

Saliva Collection

Short Title	Saliva Collection
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Version Number	1

A. PURPOSE AND BACKGROUND

Salivary collection is used as a non-invasive way to measure biological markers (e.g., hormones such as cortisol, progesterone, estrogen) that are indicators of stress or phases of the menstrual cycle) (Dickerson and Kemeny 2004).

B. PROCEDURES/STUDY PROTOCOL

Are there any controlled act(s) to be performed: Yes No

If you checked yes, list the controlled act(s) below:

Prior to providing a saliva sample, participants are asked to refrain from eating, drinking, or chewing gum or brushing their teeth for at least 1 hour. Some researchers ask that they also refrain from vigorous activity for at least 2 hours. They may be asked if any of these activities took place prior to arriving, and when.

Using salivettes, participants are asked to take their own saliva by placing a piece of sterile synthetic swab into their mouth and letting the saliva absorb into it for one minute. Participants will then be asked to carefully guide the swab back into the container using their mouth and to avoid touching the edges of the tube with their hand and then replace the cap back on the container. Once sealed, the participants will hand their salivettes to the researchers.

Alternatively, saliva samples are collected by asking participants to passively drool into a test tube.

Participants may be asked to provide samples at home or in the lab, and may be asked to provide samples at several different times during the study.

C. EQUIPMENT

1. In some cases, sterile salivettes are used to collect the saliva. This procedure is hygienic and poses no risk to the participant or researcher.
2. Please see below a photo of the salivette collection system – together and in parts.

Saliva Collection**D. DESCRIPTION TO STUDY PARTICIPANTS**

1. You will be asked to refrain from eating or drinking or brushing your teeth for 1-2 hrs before arriving at the laboratory. You may be asked to refrain from vigorous physical activity for 2 hours prior, and abstain from alcohol for 12 hours prior. After you have arrived at the laboratory, you will be asked about your prior activities and when they may have occurred.
2. A. If your saliva sample is being taken with a salivette, you will be asked to place the sterile swab in your mouth and allow your saliva to soak in for a period of one minute. Note: Some researchers will ask you not to touch the swab with your fingers – you 'shoot' the swab into your mouth from the tube and then carefully guide it back into the tube using your teeth and lips, but not your hands. Re-cap the tube.
B. If your saliva sample is being taken directly into a test tube, you will be asked to passively drool into the test tube until sufficient saliva is collected.
3. Photo A: An example of the salivette collection system. Photo B: An example of collection by passive drooling.

Photo A: Salivette collection system being used – please note that some researchers will ask you not to touch the equipment directly with your fingers, depending on the biochemical analysis to be performed.



Photo B: An example of passive drooling into a sterile test tube.

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E. RISKS

1. PARTICIPANTS

- a. When used correctly, there are no risks associated with saliva collection to adult participants. With very small children, there may be a small hazard of choking.

2. RESEARCHERS

- a. There is a slight risk for researchers to acquire illnesses that are transmitted through sputum (e.g., colds, influenza, hepatitis B&C).

F. SAFEGUARDS/SAFETY PROCEDURES

1. PARTICIPANTS

- a. Materials used (e.g., salivettes, tubes) are sterilized and disposable to prevent transmission of infectious materials from participant to participant.

2. RESEARCHERS

- a. Researchers will wear gloves while collecting saliva samples, and at all times while handling saliva or materials used to collect saliva. Materials and unused saliva will be disposed of as biohazardous material according

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to protocols established through the Brock Biosafety Committee (Brock Biosafety Manual 2017)

- b. Please be aware that handling/storage of saliva requires specific laboratory permits obtained through the Biosafety Office. Please contact this office to be sure that your permits are up to date.

G. REFERENCES (if applicable)

1. Dickerson SS and Kemeny ME. Acute stressors and cortisol responses: a theoretical integration and synthesis of laboratory research. Psychol Bull 130(3): 355-391, 2004.
2. Brock University Biosafety Manual, 2017. Waste Management and Disposal pg. 71-72. <https://brocku.sharepoint.com/human-resources/Pages/Academic%20Safety.aspx>