Instructions for Saliva Sampling

using the Saliva Set from ISD

1. In order to achieve proper saliva sampling special care must be taken to the extremely low concentrations of the analytes under investigation. We are recommending the use of special polypropylene devices like the ones enclosed in this Saliva Set. Such sampling sets are available from Demeditec Diagnostics. These sampling devices have very low absorption characteristics and are easy to handle also for non-medical individuals.

2. Ovulating women should collect saliva at best during day 21 of their cycle (first day of monthly bleeding = day 1). In case of hormone replacement therapy by application of creams the patient must clean the hands carefully after each application. In order to avoid any possible contamination these patients also must wear thin plastic gloves (single use) before starting the collection procedure.

3. Before sampling saliva please make sure that the mouth is clean. No eating or drinking of food from animal origin should have been done during the last 12 hours. Eating of purely vegetarian food may be done in small quantities up to one hour prior to sampling. Before sampling please rinse the mouth carefully with tap water. This rinsing also should be done if smoking has occurred during the last 30 minutes.

4. Sampling always should be done in the early morning during the first 2 hours after waking up. Please take the first sample immediately after you wake up. Every 30 minutes the next sample has to be taken. After 2 hours the sampling has been completed. Now you can eat your usual breakfast. In case of Cortisol or DHEA it may be useful to also collect samples in the late evening. In this case you should take 3 samples in the morning (30 – 60 – 90 minutes after you wake up) and 2 more samples in the late evening (40 and 10 minutes before you go to sleep).

5. Please use the little straw and let saliva flow from your mouth through the straw into the 2 ml plastic device. Then please mark the device clearly. Please also note the name, code or other identification information on a list. The volume of the saliva should be between 1 and 1.5 ml. This means that the device should be filled with liquid at least to the half (50%). This volume should be in the device without taking into consideration the foam. If there is too much foam please aspirate it again by using the same straw and try again to get saliva into the device.

6. It is important that there is no blood in the saliva sample. If you can see any red color in the saliva (even if it is just a slight reddish color) please discard the saliva, rinse the plastic device and the straw with tap water and wait for 10 to 15 minutes. Then start again the sampling procedure as described above.

7. In case of poor saliva flow you may stimulate the flow by thinking at a lemon or a tasty meal. Do not chew anything. Do not even do such movements with the jaw. Avoid any pressure on the teeth during the saliva collection process.

8. Storage of saliva samples: You can store saliva samples for up to 5 days at room temperature (if necessary). But it is always advantageous to store such samples at 4-6°C in a refrigerator or better at –20°C in a freezer. If you want to store saliva samples for a longer period you have to do so at a temperature of -20°C or lower anyhow. In this case you can store the samples for many years.

9. The mailing of samples can be done at ambient temperature. No special cooling is necessary during mailing. The mailing should be done by putting the 5 sampling devices into the small plastic bag. Then put the filled plastic bag into the enclosed mailing bag and add 5 paper tissues for the absorption of any possible leakage.

10. After arrival in the lab the samples should be frozen immediately. Several freezing and thawing cycles do not interfere with the steroid analysis of saliva samples. Before analyzing the samples, each sampling device has to be frozen, thawed, mixed again, and then centrifuged for 5 minutes. Aliquots of these 5 samples should be mixed (e.g. 0.2 ml each) by the lab or for special purposes measured separately (without previous mixing).

ISD-Labor Haarkoppel 31 D-23714 Malente / Germany Phone: +49 4523 8803654 Fax: +49 4523 8803655 e-mail: saliva@isd-labor.de