able to fit your little finger under the tape comfortably.

Take the measurement.

Write the measurement on the health measures card provided. Please write in the centimetres (cm) and millimetres (mm). If your measurement falls between two millimetres, please write in the nearest millimetre.

Measurements taken by your interviewer

If you are being interviewed in-person, your interviewer will measure your **blood pressure** using an inflatable cuff that goes around the upper arm. If you would like to know the result, the interviewer will tell you your blood pressure along with an indication of its meaning, but a clinical diagnosis cannot be made on measurements taken on a single occasion.

If you are being interviewed in-person, your interviewer will also measure **your standing height**. They will also ask to measure your **weight** (with your clothes on). The interviewer will also provide you with a tape measure and talk you through the process of taking your **waist** and **hip measurements**.

Why are you collecting

blood samples?

Analysis of blood samples can tell researchers a lot about the health of the population. Collecting blood samples now will give researchers really helpful information of different aspects of people's health. For those people who took part earlier in Understanding Society when we previously collected blood we will be able to look at changes in health since then.

If you are willing to, we would like you to collect a finger-prick blood sample.

We will send you a collection kit for this sample after your interview.

What do I have to do if I agree to give a blood sample?

This part of the survey involves a small quantity of blood being obtained by a finger prick and collected in two small tubes. This would involve pricking your finger and allowing the blood drops to drip into the tubes. During your interview we will ask you for your consent to send you a blood sample collection kit. This includes everything you need to collect this sample, as well as detailed instructions of how to collect it. The whole process is very straightforward and should take you just 30 minutes.

As a thank you for collecting the sample we will send you a £10 voucher after the sample is returned to us.

What will happen to the blood sample I provide?

We would like to study your blood for certain elements which have been shown to affect health by asking you to give a finger-prick blood sample. Anonymised data from the blood analysis will be made available from the UK Data Archive and other secure data repositories to trusted researchers.

If you give us permission, we would also like to take a sample of DNA from your blood sample to carry out genetic tests. The genetics data will be made available to trusted researchers for analysis. Any analysis will have to be approved by a data access committee. The data will not be used for paternity testing, life insurance or mortgage applications, nor will any findings be fed back to you. You can give us permission to analyse your blood, but not take a DNA sample if you wish.

After studying your blood sample, if you give consent, we would like to store any remaining blood at a secure facility licensed under the Human Tissue Act and make it available for future research. Your blood will be available to trusted researchers for analysis. Any blood analysis will have to be approved by an independent committee. The stored blood samples will not be tested for the HIV virus, and will not be available for commercial purposes, nor will any findings be fed back to you. Blood samples will be analysed in the UK, Europe or other countries with equivalent data protection under the General Data Protection Regulation (GDPR).

What analyses will be conducted on blood samples?

Your blood samples will be analysed for cholesterol (total cholesterol and HDL), triglyceride and HbA1c (glycosylated glycated haemoglobin) levels, which are related to heart disease and diabetes, as well as measures of inflammation (C-reactive protein), and your kidney and liver function. We will also analyse some elements related to nutrition including levels of iron in your blood (ferritin) and vitamin D. Finally, we will measure some hormones associated with stress, building muscle and ageing (testosterone, dehydroepiandrosterone and steroid hormone binding globulin).

Your DNA will be analysed to identify thousands of genes in your blood by an accredited laboratory. Variations in DNA result in slightly different versions of genes in different people, which are responsible for influencing biological processes and hence how your body works. Combining this genetic data with information about your environment, lifestyle, and health allows researchers to investigate the complex interaction of people's health and circumstances. Over time, how genes function can be changed either naturally or by our environment. One measurement of this is known as methylation, and we will also measure this so researchers can explore if and how this puts people at increased risk of health problems.

Will I be given any results?

We will provide feedback on your cholesterol and HbA1c results.