

**16TH Northern Ireland
Conference**

**PCDO
Society**

Women's Health and Diabetes: From PMOS to Menopause

DR ITUNU JOHNSON

17 September 2026

SPONSORS



This conference was developed by the PCDO Society in conjunction with OmniaMed Communications. The sponsoring pharmaceutical, device, training and educational companies have contributed financial support towards this event but have had no input into the conference agenda, speaker selection or presentations, with the exception of the symposium sessions, for which the respective sponsoring companies are fully responsible.



SPEAKER

Dr Itunu Johnson

UK-based GP with about 15 years of experience in women's health, sexual and reproductive health, and menopause care across the NHS and private sectors.

Postgraduate diplomas in obstetrics and gynaecology and in sexual and reproductive healthcare. British Menopause Society Advanced Certificate in Menopause. Lead for Equality, Diversity and Inclusion at the RCGP, North-West London, Co-chair RCGP Women's Health Special Interest Group, Committee Member Primary Care Women's Health Forum and GP tutor and examiner at Queen Mary's University of London.

DISCLOSURES

Private clinical practice: Dr Itunu Johnson at The Wellington Hospital, HCA Healthcare UK; Comfortplus Health Ltd

Other clinical/academic roles: Bupa; NHS locum GP; Queen Mary University of London

Professional roles: Co-Chair, RCGP Women's Health SIG; committee member, Primary Care Women's Health Society

Pharmaceutical industry: Paid educational/speaking engagements with **Roche, Gedeon Richter and Exeltis**

Other paid educational/media work: Osmosis; Mamamia/Very Peri Summit; Cancer Genetics conference

Author: *A Personal Guide to Menopause for Black Women*

Advisory work: Engagement with organisations in women's and reproductive health

No pharmaceutical company has had editorial control over the content of this presentation

Executive Summary

A woman's risk of diabetes is not constant across her life; it rises and falls with hormonal change.

REPRODUCTIVE YEARS

PMOS affects an estimated 1 in 8 women and is often the first driver, appearing from adolescent years onward.

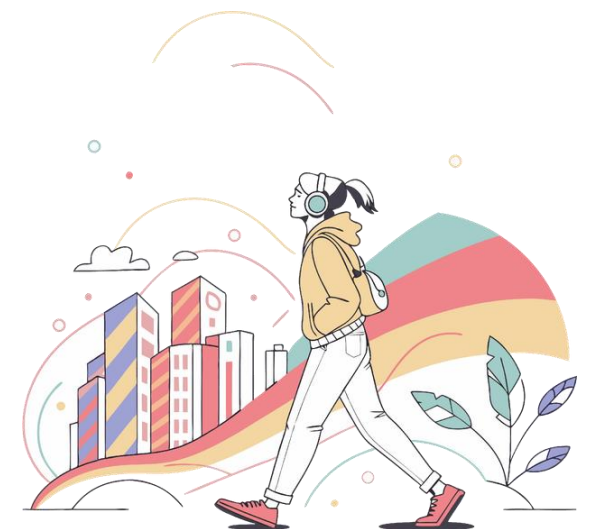
PREGNANCY

Gestational diabetes signals a future risk that many women are never told about.

MIDLIFE TRANSITION

Falling oestrogen raises insulin resistance again. Around 13 million UK women are peri- or post-menopausal.

This session traces diabetes risk across all three windows, showing how earlier recognition supports better lifelong care.



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WINDOW ONE

Reproductive Years: PMOS and Diabetes Risk





CASE STUDY – REPRODUCTIVE YEARS

PMOS in Practice

Roya, 28, a masters student, has only 4–5 periods a year, with acne and unwanted facial hair for several years. BMI 23, with several skin tags around her neck.

Diagnosed with PMOS and started on the combined pill. The focus is on her reproductive symptoms; her metabolic health is not explored or followed up.

Three years later she returns, increasingly tired and having gained weight. The skin around her neck has darkened and she is worried about diabetes.

What does Roya's story tell us about the relationship between PMOS and diabetes risk?

What Is PMOS?

Polyendocrine Metabolic Ovarian Syndrome — the name adopted internationally in 2026 for the condition long known as polycystic ovary syndrome.

It presents differently across ethnicities and body types. Lean women are affected too, and it often first appears in the teenage years or early twenties.

1 in 8

women in the UK — yet primary care records diagnosis in only 3 to 4%

ROTTERDAM CRITERIA — 2 OF 3

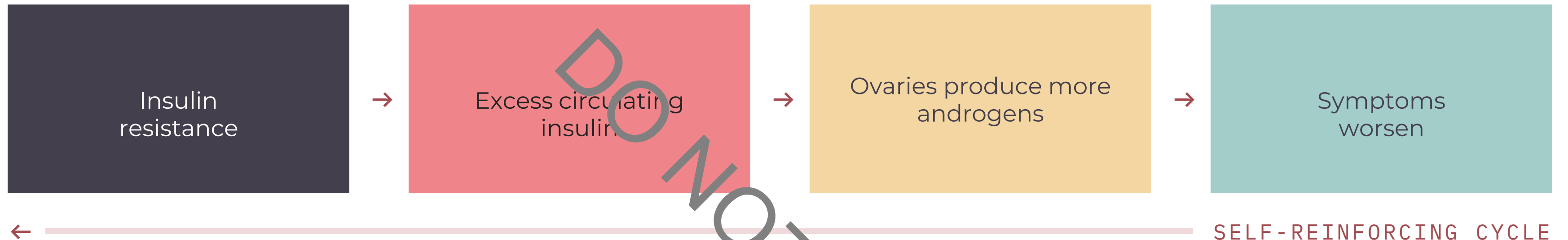
Irregular or absent ovulation

Clinical or biochemical signs of excess androgens

Polycystic ovarian morphology on ultrasound



PMOS, Insulin Resistance and Diabetes Risk



50–70%

of women with PMOS have insulin resistance, regardless of body weight

4-5×

the risk of type 2 diabetes, highest in women diagnosed in their teens and twenties

2.5×

more likely to be diagnosed among women of South Asian heritage; 1.8× African-Caribbean



Common Presenting Features of PMOS



Irregular or absent periods



Excess hair growth (hirsutism)



Acne and oily skin



Scalp hair thinning



Weight gain and central adiposity



Difficulty conceiving



Darkened skin folds (acanthosis nigricans)



Mood changes and anxiety

Managing PMOS and Reducing Diabetes Risk

- 01 Lifestyle intervention is first-line: 5 to 10% weight loss can restore ovulation and improve insulin sensitivity.
- 02 Metformin, used off-label, improves insulin sensitivity and supports metabolic and reproductive outcomes.
- 03 GLP-1 receptor agonists, also off-label, show emerging evidence for weight loss and cycle regularity.
- 04 Combined hormonal contraception regulates cycles and reduces androgen-related symptoms.
- 05 Screen regularly for impaired glucose tolerance and type 2 diabetes.
- 06 Mental health support matters: PMOS carries higher rates of anxiety and depression.



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WINDOW TWO

Pregnancy: Gestational Diabetes





CASE STUDY – PREGNANCY

Gestational Diabetes in Practice

Sarah, 35, is 24 weeks pregnant with her second child. BMI 25; her first baby weighed 4.2 kg. Her father has type 2 diabetes.

Diagnosed with GDM at routine screening and advised to change her diet, monitor glucose and increase activity. Working full-time and caring for a four-year old, she finds the dietary changes hard and feels guilty when readings are high.

By 34 weeks the monitoring has become another responsibility on an already long list.

She asks whether there is a way to manage her diabetes without feeling she is constantly failing.

What Is Gestational Diabetes?

High blood glucose first identified during pregnancy, usually in the second or third trimester.

01

Placental hormones rise
Insulin resistance increases naturally to direct more glucose to the growing baby



02

Pancreas compensates
Extra insulin is produced to overcome that normal resistance



03

GDM develops
When it cannot produce enough, blood glucose rises

1 in
8

mothers in England now has a diagnosis of gestational diabetes, with rates climbing alongside obesity and later maternal age.

NHS birth-cohort study of 2.7 million births

Women with PMOS face a significantly higher risk of developing GDM.

GDM Risk Factors and Screening

Weeks 0–24	24–28	to 40
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Screening is by oral glucose tolerance test between 24 and 28 weeks — earlier if risk factors are present.

WHO IS AT RISK

- Higher body mass index
- PMOS
- Family history of diabetes
- Older maternal age
- Certain ethnic backgrounds
- A previous pregnancy affected by GDM

IF UNTREATED

Raised risk of a larger baby, a difficult delivery, and future metabolic problems for mother and child.

Good glucose control through diet, activity and sometimes insulin protects both mother and baby.



After Pregnancy: From GDM to Future Diabetes Risk

10×

the risk of developing type 2 diabetes later in life, even though blood glucose usually returns to normal after birth.

- 01 NICE recommends a fasting glucose test 6 to 13 weeks after birth, then annual testing thereafter.
- 02 Breastfeeding may help lower the long-term risk of developing type 2 diabetes.
- 03 The postpartum period is a valuable window for lifestyle support and follow-up, connecting pregnancy to the risk women carry into midlife.



WINDOW THREE

Midlife Transition: Menopause and Diabetes Risk





CASE STUDY – MIDLIFE TRANSITION

Menopause in Practice

Linda, 51, has not felt quite herself for a year. Unpredictable periods, waking several times a night feeling hot, harder to concentrate at work, and more weight around her middle despite little overall change.

Between work, teenage children and helping her mother, she is constantly tired with little energy left for herself, and frustrated that what she once managed easily now feels much harder.

Her first health check in years finds raised blood pressure, worsening cholesterol and impaired glucose regulation.



Symptoms of Perimenopause and Menopause



Irregular periods



Hot flashes



Night sweats



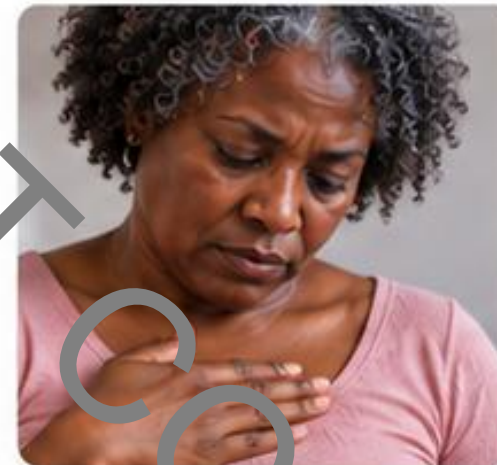
Chills



Sleep problems



Vaginal dryness



Sore or tender breasts



Headaches



Weight gain and slowed metabolism



Mood changes



Thinning hair and dry skin



Memory problems

Why These Symptoms Happen

Hot flushes

A drop in oestrogen confuses the body's temperature control.

Low mood and anxiety

Hormone changes affect brain chemicals.

Poor sleep

Driven by night sweats and mood changes.

Vaginal dryness

Less oestrogen means reduced moisture and blood flow.

Aches and pains

Lower oestrogen can cause joint stiffness and inflammation.

Why These Symptoms Happen: Hair and Muscle

- Falling oestrogen contributes to hair thinning and loss of muscle mass.
- Ageing, diabetes, obesity and nutritional deficiencies can also drive these changes.
- Some treatments, including GLP-1 receptor agonists, may contribute indirectly through rapid weight loss and reduced lean mass.
- Hair loss and muscle loss are often multifactorial, making careful assessment essential.

Not every symptom is due to menopause alone. Consider medications, metabolic health, thyroid disease and lifestyle factors.

Menopause Experience Varies

Symptoms vary widely, and ethnicity may affect how they are experienced.



Some women don't get classic hot flushes or night sweats.

Mood changes, anxiety and low self-esteem are often missed.

Brain fog and memory loss are often mistaken for stress or ageing.

Vaginal dryness, palpitations and joint pain are often overlooked.

Culture, Stigma and Help-Seeking

- Cultural beliefs and attitudes impact help-seeking behaviour.
- Menopause is stigmatised and taboo in many BAME communities.
- It can be seen as a loss of fertility and femininity, adding to the pressure.
- Women are often expected to endure symptoms silently, without complaint.
- A lack of medical research on menopause and HRT in these communities hinders access to information and care.



Diabetes and Menopause

THE CONDITION

Diabetes is a chronic condition where blood glucose levels remain high.

HOW IT DEVELOPS

Insulin is not produced in sufficient amounts, or does not work effectively.

INSULIN'S ROLE

Insulin moves glucose from the blood into the body's cells for energy.

THE MENOPAUSE LINK

Hormonal changes and weight gain during menopause increase insulin resistance.

This helps explain why diabetes risk rises around midlife and menopause.

The Diabetes Risk of Early Menopause

24%

increase in the odds of
developing type 2
diabetes

Women who experience menopause early face significantly higher long-term metabolic risk — an international finding with clear relevance in the UK, where the average age of menopause is 51 and around 13 million women are currently peri- or post-menopausal.

The Metabolic Crossroads

01

Estrogen Decline

Natural estrogen levels fall

02

Energy Shift

Metabolism slows;
hunger hormones rise

03

Central Adiposity

Fat storage shifts to
the abdomen

04

Insulin Resistance

Glucose handling and
insulin function decline

05

Diabetes Risk

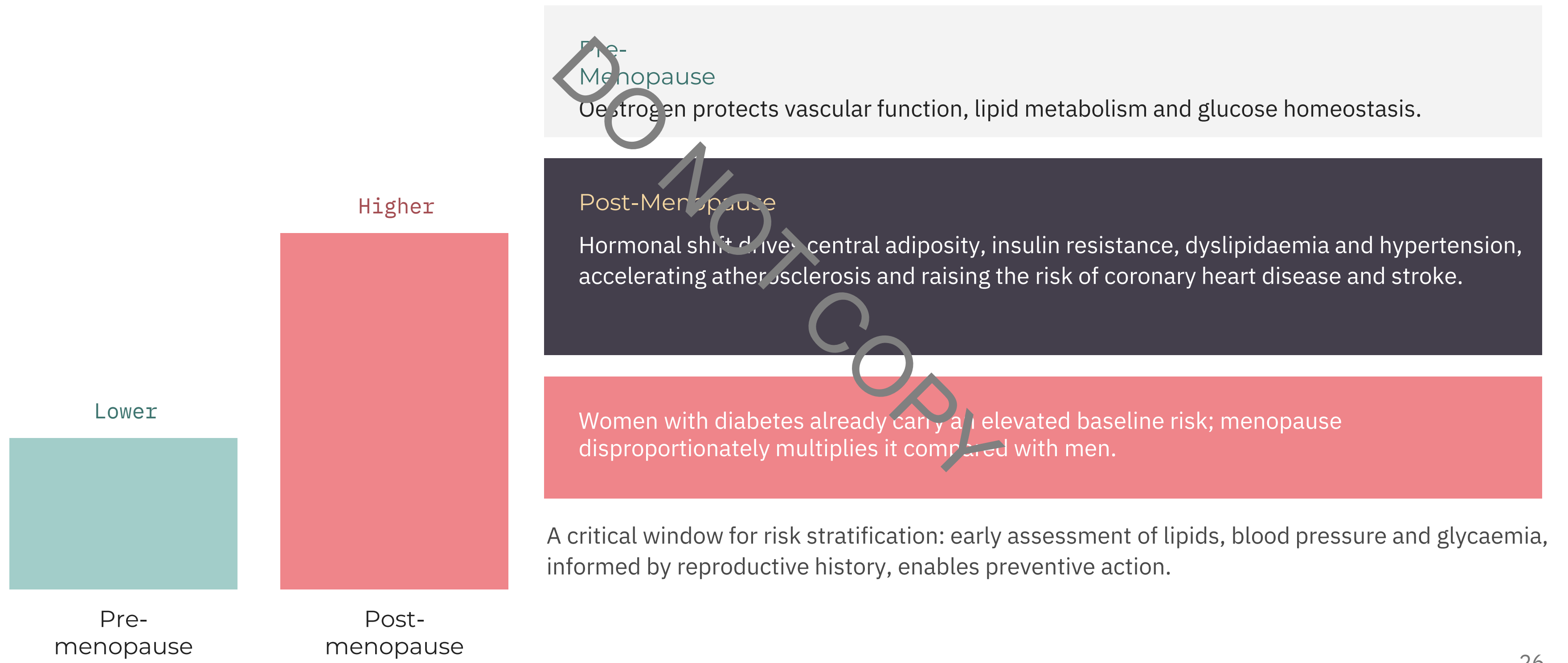
Type 2 diabetes risk
rises regardless of age

Predisposition to type 2 diabetes occurs independently of, and additively to, chronological ageing.

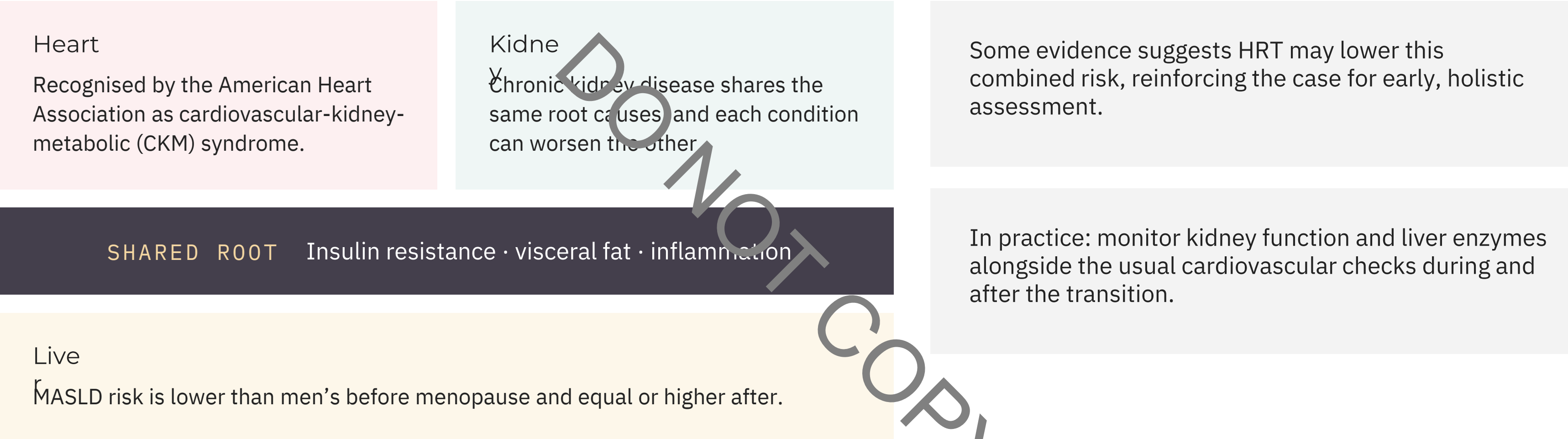
Menopause and Diabetes

- Declining oestrogen removes key cardiovascular protection.
- Visceral fat increases, driving central obesity.
- Insulin resistance worsens, increasing diabetes risk.
- Blood pressure and adverse cholesterol levels rise.
- Women with diabetes face a particularly high risk of heart disease and stroke.

Accelerated Cardiovascular Risk



The Cardiorenal Metabolic Syndrome of Menopause



DISCUSSION

Does the Impact Differ by Diabetes Type?



MANAGEMENT

Managing Diabetes Through Menopause: HRT

Hormone Replacement Therapy replaces declining oestrogen to relieve menopausal symptoms.

USUAL REGIMEN

Combined HRT — oestrogen plus progesterone.

ADDITIONS

Testosterone may be added for low libido and energy in selected women.

ROUTES

Patches, gels, sprays and vaginal preparations — local or systemic.
No increased risk of clots with topical oestrogen preparations —
safer for patients with diabetes



The Evidence for HRT

In women under 60, or within 10 years of menopause, good UK evidence — including guidance aligned with NICE and the British Menopause Society — shows that HRT may:

Improve endothelial function

Reduce progression of atherosclerosis

Have favourable effects on lipid profile

Improve insulin sensitivity — relevant in diabetes

Managing Diabetes Through Menopause: Non-Hormonal Alternatives

Medical Alternatives

SSRIs and SNRIs, NK1 and NK3 receptor antagonists, oxybutinin, gabapentin and clonidine, for hot flushes and mood symptoms.

Non-Medical Alternatives

Lifestyle changes, CBT, and some complementary therapies. “Natural” options have limited evidence.



Lifestyle Medicine: The 5-Pillar Approach



01

Nutrition

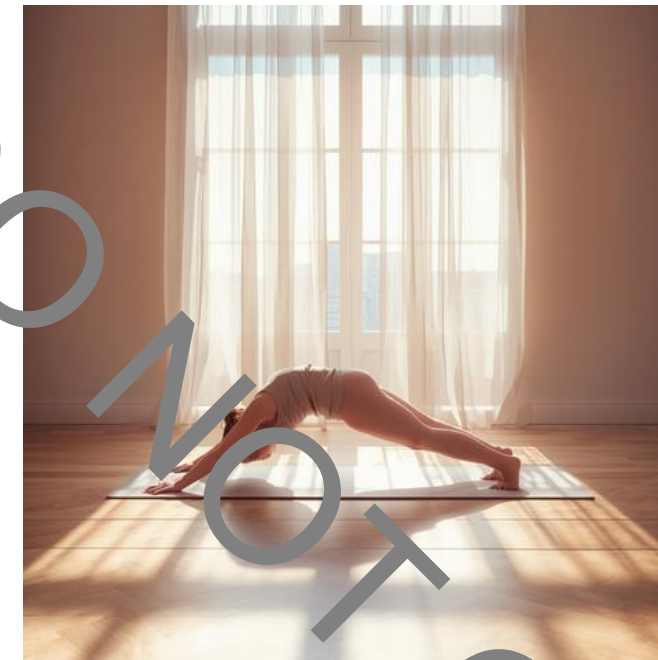
“Eat the rainbow.”
Diverse, fibre-rich whole foods, portion control, low glycaemic load.



02

Physical Activity

Daily steps with resistance training twice weekly to improve insulin sensitivity.



03

Weight & Musculoskeletal

Gradual strength building, stretching or yoga for metabolic health.



04

Sleep & Stress

Optimise for 6 to 8 hours — crucial for glycaemic variability and cortisol.



05

Self-Monitoring

Track glucose through the transition, map symptoms, favour sustainable habits.

Tailoring Risk Assessment to Ethnicity

INCREASED RISK – BMI

23 vs 25 in White populations

South Asian, Black and other minority ethnic groups (NICE)

HIGH RISK – BMI

27 vs 30 in White populations

South Asian, Black and other minority ethnic groups

Assess central adiposity and waist circumference alongside BMI, which alone can be less reliable across ethnic groups.

Interpret HbA1c with the same ethnicity-aware caution.

Menopause and Diabetes: Hormone Hesitancy

Fear of hormones often comes from outdated or misleading information.

This fear can stop women from considering safe, effective treatment.

Avoiding HRT may allow symptoms and insulin resistance to worsen.

Evidence shows HRT is safe for many women when properly prescribed.

Informed discussions help women make confident, balanced decisions.

A Biopsychosocial Approach

A purely biomedical lens can miss the psychological and social load a woman is carrying, and why she may present late or disengage from care.

Biological

Hormonal, metabolic and physical changes at each life stage — PMOS, pregnancy, menopause.

Psychological

Mental health, stress, trauma, body image and how these affect eating, self-care and engagement.

Social

Relationships, culture, work, caring responsibilities, finances and support network.

Clinical care

The same diagnosis may need very different approaches depending on context.

The Hidden Load: Mental Burden and Unspoken Trauma

Mental load is the invisible cognitive and emotional work of planning, remembering and organising family life — and it falls disproportionately on women, even in dual-earner households.

Work, childcare, caring for relatives, finances and managing the health of others all add to the burden, making her own health needs harder to prioritise.

Chronic overload raises cortisol and disrupts sleep, affecting appetite, activity and insulin sensitivity — linking mental load directly to metabolic health.

When women are exhausted, irregular meals, convenience foods or emotional eating may become coping mechanisms. This is not simply a question of willpower.

The Hidden Load: In Practice

- Prediabetes and diabetes add another layer: monitoring, medication, appointments and food choices become another mental burden.
- Do not assume it is “just hormones” — adverse childhood experiences are linked with more severe menopausal symptoms.
- Listen and look: what is she saying, what is she not saying, and what does her body language tell you?
- Make care fit her life: understand the load, reduce judgement, agree realistic steps she can sustain.

ASK INSTEAD

“What is life like for you at the moment?”

Not just: “What are your symptoms?”

Culturally Responsive Care

Clinical humility & curiosity

Take interest in patients' lives, not just their symptoms.

Trauma-informed care

Respect cultural factors and the added challenges some women face in healthcare settings.

Open communication

Foster a safe, judgment-free space to discuss menopause concerns.

Symptom recognition

Actively listen to and acknowledge reported symptoms.

Shared decision-making

Provide clear, culturally sensitive information and involve women as partners in their care.

When Changes Seem Not to Work

01 Consider HRT first — it may improve insulin sensitivity and reduce menopause symptoms.

02 Review diabetes medications if blood sugar remains difficult to control.

03 Weight-loss medications, such as GLP-1 receptor agonists, may support metabolic health.

04 Monitor key health markers: weight, blood pressure and blood sugar.

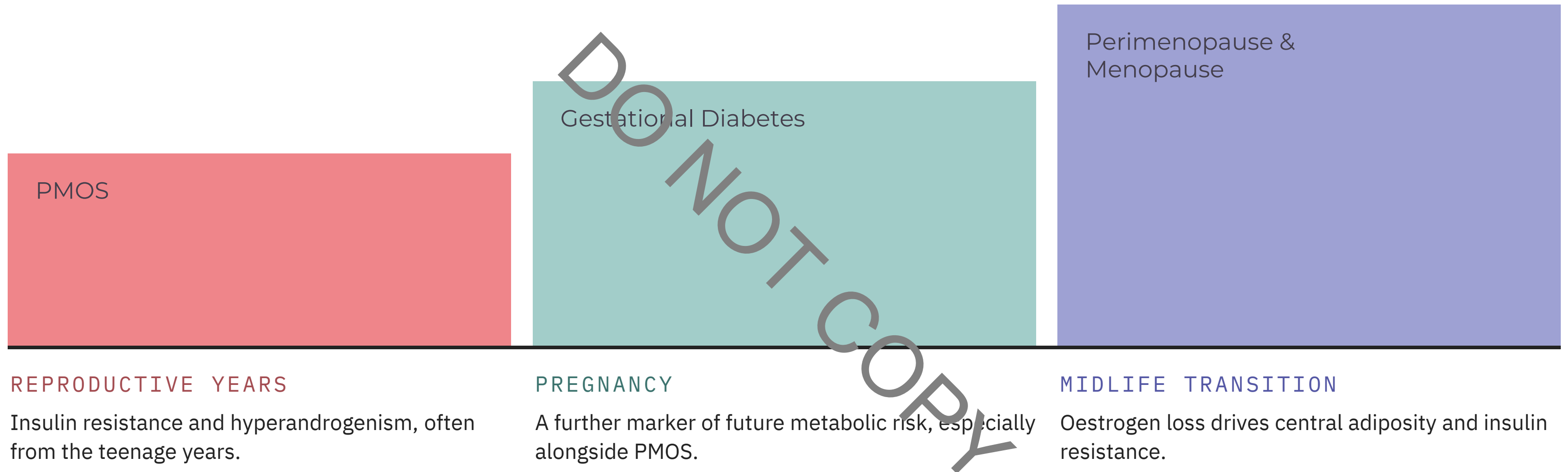
Ethnicity, Culture and Metabolic Risk

- Women from ethnic minority backgrounds often develop type 2 diabetes at lower BMI thresholds.
- Menopausal and metabolic symptoms may be under-recognised, misattributed or normalised, delaying diagnosis.
- Culturally tailored dietary advice should incorporate traditional foods rather than exclude them.
- Central adiposity and waist circumference are important markers of cardiometabolic risk during menopause.
- Adopt an individualised, culturally competent approach to assessment, risk stratification and management.



SUMMARY

Diabetes Risk Across a Woman's Life



The common thread is insulin resistance. Recognising it early, whatever the life stage, is key to protecting a woman's long-term metabolic health.

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Thank you.

Any questions?



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