

Microbiome Sample Collection SOP: Stool collection and rectal swabs for gut microbiome analysis

Purpose

This SOP standardizes the procedure for collecting stool and rectal swab samples for gut microbiome analysis

Materials

Stool sample

1. 4 ounce specimen collection container
2. Collection hat
3. Sterile collection stick (Tongue depressors or wooden applicators)
4. Biohazard bag
5. 4 sterile 1.8 mL cryovials

Rectal Swab

1. FLOQSwab package

Stool Sample

The participant will be given a clean container for the home collection of the stool sample.

1. At initial visit, participants should be given stool collection hat, a sterile 4 ounce specimen collection container, and sterile collection stick for the subsequent visit collection.
2. Less than 24 hours before the study visit (ideally the morning of visit), the participant should insert the collection hat into toilet seat and stool into the collection hat, avoiding contamination with urine.
3. The collection stick or scoop (tongue depressor or wooden applicator) should be used to scrape stool from the hat into the specimen collection container. If the stool is liquid then scoop liquid stool with the stick or scoop, insert stick or scoop in collection container, and then tap bottom and edges to release stool. Repeat until there is small pellet of visible stool in the collection container (at least the size of a nickel).
4. Place tubes in biohazard bag. Document time of collection. Keep at room temperature and bring to study visit.
5. Study staff should aliquot the stool into 4 different 1.8mL dry cryovials using a tongue depressor or wooden applicator. Ensure that each aliquot has at least 0.5 ml. Label the tubes with the LDMS label, stool and date of collection. Place the cryovials in freezer at -70°C or colder until shipping to BRI.
6. The participant should be given a new collection kit at desired visits for collection at subsequent visits.
7. Batch ship the samples monthly.

Rectal Swab

The rectal swab will be collected at the site by site staff.

1. Open individual FLOQSwab package. A sterile nylon FLOQSwab (Copan Diagnostics - 519C.US) should be inserted 2 cm beyond the anus and rotated for several seconds.
2. Place FLOQSwab in accompanying sterile dry tube. Break swab shaft at marked line by bending 180 degrees. Screw on cap.
3. Label tube and place in -70°C or colder freezer immediately.
4. Batch ship the samples to BRI monthly.