

Sample Collection Instruction Booklet – Stage 2

THE BART'S OXFORD (BOX) FAMILY STUDY: Understanding the causes of type 1 diabetes

Thank you for participating in this study. We appreciate that collecting the samples will take time and we want to support you with this in any way we can.

If you have any questions regarding collecting the samples, please do not hesitate to contact us either by email box-study@bristol.ac.uk or telephone 0117 414 7915.

You may also find the answer you are looking for on our website:

bristol.ac.uk/translational-health-sciences/box-study

You can find links on our website to a video clip for finger prick sample collection.



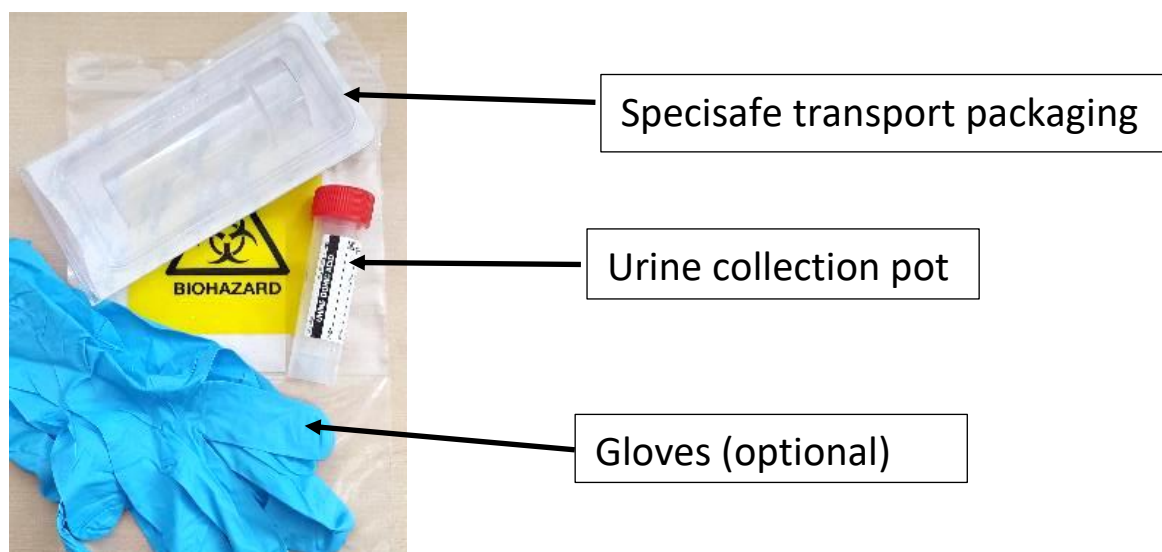
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3	Faeces (stool) sample
6	Finger prick sample – Autoantibody test
10	Finger prick sample – HbA1c test
11	Further information
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Urine sample collection

Kit contents:



Please pass urine just before your main meal of the day and discard.

1. Eat your meal as usual with a glass or more of water.
2. Do not eat or drink anything else for the next 2 hours
3. Do not pass urine until 2 hours after this meal.
4. **2 hours after this meal, please go to the toilet and pass some urine into the red-topped container provided.** Screw the lid on securely. The container has some white powder in it which is meant to be there, so please **do not** tip it out.

[Please note: If you do need to pass urine before the 2 hours is up, please collect the urine, together with any subsequent urine passed over the 2 hour period, in a large clean container. Mix, and then pour some of the mixed urine into the red-topped

container provided, screw the lid on securely, and follow the rest of the instructions.]

5. Write the **date**, the **time** of your main meal and the **time** the sample was taken on the sample return form enclosed and return this with the sample.
6. Put the red-topped container (with your urine in) inside the Specisafe transport packaging, making sure it's pushed closed. Place this in the zip lock biohazard plastic bag containing an absorbent liner and place this into the prepaid padded envelope along with the completed sample return form.
7. Please post this either the **same** day or, if the sample was taken after your evening meal, you may post your sample the next morning, if you keep it in the fridge or cool place overnight.

Faecal (stool) samples collection instructions

Kit contents: This kit contains two different collection containers, one to test your sample for gut bacteria and one to look at pancreatic function. Please use both containers on the same occasion to collect your sample.



Specisafe transport packaging

Fe-Col collection device

Faeces collection container

Omnigene Faeces collection container

Please follow the instructions on the Fe-Col collection device to capture the sample. Empty your bladder before beginning the collection so that the sample is free from urine and toilet water.



Genotek - OMNIgene•GUT (OMR-200) Instructions:



1. Unscrew the purple cap from the collection device and set it aside for later use.

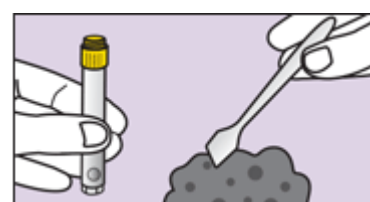
IMPORTANT:

Do NOT remove the yellow tube top.

Do NOT spill the stabilizing liquid in the tube.



2. Use the stick to collect a small amount of faecal sample.



3. Transfer the faecal sample into the yellow tube top
Repeat until the sample reaches the top and fills it completely.



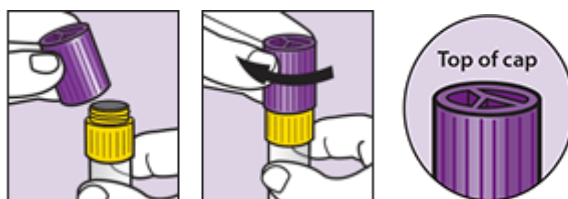
IMPORTANT: Do NOT push sample into the tube.



4. Scrape horizontally across the tube top to level the sample and remove any excess. Discard the stick. Wipe exterior of tube and top with toilet paper or tissue as needed.



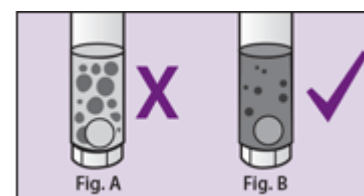
5. Screw the purple cap back onto the yellow tube top until tightly closed.



6. Shake the sealed tube as hard and fast as possible in a back and forth motion for a minimum of 30 seconds.



7. The faecal sample will be mixed with the stabilising liquid in the tube; not all particles will dissolve.



IMPORTANT: Continue shaking if large particles remain as - shown in Figure A.

Faeces Container Collection:

1. Remove the brown lid of the faeces container, attached to the inside of the lid is a scoop.
2. Please collect enough faecal sample to roughly fill the collection pot half to $\frac{3}{4}$ full.

3. Once you have collected the sample please replace the lid and make sure it is securely tightened.
4. Put the faeces container in the plastic Specisafe transport packaging.
5. Please note, the gloves provided are not flushable and should be disposed of in your normal rubbish.



Place both collection containers in the plastic biohazard zip lock bag and put them in the mailing envelope with the other samples that you have collected. If you are unable to post the faecal samples straight away please store them at room temperature (do not refrigerate) and post them as soon as possible.

Finger prick (capillary blood) instructions – Autoantibody sample

Kit contents:



Specisafe transport packaging

Capillary blood collection tube
(with separation gel – do not remove or mix)

2 alcohol wipes	(Includes 1 spare in case the first puncture attempt is unsuccessful)
2 gauze swabs	
2 plasters	
2 single use lancets	

Note: Being well hydrated the day and hours before taking your sample can make the collection easier.

1. Ensure hand and fingers are warm (holding them under warm running water for a minute or two before blood collection can help).
2. Select one of the following (shaded) sites to puncture:



Note: Many people find their 'ring' finger produces better blood flow than their middle finger.

3. Clean the chosen puncture site with the alcohol wipe and allow to **dry**.
4. Prepare the safety lancet and puncture the skin as shown:



A Twist the cap until it separates from the lancet.



B Press the lancet **very firmly** against the finger to ensure a good puncture site and blood flow. You may wish to rest the finger on a flat surface and press the firing button.

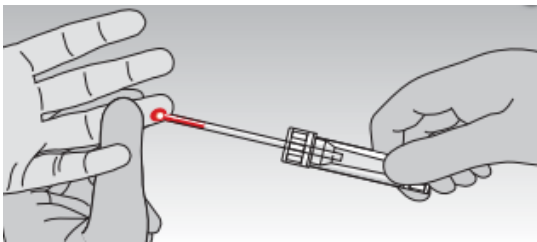
5. Discard the first drop of blood by blotting finger on the gauze swab.
6. To maintain good blood flow, hold arm downwards and massage your hand.
7. If the blood flow stops, try holding the finger high above your head for a minute, once the finger is lowered quickly wash the puncture site to prevent clotting and hopefully the blood flow may start again.

8. Collect the blood using the capillary method described in steps A-G **OR** if the capillary tube becomes blocked or you can't get blood into it, you can remove the capillary tube lid and drip/scrape blood directly into the collection pot.

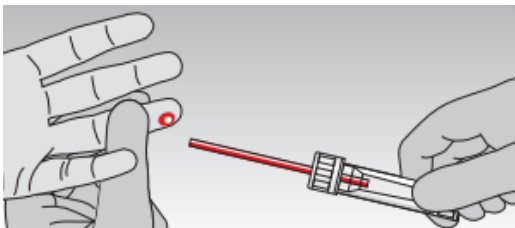
C



Capillary tube blood collection instructions

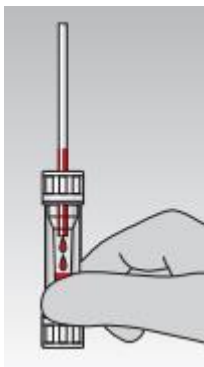


- A** Hold the blood collection tube in a horizontal or slightly inclined position and allow the blood drops to be sucked into the capillary straw.

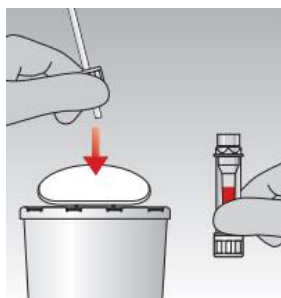


- B** Collection is complete when the capillary straw is filled with blood or the blood that has drained into the tube reaches the fill line.

Don't worry if you are unable to collect the full amount. Please return whatever you can.



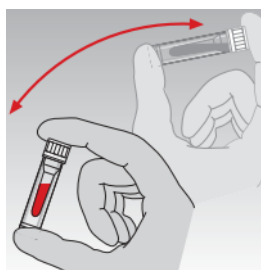
- C** Stand the tube upright on a flat surface to allow the blood to flow down into it. It might be necessary to give the tube a couple of gentle taps to encourage the flow.



D Twist the top cap with capillary straw to remove it and discard.

Remove the cap from the base of the tube by twisting and pulling downwards.

Use this to seal the tube by pressing down until it locks into place.



F Mix the sample by gently tipping it a couple of times.

9. Clean any excess blood from the puncture wound using the gauze and apply the plaster. Avoid putting any undue pressure on the puncture site or surrounding area for several hours as this may cause further bleeding.

10. Place the blood collection tube inside the Specisafe plastic transport packaging, push closed and place in the biohazard zip lock bag. Used and unused lancets can also be returned if they can't be safely disposed of. Please return the sample/s to us as soon as possible in the freepost packaging provided.



Finger prick (capillary blood) instructions – HbA1c sample

Kit contents:



Specisafe transport packaging

capillary blood (EDTA purple top) collection tube

2 alcohol wipes

2 gauze swabs

2 plasters

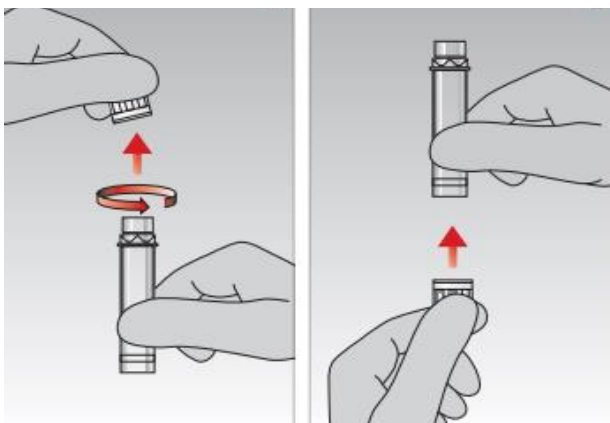
2 single use lancets

(Includes 1 spare in case the first puncture attempt is unsuccessful)

Note: Being well hydrated the day and hours before taking your sample can make the collection easier.

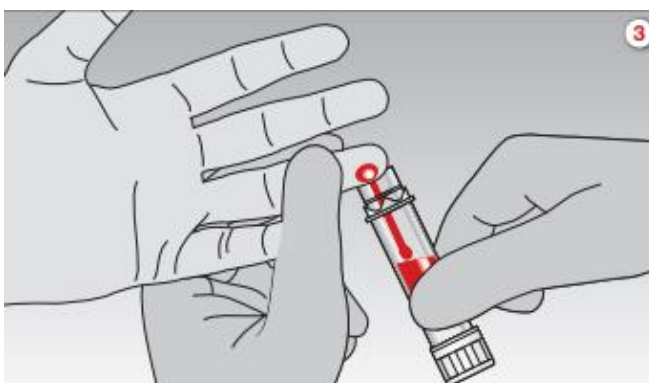
N.B. Follow the finger prick lancet Instructions on page 7

Capillary blood collection instructions



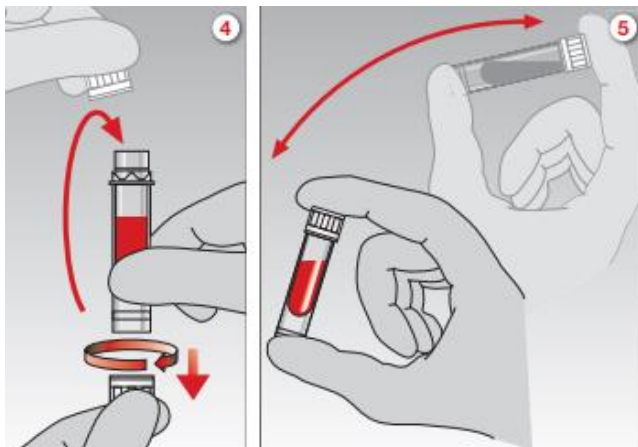
1. Turn and pull the cap to remove it.

2. Attach the cap to the bottom of the



3. Drop or scrape blood into the tube using gravity-flow. To maintain good blood flow, hold arm downwards and massage your hand towards the end of your finger.

NB. If the blood flow stops, try holding the hand high above your head for a minute. Once the hand is lowered, quickly wash the finger puncture site to prevent clotting and hopefully the blood flow will start again. Do not worry if you are unable to fill the tube to the top line, please return whatever you are able to collect.



4. Remove the cap from the base of the tube by twisting and pulling downwards. Seal the tube by pressing the lid down until it locks into place.
5. Mix the sample by gently tipping it a couple of times.

6. Clean any excess blood from the puncture wound using the gauze and apply the plaster. Avoid putting any undue pressure on the puncture site or surrounding area for several hours as this may cause further bleeding.

7. Place the blood collection tube inside the Specisafe plastic transport packaging, push closed and place in the biohazard zip lock bag. Used and unused lancets can also be returned if they can't be safely disposed of. Please return the sample/s to us as soon as possible in the freepost packaging provided.



Further information

Please make sure you have filled in the sample return form and return it to us with your samples. All the samples should be returned to us using the free post packaging provided via your local post box.

How to contact us

If you have any questions regarding sample collection please contact us or visit our website where you will find demonstration videos.

Contact us:

Chief Investigator: Professor Kathleen Gillespie PhD

Study Administrator: Mrs Isabel Wilson

Research Technician: Ms Rachel Aitken

Telephone: 0117 4147915 or 0117 414 7905

BOX Research Nurse: Clare Megson Telephone: 07814 905258

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Web: bristol.ac.uk/translational-health-sciences/box-study



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Diabetes and Metabolism – The BOX Study

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