

Collecting Salivary DHEA-S

Sample Collection Method Overview

✓ Passive Drool

+ Special Considerations

DHEA-S is very sensitive to freeze-thaw cycles. Sample collection, storage, and handling needs to be carefully designed to minimize the impact of the sensitivity of this analyte to storage and handling.

DHEA-S is highly influenced by saliva flow rate

Levels of DHEA-S in saliva do not correlate as highly with serum levels as do DHEA levels.

Consult the literature to determine whether DHEA or DHEA-S is the most appropriate analyte for your studies purposes.

+ Sample Collection (General Procedure)

Before Sample Collection

- Avoid foods with high sugar or acidity, immediately before sample collection, since they may compromise the assay by lowering saliva pH and increasing bacterial growth.
- Have a plan in place to avoid multiple freeze-thaws in the cold chain management
- DHEA(S) is available over the counter in some areas as a supplement. Care should be taken to document its use within 12 hours prior to sample collection.
- Document parameters to enable estimates of salivary flow rate
- Document consumption of alcohol, caffeine, nicotine, and prescription/over-the-counter medications within the prior 12 hours.
- Document vigorous physical activity and the presence of oral diseases or injury.
- Do not eat a major meal within 60 minutes of sample collection.
- Rinse mouth with water to remove food residue and **wait at least 10 minutes** after rinsing to avoid sample dilution before collecting saliva.

During Sample Collection

- **Recommended Collection Volume: 225 µl***
- Follow desired sample collection device protocol

*Add 300 µl to the total volume of all tests for liquid handling loss

After Sample Collection

- Record the time and date of specimen collection.
- Refrigerate samples immediately (if possible) and freeze at or below -20°C (household freezer) as soon as possible (within hours of sample collection)
- Consider aliquoting samples to avoid multiple freeze-thaws
- Samples visibly contaminated with blood should be recollected.
- Do not add sodium azide to saliva samples as a preservative.