

## **Resource Library**

## Menopause Matters

Nutrition & Exercise during perimenopause and menopause











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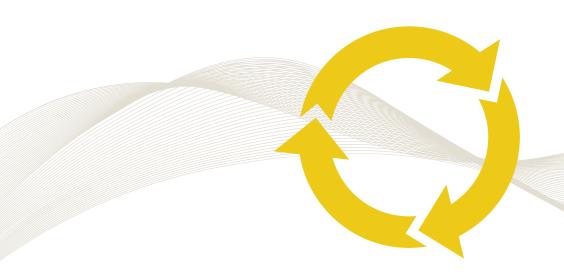
#### **Hormones**

- Chemical messengers which are responsible for hundreds of functions within the body
- Hormones all speak to each other
- The master hormones are insulin, cortisol, oxytocin – when these are out of balance this effects ALL hormones
- If cortisol is in constant use it's at the detriment of the sex hormones
- Maintain a constant state within the body, reacting to internal and external environments
- Homeostasis this is required for good function of cells and enzymes
- There are over 50 hormones, including sex hormones
- Estrogen bone health, cognitive health, cardiovascular system
- Progesterone menstruation, ovulation, pregnancy
- Testosterone mood, sex drive, energy levels

## Menstrual cycle

# What happens during the menstrual cycle?

- From day 1 14 there is a surge in estrogen (particularly between days 7-14)
- The brain then receives the message that there is enough estrogen and releases the Luteinising hormone to release the egg which then results in ovulation
- From day 14 there is an increase in progesterone
- If there is no pregnancy present menstruation will occur. Hormones return.

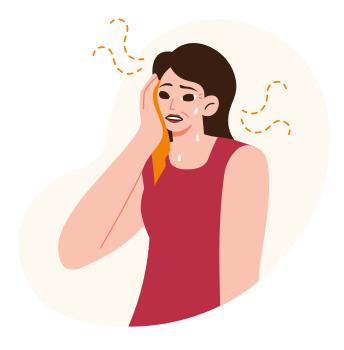


## Perimenopause

#### What is Perimenopause?

- The quantity of follicles begin to decline
- There is a loss of ovarian response to the brain which results in a change in the hormones produced by the ovarian cells
- Cycles start to become irregular
- Cycles will change in intensity
- Cycles may stop and return
- Perimenopause can start up to 10 years before the menopause





## Perimenopause

#### Perimenopause stage 1

- Progesterone starts to decline leading to estrogen dominance
- Common symptoms are increased anxiety, irrational behaviour, poor sleep, weight gain, change in body shape
- Testosterone also starts to decline lower sex drive, decreased motivation and confidence
- These symptoms may be exacerbated by under eating/over exercising, poor nutrient status, poor gut health, stress

#### Perimenopause stage 2

- Estrogen starts to decline
- Common symptoms lighter, longer periods, low mood, depression, brain fog, hot flushes, night sweats, heart palpitations, fatigue, internal dryness

#### Menopause

#### What is the Menopause?

When you are in the menopause this means that there is no longer any ovulation and there is a 30-60% decline in estrogen.

This usually happens between the ages of 45-55 years old and you must not have had a monthly period for 12 **consecutive** months.



#### Role of the sex hormones

#### Role of Progesterone...

- Converts cortisol for stress response
- Balances estrogen
- Enhances GABA and serotonin regulates mood and anxiety
- Mitigates growth of estrogen
- Skin elasticity and firmness
- Influences digestive health particularly bile motility

#### Role of Estrogen...

- Memory and cognitive health
- Metabolic health enhances insulin sensitivity
- Growth
- Bone building
- Blood clotting
- Also produced by fat cells, brain, adrenal glands
- Secrete excess estrogen via liver and bowel movements

### Role of the sex hormones

#### Progesterone/Estrogen ratio...

- Breast pain
- Brainfog, irritability, mood swings
- Disrupted sleep
- Weight gain
- Water retention

#### Low Estrogen...

- Hot flashes and night sweats
- Urinary tract infections/thrush
- Low energy/motivation
- Headaches

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- Imbalances can occur across menopause transition (and before) when liver and digestion are not fully supported.
- Overconsumption of alcohol, caffeine, sugar and low fibre effect liver and digestion. Hormone excretion takes a back seat.

## Signs and symptoms

## The signs and symptoms of Perimenopause...

#### Skin health

- collagen production reduces reduced elasticity
- Reduced blood flow dull skin
- Dry skin

#### **Hot flashes**

- 75% peri/menopausal women
- Prefuse sweating
- Redness
- anxious

#### **Body composition**

- Harder to lose weight
- More fat distribution around the middle section
- A change in body shape

### Signs and symptoms

## The signs and symptoms of Perimenopause...

- Neurological health
- Fluctuations in ovarian hormones which effect GABA
- Depression and anxiety
- Less able to cope with stressful situations
- Effects the stress response nervous system
- Brain chemicals are also effected by thoughts + environment (consider emotional health and work/life balance, might not be just hormones!)

The positive message is that the body is really good at compensating for the change in hormone balance.

But it may mean addressing some lifestyle and nutrition changes to support the body to do this.

## **Body composition**

### What this means in the Menopause...

- Fat distribution changes from around the hips to the belly
- With age, lean body mass reduces which decreases metabolism
- Lower levels of activity may mean low mood, less motivation
- Poor sleep can effect the hunger hormones, blood sugar, and reduced motivation
- Reduced estrogen increases potential for insulin resistance
- Burning fat may become a bit trickier
- Higher BMI can increase menopausal symptoms

## **Body composition**

### Things to consider...

- Energy in vs energy out still applies
- Is sleep disrupted?
- Is mood low?
- Lack of motivation?
- Increased alcohol?
- Increased sugar?
- Less movement?
- Could be thyroid/blood sugar management













#### **Insulin resistance**

#### What is insulin?

- Insulin is produced by the pancreas
- Insulin is released when we eat, to move glucose from the blood into cells to use for fuel and return blood sugar to normal levels
- Insulin resistance cells ignore insulin and don't move glucose – blood sugar levels rise, more insulin is produced = increased fat storage and slower fat burning (increased insulin shuts down other processes that create energy ie from fat)
- The ideal is metabolic flexibility the ability to fuel the body from glucose or fat

#### The risk factors are...

- Overweight/obese
- Poor sleep
- Lack of exercise/movement
- Low muscle mass
- Increased inflammation
- Low nutrient status
- Poor gut health

#### Insulin resistance

#### How to improve/manage symptoms...

- Healthy BMI
- Increase wholefoods/reduce refined carbohydrates
- Regulate sleep
- Manage stress
- Increase fibre
- Include protein with every meal
- Reduce/eliminate snacking
- Fast between meals 3-4 hours
- Elliminate liquid calories, esp between meals
- Increase muscle mass
- Increase movement across the day, walk after eating
- Avoid additional stress on the body by restricting and/or eliminating foods
- Don't be tempted to drop calories too low

   reduces NEAT, muscle mass reduction
   (metabolism), energy drops

#### How to improve/manage symptoms...

You don't need to go on a diet to improve/manage your symptoms. This can be done by making adjustments to your lifestyle and being consistent with it.

- Avoid additional stress on the body by restricting and/or eliminating foods
- Don't be tempted to drop calories too low

   reduces NEAT, muscle mass reduction
   (metabolism), energy drops

#### Solution...

- Portion control
- Increase veg and fibre
- Focus on protein
- Reduce convenience food
- Adapt macros Fats vs carbs
- Calorie counting

#### Tips...

- Elliminate foods that are easy to overeat
- Reflect on alcohol
- Increase volume of low energy foods
- Water based dishes
- Increase gaps between meals run on body fat
- Increase fibre
- Increase movement
- Increase lean muscle mass
- Circadian rhythm
- 10-14 hours fasting
- Reduce snacks
- Check in on hunger are you emotional or distraction eating
- Blood sugar support fluctuating blood sugar associated with hot flashes
- Start the day with protein, fats and fibre it is recommended to have a savoury breakfast
- Consider liquid calories

#### **Gut health**

- Many hormones are produced in the gut
- Some gut microbes responsible for balancing estrogen around the body
- Important for regulating blood sugar
- Absorption of nutrients

#### Consider how you feel after eating

- Bloating
- Constipation/loose stools
- Skin conditions
- Stiff, achy joints
- Brain fog, anxiety, low mood

#### Tips...

- Chew food 30 times before swallowing
- Increase fibre, gradually
- Increase diversity of plant foods, aiming for 30 different kinds per week
- Resistance starch
- Reduce refined sugar
- Avoid drinks around meals
- Breathe and relax before eating
- Reduce snacking 4-5 hours between meals
- Consume probiotic/prebiotic foods daily

#### Which diet should you use?

- Paleo
- Keto
- Low carb
- Vegan
- Mediterranean (incl lifestyle)

Consider the 'diet' that makes you feel good. Skin health, energy, satiety, sleep, mood as well as body composition.

### Macronutrients.... what are they?

- Fats
- Cell membranes made from fat
- Building blocks of sex hormones
- Vital for memory and cognitive function
- Omega 3 essential fatty acid oily fish SMASH
- Fat soluble vitamins A & E
- Vitamin A organ meats, eggs, animal products
- Vitamin E avocado, olive oil, dark leafy greens
- Protein
- Increased need throughout perimenopause
- Include in every meal
- 1.2 1.5g per kg of body weight per day
- Essential for lean muscle growth
- Supports bone health
- Supports blood sugar management
- Meat, fish, poultry, eggs, lentils, chickpeas, tofu, tempeh

### Macronutrients.... what are they?

- Carbohydrates
- Required for energy especially by the brain
- Choose wholefood sources, single ingredients
- Fibre rich feeds the gut
- Oats, quinoa, rye, wild rice, brown rice
- Potatoes, sweet potatoes, celeriac, beetroot, squash

#### **Nutrient density**

- Every cell requires an abundance of vitamins and minerals
- Support joints, skin, brain as well as hormones
- Metabolic function magnesium, B1, 2, 3, 5, iron, copper, COQ10
- Egg yolks, organ meats, wholegrains, nuts and seeds, vegetables, grass fed meat and poultry, oily fish and seafood, beans and pulses

#### Specific nutrients...

- Vitamin A bone health and skin
- Good sources liver, eggs, butter, cheese (also carotenoids from squash, carrots, sweet potatoes)
- Vitamin D immune system, energy, mood, bone health
- Good sources the sun! liver, oily fish, mushrooms
- Vitamin K2 works with vit D to correctly distribute calcium
- Good sources aged cheese, egg yolks•B
   Vitamins energy production, brain and mental healthGood sources – liver, seafood, poultry, dairy, leafy greens, eggs

#### Specific nutrients...

- Vitamin C essential for making collagen, progesterone building
- Good sources lemons, limes, peppers, broccoli, brussel sprouts, kale
- Iron energy, hemoglobin production
- Good sources meat, seafood, poultry (non heme iron from beans and pulses)
- Magnesium required for over 300 enzymes in the body. Blood pressure, energy production, muscle contraction.
- Good sources dark leafy greens, dark chocolate, mackerel, pumpkin seeds, avocado
- Zinc (oral contraceptive can lower levels) immune system, healing
- Good sources oysters, red meat, poultry, dairy
- Omega 3 (EPA, DHA) healthy cell membranes, memory, mood
- Good sources oily fish, algae

#### Phytonutrients...

- Anti inflammatory effect
- Support immune function
- Eat the rainbow
- Include herbs, spices, veg and fruit
- Include cruciferous veg like broccoli, cauliflower, sprouts, cabbage – support liver detoxification
- Include alliums like onions, garlic, leeks
- Think green, yellow, orange, purple and red

#### Caffeine and alcohol

- Linked to increase cases of hot flashes
- Disrupt sleep increase anxiety
- Elliminate caffeine after lunchtime
- Consider reducing
- Understand your own tolerance/metabolism (relies on good nutrient status)
- Caffeine has half life of 5-7 hours
- Swap in herbal teas, lemon balm, camomile, fennel, sage

#### **Nervous system**

## A study into hot flashes found the following triggers...

- 59% stress/emotional situations
- 44% external heat
- 38% confined space
- 20% alcohol
- 17% caffeine
- Hormones are constantly talking to the nervous system
- Sympathetic stress response effects blood pressure, inflammation, blood sugar, hormone balance
- Consider relationship audit, digital usage, commitments, work
- Parasympathic rest, digest and reproduce
- Consider walking outdoors, breathing, yoga, body scan, assess life load, sleep, friends, pets, laugh!

#### **Supplements**

#### Suggestions on supplements...

- ALWAYS start with nutrition, sleep and lifestyle first
- Vitamin D test Better You
- Magnesium 350mg
- Omega 3 look for dark glass bottle
- Creatine 3-5g per day
- L-theanine + lemon balm

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• Menopause specific multivitamin - no iron

Always check with your GP first if you are taking other medication.

#### Herbs and fermented foods

- Herbalreality.com
- Antioxidant rich herbs oregano, thyme, rosemary, turmeric - add to foods and teas
- Chlorophyl rich foods greens help purify from toxins
- Fermented foods for good elimination and gut health
- Flaxseeds support estrogen balance (2 tbsp per day)
- Mushrooms support estrogen balance
- Reishi blood sugar support, sleeplessness, stress
- Cordyceps mood, irritability, sex drive
- Avoid hot spices