A HEAVENLY HEALTH HACKS COMPANION

Chapters 6, 9 & 14

M46 MINISTRIES

WOMEN'S HEALTH, *Plainly*

Hormones, perimenopause, the heart, iron, bones, strength and screening — what to test, what the numbers mean, what actually moves them, and what to ask your doctor.

GUIDE 04

BRYAN ELLIOTT

M46 MINISTRIES · NOVEMBER 2026 · M46MINISTRIES.COM

GUIDE 04

WOMEN'S HEALTH, *Plainly*

A plain-language guide for women. What to test, what the numbers mean, what actually moves them, and where the evidence is strong or thin. Every number is given in US units first, with the units Canadian labs use in [brackets]. Part 1 is the plain version; Part 2 goes deeper. Three pages are made to print: the dashboard (Section 2), the questions (Section 18) and the tracker (Section 19).

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Contents

Our Story — Why This Booklet Exists 2
Start Here 3

Part 1 — Plainly

How to Use This Guide 4
1 Why Women Need Their Own Page 4
2 The Women's Dashboard at a Glance 6
3 The Women's Playbook 7
4 Cortisol First — Stress, Sleep, Mood and Forgiveness 9
5 Reading It All Together 11

Part 2 — Going Deeper

6 Fasting, Cold and Heat — Different Rules for Women 12
7 Your Hormones Through the Decades 13
8 Reading a Hormone Test Honestly 14
9 Perimenopause and Menopause 14
10 Hormone Therapy, Honestly 15
11 What Helps Without a Prescription 16
12 The Heart — What's Different for Women 17
13 Metabolism and the Midlife Middle 18
14 Iron and Thyroid 19
15 Bones 20
16 Strength — Muscle Is Your Longevity Organ 21
17 Screening — Breast, Cervix, Colon 23

Pages to print

18 Questions to Ask Your Doctor 25
19 My Tracker 26
More Norms — VO_2 max and chair stands 27
Key Takeaways · Action Steps · Reflection Questions 28

⚠️ Important — Read This First

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- **We are not doctors.** Bryan and Teresa Elliott are not physicians, nurses, pharmacists, dietitians or licensed health professionals of any kind. This booklet shares our own research, our own test results and our own experience, alongside the published work of researchers whose views are their own. It has not been reviewed or endorsed by any physician or medical professional.
- **Our numbers are not your targets.** The lab results shown here are personal examples. Your body, your history and your medications are different.
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Our Story — Why This Booklet Exists 📍

In Teresa's words.

Bryan and I have tested for years. In 2026 we went further: extensive testing — blood, DNA, heart and brain scans, bone density and strength — partly for the writing of *Heavenly Health Hacks*, using ourselves as human laboratories. We eat the same food, keep the same routines and train side by side, so it was the cleanest experiment we could run: same lifestyle, two different bodies. We did it to show what this way of living actually does. We keep doing it because it lets us keep adjusting.

I've run half and full marathons, I lift, and I take no medications. Here's what the tests showed at 48:

What	Mine (at 48)	Why it matters
Biological age (DNA test)	39 at a calendar age of 48.9 — 9.9 years younger, and younger than about 79% of women my age	How old your body acts, not how many birthdays you've had. A marker, not a verdict
Pace of aging (DunedinPACE)	0.75 — about three-quarters of a year of aging for every calendar year	1.0 is average. Lower means your body is wearing out more slowly
Heart scan (CT angiogram)	**Zero plaque** in every artery	The best possible result. Plaque is what causes heart attacks
ApoB	112 mg/dL [1.12 g/L] — above the 80 target	The particles that build plaque. My arteries are clean today; menopause usually pushes this number up
Inflammation (hsCRP)	below the lab's detection floor	Little fire in the artery walls
Bone density	Spine Z-score +1.3 — above about 90% of women my age. Hips, average of both sides, +2.0 — above about 97%	The bone I carry into menopause, when loss speeds up
Strength	3 min 27 s plank; 23 chair stands in 30 seconds; a 1-minute farmer carry at 75% of my bodyweight and a 90-second dead hang — both Dr. Peter Attia's targets for women	Muscle is what keeps a woman strong, steady and independent
Medications	none	

Same kitchen, two bodies. On April 22, 2026, Bryan and I gave blood at the same lab on the same morning. What surprised us both was how alike our numbers came back:

Marker	Me (48)	Bryan (55)	What it says
Biological age	39 at 48.9	48.0 at 55.8	Both of us well younger than our years
Pace of aging	0.75	0.71	Both aging at least a quarter slower than average
HbA1c	5.5%	5.5%	Identical
Fasting insulin	5.3 µIU/mL [37 pmol/L]	3.7 µIU/mL [26 pmol/L]	Both at or near optimal
Free T3 (thyroid)	2.6 pg/mL [4.0 pmol/L]	2.7 pg/mL [4.1 pmol/L]	Nearly identical
hsCRP (inflammation)	below detection	below detection	Little fire in either of us

Marker	Me (48)	Bryan (55)	What it says
Lp(a)	under 10 nmol/L	under 10 nmol/L	Both near zero — a gift from our genes, not something we earned
ApoB	112 mg/dL [1.12 g/L]	128 mg/dL [1.28 g/L]	Both above the 80 target

Where we differed, it came down to the body, not the plan. My iron stores were 38 ng/mL [38 µg/L], the low end, which is common in a woman who still has periods; Bryan's were 264, on their way down from 486, because he carries an iron-loading gene. Same plate, opposite iron. My triglycerides ÷ HDL was 1.2 [0.54], just above the 1.0 [0.44] target; his was 0.54 [0.24] that same day. And then the heart scans.

What surprised me most. Zero plaque, even with an ApoB above target. Bryan's ApoB was higher, his had been high for longer, and his scan showed early plaque. Plaque comes from how high the number is *and* how long it stays there. Before menopause, estrogen helps my liver clear those particles. That help is about to fade, which is why I'm working on the number now, while my arteries are still clean.

The tests caught me too. My iron stores came back at 38 — "normal" on the lab's range, but low enough that the lab's own note calls it probable iron deficiency. That's a common reason women feel tired long before anything shows up as anemia. You only find it if you look.

What I'd tell a woman who feels "off." If you're tired, not sleeping, foggy or thickening around the middle, and you keep hearing that your labs are normal, look at cortisol. Dr. Kristy Prouse taught me how much a woman's stress system shapes everything else — sleep, mood, blood sugar, cycles, even thyroid. Many symptoms that get blamed on hormones or age start there. Calm the stress first, then check iron and thyroid, then look at hormones.

Fix the root, not just the reading. Most of what wears a woman down in midlife — the thickening middle, rising insulin, broken sleep, low iron, a stress system running hot — comes from how we live, so most of it can be turned around by how we live. Start there, before the quick fix. Medicine is a good tool for what lifestyle can't fix, and a poor substitute for what it can. *(If you already take a prescription, keep taking it — change your life first, then let your doctor adjust as your numbers move.)*

Start with the three steps in the box below.

💡 Start here — if you read nothing else

1. Lift heavy and eat 30–40 g of protein at breakfast — the two moves that protect bone, muscle and blood sugar through midlife.
2. Check ferritin and TSH before you blame your hormones.
3. Know your ApoB before menopause moves it.

Bottom line: Most of what changes in your 40s is predictable — and most of it is movable. Root first, pill second.

Part 1 — Plainly

How to Use This Guide 💡

This guide is the women's page of *Heavenly Health Hacks*. It comes in two parts.

Part 1 — Plainly is the short version: Teresa's story, the numbers that matter most, the weekly playbook, the stress system that sets the tone for everything else, and how to read it all together. If you read only Part 1, you'll know what to test, why it matters and what to do first.

Part 2 — Going Deeper is the reference: fasting and cold for women, hormones through the decades, perimenopause, hormone therapy, the heart, metabolism, iron and thyroid, bones, strength norms and screening. Go to the section you need.

Every section opens with one line in bold — **Why it matters**. Read those lines alone and you have the booklet in a page.

Teresa's numbers. Bryan's wife Teresa ran the same advanced testing he did in April and May 2026, at 48, and agreed to share her results. Boxes marked 📍 **Teresa's numbers** show them. They are examples, not targets.

Postpartum, perimenopausal, or carrying a lot right now? Read the one-level-more-conservative rule at the top of Section 6 before you change anything.

How to read the evidence. "Solid" means large trials or consistent studies. "Moderate" means smaller or older studies pointing the same way. "Thin" means early, mixed or mostly marketing. Where the mainstream view and this book differ, I say so.

Units. US units first, Canadian [SI] units in brackets. Some numbers read the same in both countries — HbA1c (%), hsCRP (mg/L), Lp(a) (nmol/L), TSH (mIU/L), VO_2 max, waist ÷ height and waist ÷ hips — so they carry no bracket.

📍 Cross-reference: *Heavenly Health Hacks* — Chapter 3 (forgiveness) · Chapter 6 (Cortisol — the Women's Notes) · Chapter 9 (My Body, My Lab — Teresa's results) · Chapter 14 (The Power of Movement — women, protein, creatine and jumping) · Chapter 15 (sleep) · *Men's Health, Plainly* · *Bloodwork, Plainly* · *Cholesterol, Plainly*

1 Why Women Need Their Own Page 👩

Why it matters: Women live longer but spend more of those years sick, and midlife changes start years before most women expect them.

Women live longer than men in Canada — 84 years against 79.6 in 2023. But more of those years are spent with chronic illness: in 2023, 48.9% of Canadian women reported at least one chronic disease, against 43.3% of men.

Three things are true for most women:

- **Much of medicine was built on men.** About two-thirds of heart disease research has focused on men. Women's heart attacks are missed more often, and their symptoms are more often called "atypical."
- **Midlife is a turning point, and it starts earlier than most expect.** Perimenopause can begin four to eight years before the last period. Cholesterol jumps, bone loss speeds up, muscle slips and mood can change — often in your early-to-mid 40s, while periods are still coming.

- **“Normal” lab ranges can hide real problems.** A ferritin that a lab calls normal may already mean low iron. A hormone test read against the wrong phase of the cycle can say “imbalance” when it’s just timing.

Women are not small men. That’s Dr. Stacy Sims’ line — the exercise physiologist whose research is behind most of the book’s women’s training, fasting and recovery rules. Most of the studies behind fasting, cold plunges and “standard” training were done on men, then handed to women as if the results would transfer. Often they don’t. That’s why this booklet exists separately from *Men’s Health, Plainly*.

The other voice here is Dr. Kristy Prouse, MD, FRCSC — obstetrician, gynecologist and integrative women’s health specialist, who wrote the book’s foreword and shaped most of Chapter 6. Her work on cortisol and the female stress response is the backbone of Section 4.

The goal of this guide is simple: know your numbers, understand what changes in midlife and why, fix the foundations, and use medicine when the evidence says it helps — not out of fear, and not out of hype.

2 The Women's Dashboard at a Glance 🩺

Why it matters: A handful of cheap numbers show midlife changes years before a diagnosis. Test these and you'll know where you stand.

Know your numbers — that's where the power is. The number you refuse to look at runs you from behind a curtain. And don't settle for the lab's "normal": normal is the average of everyone who walks into a lab, people already getting sick included. In a 2022 Tufts study of 55,000 US adults, only 6.8% had optimal heart and metabolic health. Normal isn't your target. Optimal is.

Watch insulin before sugar. Glucose is the smoke detector; insulin is the fire, often burning ten years before the alarm goes off. Most physicals never test it, so ask for fasting insulin by name.

The rhythm. Test. Change one thing. Retest in about 90 days — blood takes that long to show you the truth.

These are the numbers that matter most for a woman's health and length of life. If you can test only some, start with the first six.

Gauge	What it tells you	Lab "normal" or common cut-off	🎯 Aim for
ApoB	The number of cholesterol particles that build plaque	under 105 mg/dL [1.05 g/L]	**under 80 mg/dL [0.80 g/L]**
Fasting insulin	Whether your metabolism is straining	up to about 25 µIU/mL [174 pmol/L]	**2–5 µIU/mL [14–35 pmol/L]**
HbA1c	Three-month average blood sugar	under 5.7% (US); Canada flags from 6.0%	**under 5.4%**
Ferritin	Your iron stores	many labs: from about 15 ng/mL [15 µg/L]	**50 ng/mL [50 µg/L] or more** if you menstruate or have symptoms
TSH (with free T4)	Thyroid function	about 0.4–4.5 mIU/L	**0.5–2.5 mIU/L** (the book's range), with no symptoms
Blood pressure	Pressure on every artery, every beat	under 130/80	**under 120/80**
Waist ÷ height	Belly fat — the fat that matters	—	**under 0.5** (waist-to-hip under 0.80)
Lp(a), once in your life	An inherited, sticky cholesterol particle	under 100 nmol/L	under 75 nmol/L
Bone density (DEXA)	Fracture risk	Z-score above −2.0 before menopause; T-score above −1.0 after	at or above your age group
Grip strength	Whole-body strength and future health	US average about 68 lb [31 kg] in your 40s	average or better for your age (Section 16)
Push-ups (knee or full)	Upper-body strength and fitness	—	"very good" or better for your age (Section 16)
VO_2 max	Heart and lung fitness	—	top quarter for your age (More Norms page)
Sleep	Hormones, appetite, mood, heart	—	7–8 hours, regular times

Read them together. A woman whose waist is growing, whose insulin is creeping up and whose sleep is breaking down in her 40s usually has one process going on, not three.

🔑 **Remember:** A woman who knows her numbers can't be surprised by them.

3 The Women's Playbook 🗓️

Why it matters: These few habits protect bone, muscle, blood sugar and mood at the same time — and women need their own rules, not men's.

The book gives women their own rules (Chapters 6, 14, 19 and 21), most of them Dr. Stacy Sims' (*ROAR*, *Next Level*). Here they are in one place.

Every week

Practice	The rule	Why
Lift heavy	2–3 times a week, 20–45 minutes. Squat, hinge (deadlift), push, pull, carry. Use loads where the last 2–3 reps are a fight — 6–12 reps, and once your form is solid, Sims' version: 2–4 sets of 3–6 reps with 2 minutes' rest. Expect 6–12 months to learn heavy lifting well — form before load. New to lifting? An empty bar is heavy enough to start	Light weights with high reps won't hold muscle and bone after 40
Jump	10 minutes, 3 times a week — skipping, hops, step-downs. Build up slowly	Bone answers to impact, not to walking
Sprint	Twice a week: 20–30 seconds all-out, 2–4 minutes easy, 4–8 rounds. A bike, kettlebell swings or burpees all count	Replaces some of what estrogen did for body shape and blood sugar. Efforts longer than about a minute push stress hormones up — short is the point
Walk	20–30 minutes every day, ideally after meals. Swap some long, steady cardio for sprints and lifting; walk on the easy days	Lowers blood sugar and stress, with zero recovery cost. Better than long, moderate cardio when you're stressed or tired 🔸

Every day

Practice	The rule	Why
Protein	30–40 g per meal — 35–40 g if you're over 40, with about 3 g of leucine a meal (meat, fish, eggs, dairy or tofu). Start at breakfast; about 20 g in a snack. About 0.7–1 g per lb of target bodyweight a day [1.5–2.2 g per kg]	It takes about 30–40 g in one meal to switch on muscle building, and women over 40 respond less to smaller amounts
Fuel your training	About 15 g protein and 30 g carbs before lifting; 30–40 g protein within 45 minutes after. Get most carbs from fruit and vegetables, and save starchy carbs (bread, pasta) for around training. Don't train fasted 🔸	Fasting plus hard training is a double stress
Eat early, eat enough	Breakfast within 30–45 minutes of waking 🔸. Eat enough for your activity, especially in perimenopause	Under-eating raises stress hormones, disrupts cycles and costs muscle and bone

Practice	The rule	Why
Creatine	3–5 g monohydrate a day, no loading phase — Sims' first-choice supplement	Women carry less of it; it helps muscle with lifting, and may help mood and memory
Vitamin D3	Test first; the book's target is 40–80 ng/mL [100–200 nmol/L] (*Bloodwork, Plainly*)	Her second choice — bone, immunity, mood
Morning light	5–10 minutes or more outside within an hour of waking	Sets your body clock — sleep and hormones follow
Heat over cold	Sauna over ice baths. If you use cold, about 55°F [13°C], never right after lifting (Section 6)	Extreme cold pushes women into fight-or-flight sooner than men 🔸
Sleep	7–8 hours, cool and dark, same wake time	Every hormone in this guide depends on it. Training only works if you recover from it

Train with your cycle 🔸 - **Days 1–14** (period to ovulation): push — heavier lifts, harder sprints. Fasting and cold are better tolerated. - **Days 15–28** (after ovulation): progesterone raises your core temperature about 1°F [0.5°C], makes you lose more sodium and breaks down more muscle. Keep the volume, drop the intensity, eat more carbs around hard sessions, and fast no longer than 12 hours overnight. Salt your food and water, have protein before *and* after training, and keep the bedroom cool. - **Perimenopause or irregular cycles:** let your sleep and mood pick the hard days. - **After menopause:** keep lifting heavy, but rest longer between hard sessions — cut the volume, not the intensity. Recovery takes longer now, and a lighter week every month or two helps.

🔸 = *thinner evidence — low-risk and worth trying, not proven.*

🔑 **Remember:** Lift heavy, eat protein early, sleep. Everything else in this booklet works better on top of those three.

4 Cortisol First — Stress, Sleep, Mood and Forgiveness 🤝

Why it matters: Your stress system sets the tone for every other hormone. Calm it first, and sleep, mood, blood sugar and cycles often follow.

Cortisol — the hormone that sets the tone for the others

The book puts cortisol first for women (Chapter 6). It's your main stress hormone, and it should follow a daily rhythm: high in the morning to wake you, falling through the day, low at night so you can sleep. Under long stress the rhythm can flatten or flip — tired all morning, wired at bedtime.

Why it hits women harder. Dr. Kristy Prouse, OB/GYN, explains that women's stress systems are more sensitive and more tightly tied to their reproductive hormones. Chronic stress can worsen hot flashes, night sweats, sleep, mood, PMS and cycle changes — symptoms easily blamed on perimenopause alone. It also slows the thyroid's conversion of T4 into active T3, and it pushes blood sugar up, which keeps insulin high.

A note on the "pregnenolone steal." The book draws it as stress diverting the raw material for progesterone into cortisol. The pattern it describes — stress lowering progesterone and scrambling cycles — is real. The exact mechanism is debated, because the adrenals and ovaries mostly make their own supplies. The practical point stands either way: calm the stress before you chase the hormones.

Testing. A single morning blood draw is one snapshot of a hormone that changes hour by hour. To see the curve, the book recommends a four-point saliva test or the DUTCH urine test, plus **DHEA-S**. Independent evidence for these tests is limited (Section 8); they belong with a practitioner who reads them in context.

✅ **What helps:**

- **Eat within 30–45 minutes of waking**, with protein, and don't train fasted.
- **Get outside within 30 minutes of waking** for 5–15 minutes of morning light — longer if it's cloudy. A window doesn't count.
- **Delay caffeine 60–90 minutes after waking**, and none after noon. Let your natural cortisol peak do its job first.
- **Protect sleep:** the same wake time every day, a cool room (65–67°F [18–19°C]) and full darkness. Finish eating two to three hours before bed.
- **Replenish what stress drains:** magnesium (glycinate or L-threonate, 200–400 mg, especially at bedtime), vitamin C and methylated B vitamins. Adaptogens such as ashwagandha only with guidance — not in pregnancy, and check with your doctor if you have a thyroid condition.
- Lift and walk rather than grinding through long, hard cardio.
- Lower the load where you can. The book's rule is to fill the bucket and plug the holes.

📍 **Teresa's numbers.** Her DUTCH cortisol test (May 2026, four urine samples over a day) came back within range, but at the low end through the morning and the day. That's the kind of result that matters more next to how you feel than on its own — and why the book reads cortisol as a pattern, not a single number.

Mood, sleep and connection

Perimenopause is a real risk time for depression. In a Harvard study, women with no history of depression were about twice as likely to develop significant depressive symptoms once they entered perimenopause. A US

study found the risk of major depression was higher during and just after the transition than before it. For many women it's the first time — and they don't recognize it.

It may look like irritability, rage, anxiety, crying easily, losing interest, or feeling flat — more than sadness.

Sleep is often the first domino. Night sweats, 3 a.m. waking and falling progesterone break sleep. Broken sleep worsens mood, cravings, blood sugar and pain. Treat sleep as a priority, not a luxury. Aim for seven to eight hours of actual sleep: in the largest studies the lowest-risk band is about 6½ to 8 hours asleep, with the sweet spot near 7, and under 6 and over 9 both carry higher risk. Your body and your mornings will tell you where you sit.

✅ **What helps:** - **Tell someone.** Your husband, a friend, a pastor, your doctor. You're not imagining it, and you're not alone. - **Ask your doctor directly** about mood in perimenopause. Counselling works. Hormone therapy can help mood when hot flashes and broken sleep are driving it. Antidepressants work, and some also reduce hot flashes. - **Move, get outside, and get morning light.** - **Protect sleep:** cool room, same wake time, no alcohol close to bed. - **Keep your people close.** Women often carry everyone else's needs. Let someone carry yours.

Forgiveness — what the body keeps 💝

The book treats unforgiveness as a physical load, not only a spiritual one, and women often carry it quietly while carrying everyone else. A grudge keeps the stress system running: cortisol and adrenaline stay up, and blood pressure and inflammation follow. In a well-known study, people who replayed a grudge saw their heart rate and blood pressure climb; when they imagined forgiving the same person, both settled. Larger studies link forgiving with lower stress and better mental health. The evidence on hard outcomes like heart attacks is thinner — call it moderate.

What forgiveness is — and isn't. It is a decision, not a feeling; you can choose it while you still hurt. It doesn't excuse what happened, doesn't require you to trust or reconcile with someone unsafe, and doesn't cancel justice. It releases *their* hold on *you*.

The four steps (Chapter 3, "The Power of Forgiveness"). Be specific at every step. Vague forgiveness brings vague freedom.

1. **Choose to forgive.** It's a decision, not a feeling. You can make it while you still hurt. The feeling follows — sometimes right away, sometimes over days.
2. **Name it, feel it, release it — one item at a time.** Take a page. For each thing they did, write it down plainly, then write how it made you feel: abandoned, betrayed, rejected, humiliated, small. Don't rush past the feeling; this is where the heart gets dealt with. Then release that one item out loud: *"When you ***, I felt*** . I choose to forgive you for it. I release you from owing me ___. I give this debt to Jesus."* Then the next item, until the page is done.
3. **Surrender it to Jesus.** Go back to the memory and ask, *"Lord, where were You when this happened?"* Wait. Listen. Let Him show you His presence there and replace the lie that took root — *I'm not enough, I'm not safe, I'm alone* — with His truth.
4. **Pray for them and bless them.** This is the hardest step and the most powerful. Jesus said, "Love your enemies and pray for those who persecute you" (Matthew 5:44, NIV). Pray for the person by name. Ask God to bless them and to begin something new in them. Blessing doesn't mean approving what they did. It cuts the last thread of bitterness. *Forgiveness releases the pain; blessing restores love.*

Deep wounds often take more than one pass, as deeper layers surface. That isn't failure; it's healing in layers. If the wound is abuse, betrayal or violence, walk through it with a counsellor or pastor beside you. You don't have to do it alone.

⚠ **If you are thinking about ending your life, or you're worried about someone who is:** call or text **988**, any time, in Canada or the US. If someone is in immediate danger, call 911.

🔑 **Remember:** You can't out-supplement a stress system that's still running the ledger. Calm first, then the rest.

5 Reading It All Together 🧩

Why it matters: One number rarely tells the story. The pattern tells you where to start.

One number rarely tells the story. Patterns do.

Pattern	What it suggests	Where to look
Over 40, cycles changing, poor sleep, anxiety, heavier periods	Perimenopause — usually diagnosed from your story, not a test	Sections 7, 9
"Low progesterone, high estrogen" on one untimed test	Possibly a cycle without ovulation — check the timing and ranges before calling it a disorder	Section 8
Tired, short of breath, hair shedding; ferritin under 50	Iron deficiency, even with normal hemoglobin	Section 14
Tired, cold, gaining weight, low mood	Check thyroid before blaming menopause	Section 14
ApoB rising in your late 40s	The menopause lipid jump — act before it settles in	Section 12
Waist growing, insulin creeping up, same habits	The midlife shift in fat and insulin — lift, protein, sleep	Sections 13, 16
Hot flashes or night sweats wrecking sleep and work	Worth a hormone therapy conversation if under 60 or within 10 years of menopause	Section 10
New fatigue, breathlessness, jaw or back pain, nausea	Could be the heart — don't dismiss it	Section 12
Fasting, hard training or cold — and now poor sleep, anxiety or changing cycles	Too much stress for your body right now — back off to 12-hour fasts, fuel your training, swap cold for sauna	Section 6
First-ever low mood, irritability or rage in your 40s	Perimenopausal depression is common and treatable	Section 4

The order to act in. Fix what moves the most at once: strength training, protein, sleep, alcohol and stress. They move insulin, ApoB, bone, muscle, mood and sleep together. Then deal with the specific gauges — and use medicine where it clearly helps.

Part 2 — Going Deeper

The reference: read the section you need. Each one opens with why it matters.

6 Fasting, Cold and Heat — Different Rules for Women 🔥

Why it matters: Fasting, cold and hard training are stresses. The right dose strengthens a woman's body; too much on a tired one does the opposite.

♀ **The one-level-more-conservative rule.** The book scores every reader on a Stress Bucket — 🟢 Green (go ahead), 🟡 Yellow (go gently) or 🔴 Red (foundations only: no fasting, cold exposure or intense exercise yet).

- **If you're postpartum, in perimenopause, or living with significant hormonal symptoms, move one level more conservative, whatever your score.** Green becomes Yellow, and Yellow becomes Red.
- Women's stress systems react more strongly, and what works for men can backfire in these seasons.
- **Postpartum especially:** eat enough, sleep when you can, and ask your provider to check ferritin and thyroid. Both commonly drop or swing after birth and look like plain exhaustion.
- Tell your provider about low mood or anxiety that lasts more than two weeks. Postpartum depression is common and treatable.
- Talk with your provider before adding fasting, cold or hard training while pregnant, breastfeeding or postpartum.

Fasting — gentle wins

Women's bodies treat aggressive fasting as a threat sooner than men's do. Stress hormones rise, cycles can be disrupted, and the body may hold on to fat. That gets worse in perimenopause 🔸.

- **Start with a 12-hour overnight fast** (7 p.m. to 7 a.m.). For most women, that's enough.
- **Days 1–14 of your cycle:** 13–16 hours is fine if you feel well.
- **Days 15–28:** 12 hours maximum.
- **In perimenopause:** 12-hour windows only. Fuelling beats fasting.
- **Don't lift fasted.**
- **Most of the benefit is in reach without long fasts:** good sleep, a 12-hour overnight fast and exercise get you most of the cell clean-up (autophagy) women are after 🔸.

⚠ **Stop and back off if you notice:** waking at 2–4 a.m., anxiety, shakiness, brain fog, missed or irregular periods, weight gain, or obsessive thoughts about food. **Don't fast at all** if you're pregnant or breastfeeding or have a history of disordered eating. If you take medication for blood sugar, talk to your doctor first.

Cold — less is more

The ice-bath craze was built on men. Extreme cold can push women into fight-or-flight without the payoff 🔸.

- **If you use cold:** about 55°F [13°C], 1–3 minutes. It's easier in the first half of your cycle.
- **Not right after lifting** — cold blunts muscle and strength gains.
- **Skip it** when sleep is poor, you're run down, getting sick or burned out.
- **The cold face plunge works for everyone:** a bowl of cold water, face in for 10–30 seconds. It's the fastest reset for stress or racing thoughts at bedtime.

- ⚠ Heart disease, high blood pressure, heart-rhythm problems or Raynaud's: get clearance first. Never plunge alone.

Heat — your sauna is your cold plunge

- **Sauna:** 160–195°F [71–91°C] for a traditional dry sauna. Start at the low end for 15 minutes and build to 20–30 minutes, 3–4 times a week. Replace fluids and salt.
- **After training is a good time.**
- **What it does:** in large Finnish studies, regular sauna users had less heart disease, and later research found the heart benefit in women too. Women often report fewer hot flashes 🔸 .
- **No sauna? A hot bath counts** (Chapter 19).
- ⚠ Pregnant? Skip high heat.

7 Your Hormones Through the Decades ⚖️

Why it matters: Knowing what each decade normally brings helps you tell a real problem from a normal change.

The cycle in one paragraph. In the first half of a cycle, estrogen rises and builds the uterine lining. At ovulation, an egg is released. The empty follicle then makes progesterone for about two weeks — the calming, sleep-supporting hormone that balances estrogen. If there's no pregnancy, both fall and a period starts. **No ovulation, no progesterone** — that's the single most useful fact for understanding perimenopause.

Your 20s and 30s. Cycles are usually regular. Low progesterone in these years often points to stress, under-eating, over-training, thyroid problems or polycystic ovary syndrome (PCOS).

PCOS — the common one nobody connects to insulin. It affects about one woman in ten and is, at its core, an insulin problem that shows up as irregular cycles, acne, hair changes and trouble conceiving. The tests are the same ones in this guide — fasting insulin, HbA1c, triglycerides ÷ HDL — and so are the fixes: strength training, protein, fewer refined carbs, sleep. If that pattern is yours, the metabolic pages apply to you first.

Your 40s — perimenopause. Ovulation becomes less reliable. In months you don't ovulate, progesterone stays low while estrogen can swing high and low. That's why perimenopause can bring heavier periods, breast tenderness, poor sleep, anxiety and irritability — often before a single hot flash. The average age of the last period in Canada is 51, and perimenopause can start four to eight years before it, sometimes ten.

After menopause. Menopause is one year after your last period. Estrogen and progesterone stay low for good. Testosterone falls more slowly — women make it too, and it matters for muscle, bone and desire.

What hormone tests can and can't tell you

- **Over 45, with symptoms and changing cycles, perimenopause is usually diagnosed from your story, not a test.** Canadian and international menopause guidance agrees on this. Hormones in perimenopause swing so much that one test can say almost anything.
- **To check whether you're ovulating,** test progesterone about seven days before your next period is due (around day 19–21 of a regular 28-day cycle). A good level means you ovulated that month. One low result in a woman over 40 may just mean you skipped ovulation that month.
- **FSH** rises as the ovaries wind down, but in perimenopause it jumps around. It's more useful under 45, when early menopause is a question.
- **Thyroid and iron** cause many of the same symptoms — fatigue, low mood, heavy periods, hair changes. Check TSH and ferritin before blaming hormones.
- **Testosterone** in women should be measured in blood, with SHBG.

Cortisol, the hormone that sets the tone for all of these, has its own section in Part 1 (Section 4).

8 Reading a Hormone Test Honestly 🔍

Why it matters: A hormone result means little without its timing — one untimed test can call a normal cycle a disorder.

Teresa's hormone test taught us both something worth passing on: **a hormone result only means something in context** — where you are in your cycle, what kind of sample was tested, and what the rest of your body is showing.

Her clinic used the DUTCH test — dried urine collected four times over a day. It measures hormone breakdown products and gives a daily cortisol pattern. It is popular in functional medicine. Its maker has published studies showing it agrees with blood tests, but there's little independent evidence that guiding treatment with it leads to better outcomes than standard testing. Mainstream menopause guidance doesn't use it.

📍 **Teresa's numbers** (urine, May 2026, at 48). You don't need to understand these units — watch what changed the reading.

Hormone	Teresa	Range after ovulation (luteal)	Range around ovulation
Progesterone breakdown product	197 ng/mg	600–2,000	100–300
Estradiol (E2)	5.63 ng/mg	1.8–4.5	4.0–12.0
Estrone (E1)	26.99 ng/mg	12–26	22–68

On paper, read against the after-ovulation range, the report flagged "estrogen dominance," very low progesterone and low testosterone. Three things changed that picture:

- **Timing.** The samples weren't collected in the after-ovulation window of a regular cycle — and in perimenopause, cycles often aren't regular. Read against the around-ovulation range on the same report, all three numbers in the table sit where they should.
- **Sample type.** Urine measures what the body has broken down and cleared; blood measures what's circulating. The two don't always line up, so a flag can show up in one and not the other.
- **The whole picture.** Dr. Kristy Prouse, MD, FRCSC — OB/GYN, who wrote the book's foreword — cross-checked the urine results against Teresa's blood work, cycle history and how she was feeling. Her conclusion: the anomalies came from normal perimenopausal cycling and the differences between urine and blood testing. Teresa's hormones were fine.

🔍 **What this means for you.** - If a hormone test wasn't timed to your cycle, its "high" and "low" flags may not mean much. - "Estrogen dominance" is a functional-medicine term, not a medical diagnosis. In midlife, the pattern behind it is usually a cycle where ovulation came late or didn't happen. - Don't act on one sample. Have a physician who knows hormones read it against your cycle, your blood work and your symptoms first.

9 Perimenopause and Menopause 🌓

Why it matters: The changes start years before the last period, and the ones you can't feel — cholesterol, bone, muscle — matter most.

What it can feel like. Not every woman gets every symptom, and the order varies:

- Cycles shorter, longer, heavier or skipped
- Poor sleep and waking at 3 a.m.
- Anxiety, irritability or low mood — sometimes for the first time in your life
- Hot flashes and night sweats
- Brain fog and word-finding trouble
- Joint aches, and a thickening middle despite no change in eating
- Lower desire, vaginal dryness, urinary urgency or repeat infections

How long it lasts. Hot flashes last about seven years on average, often starting before the last period and continuing for four or five years after; for some women they last more than ten. Vaginal and urinary symptoms tend to persist or worsen without treatment.

Leaking, urgency and repeat infections are treatable — and rarely said plainly. Pelvic-floor physiotherapy is the first-line treatment for leaking and urgency, at any age; after menopause, low-dose vaginal estrogen (Section 10) is what prevents the repeat infections. Neither is something to live with.

What changes underneath — and why it matters for the rest of your life:

What changes	When	Why it matters
LDL cholesterol and ApoB jump	Within a year either side of the last period	The steepest lipid rise of a woman's life — see Section 12
Bone loss speeds up	Late perimenopause through the first years after	The fastest loss happens here — see Section 15
Fat moves to the belly; insulin sensitivity drops	Through the transition	Raises diabetes and heart risk — see Section 13
Muscle slips	From the 40s on	Strength and protein matter more, not less — see Section 16
Depression risk rises	Perimenopause and the first years after	Even in women who were never depressed — see Section 4

Seek care promptly for: bleeding after a year with no periods; bleeding between periods or after sex; periods heavy enough to soak a pad or tampon every hour; or periods closer than three weeks apart. These need checking.

10 Hormone Therapy, Honestly 💊

Why it matters: It's the most effective treatment for hot flashes and it protects bone. The real risks are small and depend on the type.

Menopausal hormone therapy (MHT, also called HRT) is the most effective treatment for hot flashes and night sweats, and it protects bone. For twenty years, fear kept most women from even discussing it.

What the big trial found — and didn't

In 2002, the Women's Health Initiative (WHI) stopped its trial of combined hormones early. The headline was a 26% higher breast cancer risk. In absolute numbers: for every 10,000 women taking that combination for a year, there were about **8 more breast cancers, 7 more heart events, 8 more strokes and 8 more blood clots in the lungs** — and fewer hip fractures and colon cancers.

What the headlines missed: - The trial used one specific pill combination (horse-derived estrogen plus a synthetic progestin), in women averaging 63 — most of them many years past menopause. - **In women who took estrogen alone** (they'd had a hysterectomy), breast cancer was **lower**, not higher. Strokes still rose.

Where things stand now

- **Canada:** the Society of Obstetricians and Gynaecologists of Canada and the Canadian Menopause Society say hormone therapy is reasonable to consider for healthy women **under 60 or within 10 years of their last period**, without reasons to avoid it. Fewer than 1 in 10 eligible Canadian women use it.
- **US:** in November 2025, the FDA began removing the boxed warning about heart disease, breast cancer and dementia from hormone therapy labels, while keeping the endometrial cancer warning on systemic estrogen-alone products. Critics, including Public Citizen, said the decision rested on expert opinion rather than new safety data. The underlying risk numbers above haven't changed.

The details that matter

- **If you have a uterus, estrogen needs a progestogen** with it to protect the lining from cancer. Many menopause specialists prefer micronized (body-identical) progesterone.
- **Patches and gels** carry a lower blood-clot risk than estrogen pills.
- **Low-dose vaginal estrogen** for dryness and urinary symptoms is a different thing from whole-body hormone therapy. Very little reaches the bloodstream.
- **Who should think twice:** women with past breast or endometrial cancer, past blood clots or stroke, active liver disease, or unexplained bleeding.
- **Keep your mammograms going** while on it.

✅ **Where the book and the mainstream meet.** Fix cortisol, sleep and metabolic health first (Chapter 6). If symptoms are still taking your life, talk with a doctor who knows menopause — for most healthy women under 60 who need it, hormone therapy is safe and effective.

11 What Helps Without a Prescription 🌿

Why it matters: The foundations move most symptoms. A few supplements help; many don't.

The foundations come first — the lifting, protein, jumping, light and sleep in the Playbook (Section 3), and the gentle fasting and sauna rules in Section 6. Three more matter especially in the menopause years:

- **Cut back alcohol.** It worsens hot flashes and sleep, and even one drink a day raises breast cancer risk. Canada's 2023 guidance: two drinks a week or fewer is low risk; three to six is moderate; seven or more is increasingly high. No amount is risk-free.
- **Keep the bedroom cool.** It helps night sweats and sleep.
- **Manage the stress load** (Chapter 6). Chronic stress worsens sleep, mood and blood sugar at a time when all three are already under pressure.

Supplements — what the evidence actually says.

Supplement	Evidence	Notes
Magnesium (glycinate)	Moderate for sleep and PMS	Gentle and cheap
Creatine, 3–5 g	Solid for muscle with lifting; mixed for bone	The book's pick for women over 40 (Chapter 14)

Supplement	Evidence	Notes
Omega-3 (EPA and DHA)	Solid for triglycerides; moderate for inflammation and mood	Part of the book's Foundation Six. Test your omega-3 index; aim for 8–12%
Vitamin D	Fix a deficiency; test first	See *Bloodwork, Plainly*
Iron	Only if ferritin is low	See Section 14 — test, don't guess
Vitex (chasteberry)	Moderate for PMS; little evidence for menopause symptoms	Not for women on hormones or fertility drugs
DIM	Shifts urine estrogen breakdown products; no trials showing it improves symptoms or prevents disease	Cruciferous vegetables do the same thing, with fibre
Black cohosh, evening primrose	Mixed to weak for hot flashes	

⚠ **Bioidentical "compounded" hormones** made by custom pharmacies aren't tested the way approved products are, and doses can vary. Approved body-identical estradiol and micronized progesterone exist — ask for those.

12 The Heart — What's Different for Women ❤️

Why it matters: Heart disease is a leading killer of women, women's symptoms are missed, and ApoB jumps around menopause.

Heart disease and stroke are the leading causes of premature death in Canadian women. Yet half of women who have a heart attack have their symptoms go unrecognized.

The symptoms can look different. Chest pain or pressure is still the most common sign, but women more often also have unusual tiredness (sometimes for days before), shortness of breath, nausea or indigestion, pain in the jaw, neck, back or arm, sweating or dizziness. If it's new and doesn't feel right, call 911. Don't drive yourself, and don't wait to be sure.

Risks unique to women — tell your doctor if you've had any: preeclampsia or high blood pressure in pregnancy, gestational diabetes, preterm birth, PCOS, early menopause (before 45), or autoimmune disease such as lupus or rheumatoid arthritis.

Blood pressure — measure it yourself. The most common, most fixable risk on the dashboard. Use a home arm cuff: seated, back supported, feet flat, after five minutes' rest, no caffeine or exercise in the previous half hour; two readings a minute apart, two or three mornings a week. Under 120/80 is the goal; a home average over 135/85 is a conversation with your doctor — and any high reading in pregnancy is a same-day call.

The menopause jump. In a large US study of women going through menopause, LDL cholesterol and ApoB rose sharply within a year either side of the last period — a rise tied to menopause itself, not just age. The best time to know your numbers is before it happens.

📍 **Teresa's numbers** (April 2026, at 48):

Gauge	Teresa	Aim for
ApoB	112 mg/dL [1.12 g/L] ⚠	under 80 [0.80]
LDL cholesterol	179 mg/dL [4.62 mmol/L] ⚠	—

Gauge	Teresa	Aim for
HDL	58 mg/dL [1.49 mmol/L] ✅	50–90 [1.29–2.33]
Triglycerides	71 mg/dL [0.80 mmol/L] ✅	under 80 [0.90]
Triglycerides ÷ HDL	1.2 [0.54] 🟡 just above	under 1.0 [0.44] is ideal
hsCRP (inflammation)	under 0.5 mg/L — below her lab's detection floor ✅	under 0.36 mg/L; "below detection" is the goal
Lp(a)	under 10 nmol/L ✅	under 75
CT angiogram	**zero plaque** in every artery ✅	zero

Zero plaque at 48 with low inflammation and low Lp(a) is excellent. Her ApoB is still above where I'd want it — especially heading into menopause, when it typically rises. Her clinic's plan: retest within a year, and discuss medication if food, training and supplements don't bring ApoB under 80 within six months. The full ApoB story is in *Cholesterol, Plainly*.

Two everyday habits 🦷🛢️

- **Skip daily antiseptic mouthwash.** It kills the mouth bacteria that help make nitric oxide, the gas that relaxes blood vessels; in a controlled trial it raised blood pressure. Brush, floss, scrape your tongue, and rinse with salt water if you want a rinse.
- **Cook with olive oil, avocado oil, butter or ghee, and cut packaged and fried food.** That's where most seed oil hides. The book says cut seed oils out; mainstream guidelines still recommend them, and the evidence is argued. The full picture for both is in *Men's Health, Plainly* (Sections 11 and 12) and Chapter 8.

13 Metabolism and the Midlife Middle ⚖️

Why it matters: As estrogen falls, fat moves to the belly and insulin sensitivity drops — and insulin rises years before blood sugar does.

Many women in their 40s notice the same thing: same food, same exercise, and the waist grows anyway. That's real. As estrogen falls, fat moves from the hips to the belly, and insulin sensitivity drops.

Why the belly matters. Fat around the organs (visceral fat) drives insulin resistance, inflammation and heart risk in a way that fat on the hips doesn't. That's why waist measurements beat BMI.

Two simple measures: - **Waist ÷ height** — under 0.5. - **Waist ÷ hips** — under 0.80 for women. From 0.80 to 0.85 is moderate risk; over 0.85 is high.

The blood tests that catch it early: fasting insulin, fasting glucose, HbA1c and the triglycerides ÷ HDL ratio. Insulin rises years before blood sugar does.

📍 **Teresa's numbers** (April 2026):

Gauge	Teresa	Aim for
Fasting insulin	5.3 µIU/mL [37 pmol/L] 🟢 just above optimal	2–5 [14–35]
Fasting glucose	90 mg/dL [5.0 mmol/L] 🟡 just above	70–85 [3.9–4.7]
HbA1c	5.5% 🟡	under 5.4%
BMI	21.1 ✅	—

Gauge	Teresa	Aim for
Waist ÷ hips	0.82 🟡	under 0.80

A lean woman with excellent fasting insulin, a fasting glucose a touch above the book's range — and a waist-to-hip ratio just into the moderate zone. That's the midlife shift showing up early, and it's the right time to act on it: strength training, protein, fewer refined carbs, good sleep.

🔍 **A note on specialty tests.** Her clinic also ran a white-blood-cell growth test (SpectraCell) that scored her "glucose-insulin interaction" as slightly low. That kind of test isn't widely validated for diagnosing insulin resistance. Her fasting insulin, glucose and triglycerides are the stronger evidence, and they say her metabolism is working well.

The GLP-1 trap — Ozempic, Wegovy, Mounjaro, Zepbound 💊

These drugs copy GLP-1, the gut hormone that tells you you're full. Your own GLP-1 lasts minutes; the drug lasts a week, so the signal never switches off. They do real good — in the SELECT trial, semaglutide cut major heart events by 20% in people with heart disease. But the costs are real too:

- **Muscle and bone go with the fat** — on top of the loss that already comes after 40. Dr. Peter Attia calls it ending up "smaller but fatter."
- **The weight comes back.** Most people regain about two-thirds within a year of stopping.
- **Side effects:** nausea and constipation are common; pancreatitis, gallbladder disease, bowel blockage and, very rarely, sudden vision loss are on the labels. Tell any surgical team you take it.
- **Pregnancy and the pill.** Stop semaglutide at least two months before trying to conceive. Tirzepatide can make birth-control pills less reliable: the label says to switch to a non-pill method, or add a barrier method, for four weeks after starting and after each dose increase.

✅ **If you're on one, protect your muscle from day one:** lift two to three times a week, eat about 1 g of protein per lb of target bodyweight [2.2 g per kg], and track body composition, not just weight.

Your own body makes GLP-1 at every meal, most of all with protein, fibre and slow eating. Medication can be a bridge. It isn't the foundation. *(Full detail, including the lawsuits and label warnings, is in the book and in Men's Health, Plainly.)*

14 Iron and Thyroid 🩸

Why it matters: Low iron and a slow thyroid cause the same tiredness, low mood and heavy periods that get blamed on hormones. Check them first.

Iron — the most common deficiency in women

Ferritin is your iron savings account. The World Health Organization and some labs still call it low only under 15 ng/mL [15 µg/L]. That misses most iron deficiency.

What changed in 2026: the American Society of Hematology now says a ferritin of **30 ng/mL [30 µg/L] or lower** means iron deficiency in adults, including women who menstruate. For women with heavy periods, or who are pregnant and anemic, **up to 50** may count. At the 30 cut-off, about a third of US women under 50 are iron deficient.

You can be iron deficient without being anemic. Hemoglobin falls last. Fatigue, breathlessness on exercise, hair shedding, restless legs, cold hands and brittle nails can all come first. In a trial of tired women with ferritin under 50 and no anemia, oral iron cut fatigue more than placebo.

✅ **What to do:** ask for ferritin with your blood count. If it's low, ask why — heavy periods are the most common reason. Take iron every other day with vitamin C, away from tea, coffee and calcium. Retest in about three months. Don't take iron without testing; too much is harmful.

📍 **Teresa's numbers:** ferritin 38 ng/mL [38 µg/L]. Her lab's own note reads 30–50 as "probable iron deficiency." Hemoglobin 13.1 g/dL [131 g/L], normal — but MCH, a measure of iron inside each red cell, was just below range at 27.3 pg. Together, that's early, mild iron depletion without anemia, common in a woman who still menstruates — and worth treating and retesting.

Thyroid

Thyroid disease is far more common in women and often shows up in midlife. Low thyroid can mimic perimenopause: tiredness, weight gain, low mood, heavy periods, hair loss and feeling cold.

✅ **Ask for:** TSH and free T4; free T3 and thyroid antibodies (anti-TPO) if symptoms persist or there's a family history.

📍 **Teresa's numbers:** TSH 1.1 mIU/L, free T4 0.93 ng/dL [12 pmol/L], free T3 2.6 pg/mL [4.0 pmol/L], antibodies negative. Healthy thyroid.

15 Bones 🦴

Why it matters: Bone loss speeds up around menopause, and the first sign is often a fracture. What you build before then is what you keep.

At least 1 in 3 Canadian women will break a bone from osteoporosis in her lifetime. The first sign is often the fracture itself — a wrist, a spine, a hip. About 1 in 5 women who break a hip die within a year.

When the loss happens. Bone loss speeds up sharply in late perimenopause and the first couple of years after the last period. As women approach menopause they can lose about 2–3% of bone a year.

Testing. A DEXA bone density scan. Before menopause, the result is a **Z-score** (compared with women your age). After menopause, it's a **T-score** (compared with young adults): −1.0 to −2.5 is low bone mass; −2.5 or lower is osteoporosis. Osteoporosis Canada's 2023 guideline recommends testing at 70; at 65 with one risk factor; and from 50 with a past fragility fracture or two or more risk factors — such as early menopause, steroid use, low body weight, smoking, or a parent who broke a hip.

✅ **What builds and protects bone:** - **Heavy lifting and impact.** In the LIFTMOR trial, women in their 60s with low bone density did 30 minutes of supervised heavy lifting and jumping twice a week for eight months. Their spine density rose about 3%, while the comparison group lost bone. Ten minutes of jumping three times a week is the book's version (Chapter 14). - **Protein, calcium from food, and vitamin D if you're low.** - **Hormone therapy** prevents bone loss and fractures when started around menopause. - **Medication** when the risk is high — it works.

📍 **Teresa's numbers** (April 2026): spine Z-score +1.3, hips +1.9 and +2.0 — above average for her age. Her 10-year risk of a major fracture: 6.1%. That's the bank account she carries into menopause — and the reason to keep lifting through it.

16 Strength — Muscle Is Your Longevity Organ 💪

Why it matters: Women start with less muscle and lose it faster from the 40s on. Muscle is what keeps you independent at 80.

Muscle burns most of your blood sugar, protects your joints and bones, keeps you upright and independent, and predicts how long you'll live. Women start with less of it and lose it faster from the 40s on. That makes strength training more urgent for women, not less.

What to do: lift heavy, jump, sprint, and hit 30–40 g of protein a meal — the full rules are in the Playbook (Section 3).

Grip strength is worth tracking. In a study of nearly 140,000 people in 17 countries, each 11-lb [5 kg] drop in grip meant a 16% higher risk of death from any cause.

Grip strength by age — women

Age	Low	Average	Strong
18–29	under 56 [25]	68 [31]	80+ [36+]
30–39	under 57 [26]	70 [32]	82+ [37+]
40–49	under 56 [25]	68 [31]	81+ [37+]
50–59	under 51 [23]	64 [29]	76+ [34+]
60–69	under 47 [21]	59 [27]	70+ [32+]
70–80	under 37 [17]	49 [22]	60+ [27+]

Grip in lb [kg], best squeeze of your stronger hand. "Low" and "strong" mark roughly the bottom and top sixth of US adults. Source: Bohannon et al., American Journal of Occupational Therapy 2019 (NHANES 2011–2014 and NIH Toolbox).

What to do with your number: below average, add carries, dead hangs and heavy holds twice a week and retest in three months — grip responds fast.

Push-ups by age — women

The Canadian norms for women use **knee push-ups** — knees down, body straight from knees to head, chest to a fist-height off the floor. If you do full push-ups from your toes, you're beyond these tables; there's no matching Canadian norm, so use the men's table as a stretch goal.

Age	Excellent	Very good	Good	Fair	Needs improvement
20–29	30+	21–29	15–20	10–14	9 or fewer
30–39	27+	20–26	13–19	8–12	7 or fewer
40–49	24+	15–23	11–14	5–10	4 or fewer
50–59	21+	11–20	7–10	2–6	1 or fewer
60–69	17+	12–16	5–11	2–4	1 or fewer

Push-ups in a row, without stopping, with good form. Source: Canadian Society for Exercise Physiology (CSEP-PATH, 2019) — the same table used in ACSM's Guidelines for Exercise Testing and Prescription.

The carry and the hang — two tests you can do tonight 🏋️

Test	How	Target for women (Dr. Peter Attia, age 40)
Farmer carry	A weight in each hand totalling 75% of your bodyweight, and walk	1 minute
Dead hang	Hang from a bar, arms straight, feet off the floor	90 seconds

The book's general targets are bodyweight for the carry and 2 minutes for the hang; the women's numbers above are Dr. Attia's. He lowers both a little for each decade past 40. Below target? Start with 25% of your bodyweight for the carry and 15–30 seconds for the hang, and add a little each week.

📍 **Teresa's numbers** (April 2026, at 48):

Test	Teresa	How it reads
Plank	3 min 27 s	**excellent**
Chair stands in 30 s	23	**strong**
Biceps curls in 30 s	23	**strong**
Single-leg calf raises	52 right, 45 left	**excellent**
Farmer carry	75% of her bodyweight for 1 minute	**meets the target**
Dead hang	1 min 30 s	**meets the target**
Grip (hand meter)	57 lb [25.7 kg]	**low end of normal** for her 40s; the US average is 68 lb [31 kg]

Strong, fit and enduring. Her carry and hang meet the targets, yet her squeeze on the hand meter came in low-normal — a reminder that a single grip reading isn't the whole story. Heavy holds and carries keep both moving up.

Strength for your size ⚖️

Being strong *for your body* is what gets you up the stairs and off the floor. Researchers measure it as grip divided by body weight. In a US study of 4,066 adults, every 0.05 drop raised the odds of diabetes by about a quarter. The weakest, highest-risk women sat at or below these lines:

Age	20–39	40–59	60–80
Women — highest risk at or below	0.42	0.38	0.33

Source: Peterson et al., Sports Medicine 2016. A link, not proof. The line is the floor, not the goal.

Do yours: best grip ÷ body weight (kg ÷ kg or lb ÷ lb). Losing belly fat raises this number even if your grip doesn't change — and so do carries and hangs. *(Heart-and-lung fitness and chair-stand norms are on the More Norms page at the back.)*

🔑 **Remember:** Nobody feels the muscle leaving. Everybody feels it gone.

17 Screening — Breast, Cervix, Colon

Why it matters: A few screens save lives. Knowing the honest numbers lets you choose with your doctor instead of out of fear.

Breast

The guidelines differ, and they've changed:

Who	What they say
US Preventive Services Task Force (2024)	Mammogram every two years from **40** to 74
Canadian Task Force on Preventive Health Care (2024 draft, never finalized; the Task Force was replaced in June 2026 by the National Advisory Committee on Preventive Health Services, whose first job is this guideline)	Every two to three years from 50 to 74. From 40 to 49, not routine — but a woman who wants screening after an informed discussion should be offered it
Canadian Cancer Society and many breast imaging experts	Start routine screening at **40**
Provinces	New Brunswick, Ontario, BC, Nova Scotia, PEI, Newfoundland and Labrador, Saskatchewan and Yukon let women book from 40. Check yours

Mammograms — the honest numbers

You may have heard that mammograms do more harm than good. The truth is in between: the benefit is real but smaller than the posters suggest, and the main harm is not the one most people worry about.

Question	What the evidence shows
Do they save lives?	Yes, modestly. Women invited to screening are about 20% less likely to die of breast cancer — about 1 death prevented for every 235 women invited over 20 years (UK independent review, 2012)
What's the real cost?	**Overdiagnosis** — finding and treating cancers that would never have caused harm. For every breast cancer death prevented, about 3 women are treated for a cancer that wouldn't have hurt them
False alarms?	Common. Over 10 years, about half of women screened every year get at least one call-back for more imaging, and about 1 in 10 a biopsy that turns out benign. Every two years cuts that to about a third, and 1 in 14
Radiation?	Small next to the benefit. Screening every two years from 50 to 74 is estimated to cause about 4 breast cancer deaths per 100,000 women while preventing about 627. Yearly from 40 raises the radiation risk about fivefold — still far outweighed by deaths prevented. Women with large breasts or implants get more radiation and should ask about it
Does the squeeze spread cancer?	No evidence it does. Compression flattens the breast so the picture is clearer and the radiation dose lower. When Swedish researchers measured tumour cells in the blood before and after compression in women with breast cancer, they found no increase. It was a small study (24 women), but nothing suggests harm

Question	What the evidence shows
Do they make people live longer overall?	Not shown. Trials weren't large enough to show a change in deaths from all causes — critics read that as no benefit; screening experts say no single-cancer test could show it
Thermography instead?	No. The FDA has warned repeatedly that it is not a substitute and misses cancers

What to do with this. Make it your choice, with your doctor. For most women 50–74, screening every two years is a good trade. In your 40s the balance is closer — a personal decision. With higher risk, screen earlier and often add MRI or ultrasound. If your health means you're unlikely to live another ten years, the harms probably win.

Higher risk — talk earlier and more often: a mother, sister or daughter with breast or ovarian cancer, especially young; a known BRCA or similar gene variant; past chest radiation; or dense breasts on a mammogram.

About blood cancer tests. Multi-cancer blood tests such as Galleri can find some cancers early. But in its own study data, it detected only about 30% of breast cancers and 28% of uterine cancers. A "no signal" result doesn't replace a mammogram.

Cervix

Cervical cancer is one of the most preventable cancers. Screening is moving from the Pap test to HPV testing, which is more sensitive and can be done less often. Follow your province's program, and keep going until your doctor says you can stop.

Colon

Colon cancer is rising in people under 50. Most Canadian programs offer a home stool test (FIT) every two years from 50 — Ontario and PEI now start at 45, as does the US. Don't ignore bleeding, a change in bowel habits or iron deficiency without a clear cause — get checked whatever your age.

📍 **Teresa's numbers:** her multi-cancer blood test (April 2026) found no cancer signal. Her clinic still recommended regular mammograms — a blood test doesn't replace them.

18 Questions to Ask Your Doctor 🗣️

Bring this page. A good doctor will welcome it.

About hormones and menopause

1. Based on my symptoms and cycles, am I in perimenopause?
2. If we test hormones, can we time them to my cycle — and repeat them before deciding anything?
3. Am I a candidate for hormone therapy? Which type, which route, and what are my personal risks?
4. Can we treat vaginal and urinary symptoms separately with low-dose vaginal estrogen?

About the heart and metabolism

5. Can we check ApoB, Lp(a) once, fasting insulin and HbA1c with my next panel?
6. I had [preeclampsia / gestational diabetes / early menopause / PCOS]. How does that change my heart risk?

About iron, thyroid and bone

7. Can we check ferritin and a blood count — and treat if ferritin is under 30, or under 50 with symptoms?
8. Can we check TSH and free T4?
9. Should I have a bone density scan now, given my risk factors?

About screening and mood

10. When should I start mammograms, given my family history and breast density?
11. Am I up to date on cervical and colon screening?
12. My mood, sleep or patience has changed. Can we talk about that?

If a doctor won't order a test or explain a result, you are allowed to ask why, get a second opinion, or see a menopause-certified provider. You are a participant in your health, not a passenger.

19 My Tracker 📋

Print this page. Fill it in after each test. Trends tell the truth.

Gauge	Aim for	Date: _____	Date: _____	Date: _____	Date: _____
ApoB	under 80 mg/dL [0.80 g/L]				
Fasting insulin	2–5 µIU/mL [14–35 pmol/L]				
HbA1c	under 5.4%				
Ferritin	50 ng/mL [50 µg/L] or more				
TSH	0.5–2.5 mIU/L, no symptoms				
Blood pressure	under 120/80				
Waist ÷ height	under 0.5				
Waist ÷ hips	under 0.80				
Grip strength	average or better for your age				
Push-ups (knee or full)	“very good” or better for your age				
Farmer carry (75% of bodyweight)	1 minute				
Dead hang	90 seconds				
VO_2 max	top quarter for your age				
Chair stands in 30 s (60+)	above average for your age				
Bone density (DEXA)	at or above your age group				
Cycle (length, flow)	—				
Sleep (hours, night waking)	7–8				
Mood, hot flashes, notes					

More Norms 📊

For readers who want to see where they stand on heart-and-lung fitness and leg strength.

Heart and lung fitness (VO_2 max) by age — women

VO_2 max is the most oxygen your body can use at full effort. It is the strongest fitness predictor of a long life: in a Cleveland Clinic study of 122,007 adults, people in the bottom quarter for fitness had about five times the risk of death of the fittest 2.5%. A lab treadmill test with a breathing mask measures it; many watches estimate it.

Age	Low	Average	High	Top 10%
20–29	under 30.5	37.6	44.7+	51.3+
30–39	under 25.3	30.2	36.1+	41.4+
40–49	under 22.1	26.7	32.4+	38.4+
50–59	under 19.9	23.4	27.6+	32.0+
60–69	under 17.2	20.0	23.8+	27.0+
70–79	under 15.6	18.3	20.8+	23.1+

VO_2 max in mL/kg/min (the same unit in the US and Canada), measured on a treadmill. "Low" is the bottom quarter, "high" the top quarter. Source: Kaminsky et al., Mayo Clinic Proceedings 2015 (FRIEND registry, US).

What to do with your number: the sprints and daily walks in the Playbook are what move it; moving from the bottom quarter to the middle is the biggest single gain in risk you can make.

Chair stands in 30 seconds, ages 60 and up — women

Sit in a firm chair with no arms (seat about 17 in [43 cm] high), arms crossed over your chest. Stand all the way up and sit back down as many times as you can in 30 seconds. It measures leg strength — the strength that keeps you getting up, climbing stairs and not falling.

Age	Below average	Average	Above average
60–64	under 12	12–17	18+
65–69	under 11	11–16	17+
70–74	under 10	10–15	16+
75–79	under 10	10–15	16+
80–84	under 9	9–14	15+
85–89	under 8	8–13	14+
90–94	under 4	4–11	12+

Source: Rikli & Jones, Senior Fitness Test (US adults 60–94). "Average" is the middle half of people your age. The CDC's fall-prevention program (STEADI) treats a below-average score as a sign of higher fall risk.

Key Takeaways 💡

1. Women live longer than men but spend more years with chronic illness — and much of medicine was built on men's bodies.
2. Perimenopause starts years before the last period. In your 40s, poor sleep, anxiety and heavier periods can come before any hot flash.
3. A hormone test means little without its timing. Low progesterone in one month usually means no ovulation that month, not a disease.
4. Hormone therapy is safe and effective for most healthy women under 60 or within 10 years of menopause who need it. The real risks are small in absolute terms and depend on the type.
5. Heart disease is a leading killer of women, and women's symptoms are missed. ApoB jumps around menopause — know it before then.
6. Ferritin under 30 is iron deficiency, and under 50 may be if you have heavy periods — even with normal hemoglobin.
7. Bone and muscle loss speed up in midlife. Heavy lifting, jumping and protein are the strongest tools you have.
8. Know your numbers. Normal isn't the target — optimal is. Test, change one thing, retest in 90 days.
9. Cortisol first. Your stress system sets the tone for sleep, mood, blood sugar and cycles — and forgiveness, done specifically, takes real load off it.
10. First-ever depression in your 40s is common and treatable. Tell someone. In crisis, call or text 988.

Action Steps ✅

1. 🩸 Book a fasting blood test: ApoB, Lp(a) once, fasting insulin, HbA1c, ferritin with a blood count, and TSH.
2. 📏 Measure your waist and divide by your height (under 0.5), then by your hips (under 0.80).
3. 💪 Start or keep lifting heavy two to three times a week, and add protein at breakfast.
4. 📅 Track your cycle, sleep and mood for three months before any hormone conversation.
5. 🎗️ Check that your mammogram, cervical and colon screening are up to date.
6. 🦴 Ask whether you need a bone density scan.
7. 💝 Take one page and walk through the four forgiveness steps for one person (Section 4).
8. 🔁 Retest what you're changing in 8–12 weeks.

Reflection Questions 🤔

1. Which symptom have you been explaining away as "just stress" or "just getting older"?
2. If your doctor said your iron, thyroid and sleep were the problem — not your hormones — which would you fix first?
3. Who carries you when you're carrying everyone else — and when did you last let them?
4. Who are you still holding something against — and what is it costing your body?

Sources: Heavenly Health Hacks, Fourth Edition (Chapters 3, 6, 8, 9, 14, 15, 19 and 21); Dr. Stacy Sims and Dr. Mindy Pelz, as cited in Chapters 6, 14, 19 and 21; Dr. Kristy Prouse, MD, FRCSC, foreword and Chapter 6 of Heavenly Health Hacks; Dr. Stacy Sims, "What to Do Differently in Peri & Postmenopause" (drstacysims.com, October 2025); Dr. Stacy Sims, ROAR (2016) and Next Level (2022), drstacysims.com, and the Huberman Lab podcast with Dr. Sims; Statistics Canada, health-adjusted life expectancy release (January 2026, 2023 data) and chronic disease prevalence by sex, 2023; Heart & Stroke Foundation of Canada, Ms. Understood (2018) and System Failure (2023) reports; Norris & Mulvagh, CJC Open 2024, "Looking

After HER HEART" (editorial); Society of Obstetricians and Gynaecologists of Canada and Canadian Menopause Society, Menopause Hub; SOGC statement on menopausal hormone therapy (November 2025); Canadian Menopause Society submission to the House of Commons Standing Committee on Health; Matthews et al., Journal of the American College of Cardiology 2009 (SWAN, lipids at the final menstrual period); Writing Group for the Women's Health Initiative, JAMA 2002, and Chlebowski et al., JAMA 2020 (WHI breast cancer long-term follow-up); US FDA, labeling changes for menopausal hormone therapy, November 2025, and Public Citizen, Worst Pills Best Pills (January 2026); American Society of Hematology 2026 guidelines on the diagnosis of iron deficiency (Blood Advances); Tawfik et al., JAMA Network Open 2024 (ferritin thresholds and prevalence); Osteoporosis Canada, facts and statistics and 2023 clinical practice guideline; Canadian Society for Exercise Physiology, CSEP-PATH Resource Manual (2019, push-up norms, as reprinted in ACSM's Guidelines for Exercise Testing and Prescription); Bohannon et al., American Journal of Occupational Therapy 2019 (US grip strength reference values, NHANES and NIH Toolbox); Kaminsky et al., Mayo Clinic Proceedings 2015 (FRIEND, VO_2 max reference standards); Mandsager et al., JAMA Network Open 2018 (fitness and mortality, 122,007 adults); Rikli & Jones, Journal of Aging and Physical Activity 1999 (Senior Fitness Test norms), and CDC STEADI 30-Second Chair Stand (2017); Watson et al., Journal of Bone and Mineral Research 2018 (LIFTMOR); Leong et al., Lancet 2015 (PURE, grip strength); Dr. Peter Attia, Outlive (2023) and The Drive, episode 329 (farmer carry and dead hang targets for women); Marmot et al., Independent UK Panel on Breast Cancer Screening, Lancet 2012; Miglioretti et al., Annals of Internal Medicine 2016 (radiation-induced breast cancer from mammography); Ho et al., JAMA Network Open 2022 (10-year false-positive risk); Förnvik et al., Breast Cancer Research and Treatment 2013 (compression and circulating tumour cells); Bretthauer et al., JAMA Internal Medicine 2023 (lifetime gained with cancer screening); US FDA safety communications on thermography (2011 and 2019); Laukkanen et al., BMC Medicine 2018 (sauna and cardiovascular mortality in men and women); Roberts et al., Journal of Physiology 2015 (cold water immersion after strength training); US Preventive Services Task Force, breast cancer screening (2024); Canadian Task Force on Preventive Health Care, breast cancer screening draft (2024, not finalized); Ontario Health, colorectal screening from 45 (2026); van Die et al., Planta Medica 2013 (Vitex systematic review); Thomson et al., Nutrition Reviews 2016 (DIM review); Cohen et al., Archives of General Psychiatry 2006, and Bromberger et al., Psychological Medicine 2011 (SWAN, depression across the menopausal transition); Kripke et al., Archives of General Psychiatry 2002, and Li et al., Nature Aging 2022 (sleep duration, mortality and cognition); Canadian Centre on Substance Use and Addiction, Canada's Guidance on Alcohol and Health (2023); World Health Organization, polycystic ovary syndrome fact sheet; Canadian Press, 10 June 2026 (National Advisory Committee on Preventive Health Services); GRAIL, Galleri test sensitivity by cancer type (CCGA3); Precision Analytical (DUTCH) published validation studies; Teresa Elliott's own LifeLabs, Regenalife, DUTCH, SpectraCell, Cleerly, DEXA and musculoskeletal reports, April–May 2026, shared with her permission; Lincoff et al., NEJM 2023 (SELECT); Wilding et al., Diabetes Obesity and Metabolism 2022 (STEP 1 extension, weight regain); EMA PRAC, June 2025 (semaglutide and NAION); Mounjaro, Zepbound, Ozempic and Wegovy prescribing information; Kapil et al., Free Radical Biology and Medicine 2013 (chlorhexidine mouthwash and blood pressure); Joshipura et al., Blood Pressure 2020 and Nitric Oxide 2017 (mouthwash, hypertension and diabetes); Ramsden et al., BMJ 2013 (Sydney Diet Heart Study) and BMJ 2016 (Minnesota Coronary Experiment); Witvliet et al., Psychological Science 2001 (forgiveness and physiology); O'Hearn et al., Journal of the American College of Cardiology 2022 (optimal cardiometabolic health in US adults); Peterson et al., Sports Medicine 2016 (normalized grip strength and diabetes).