



COMPARISON: ADRENAL FUNCTION ASSESSMENTS

Saliva, Serum, and Urine Tests

	SALIVA TEST	SERUM TEST	URINE TEST
General Remarks	Multiple time-specific specimens. Hormone values reflect real-life physiological conditions and responses.	Only approximates real life conditions. Single specimens.	24-hour urine contains metabolites of the hormones, is not time specific, and does not reflect timesensitive hormonal and stress responses.
Ease of Collection	Easily collected by the patient under real life situations; at work, at home, etc..	Requires clinical staff for blood draw. Disrupts routine schedule of patient. Creates apprehension due to anticipation of venipuncture. Causes an artificial increase in cortisol.	Cumbersome and time consuming, especially for women.
Biohazard	Minimal biohazard to clinical staff.	Potentially biohazardous to clinic staff, especially given AIDS and Hepatitis.	Minimally biohazardous to clinic staff.
Time Specific	Multiple saliva samples collected at different times allow real-time evaluation of hormonal stress response and circadian rhythm.	A single sample does not allow circadian rhythm evaluation, i.e., no real-time component.	Absolutely not real-time specific and does not reflect circadian rhythm variation at all.
Unbound Free Fraction	Measures the unbound bioactive hormone fraction available to living cells. This is the hormone level that needs to be evaluated.	Routine serum hormone testing reflects total hormone level not the bioactive hormone fraction. Total levels are crude estimates of the unbound bioactive hormone.	Reflects production and catabolism and not the bioactive hormone fraction that living cells can utilize. Urinary hormone interpretation is very misleading.
Therapeutic Discrimination	Subclassifies adrenal function into time related values and stages of adrenal exhaustion. Consequently, therapeutic options are expanded and treatments are very specific.	Test results are reported as: high, low, or normal. Hormone values and treatment options are limited and not always synchronized and harmonious with the natural circadian cycle of the patient.	