THE ADULTING VAULT

Understanding Your Body

Anatomy, Hormones, and What Changes Across a Lifetime

EVERYTHING THEY FORGOT TO TEACH YOU

Bodies run on chemical signals that almost nobody explains. You are told about puberty once, briefly, and then left to work out on your own why your energy collapsed at thirty-eight, why your sleep changed, or whether the thing your body is doing is normal. This guide covers the anatomy plainly, explains what hormones actually do beyond reproduction, and walks through the stages a body moves through — including the two that get the least coverage and cause the most confusion.

Please Read This First

This guide is general educational information, not medical advice. It is not a substitute for diagnosis, treatment, or care from a qualified clinician who knows your history. Nothing here creates a provider-patient relationship. Do not delay seeking care, or disregard advice you have been given, because of something you read here. If you think you may have a medical emergency, call 911 or go to your nearest emergency department.

CURRENCY OF THIS GUIDE

This guide describes typical anatomy and physiology. Bodies vary enormously and variation is not pathology. Nothing here can tell you whether something in your body is a problem — that requires a clinician who can examine you and knows your history. Treatment options described are for orientation only; the evidence in some areas, particularly hormone therapy, is nuanced and evolving.

Part One: Anatomy, Plainly

Written so it is useful whatever body you have.

Most anatomy education is organised around two templates and treats everything else as an exception. That is neither accurate nor practical. Bodies vary in structure, hormone levels, and function, and that variation is ordinary. This section describes structures and what they do; which ones you have is a separate question from which ones this guide covers.

Structures and function

Structure	What it does
Ovaries	Release eggs and produce oestrogen and progesterone. Also produce testosterone.
Uterus	Muscular organ where a pregnancy develops. Its lining builds and sheds cyclically.
Fallopian tubes	Transport eggs from the ovaries. Where fertilisation typically occurs.
Cervix	The lower part of the uterus opening into the vagina. Produces mucus that changes across the cycle.
Vagina	Muscular canal. Self-regulating and self-cleaning — internal washing disrupts its bacterial balance and causes problems rather than preventing them.
Vulva	The external structures, including the clitoris, labia, and openings. Frequently confused with the vagina, which is internal.
Testes	Produce sperm and the majority of the body's testosterone.
Prostate	Produces fluid that carries sperm. Enlarges with age in most people who have one.
Penis and urethra	Urination and ejaculation. The urethra is shorter in some bodies than others, which affects urinary infection risk.

TWO THINGS WORTH CORRECTING

The vagina is internal; the vulva is external. Using the words accurately matters when describing a symptom to a clinician, because the treatment differs.

Vaginas do not need cleaning products. Douching and internal washes disrupt the bacterial balance that protects against infection. External washing with water is sufficient.

Part Two: What Hormones Actually Are

A messaging system, not a personality.

Hormones are chemical messengers produced by glands and carried in the blood to tell distant parts of the body what to do. They regulate growth, metabolism, sleep, stress response, blood sugar, mood, reproduction, and appetite. When people say a symptom is hormonal, that covers an enormous range of quite different mechanisms.

The ones that are not about reproduction

Hormone	What it governs	When it goes wrong
Thyroid hormones	Metabolic rate across the whole body	Underactive: fatigue, weight change, cold, low mood, hair changes. Overactive: racing heart, anxiety, heat, weight loss. Both are common, both are frequently mistaken for depression or anxiety, and both are treatable.
Cortisol	Stress response, blood sugar, inflammation, sleep-wake rhythm	Chronic elevation affects sleep, immune function, and blood sugar. Rare disorders of over- and under-production also exist.
Insulin	Moves glucose from blood into cells	Resistance develops gradually and silently, and is the mechanism underlying type 2 diabetes.
Melatonin	Signals the onset of sleep, driven by darkness	Disrupted by evening light and irregular schedules.

IF YOU FEEL PERSISTENTLY UNWELL AND NOBODY CAN SAY WHY

Thyroid function and vitamin deficiencies are simple, cheap blood tests that explain a surprising proportion of vague, long-running symptoms — exhaustion, low mood, poor concentration, hair and skin changes.

These are frequently not checked. Asking for them by name is reasonable.

A caution about hormone claims

Hormones are a favourite of the supplement and wellness industries precisely because "hormonal imbalance" sounds explanatory while meaning almost nothing specific. Actual endocrine disorders are diagnosed with blood tests and treated with regulated medication. Be sceptical of anything sold to balance your hormones without measuring them first.

Part Three: The Stages

Including the two nobody prepares you for.

Puberty, briefly

A years-long process, not an event, driven by rising sex hormones. It produces changes in height, body composition, hair, voice, skin, and the onset of reproductive capacity. Timing varies widely, and wide variation is normal.

The reproductive years

For people who menstruate, a roughly monthly hormonal cycle governs the lining of the uterus and the release of eggs. Symptoms across the cycle — energy, mood, appetite, sleep, pain — are real physiological effects, not imagination.

For people producing testosterone, levels follow a daily rhythm rather than a monthly one, generally highest in the morning. This matters practically: a testosterone test taken in the afternoon may read low simply because of when it was drawn.

Perimenopause — the stage that catches people out

Perimenopause is the transition preceding menopause, and it commonly begins in the forties, sometimes earlier. It can last several years. Menopause itself is defined as twelve consecutive months without a period; everything before that point is the transition.

The reason it catches people out is that the symptoms are wide-ranging and frequently do not look reproductive at all.

- Cycles becoming irregular, heavier, lighter, or closer together
- Sleep disruption, often waking in the early hours
- Hot flushes and night sweats
- Mood changes, anxiety, and irritability that feel unfamiliar
- Brain fog and word-finding difficulty
- Joint aches
- Changes in libido, and vaginal dryness or discomfort
- Palpitations

> **WHY THIS MATTERS PRACTICALLY**
>
> People in perimenopause are frequently treated for anxiety, depression, or insomnia in isolation, without anyone connecting the symptoms to a hormonal transition. Years

> can pass this way.
>
> If you are in your forties and several of the above arrived together, it is reasonable to ask directly: "Could this be perimenopause?"
>
> Treatment options exist, including hormonal and non-hormonal approaches. The evidence around hormone therapy is more nuanced than the alarming coverage of two decades ago suggested, and current guidance depends heavily on individual risk factors, timing, and symptoms. That is a conversation with a clinician who knows your history, not something to decide from a guide.

Testosterone changes with age

Testosterone declines gradually with age in most people who produce it — typically a slow decline rather than an abrupt transition. Symptoms can include fatigue, reduced libido, mood changes, loss of muscle mass, and difficulty concentrating.

The complication is that all of those are also caused by sleep problems, depression, thyroid dysfunction, medication, alcohol, and metabolic conditions — several of which are far more common. Testosterone replacement is heavily marketed direct to consumers and is not appropriate for everyone; it carries genuine risks including effects on fertility. Proper evaluation involves testing more than once, in the morning, and ruling out the alternatives first.

Part Four: Reading the Signals

What common changes may be pointing at.

None of this is diagnostic. It is a map of what a clinician might consider, so you can describe things usefully instead of guessing.

Signal	May relate to
Persistent exhaustion	Sleep disorders including apnoea, thyroid function, anaemia, vitamin deficiency, depression, blood sugar, medication
Unexplained weight change	Thyroid, blood sugar, medication, stress, digestive conditions
Hair loss or thinning	Thyroid, iron, hormonal change, stress, genetics, some medications
Persistent skin changes	Hormonal shifts, thyroid, allergy, autoimmune conditions
Feeling cold or hot constantly	Thyroid, anaemia, circulation, hormonal transition
Frequent urination or thirst	Blood sugar. Worth checking promptly
Digestive changes lasting weeks	Diet, stress, thyroid, and conditions worth investigating rather than managing indefinitely
New or worsening low mood	Thyroid, vitamin deficiency, hormonal transition, sleep, and depression itself — all worth testing rather than assuming

The pattern that matters most

A single symptom is usually nothing. Several arriving around the same time, persisting for weeks, and not explained by an obvious change in your life, is a pattern — and patterns are what get investigated. Write down when things started. That timeline is frequently the most useful thing you bring to an appointment.

What has changed in the last six months, and roughly when did each thing start?

Part Five: What "Normal" Actually Means

An enormous range, and a much smaller set of genuine warning signs.

Ordinary variation

Bodies differ in size, shape, colour, asymmetry, hair distribution, and smell. Breasts and testicles are commonly different sizes from each other. Labia vary widely in size and shape. Discharge changes across the cycle. None of this is a defect, and a great deal of anxiety about bodies is anxiety about a variation that is simply less visible in media than it is in life.

What is worth getting checked

The general principle is change, persistence, and asymmetry — something that is new, that lasts, or that differs from your own baseline.

- A new lump anywhere, particularly one that is hard, fixed, or growing
- A mole that changes in size, shape, colour, or borders, or that bleeds
- Any bleeding that is unexplained — between periods, after sex, after menopause, or in urine or stool
- A sore or ulcer that does not heal within a few weeks
- Persistent pain anywhere without an obvious cause
- A change in bowel or bladder habits lasting more than a few weeks
- Unexplained weight loss
- Anything your own body is doing that it has not done before and will not stop

> **KNOWING YOUR OWN BASELINE IS THE WHOLE SKILL**
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> The value of familiarity with your own body is not that you will diagnose something. It is that you will notice change early, and early is what changes outcomes.
>
> That is all self-examination is really for — not detecting cancer, but knowing what your normal is so a departure from it registers.

Closing

Most people carry two unhelpful beliefs about their body: that any variation from a narrow ideal is a defect, and that any symptom is either nothing or catastrophic. The reality sits between — a very wide range of ordinary, and a fairly short list of things genuinely worth acting on.

What bridges the two is familiarity. Knowing roughly how your own body behaves, noting when that changes, and describing the change accurately to someone qualified to interpret it. That is not medical knowledge. It is attention, plus the willingness to ask.

> **IF YOU TAKE THREE THINGS FROM THIS**
>
> Several symptoms arriving together and persisting for weeks is a pattern worth investigating. Write down when each started.
>
> Thyroid function and vitamin levels are cheap tests that explain a surprising amount of vague long-running illness. Ask by name.
>
> If you are in your forties and several unfamiliar things arrived at once, "could this be perimenopause?" is a reasonable question to ask directly.