

## MIDNIGHT SALIVARY CORTISOL TESTING

Doctors are beginning to use saliva as a way of checking for diurnal rhythm variations of hormones. For many hormones, salivary levels do not correspond to blood levels and their measurement cannot be recommended. However, for cortisol, there is a very good correlation between blood and saliva levels. Diurnal rhythm, our inner clock, tells us when to wake up and when to go to sleep at night. In healthy individuals, the largest dose of cortisol is released in the early morning. This tells our body to wake up and get ready for the day.

In people with Cushing's disease, this diurnal rhythm is inappropriately high in the evening hours. Cushing's patients may have high levels of cortisol after the sun goes down and the rest of the world is ready for rejuvenating sleep. This alteration in the diurnal rhythm is a very important piece of the puzzle when trying to establish the proper diagnosis of a patient who is suffering from Cushing's type symptoms.

## PROTOCOL FOR COLLECTING SALIVA SAMPLES

**Each salivary kit contains:** two salivettes for sampling, one requisition, and an instructional handout from ACL.

If you have cyclical or periodic Cushing's disease, it is often challenging to determine what days are good "test" days, especially when you, the patient, is used to feeling pretty crummy most of the time. The salivary testing process, particularly in cyclical patients, can be time consuming and frustrating.

If you are feeling nauseous, tired, achy, or slightly depressed, you may not have a positive testing outcome. Instead, pick an evening where you are feeling awake after dark. If you are experiencing bloating, acne, anxiety, irritability, weight gain, are unable to sleep and feeling manic you will probably have a more favorable outcome. Some people find that testing when they feel highly alert works, while others find it best to test when they are feeling normal. It may take a while to learn your cycles, so do not be discouraged if you do not produce positive results right away. It often takes people weeks or months to accurately diagnose their cycles. For this reason, we suggest keeping a diary of how you feel when you do each test. In this way, if we get an abnormal result, we can ask you to do further testing at times when you feel the same and perhaps expedite getting more abnormal results to back up your diagnosis

At 11pm, wash your hands and dry them thoroughly. **DO NOT BRUSH YOUR TEETH** before you sample. Without touching the salivette, remove the top of the plastic container and put the salivette into your mouth. Chew on it for approximately 3 minutes until the salivette is soaked. Place the soaked salivette back in the top portion of the plastic container. Label it and send it, along with the attached paperwork, to ACL laboratories in Milwaukee, Wisconsin. The lab requires the first sheet of the requisition (the top page of the tri-colored requisition form), but the 2 colored sheets are for you and your insurance company.

**Note:** The lab requisition states you should do two salivettes sequentially and mail them both at the same time. We have found that if you do not feel "high" the second night, you can freeze your first sample and then once you have found an appropriate time to collect the second sample, send them together. This way you can make better use of each kit.

Approximately 10-14 days later, we will receive the results at the office. Dr. Friedman will use these results to help assess your condition.