WOMEN'S BIOCARE: MENOPAUSE

BIOMEDICAL™ HEALTHCARE
CELLULAR HEALTHCARE
NEXT GENERATION HEALTHCARE

WEEKLY REPORT

Your Cellular BioResponse Report

How your hormones, sleep, bones, muscles, heart, gut and nutrition responded this week.

PREPARED FOR

Sarah Mitchell

BMH-2026-0533 · 52 · Female

WEEK

Monday 28 September to Sunday 4 October 2026

Week ending Sunday 4 October 2026

- Your menopause
- Symptoms and HRT
- Blood and hormones
- Gut and estrobolome
- Bone and muscle
- Fitness
- Your plan

Your week at a glance

Patient **Sarah Mitchell** ID **BMH-2026-0533** **52 · Female** Programme **Women's BioCare: Menopause** Doctor **Dr Priya Nair**

Your goal: ease my hot flushes and sleep better, protect my bones and heart, and stop the weight gathering around my middle.

71 BIOSCORE

WEEK ENDING SUNDAY 4 OCTOBER 2026

Ten weeks into HRT, your hot flushes have almost halved and your strength training is building muscle. Cholesterol, insulin and fat around the middle are the areas to work on next.

4.1 hot flushes a day, down from 7.8

10 weeks on HRT

12 AREAS THIS WEEK — ON TRACK · IMPROVING · WATCH · FOCUS AREA

Hot flushes — IMPROVING
4.1
a day, was 7.8 before HRT

Sleep — FOCUS AREA
6h 05m
4 wakes a night

Mood and brain — IMPROVING
3.4
out of 5; brain fog 3 days

Bone — FOCUS AREA
-1.6
spine T-score, osteopenia

Muscle and strength — ON TRACK
42.3 kg
muscle; grip 26 kg

Heart and cholesterol — FOCUS AREA
4.0
LDL mmol/L; ApoB 1.18

Insulin and sugar — FOCUS AREA
3.1
HOMA-IR; HbA1c 41

Middle fat — FOCUS AREA
10
visceral rating, was 8

Gut and estrobolome — WATCH
3.4
diversity; not an equol producer

Nutrition — IMPROVING
74 g
protein a day, goal 90 g

Fitness — ON TRACK
31.2
VO2 max; 2 strength sessions

HRT response — ON TRACK
Week 10
estradiol 182 pmol/L

What is working

- Hot flushes down from 7.8 to 4.1 a day since starting HRT
- Two strength sessions every week for 6 weeks; muscle up 0.6 kg
- Night-time temperature spikes down from 21 to 9 a week

Your focus for next week

- No alcohol on weeknights; flushes are 2.8 higher on drinking days
- Protein up to 90 g a day and calcium to 1,200 mg
- Ask Dr Nair about cholesterol (LDL 4.0, ApoB 1.18)

Your menopause and HRT

How are your body and symptoms responding?

Responding well

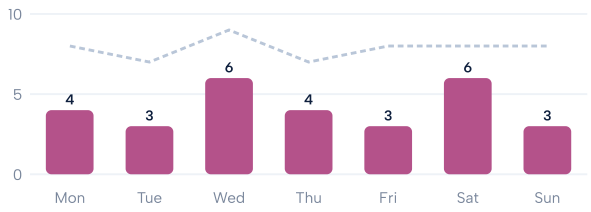
Your last period was 7 months ago and your FSH is 68, so you are in late perimenopause. HRT (estradiol gel and micronised progesterone) began 10 weeks ago, and your symptom score has fallen from 31 to 18.

Hot flushes · IMPROVING **4.1 a day** was 7.8 before HRT Patient log	Night sweats · IMPROVING **9 spikes** skin temperature, was 21 Bio Band	Symptom score · IMPROVING **18 / 63** was 31 before HRT Patient log	Sleep wakes · FOCUS AREA **4 a night** goal 2 or fewer Bio Band
Brain fog · IMPROVING **3 days** this week, was 5 Patient log	Joint aches · WATCH **4 / 10** knees and hands Patient log	Palpitations · ON TRACK **1 episode** resting HR 66 Bio Band	Vaginal and urinary · WATCH **Mild** discuss local treatment Patient log

Hot flushes per day

PATIENT LOG

4.1 a day same week before HRT: 7.8

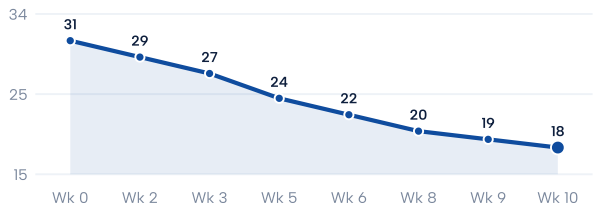


Higher on Wed and Sat: both evenings with wine

Symptom score since HRT

PATIENT LOG

18 / 63 lower is better



IN PLAIN ENGLISH

Menopause lowers oestrogen, which affects far more than periods: it changes sleep, mood, how the body stores fat, cholesterol, insulin, bone strength and muscle. Your HRT is easing the symptoms well. The next step is to protect your long-term health: strength training for bone and muscle, more protein and calcium, less alcohol, and a closer look at cholesterol and insulin.

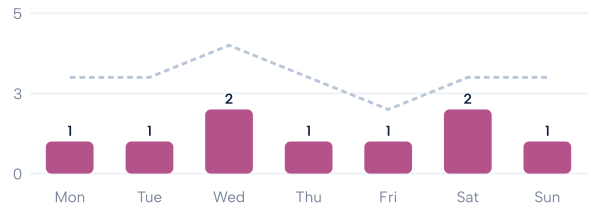
What drives your symptoms

Your Bio Band, food diary and symptom log show what makes your hot flushes and sleep better or worse.

Night-time temperature spikes

BIO BAND

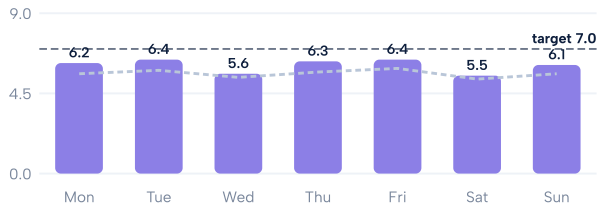
9 this week before HRT: 21



Sleep and wakes

BIO BAND

6h 05m 4 wakes a night



Your triggers this week

TRIGGER	FLUSHES ON THOSE DAYS	OTHER DAYS	EFFECT
Wine in the evening (2 days)	**6.0**	3.4	+2.6
Coffee after 2 pm (3 days)	**4.7**	3.7	+1.0
Spicy evening meal (1 day)	**5.0**	4.0	+1.0
Strength session (2 days)	**3.5**	4.4	-0.9
Bed before 23:00 (4 days)	**3.5**	4.9	-1.4

Averages of logged hot flushes per day. A pattern over several weeks is more reliable than one week.

Your HRT

Estradiol gel 0.06%	2 pumps daily, on the arms
Micronised progesterone	100 mg nightly, protects the womb lining
Started	27 July 2026 · week 10
Estradiol level	182 pmol/L on treatment
Bleeding	Light spotting in weeks 3 to 5, none since

Mood, brain and wellbeing

Mood	3.4 / 5, up from 2.8
Anxiety	2 days this week
Brain fog	3 days, down from 5
Stress (HRV based)	46 / 100
Libido and intimacy	Lower; worth discussing

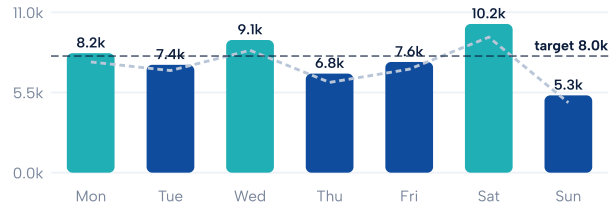
Your trends: heart, activity and recovery

This week or latest period · Previous (dashed) · Target range

Steps

BIO BAND

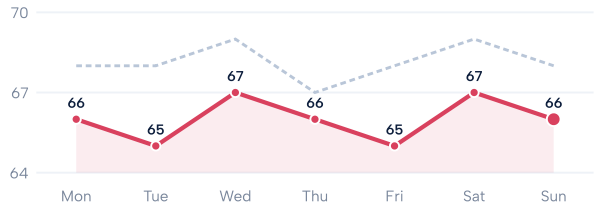
7,800 a day last week 7,200



Resting heart rate

BIO BAND

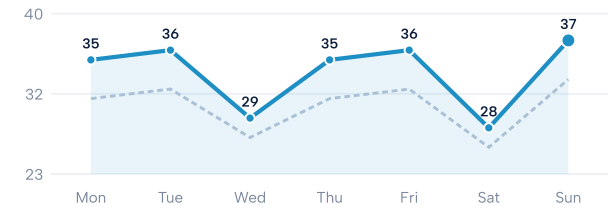
66 bpm last week 68



HRV

BIO BAND

34 ms recovery; higher is better

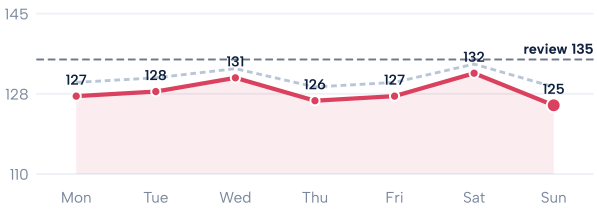


Dips on Wed and Sat follow evenings with wine

Blood pressure (systolic)

BIO BAND

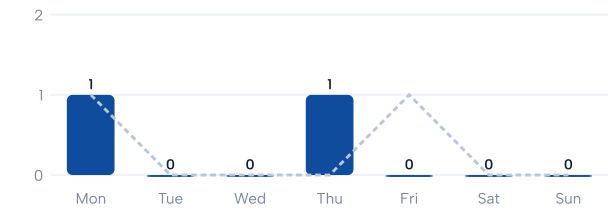
128/82 mmHg last week 131/84



Strength sessions

PATIENT LOG

2 this week 6 weeks in a row

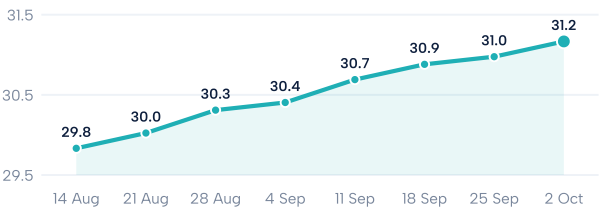


Plus 1 brisk walk-jog interval session

VO2 max, 8 weeks

BIO BAND

31.2 mL/kg/min fair for age 52; good is 33 or more



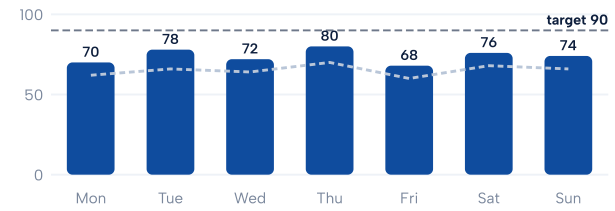
Your trends: nutrition and body

This week or latest period · Previous (dashed) · Target range

Protein

DIET DIARY

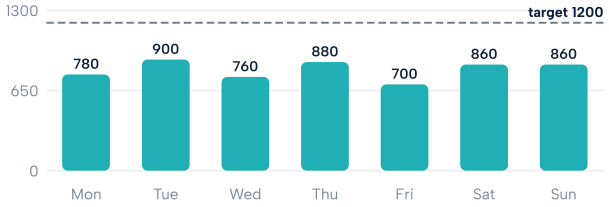
74 g a day goal 90 g (1.2 g per kg)



Calcium

DIET DIARY

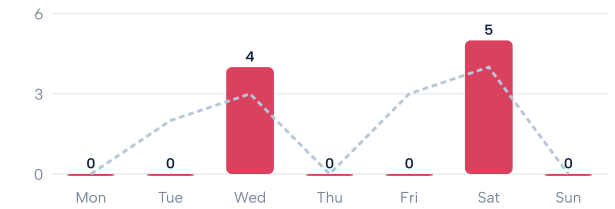
820 mg a day goal 1,200 mg after menopause



Alcohol

DIET DIARY

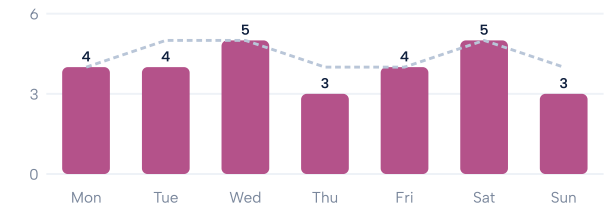
9 units this week low-risk limit 14



Caffeine

DIET DIARY

4 cups a day 3 days with coffee after 2 pm



Weight, 8 weeks

BIO SCALE

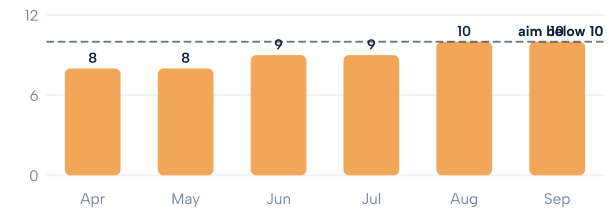
74.6 kg was 75.4 kg



Visceral fat, 6 months

BIO SCALE

10 rating was 8 in April; aim below 10



Your blood results

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SAMPLE TAKEN	MARKERS	OUTSIDE RANGE
Monday 21 September 2026	**31**	**7**

Your hormone results confirm the menopause transition and show HRT is being absorbed. Cholesterol, ApoB and insulin have risen as oestrogen fell; these are common after menopause and respond to diet, exercise and treatment.

MARKER	RESULT	RANGE	STATUS	CONNECTED TO
HORMONES				
FSH confirms menopause transition	**68** IU/L	menopause above 25	MENOPAUSAL	Hormones
LH	**41** IU/L	menopause above 15	MENOPAUSAL	Hormones
Oestradiol gel absorbed well	**182** pmol/L	on HRT 150 to 400	ON TARGET	Hormones, Bone
Testosterone	**0.6** nmol/L	0.3 to 1.7	IN RANGE	Hormones, Muscle, Mood
SHBG	**74** nmol/L	32 to 128	IN RANGE	Hormones
TSH	**2.1** mU/L	0.27 to 4.2	IN RANGE	Hormones
HEART AND CHOLESTEROL				
Total cholesterol	**6.1** mmol/L	below 5.0	HIGH	Heart, Diet
LDL cholesterol was 3.1 in 2023	**4.0** mmol/L	below 3.0	HIGH	Heart, Diet, Hormones
HDL cholesterol	**1.5** mmol/L	above 1.2	IN RANGE	Heart
Triglycerides	**1.6** mmol/L	below 1.7	BORDERLINE	Heart, Diet
ApoB	**1.18** g/L	below 1.0	HIGH	Heart
Lp(a) inherited; normal	**32** nmol/L	below 75	IN RANGE	Heart
hs-CRP	**2.8** mg/L	below 1.0 is low risk	MODERATE	Heart, Gut
SUGAR AND INSULIN				
HbA1c top of normal	**41** mmol/mol	below 42	BORDERLINE	Metabolic
Fasting glucose	**5.4** mmol/L	4.0 to 5.9	IN RANGE	Metabolic
Fasting insulin	**14** mU/L	2 to 10	HIGH	Metabolic, Diet
HOMA-IR insulin resistance	**3.1**	below 2.0	HIGH	Metabolic, Diet
BONE, BLOOD AND NUTRIENTS				
Vitamin D	**61** nmol/L	50 to 175	IN RANGE	Bone, Supplements
Calcium, adjusted	**2.38** mmol/L	2.20 to 2.60	IN RANGE	Bone
Magnesium	**0.82** mmol/L	0.70 to 1.00	IN RANGE	Muscle, Sleep
Ferritin light spotting in weeks 3 to 5	**28** µg/L	30 to 400	LOW	Muscle, Mood
Haemoglobin	**132** g/L	115 to 165	IN RANGE	
Vitamin B12	**340** ng/L	197 to 771	IN RANGE	Mood
Omega-3 index	**5.1** %	8% or more is ideal	BELOW IDEAL	Heart, Mood, Diet
LIVER AND KIDNEY				
ALT	**24** U/L	below 33	IN RANGE	Liver
GGT	**32** U/L	below 38	IN RANGE	Liver
eGFR	**88** mL/min	above 60	IN RANGE	Kidney

Ranges are the laboratory's adult reference ranges. Results outside range are not a diagnosis; your doctor reviews every result with you.

Your gut health

How is your gut handling hormones and food?

Partly supporting

GUT TEST
Thursday 17 September 2026

Your gut bacteria help recycle oestrogen (the estrobolome) and turn plant foods into helpful compounds. Your diversity is slightly low, you do not make equol from soy, and Akkermansia, linked to a healthy waist and insulin, is low.

Diversity	Estrobolome activity	Equol producer	Bloating
WATCH	WATCH	WATCH	ON TRACK
3.4	**Moderate to high**	**No**	**3 / 10**
healthy 3.5 or more	beta-glucuronidase	soy benefits limited	mostly evenings

Your gut bacteria

Akkermansia muciniphila	linked to visceral fat and insulin resistance	LOWER
Bifidobacterium	fibre digestion and immunity	NORMAL
Butyrate producers	feed and protect the gut lining	NORMAL
Beta-glucuronidase producers	release oestrogen back into the body	HIGHER
Lactobacillus	supports vaginal and urinary health too	NORMAL

How your gut links to your menopause

Estrobolome
Higher beta-glucuronidase recycles more oestrogen. Fibre and cruciferous vegetables help keep this balanced.

Equol
You do not convert soy into equol, so soy foods may ease flushes less for you; flaxseed lignans are an alternative.

Akkermansia and insulin
Low Akkermansia fits your HOMA-IR of 3.1. Polyphenols (berries, green tea, cocoa) and fibre help it grow.

Alcohol
Wine on 2 nights; alcohol lowers gut diversity and raises flushes.

Fibre
21 g a day; aim for 30 g for gut, cholesterol and insulin.

IN PLAIN ENGLISH

Your gut is part of your hormone system. Eating 30 different plant foods a week, 30 g of fibre a day, a spoon of ground flaxseed and plenty of berries and leafy greens will help your gut balance oestrogen, insulin and cholesterol together.

Your medicines and supplements

Sarah takes HRT and four supplements. Here is how each works with her gut, nutrients, muscle and bone.

MEDICINE	YOUR GUT	NUTRIENTS	MUSCLE AND BONE	TIMING TIP
Estradiol gel 0.06% 2 pumps daily · week 10 Menopause symptoms, bone protection	Gel avoids the liver and gut; fewer clotting effects than tablets		Slows bone loss; supports muscle	Same time daily on clean, dry arms; no lotion for 1 hour
Micronised progesterone 100 mg nightly Protects the womb lining with oestrogen	Can cause bloating early on			At bedtime; mild drowsiness helps sleep
Vitamin D3 1,000 IU daily Bone and muscle		Blood level 61 nmol/L, in range	Supports calcium absorption	With your main meal
Magnesium glycinate 200 mg nightly Sleep and cramps	Gentle; glycinate rarely loosens stools	Blood level 0.82, in range	Muscle relaxation	Evening
Omega-3 (fish oil) 1 g daily Heart, joints and mood		Omega-3 index 5.1%, below 8% ideal	May ease joint aches	With a meal
Collagen peptides 10 g in morning coffee Skin and joints		Adds 9 g protein but lacks leucine	Does not replace complete protein for muscle	Any time
Iron (not taking) Discuss Ferritin 28 µg/L	Iron can cause constipation and darker stools	Absorbs best with vitamin C, away from tea and calcium	Low iron lowers stamina	If advised: morning with orange juice

Examples of how each medicine can interact with your gut, nutrients, muscle and bone. Never stop or change a medicine without speaking to your doctor or pharmacist.

How your medicines connect

Medicine, nutrient and gut map

	Hot flushes	Sleep	Bone	Muscle	Cholesterol	Gut	Iron	Mood
Estradiol gel 0.06%	✓	✓	✓	✓	?			✓
Micronised progesterone		✓				?		
Vitamin D3			✓	✓				
Magnesium glycinate		✓		✓				
Omega-3					?			?
Collagen peptides				?				
Iron						?	?	

! can lower or disturb ✓ supports ? worth checking

Sarah's daily routine

07:00	Estradiol gel on the arms; collagen in coffee
08:00	Breakfast with protein; vitamin D3 and omega-3 with lunch
Before 14:00	Last coffee of the day
18:00	Strength session on Tue and Fri
21:30	Magnesium glycinate
22:30	Micronised progesterone, lights out by 23:00

For your doctor and pharmacist

- HRT response good at week 10 (flushes 7.8 to 4.1, score 31 to 18, estradiol 182). Review at the 3-month check.
- LDL 4.0 and ApoB 1.18 with HOMA-IR 3.1: assess cardiovascular risk and discuss diet, exercise and treatment options.
- Ferritin 28 µg/L after spotting: consider whether iron is needed and recheck.
- Mild genitourinary symptoms: local vaginal oestrogen could be discussed.
- DEXA spine -1.6: repeat in 2 years; HRT and resistance training are protective.

IN PLAIN ENGLISH

HRT is doing most of the heavy lifting for your symptoms and helps protect your bones. Your supplements support sleep, bone and muscle. Collagen is fine for skin and joints, but it does not build muscle like complete protein does. Your iron store is low, so ask Dr Nair whether you need iron.

Your nutrition

Daily average this week

Energy		**1,780** / 1,800 kcal
Protein		**74** / 90 g
Fibre		**21** / 30 g
Calcium		**820** / 1,200 mg
Added sugar		**42** / 30 g
Alcohol		**9** / 14 units

Energy is about right. Protein, fibre and calcium are short; added sugar is above the limit, mostly from snacks in the evening when sleep is poor.

Key nutrients

Vitamin D		**4.2** / 10 mcg
Iron		**11.2** / 14.8 mg
Magnesium		**240** / 270 mg
Omega-3		**1.1** / 1.4 g
Folate		**260** / 400 mcg
Potassium		**2900** / 3500 mg
Phytoestrogens		**1** / 7 servings
Saturated fat		**24** / 20 g

A typical day this week

Breakfast	**Granola, milk and coffee with collagen**	19 g protein
Lunch	**Chicken salad wrap**	26 g protein
Snack	**Crackers and cheese**	8 g protein
Evening	**Salmon, rice and greens; 2 glasses of wine on Wed**	28 g protein

Food and medicine

HRT and alcohol
Alcohol raises oestrogen levels and triggers flushes; flushes were 2.6 higher on wine evenings.

Phytoestrogens
As you do not make equol, flaxseed (ground, 1 tablespoon a day) may suit you better than soy.

Calcium
Add a yoghurt or fortified plant milk to reach 1,200 mg; calcium helps bone alongside HRT.

Iron
Pair iron-rich foods with vitamin C and keep tea and coffee an hour away.

IN PLAIN ENGLISH

After menopause, muscle and bone need more protein and calcium, and the heart benefits from more fibre and omega-3 and less saturated fat and sugar. Small swaps help most: Greek yoghurt instead of granola, oily fish twice a week, flaxseed on breakfast, and alcohol kept to weekends.

Body composition and fitness

Body composition · Bio Scale

Weight	**74.6 kg**	WATCH	BMI 27.4
Body fat	**39.8%**	FOCUS AREA	fat mass 29.7 kg
Visceral fat	**10**	FOCUS AREA	was 8 in April
Waist	**92 cm**	FOCUS AREA	aim below 80 cm
Muscle mass	**42.3 kg**	ON TRACK	up 0.6 kg in 6 weeks
Skeletal muscle	**27.1%**	ON TRACK	
Fat-free mass	**44.9 kg**		
Bone mass	**2.4 kg**	WATCH	scale estimate
Body water	**32.9 kg**	ON TRACK	44.1%
Protein	**12.6%**	WATCH	
BMR	**1,390 kcal**		

Fitness and strength tests

VO2 max	**31.2**	ON TRACK	good is 33 or more
Grip strength	**26 kg**	ON TRACK	healthy 22 or more
Plank	**45 s**	ON TRACK	
One-leg balance	**25 s**	ON TRACK	
Push-ups (knees)	**14**	ON TRACK	
Resting HR	**66 bpm**	ON TRACK	
DEXA spine	**-1.6**	FOCUS AREA	osteopenia, June 2026
DEXA hip	**-1.2**	WATCH	osteopenia

SOURCE Trainer tests 30 Sep · DEXA June 2026 · Bio Band

Muscle mass, 8 weeks

BIO SCALE

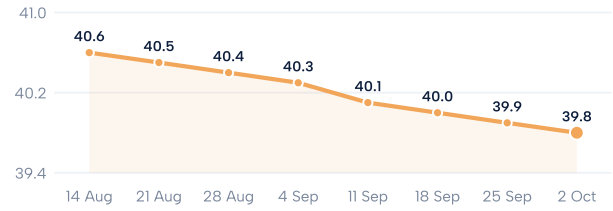
42.3 kg strength training from week 3



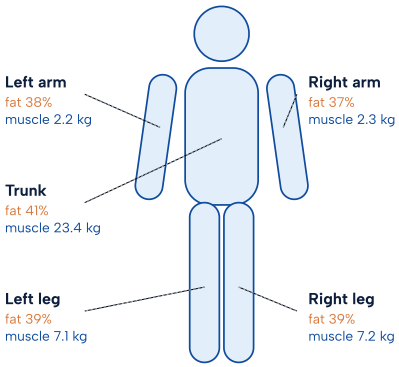
Body fat, 8 weeks

BIO SCALE

39.8 % was 40.6%



Segmental analysis



Estimated from one whole-body reading; best used to compare left and right and to track change.

IN PLAIN ENGLISH

Sarah's strength training is working: muscle is up and body fat is coming down. Fat has gathered around the trunk (41%), which is typical after menopause as oestrogen falls. Keeping two strength sessions a week, adding a brisk interval session and cutting weeknight alcohol will move visceral fat back below 10.

How everything connects

Each line links Sarah's HRT, supplements, food and training to her symptoms, blood, gut and body.



Helping · Needs attention · Waiting for a result or worth checking

The menopause chain

Falling oestrogen	flushes, poor sleep
Poor sleep	sugar cravings, insulin rises
Insulin and alcohol	fat around the middle
Middle fat	cholesterol and heart risk

What will help most

Keep	HRT and 2 strength sessions
Cut	weeknight wine and late coffee
Add	protein, calcium, fibre, flaxseed
Ask	about cholesterol and iron

Guidance for your BioCare Team and your plan

Doctor

Dr Priya Nair, Endocrinology

- HRT response good at week 10: flushes 7.8 to 4.1 a day, Greene score 31 to 18, estradiol 182 pmol/L on gel. Review at 3 months.
- LDL 4.0 (3.1 in 2023), ApoB 1.18, HOMA-IR 3.1, visceral fat 8 to 10: cardiometabolic risk assessment recommended.
- Ferritin 28 after early spotting: consider iron and recheck in 8 to 12 weeks.
- Mild genitourinary symptoms and lower libido reported: discuss local oestrogen and other options.
- DEXA spine -1.6, hip -1.2: HRT plus resistance training; repeat DEXA in 2 years.

Nutritionist

Ritu Desai, BioMedical Nutritionist

- Protein 74 g against 90 g (1.2 g/kg); add Greek yoghurt or eggs at breakfast and a protein snack instead of crackers.
- Calcium 820 mg against 1,200 mg: dairy or fortified alternatives at two more points a day.
- Non-equol producer: suggest 1 tablespoon ground flaxseed daily for lignans rather than relying on soy.
- Fibre 21 g to 30 g and 30 plant foods a week to support Akkermansia, insulin and LDL. Reduce saturated fat (24 g) and added sugar (42 g).
- Alcohol to weekends only; flushes and HRV both worsen on drinking days.

Personal trainer

Arjun Mehta, BioMedical Fitness Trainer

- Muscle up 0.6 kg in 6 weeks; keep 2 progressive strength sessions (squat, deadlift pattern, row, press) at 3 sets of 8 to 10.
- Osteopenia: add impact work twice a week (step-ups, small jumps or skipping if comfortable) for bone loading.
- VO2 max 31.2: one interval session a week (4 x 4 minutes brisk) to reach 33.
- Avoid late evening sessions on poor-sleep days; HRV dips after wine evenings, so schedule hard sessions away from them.

THREE GOALS FOR NEXT WEEK

- ☐ **Alcohol at weekends only**
  flushes and sleep improve
- ☐ **90 g protein, 1,200 mg calcium**
  yoghurt, eggs, fish, flaxseed
- ☐ **2 strength and 1 interval session**
  plus impact for bone

HRT 3-month review
Thu 22 Oct, 11:00
Dr Priya Nair

Blood recheck
Mon 7 Dec
lipids, insulin, ferritin

Next DEXA
June 2028
bone scan

This sample report uses illustrative data to show how the Cellular BioResponse Report works for this programme. Guidance is drafted for your care team to review; it supports and does not replace your consultations. Never stop or change a medicine without your doctor. If you feel unwell, contact your doctor or emergency services.