Questions & Answers About Buccal Swabs

EXPLAINING BUCCAL SWABS

Q: What is a buccal swab?
A: Buccal swabs are cotton-tipped applicators. They look like the cotton swabs used in personal care but have a longer stem and one cotton tip.

Q: How are buccal swabs used?
A: Buccal swabs are used to collect cheek cells from inside your mouth. These cheek cells provide DNA for HLA testing, which is used to determine a match between a donor and a patient.

Buccal swabs provide the least invasive way of collecting DNA samples for HLA testing.

Q: What does the word “buccal” mean?
A: Buccal is a term used for cheeks or the mouth cavity.

Q: Is this like the DNA tests on the crime shows?
A: This method of collecting DNA is similar to what is seen on TV. However, the NMDP uses your DNA ONLY for HLA testing. HLA testing is used to determine an individual’s tissue type so it can be listed on the NMDP Registry where it will be matched against the tissue types of patients who need marrow donors.

HOW TO COLLECT SAMPLES

Q: What do I have to do to collect the sample?
A: Brush a swab against the inside of your cheek for approximately 10 seconds using the same force used to brush your teeth.

Q: Why do I have to provide 4 samples?
A: The NMDP needs two swabs to be available for the laboratories to do the initial DNA for HLA testing, and we store 2 samples for additional HLA testing.

Q: Why do I have to take each sample from a different location?
A: Once an area of the cheek has been swabbed, the loose buccal cells are now on the swab. If you swabbed the same area twice, the second swab could have too few cells from which to obtain the DNA for HLA testing.
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Q: Why do I have to put it in my mouth? Can I just suck or spit on the swab?
A: Your saliva does not contain enough cells for us to test. The swabs work best when you swallow first, and then swab your cheek.

Q: Are there any chemicals on the swab? What if I'm allergic?
A: There are no chemicals or additional substances on the swab. The swabs are sterile and made to be used by doctors and hospitals. If you are allergic to cotton you should not use the swab.

Q: Does this mean I don’t have to give blood?
A: You do not need to give a blood sample today to join the Registry. If you are called as a match for a patient you will have to provide additional blood samples. Both of the donation procedures, marrow and peripheral blood stem cells (PBSC), involve using needles to extract the cells needed for transplantation.

Q: Do buccal swabs provide a better sample than blood?
A: No, DNA is found in both buccal cells and blood. Buccal swabs are an easier way of obtaining your sample for HLA testing.

Q: I just ate a donut, will food affect collecting my sample?
A: Buccal swab samples are generally not affected by food, toothpaste, tobacco, gum or alcohol. However, the best quality swab is one taken when your mouth is empty.

Q: I have a cold, will that affect my sample?
A: Buccal swabs are not affected by the cold virus.

SAMPLE HANDLING

Q: What happens to the swab once you’ve used my sample? Is it thrown away?
A: After your DNA has been extracted from the swab, the swab is thrown away. If you decide to remove your name from the donor registry, your remaining swabs will be thrown away.

Q: What if I drop my swab on the floor or table?
A: Throw out any swabs that are dropped. The NMDP representative has extra sterile swabs to use. It is also acceptable to submit a kit with fewer than 4 swabs.