

# Changing body shape during the menopause

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**balance**  
the menopause support app

This booklet has been written by Dr Zoe Hodson, GP with a special interest in the menopause, and Dr Louise Newson, GP, menopause specialist and director of the balance app. Louise is also director of the not-for-profit company, Newson Health Research and Education, and is the founder of The Menopause Charity.

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Nearly all women will experience a change in their body shape during perimenopause and menopause. This is usually due to fluctuations in hormone levels and this is often a good time to reflect on food choices and exercise, with a focus on future health and wellbeing.

Eating behaviours and weight can be linked to many different aspects of life, including a different genetic make-up, stress levels, and quality of sleep - all these factors need to be taken into consideration alongside your hormonal health.

It can be hard to know which type of nutrition is best for you when there are so many conflicting messages and an intense focus on weight in the media; it's no wonder it can be difficult to know where to start.

## How can fluctuating levels of hormones affect your body shape?

A woman is in the menopause when she hasn't had a period for at least 12 months; this is usually because your ovaries have stopped producing eggs and are no longer producing the hormones estrogen, progesterone and testosterone. During the perimenopause (the time

leading up to the menopause when a woman has menopausal symptoms, but is still having periods), your hormones already start to fluctuate and decline, and this can affect many different pathways in your body.

### Effects of changes to levels of estrogen

#### ***Increased fat around the middle***

Fluctuating or declining levels of ovarian estrogen can affect several pathways, and this is why many common symptoms arise. Estrogen receptors are present throughout every cell in your body from your brain to your gut. Your body starts to recognise the decreasing levels and will try to obtain a different form of estrogen produced by fat cells. Many women find that they start to develop a 'spare tyre' in response to this and might also have strong cravings for foods high in sugar or unhealthy fats, which the body will in turn lay down as (estrogen-producing) abdominal fat. There may also be changes to your visceral (internal fat). You can find out more about this by having a body composition scan (using a DEXA scan machine) that assesses your distribution of fat, muscle and bone mass, and can help inform nutrition and fitness plans and indicate whether there are any potential health risks for you.

#### ***Stress and insulin resistance***

The sympathetic nervous system is supported by estrogen, so low levels can trigger a 'fight/flight/freeze' reaction. This stress reaction also releases adrenaline and cortisol – the 'stress' hormones. Adrenaline can cause symptoms such as an increase in heart rate, breathing rate, dry mouth, 'butterflies in the stomach'

and cortisol causes the body to release glucose for a burst of energy to allow the body to 'flee'. When this glucose is not utilised for physical activity, it triggers the release of insulin, which then packages the glucose away as fat.

Chronic stress can lead to something called 'insulin resistance'; this mechanism usually results in fluctuations of blood sugar levels which can, in turn, lead to a higher risk of developing type 2 diabetes and heart disease.

#### ***Less exercise due to joint pains***

Lower levels of estrogen can often cause widespread joint pains and many women will reduce their day to day exercise because of this. Exercise helps physical health, psychological wellbeing and can reduce anxiety.

#### ***Problems with sleeping***

Estrogen deficiency can disrupt sleep patterns due to a number of reasons. These include vasomotor symptoms such as hot flushes and night sweats, as well as disruption to melatonin (the sleep hormone) with raised cortisol levels. Anxiety can manifest at night as well, due to the cortisol imbalance and many women can wake during the night with hunger cravings when they never did before.

## Leptin and ghrelin – the ‘hunger hormones’

Leptin and ghrelin are two other hormones that are closely linked to weight. Leptin acts as an appetite suppressant and ghrelin as an appetite stimulant. Increased fat in the body can cause leptin resistance which means that the normal signals to let us know we are full become disrupted. Many ‘quick-fix’

weight loss plans can trigger increasing levels of ghrelin and hunger. Sleep also has an important part to play in the regulation of these two hormones; poor sleep can increase ghrelin which can make us feel hungry, and it decreases leptin which stops us from feeling full.

## Lower testosterone: slower metabolism

Testosterone is another important female hormone. Women produce more testosterone than estrogen from the ovaries, and a decline in levels can lead to a decrease in muscle mass and lower energy levels. This in turn can reduce your baseline metabolic rate; fewer calories are burned even with exactly the same nutritional intake as before your perimenopause.

The pathway for this can be slightly different in women who have a history of conditions such as polycystic ovarian syndrome. Women with this condition can have slightly higher testosterone levels as the usual ovarian cycle pathway is disrupted. It is also commonly associated with insulin resistance and women with polycystic ovarian syndrome often have difficulty reducing weight.

## Neurotransmitters that influence mood and reward centres in the brain

Neurotransmitters - such as dopamine, oxytocin and serotonin - are chemicals that often impact on the mood and reward centres in your brain. We know that fluctuating levels of estrogen and testosterone can influence the levels of these neurotransmitters.

**Dopamine** is often released when thinking about a ‘reward’ or pleasurable experience and can be linked to repeated patterns of behaviour, such as comfort eating at the end of a stressful day.

**Serotonin** is responsible for stabilising your mood and is commonly affected by fluctuating hormones. It has an effect on appetite regulation and, as well as being

produced in the brain, it is also produced in the gut. A healthy gut environment can really help stabilise your mood, which in turn can affect the cravings that are so commonly experienced during menopause.

**Oxytocin** - sometimes known as the ‘cuddle hormone’ due to its effect on relationships and social interactions - is also produced in the brain and the gut, and has a positive effect on gut health.

These are only some of the pathways supported by female hormones - it isn't hard to see why there can be so much disruption during the perimenopause and menopause.

## How can you begin to tackle this?

### HRT

Body identical HRT can be safely used by the vast majority of women and can be a key factor in starting to stabilise all of these pathways. There are many other aspects to health and wellbeing that also need to be considered alongside HRT and it can be useful to look at both as a

long-term plan for the future. The benefits of HRT in relieving menopausal symptoms and protecting your future health is covered in detail in other booklets, podcasts and videos on the [menopausedoctor.co.uk](http://menopausedoctor.co.uk) website.

### Our top tips are:

#### 1. Keep a food diary

This can be a really helpful start to pinpoint times where you may be more likely to over or under eat. You might find it useful to jot down meals and snacks, make a note of your mood, and note how hungry you were feeling, both at the time, and half an hour after eating.

#### 2. Include complex carbohydrates, protein and healthy fats with every meal

Eating complex carbohydrates (for example, vegetables and whole grains), protein (e.g. fish, chicken, meat, dairy products, eggs, pulses) and healthy fats (e.g. olive oil, avocados, oily fish, seeds and nuts) will promote feelings of fullness for longer.

If you notice a pattern in your food diary where you are having very little to eat during the day, but then ending up having a large meal followed by evening snacks, try having a meal earlier in the day that includes complex carbohydrates, healthy fats and protein. This will reduce the level of ghrelin (the hunger hormone) that is released and is likely to improve energy levels. A good example would include porridge with full fat milk (protein and

healthy fat), mixed berries (complex carbohydrate) and some nuts and seeds (protein and healthy fat - unless you have a nut allergy, of course).

#### 3. Support your gut health

There is increasing evidence that improving gut health has hugely beneficial effects on mood, weight and quality of sleep, to name but a few. There are many resources available on [menopausedoctor.co.uk](http://menopausedoctor.co.uk) that discuss gut health, including booklets, podcasts and videos with nutritionist Emma Ellice-Flint

We know the importance of adding a wide variety of fruit and vegetables to our diet. The ratio should be approximately 2 pieces of fruit, to 8 portions of vegetables. Studies have shown that this variety promotes a healthy gut and may reduce symptoms such as constipation and bloating. Look for online guides to 'eating the rainbow' - which aim to include many different colours of fruit and vegetables in our diets. This ensures intake of a wide variety of micronutrients, which are essential for good health.

#### 4. Keep well hydrated

When we are busy, it is easy to mistake thirst for hunger so have a glass of water before reaching for a snack. Try to reduce caffeine found in soft drinks, coffee and tea, as they act as diuretics which may cause dehydration and increase bladder irritability. If you usually consume a lot of these drinks, reduce them gradually over a few weeks, as a sudden reduction can trigger a rebound headache. Caffeine also stays in the system for a long time and disrupts sleep. As mentioned before, poor sleep increases cortisol and ghrelin which leads to hunger and weight gain.

#### 5. Identify the tricky times

Use your food diary to help identify why you eat when you do, and whether the types of food you're eating could be improved upon. Do you snack because you are bored or stressed? Have you skipped meals or not drunk enough? Have you had enough protein, or did you have a glucose dip because of too many refined carbohydrates, causing an insulin spike? Planning ahead really helps these issues; eating 2-3 regular meals will reduce insulin spikes and, with the right nutrition, can also reduce hunger.

Changing routines in the evening such as going out for half an hour of fresh air after an evening meal or planning a telephone catch up with somebody to avoid late snacking, can start to break ingrained patterns.

Writing in a journal can also help to declutter our brains at the end of the day and possibly identify hidden thoughts or worries that may need addressing with the help of friends, or through supportive counselling.

#### 6. Support your reward pathways

Avoiding having sugary snacks in the house can be useful to begin with. Ask

friends or relatives to support you and let them know that this is going to be hard.

The hypothalamus is the primitive part of your brain that sends out fast, 'impulse' thoughts. It takes the cortical part of your brain - often more true to yourself - longer to process the thoughts and make a decision.

Try and tune into the slower, decision-making pathways and spend a little time 'discussing' this with the impulse pathway. Taking time to eat without distractions, not grabbing food on the go, and planning your nutrition ahead, can all help.

Stress often leads to comfort eating and this will in turn lead to uncomfortable feelings. Plan ahead and think about other ways that you could take some time out to manage stress. Activities that calm the parasympathetic nervous system such as being outside (walking in green spaces is particularly good for this), yoga, Pilates, mindfulness, meditation and craft can all help.

#### 7. Avoid or reduce alcohol

Many women find that they become much more intolerant of alcohol during the menopause and it may be the time to take a good look at your drinking habits. Alcohol is damaging for many reasons - it is often high in sugar and empty calories (there are approximately 190 calories in a 250ml glass of white wine). The sugar content will trigger an insulin spike, followed by low blood sugars. This in turn leads to cravings and, at the same time, inhibits the slower thought processing. As a result, it can become much more difficult to resist those fast impulses described earlier and make more thoughtful decisions. There are many online support groups and books available to help 'dig down' into

whether alcohol is having a major impact on your wellbeing during this time.

### **8. Change the way you talk to yourself**

Navigating through the menopause can be really tough and women often talk to themselves in a negative way. Changing small elements of your routines gradually builds up self-confidence. A good way to visualise the changes is to use an 'I can do this' board (physical or digital) by writing down 3 things that you have done for your health and wellbeing each day, in a diary or on post-it notes, or use photos on your phone as a reminder of the healthier choices you made.

Try to think of activities that you enjoy and set aside some regular time for them.

Monitor the way that you 'speak' to yourself and ask yourself whether you would address a friend in the same manner.

### **9. Avoid quick fix diets**

Any diet plan that promises quick fixes is

not going to be of long-term benefit. Many women have spent their lives 'yo-yo' dieting and it can be immensely frustrating to lose weight, only to regain even more. The reason behind this is that restricting calories will ultimately decrease your basal metabolic rate. You may have noticed changes in your skin and hair when doing these diets, due to nutrient deficiencies. They are also likely to cause muscle breakdown and increase cortisol, leading to more stubborn fat deposition.

Try to focus more on the number and variety of healthy foods that you are adding to your diet. If you feel that you need more structure with this, then it may be worth investing in some sessions with a nutritional therapist or asking a trusted friend to advise. 'How Not To Diet' by Michael Greger, or 'Brain Changer' by Prof. Felice Jacka are both books that give sound nutritional advice.

## **Finally...**

Use the perimenopause or menopause as an opportunity to carry out a full MOT for your health and wellbeing. It can be really hard to change behaviours but introducing small changes at a time, and then adding more as you become more confident, will soon start to make a difference.

Throw out the scales. This is all about how you look after your body and your psychological health - and how you feel as a result.

There will be ups and downs, there always are. However, a bad day is just that - a day. The next day is time to try again.

Change is slow. This is a long-term plan, not a quick fix. Ask a family member or good friend to join this journey with you, as they can be a great source of support and encouragement.



Dr Louise Newson is a GP and menopause specialist in Stratford-upon-Avon, UK and the founder and writer of the balance app and website.

The website and app contain evidence-based, non-biased information about the perimenopause and the menopause. She created both platforms to empower women with information about their perimenopause and menopause and to inform them about the treatments available.

Her aim is for people to acquire more knowledge and confidence to approach their own GP to ask for help and advice about their hormones. She is passionate about improving awareness of safe prescribing of HRT in all stages of the perimenopause and menopause.

Louise is also the director of the not-for-profit company Newson Health Research and Education.



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