

STN

Nutritional Laboratory Services
Self-Test Kits - taking scientific testing to the home

Monitoring Hormonal Needs with Saliva Testing.....How Often to Test

As you get older and your hormone levels shift, the delicate balance required to keep your body in good health will change. Simple saliva testing will give you a clear picture of your hormone levels and help you determine if you need to make adjustments to your natural hormone supplementation.

- Baseline saliva hormone test done when you are in your thirties provides you with a baseline of your health, so you can see how your hormone levels change over time.
- These hormone levels become valuable as you age, as they help you identify potential target ranges when your hormones begin to diminish and you start hormone replacement therapy (HRT) becomes an option.
- Yearly saliva hormone testing helps you see how your hormone levels change over time, so you can adjust your HRT or natural hormone supplementation accordingly.
- If you have selected your particular hormone replacement therapy, it is critical to monitor your newly adjusted hormone levels with saliva testing to make sure you are taking the appropriate amounts. Once HRT has been optimised, yearly testing will reveal any changes in your hormonal needs over time.
- If you are on HRT, you may wish to alter your HRT saliva testing to be extremely helpful in assisting you and your healthcare provider to make decisions regarding your new HRT protocol.

Why test Saliva for Hormones?

- The measuring of steroid hormones in saliva has been around for more than 30 years.
- Saliva testing measures the levels of free, bio-available hormones in your body, those hormones which move freely into cells and carry out critical jobs in different parts of your body.
- Simple collection can be timed precisely, which is critical in some hormones.
- Saliva testing is an accurate, flexible tool for adjusting and monitoring hormone replacement therapy (HRT) Blood collection has can be stressful, invasive, and difficult to time precisely.
- Saliva testing is simple, accurate, and easy to use.
- Saliva testing offers convenience and privacy of home collection.

What is a Hormone?

A hormone is a chemical messenger that circulates throughout your body telling your cells what to do. Hormones are produced by organs & glands belonging to the "endocrine system", eg the pituitary glands, thyroid, thymus, pancreas, adrenals, ovaries and testes.

Functions of Your Endocrine System:

- Determines sex characteristics
- Enables female growth
- Enables you to become pregnant and carry a baby
- Mediates sex drive
- Enables individuals to build strong, healthy bones

Nutritional Laboratory Services has developed testing for hormone levels in saliva – a superior medium for measurement of body hormone levels.

Benefits of Particular Hormones

Estradiol

- Relieves menopausal symptoms
- Protects against osteoporosis, heart disease, Alzheimer's disease, colon cancer, incontinence and tooth loss
- Improves mood and energy
- Increases serotonin and endorphin levels

Estrone

- Readily converts to estradiol
- Levels increase following menopause
- Giving the body some estrogen benefits

Estrone

- Essential for a successful pregnancy
- Useful in promoting overall health
- Reported to oppose and modulate the more potent estrogen, estradiol

Progesterone

- Decreases risk of endometrial cancer
- Enhances mood and has a calming effect
- Involved in reduction of PMS and depression
- Regulates fluid balance

Testosterone

- Builds muscle and promotes muscle tone
- Increases libido
- Helps strengthen bones

Dehydroepiandrosterone (DHEA)

- Helps protect against heart disease, osteoporosis, diabetes, cancer, rheumatoid arthritis
- Can increase and enhance energy levels, libido, memory, and immunity
- Protects against the effects of stress
- Aids weight loss and healing of burns
- Helps to prevent wrinkles and dry eyes

Cortisol

- Helps in responding and coping with stress
- Treats arthritis and environmental extremes
- Increases energy and metabolism
- Helps regulate blood pressure
- Enhances the integrity of blood vessels

Nutritional Laboratory Services has developed testing for hormone levels in saliva – a superior medium for measurement of body hormone levels.

Benefits of Particular Hormones

Estradiol

- Relieves menopausal symptoms
- Protects against osteoporosis, heart disease, Alzheimer's disease, colon cancer, incontinence and tooth loss
- Improves mood and energy
- Increases serotonin and endorphin levels

Estrone

- Readily converts to estradiol
- Levels increase following menopause
- Giving the body some estrogen benefits

Estrone

- Essential for a successful pregnancy
- Useful in promoting overall health
- Reported to oppose and modulate the more potent estrogen, estradiol

Progesterone

- Decreases risk of endometrial cancer
- Enhances mood and has a calming effect
- Involved in reduction of PMS and depression
- Regulates fluid balance

Testosterone

- Builds muscle and promotes muscle tone
- Increases libido
- Helps strengthen bones

Dehydroepiandrosterone (DHEA)

- Helps protect against heart disease, osteoporosis, diabetes, cancer, rheumatoid arthritis
- Can increase and enhance energy levels, libido, memory, and immunity
- Protects against the effects of stress
- Aids weight loss and healing of burns
- Helps to prevent wrinkles and dry eyes

Cortisol

- Helps in responding and coping with stress
- Treats arthritis and environmental extremes
- Increases energy and metabolism
- Helps regulate blood pressure
- Enhances the integrity of blood vessels

Our gender and age-based saliva hormone ranges are guidelines for targeting a hormone level that gives and sustains optimal health.

If you have any concerns please contact your healthcare professional for further advice.

The Nutritional Laboratory Services Test Results Report Form consists of the following information:

- Saliva hormone levels for the requested hormones
- Easy-to-read age, gender and treatment specific expected saliva hormone ranges
- Nutritional Laboratory Services saliva hormone target ranges that are based on highly significant number of individuals representing each of the defined populations and provide an excellent means for comparison.

Individual and Physiological Variability

Some of the ranges may seem broad, but this variation points out the wide individuality of hormone levels.

For each of us, our age and our genetic background. Women have much higher levels of the estrogens and progesterone than men. Cycling women who have ceased cycling. Men, in general, have higher levels of testosterone and DHEA than women, but in both sexes the level of each drop dramatically with age. Cortisol levels remain constant throughout our lifetime, regardless of sex or age.

Importance of the Time of Collection

The ranges represent saliva hormone levels from specimens collected in the early morning. This fact is important because several of the hormones (such as testosterone, cortisol and DHEA) express diurnal variation which means that levels rise over the course of the day and are at their lowest in the early morning. Your saliva collection was not done in the early AM, it is important to make note of the time difference so it can be taken into consideration when evaluating your results.

1. Location With-in the Ranges if you are not Supplementing.

For each of your approximate saliva hormone range is from the middle to the high level. For example, if you are a 51-year-old postmenopausal woman and your testosterone value is 26 pmol/L, you might discuss with your healthcare professional the possibility of supplementation.

2. Hormone Levels that Fall at the Low End or Below the Established Saliva Ranges

Saliva hormone levels below or at the very low end of the established range indicate sub-optimal values, and hormone replacement therapy (HRT) should be discussed with your healthcare provider. Ideal HRT target ranges should be established through your healthcare professional. For example, if your testosterone or DHEA level is lower than your age-specific range, do you supplement back to your age range or, perhaps, back to a more youthful range?

Our gender and age-based saliva hormone ranges are guidelines for targeting a hormone level that gives and sustains optimal health.

If you have any concerns please contact your healthcare professional for further advice.

The Nutritional Laboratory Services Test Results Report Form consists of the following information:

- Saliva hormone levels for the requested hormones
- Easy-to-read age, gender and treatment specific expected saliva hormone ranges
- Nutritional Laboratory Services saliva hormone target ranges that are based on highly significant number of individuals representing each of the defined populations and provide an excellent means for comparison.

Individual and Physiological Variability

Some of the ranges may seem broad, but this variation points out the wide individuality of hormone levels.

For each of us, our age and our genetic background. Women have much higher levels of the estrogens and progesterone than men. Cycling women who have ceased cycling. Men, in general, have higher levels of testosterone and DHEA than women, but in both sexes the level of each drop dramatically with age. Cortisol levels remain constant throughout our lifetime, regardless of sex or age.

Importance of the Time of Collection

The ranges represent saliva hormone levels from specimens collected in the early morning. This fact is important because several of the hormones (such as testosterone, cortisol and DHEA) express diurnal variation which means that levels rise over the course of the day and are at their lowest in the early morning. Your saliva collection was not done in the early AM, it is important to make note of the time difference so it can be taken into consideration when evaluating your results.

1. Location With-in the Ranges if you are not Supplementing.

For each of your approximate saliva hormone range is from the middle to the high level. For example, if you are a 51-year-old postmenopausal woman and your testosterone value is 26 pmol/L, you might discuss with your healthcare professional the possibility of supplementation.

2. Hormone Levels that Fall at the Low End or Below the Established Saliva Ranges

Saliva hormone levels below or at the very low end of the established range indicate sub-optimal values, and hormone replacement therapy (HRT) should be discussed with your healthcare provider. Ideal HRT target ranges should be established through your healthcare professional. For example, if your testosterone or DHEA level is lower than your age-specific range, do you supplement back to your age range or, perhaps, back to a more youthful range?

Our gender and age-based saliva hormone ranges are guidelines for targeting a hormone level that gives and sustains optimal health.

If you have any concerns please contact your healthcare professional for further advice.

The Nutritional Laboratory Services Test Results Report Form consists of the following information:

- Saliva hormone levels for the requested hormones
- Easy-to-read age, gender and treatment specific expected saliva hormone ranges
- Nutritional Laboratory Services saliva hormone target ranges that are based on highly significant number of individuals representing each of the defined populations and provide an excellent means for comparison.

Individual and Physiological Variability

Some of the ranges may seem broad, but this variation points out the wide individuality of hormone levels.

For each of us, our age and our genetic background. Women have much higher levels of the estrogens and progesterone than men. Cycling women who have ceased cycling. Men, in general, have higher levels of testosterone and DHEA than women, but in both sexes the level of each drop dramatically with age. Cortisol levels remain constant throughout our lifetime, regardless of sex or age.

Importance of the Time of Collection

The ranges represent saliva hormone levels from specimens collected in the early morning. This fact is important because several of the hormones (such as testosterone, cortisol and DHEA) express diurnal variation which means that levels rise over the course of the day and are at their lowest in the early morning. Your saliva collection was not done in the early AM, it is important to make note of the time difference so it can be taken into consideration when evaluating your results.

1. Location With-in the Ranges if you are not Supplementing.

For each of your approximate saliva hormone range is from the middle to the high level. For example, if you are a 51-year-old postmenopausal woman and your testosterone value is 26 pmol/L, you might discuss with your healthcare professional the possibility of supplementation.

2. Hormone Levels that Fall at the Low End or Below the Established Saliva Ranges

Saliva hormone levels below or at the very low end of the established range indicate sub-optimal values, and hormone replacement therapy (HRT) should be discussed with your healthcare provider. Ideal HRT target ranges should be established through your healthcare professional. For example, if your testosterone or DHEA level is lower than your age-specific range, do you supplement back to your age range or, perhaps, back to a more youthful range?

Our gender and age-based saliva hormone ranges are guidelines for targeting a hormone level that gives and sustains optimal health.

If you have any concerns please contact your healthcare professional for further advice.

The Nutritional Laboratory Services Test Results Report Form consists of the following information:

- Saliva hormone levels for the requested hormones
- Easy-to-read age, gender and treatment specific expected saliva hormone ranges
- Nutritional Laboratory Services saliva hormone target ranges that are based on highly significant number of individuals representing each of the defined populations and provide an excellent means for comparison.

Individual and Physiological Variability

Some of the ranges may seem broad, but this variation points out the wide individuality of hormone levels.

For each of us, our age and our genetic background. Women have much higher levels of the estrogens and progesterone than men. Cycling women who have ceased cycling. Men, in general, have higher levels of testosterone and DHEA than women, but in both sexes the level of each drop dramatically with age. Cortisol levels remain constant throughout our lifetime, regardless of sex or age.

Importance of the Time of Collection

The ranges represent saliva hormone levels from specimens collected in the early morning. This fact is important because several of the hormones (such as testosterone, cortisol and DHEA) express diurnal variation which means that levels rise over the course of the day and are at their lowest in the early morning. Your saliva collection was not done in the early AM, it is important to make note of the time difference so it can be taken into consideration when evaluating your results.

1. Location With-in the Ranges if you are not Supplementing.

For each of your approximate saliva hormone range is from the middle to the high level. For example, if you are a 51-year-old postmenopausal woman and your testosterone value is 26 pmol/L, you might discuss with your healthcare professional the possibility of supplementation.

2. Hormone Levels that Fall at the Low End or Below the Established Saliva Ranges

Saliva hormone levels below or at the very low end of the established range indicate sub-optimal values, and hormone replacement therapy (HRT) should be discussed with your healthcare provider. Ideal HRT target ranges should be established through your healthcare professional. For example, if your testosterone or DHEA level is lower than your age-specific range, do you supplement back to your age range or, perhaps, back to a more youthful range?

Salivary Hormone Test Kit Collection Instructions

3. Hormone Replacement or Supplementation

a. Oral or topical application: The best time for saliva collection is in the early morning, prior to the next hormone product usage.

b. Sublingual: If hormones are taken by sublingual delivery (under the tongue), be sure to rinse your mouth thoroughly and wait at least 12-24 hours after last dose prior to collecting specimen. This delivery method increases the chance of saliva contamination.

c. Patches: For continuous pharmaceutical patches i.e. an estradiol patch, collect saliva 24-48 hours after patch application.

4. Melatonin Panel

Two samples of saliva are required to measure your levels of melatonin. The first sample is collected at 12 midnight and a second sample is taken in the morning between 6:00am – 8:00am. Please ensure that samples are taken in the specified order.

How to Collect Your Saliva

Saliva for hormone testing is generally collected in the early morning between 6:00am – 9:00am before brushing/flossing your teeth, eating, drinking or applying makeup.

To ensure accuracy of the test results and avoid contamination of the saliva it is important to:

- Wash hands thoroughly with soap and water before beginning.
- Do not eat, brush or floss your teeth for one hour prior to collection of saliva.
- On the day of collection avoid caffeine, alcohol and nicotine if possible.
- Rinse your mouth at least twice with cool water and then wait for 5 minutes before you start the collection.

How to Mail Your Saliva Specimen

- Place the specimen tube on the card that has been filled out in the prepaid post pack
- Secure the end of the mailer. It is a good idea to tape each end
- Mail to Nutritional Laboratory Services. Clients outside Australia need to provide postage

Kit Contents

- Collection instructions
- Collection tube with identification label
- Personal & payment details form
- Prepaid post pack

Please read all of the collection instructions before beginning saliva collection. Nutritional Laboratory Services conducts all testing through an accredited laboratory.

- Saliva collection is simple and can be performed in your home at your convenience

- Hormones in saliva are stable at room temperature for several weeks so there are no special needs in shipping to Nutritional Laboratory Services (NLS)
- Once collected just mail your saliva specimen to Nutritional Laboratory Services in the prepaid post pack provided
- Clients outside Australia will need to provide postage

When to collect Your Saliva

The following guidelines are recommended:

1. **Males & Post Menopausal Females**
Baseline Female and Male Hormone Levels with the exception of Melatonin, saliva is best collected in the early morning, preferably right after rising.

2. Cycling Female Hormone Levels

For premenopausal or peri-menopausal women, the most favourable time for saliva collection is during the middle of the luteal phase (the last two weeks of your cycle). Collect your saliva between days 20 and 23 of your cycle, counting day 1 as the first day of your menstrual flow. If your cycles are sporadic (you have skipped several in a row), saliva collection may be done anytime, as ovulation is highly unlikely.

