



## What the DUTCH Test Is

The DUTCH test is usually done at home. You collect several small urine samples on special filter paper over about 24 hours, let them dry, and send them to a lab for analysis. The lab analyzes hormones and their metabolites (how your body processes them), which gives a more detailed picture than many standard blood tests.

### What the DUTCH Test Measures

It looks at many hormones and related markers, including:

Sex hormones

- Estrogen
- Progesterone
- Testosterone

Adrenal/stress hormones

- Cortisol
- Cortisone
- DHEA

Other markers

- Melatonin (sleep hormone)
- Hormone metabolites (how hormones are broken down)
- Some organic acids or nutritional markers depending on the panel

### Why It Can Be Important

The DUTCH test is popular in functional and integrative medicine because it provides deeper insight into hormone patterns.

#### 1. It shows hormone patterns across the day

Unlike a blood test that gives a single snapshot, the DUTCH test can show how hormones fluctuate over time, especially cortisol (your stress hormone).

#### 2. It shows how your body metabolizes hormones

It doesn't just measure hormone levels—it shows how your body processes and clears them, which may reveal issues like estrogen dominance or poor hormone detoxification.





### **3. It may help explain symptoms like:**

- Chronic fatigue
- Mood swings or anxiety
- Weight gain
- Sleep problems
- Hormonal acne or hair loss
- PMS or menopause symptoms

### **Important Limitations**

It's important to know that:

- The test is not FDA-cleared.
- Some experts say there isn't enough independent research proving it improves medical outcomes.

Because of that, many doctors use it alongside other tests rather than relying on it alone.

### **In simple terms:**

The DUTCH test is a detailed hormone mapping test that can help identify hidden hormonal imbalances, stress patterns, and metabolism of hormones—especially when someone has symptoms but standard labs appear normal.



# What the DUTCH Test Covers (Detailed Breakdown)

## 1. Sex Hormones

These regulate reproduction, metabolism, mood, muscle, and many other functions.

Estrogens

- Estrone (E1)
- Estradiol (E2)
- Estriol (E3)

These help evaluate:

- Estrogen dominance
- Menopause/perimenopause changes
- PMS symptoms
- Fertility issues

Progesterone

- Usually measured via metabolites like pregnanediol

This helps show:

- Ovulation status
- Balance between progesterone and estrogen
- PMS or anxiety patterns

Androgens (male-type hormones)

Even women produce these.

Includes:

- Testosterone
- DHEA / DHEA-S
- DHT (dihydrotestosterone)
- Androsterone
- Etiocholanolone

These affect:

- Libido
- muscle mass
- acne
- hair growth or hair loss





## **2. Adrenal (Stress) Hormones**

The DUTCH test is well known for its cortisol rhythm mapping.

It measures:

- Cortisol
- Cortisone
- Cortisol metabolites

This helps evaluate:

- Stress response
- adrenal function
- burnout or chronic stress patterns
- inflammation patterns

Because samples are taken several times during the day, it can show the daily cortisol rhythm, which should normally peak in the morning and decline at night.

## **3. Hormone Metabolism (Detox Pathways)**

This is one of the biggest differences between the DUTCH test and regular hormone labs.

It measures how hormones are broken down in the liver.

Example pathways measured:

- 2-hydroxy estrogen pathway
- 4-hydroxy estrogen pathway
- 16-hydroxy estrogen pathway
- Methylation markers

These pathways may help assess:

- estrogen detoxification
- cancer risk patterns
- liver detox efficiency



#### **4. Melatonin and Sleep Markers**

Many DUTCH panels measure:

- Melatonin (sleep hormone)
- melatonin metabolites

These can reveal:

- circadian rhythm issues
- insomnia causes
- nighttime hormone disruption

#### **5. Organic Acids (in some panels)**

Some DUTCH tests include an OAT (Organic Acids Test) component.

These markers can give clues about:

- gut health
- nutrient status
- neurotransmitters
- oxidative stress
- detoxification capacity

Examples include:

- dopamine metabolites
- norepinephrine metabolites
- B-vitamin markers
- oxidative stress markers (like 8-OHdG)

#### **6. Additional Biomarkers**

Depending on the specific DUTCH panel, it may also measure:

- creatinine (to normalize urine concentrations)
- glutathione markers
- neuroinflammation markers
- gut metabolites like indican



## What Makes It Different From Standard Hormone Tests

Typical hormone tests only measure hormone levels in blood at one moment.

The DUTCH test adds three important layers:

1. Hormone production
2. Hormone metabolism (how they're broken down)
3. Daily rhythm patterns (especially cortisol)

This is why many functional medicine practitioners call it a “hormone mapping test.”

In simple terms:

The DUTCH test covers three major systems simultaneously:

- Sex hormones
- Stress/adrenal hormones
- Hormone detox/metabolism pathways

Plus optional insights into sleep, gut health, and neurotransmitters.