



# Master the Menopause

..by understanding your  
hormones and how your  
nutrition can play a crucial role  
in managing them.



# The Hormone System

## AN INTRODUCTION.

We have more than 150 hormones circulating in our bloodstream. They act as chemical messengers **controlling** many of our our bodily functions and processes.

Hormones are released or "secreted" by endocrine glands, which include the pituitary, the thyroid, the adrenals, the hypothalamus, the ovaries and the testes.

Other body tissues are also now known to secrete hormones, including the kidneys, the gut, the heart and even fat cells.

Unless you're really into biology, we tend to only discuss hormones at certain stages in our lives, when in reality they are working all the time:

- **Insulin** and glucagon control our blood sugar.
- Adrenalin controls our fight or flight response.
- **Cortisol** helps us manage stress
- Thyroxine sets our metabolic rate

And there are many more.



Puberty is when lots of teenage angst and behaviours are often attributed to changes in hormones.

At this time of life the pituitary gland starts to release follicle stimulating hormone (FSH) and luteinising hormone (LH.)

These hormones are responsible for the development of follicles in the ovaries. They also produce oestrogen and progesterone, controlling menstruation.

For the next few decades the menstrual cycle and its associated hormones carry on their amazing functions.

In our **forties**, however, things generally start to change.

So, let's take at these changes that occur over the decades.



## *So, what happens to my hormones?*

### **IN OUR TWENTIES**

The last thing we're thinking about in our twenties is "what will happen to all these hormones during the menopause?"

If only we'd appreciated it at the time! In our twenties we have shed the uncomfortable teens and have spread our adult wings. Our skin has plenty of elastin and collagen which makes it firm and springy.

Bone mass and lean muscle is at its peak.

The sex hormones (estrogen, progesterone, testosterone, FSH, LH, DHEA) are at optimal levels and control our menstruation and fertility.

### **IN OUR THIRTIES**

Our metabolism slows down a little, it's easier to gain weight.

As we approach forty our fertility declines, **estrogen** levels decline and so does the amount of **collagen** and **elastin** in our skin.

There is also a decline in collagen and elastin in our connective tissues, tendons and ligaments, making us generally less flexible.

## OUR FORTIES

These are the transitional years between childbearing and menopause and therefore this is usually when we go through the **perimenopause**.

The first reproductive hormone to decline is progesterone, followed by estrogen.

FSH levels may increase initially as there is an attempt to stimulate follicles in the ovaries. **Raised FSH** can be an indicator of perimenopause and menopause.

The symptoms that foreshadow menopause include missed periods, PMS, breakthrough/midcycle bleeds, palpitations, migraines, hot flashes/sweats, vaginal dryness, insomnia, back pain, aches, anxiety.... such fun!

It is so important that we try and take care of ourselves at this time. Unfortunately we can be so exasperated about it all and sometimes in denial, that we often don't!

## NEXT COMES MENOPAUSE

Technically this is defined as 12 months after your last period.

Thereafter you are supposedly **postmenopausal**, although in reality the whole process is a transition from one stage to another. It can take years.

The average age of menopause is 51. It can be much younger in smokers however.

Menopause is when your body is switching off its reproductive capacity and can drastically affect the whole body.

So, what is happening to our hormones during the menopause?





## HORMONES DURING MENOPAUSE

The estrogen levels which fluctuated greatly during perimenopause drop by 75% or more. For some this causes few problems. For others there can be unpleasant effects such as acne, hair loss, aches and pains, exhaustion, weight gain (particularly around our middle, thighs, bottom, chin.)

The loss of estrogen can lower libido and cause vaginal dryness. Bone mass can be lost quite rapidly.

The declines in estrogen, progesterone, testosterone, DHEA cause a change in the absorption of **skeletal calcium** and a risk of osteoporosis.

It is important to try and counteract this with Vitamin D and K supplements, strength training and eating a diet high in **alkaline-forming foods**. If osteoporosis develops, it can't be reversed.

*"However, menopause is NOT a disease. It is a perfectly natural stage of life . Eastern cultures often refer to it as a "second spring"*

Post menopause can be quite liberating, a new place of confidence and a potentially rewarding phase of life.

You can begin to re-assess your life and goals. Many people make a conscious decision to "make the most of this phase of my life" and create new experiences - travel, new careers, new hobbies.

It is so easy to yearn for our lost youth, even though we are often seeing it through rose-tinted spectacles! We need to be grateful for each phase of life, and also be mindful of what we need to do to take care of our selves.



*It's not  
the usual  
suspects!*

In order to help those symptoms, it's useful to have some understanding of what's going on.

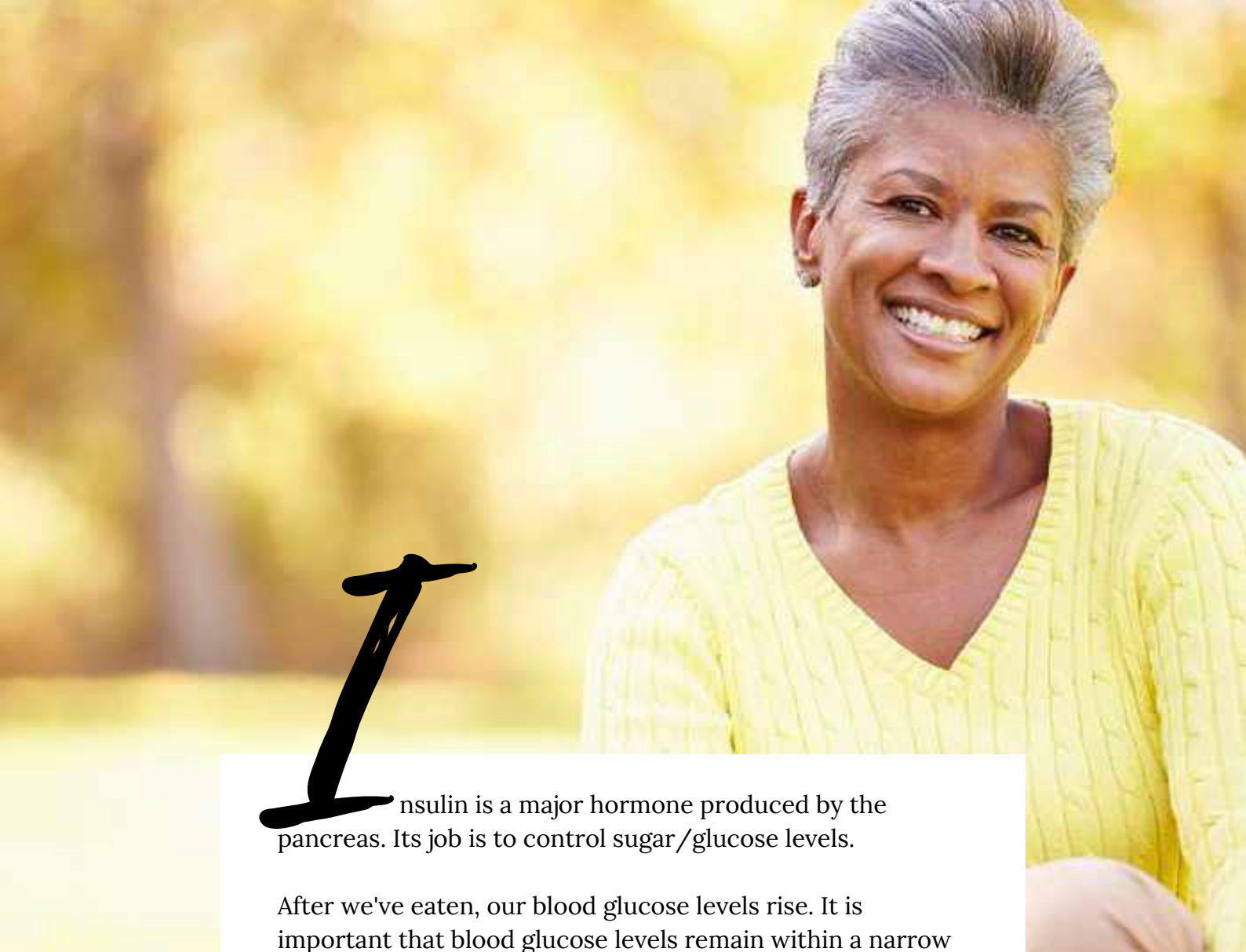
Usually it's the sex hormones (estrogen, progesterone, testosterone, DHEA) which are most often given the blame for our menopausal symptoms.

However, this is **not** the whole story. When it comes to menopause, the three hormones we need to be concerned with are **INSULIN, CORTISOL and OXYTOCIN.**

Each of these hormones is intrinsically involved with how we feel, how we think and how we look.

If you feel less and less like your usual self during this stage in life, it is likely due to an imbalance in these hormones.

The good news is that it is possible to rebalance these hormones with a combination of **acupuncture, diet and lifestyle.**



nsulin is a major hormone produced by the pancreas. Its job is to control sugar/glucose levels.

After we've eaten, our blood glucose levels rise. It is important that blood glucose levels remain within a narrow range, and insulin is produced to encourage our cells to absorb this glucose to lower the blood levels back to normal.

Around menopause, many women become more insulin resistant. What this means is our cells are **less sensitive** to insulin and don't take up the excess glucose from the blood.

This extra circulating glucose is converted into fat! To add insult to injury, because we have lower levels of oestrogen at this time, this fat can tend to be more around our middle: belly fat! The **menobelly**, some call it!!

Insulin resistance is also thought to lurk beneath many other common menopausal symptoms: hot flashes/sweats, fatigue, difficulty concentrating and weight gain.

# C

ortisol is a key **stress hormone** and is essential in times of danger and stress.

Adrenalin is our emergency stress hormone, but once the initial emergency is over, cortisol takes over to help us manage chronic stress.

It is unfortunate that around the time of menopause, many of us are under a lot of life stresses - work, teenagers, ageing parents - so our **cortisol levels** are inclined to be raised. Remember, the intentions of cortisol are good - it helps us manage this stress.

Cortisol also functions to reduce **inflammation**, which is our body's natural response to stress, whether that stress be a mosquito bite, an organ transplant or an emotional/psychological stress.

Inflammation is part of our bodies immune response to try and attack the invaders.

Chronic or unresolved stress can lead to **chronically elevated** cortisol levels. Over time its efforts to reduce inflammation can cause problems with our immunity.

Raised cortisol can increase acidity, unbalance our gut bacteria, cause rapid ageing, depression, adrenal fatigue - all due to the cycle of stress, cortisol and inflammation going on in our body.

Eventually, a control centre in the brain (the PVN) tells our adrenal glands to reduce the production of cortisol because it is damaging our body. This allows the **inflammation to go essentially unchecked!** We can get problems such as IBS and depression-like symptoms.

In addition, because cortisol is a **steroid** hormone, when we produce high amounts of it, it can be at the expense of other steroid hormones such as oestrogen, progesterone, testosterone and DHEA.

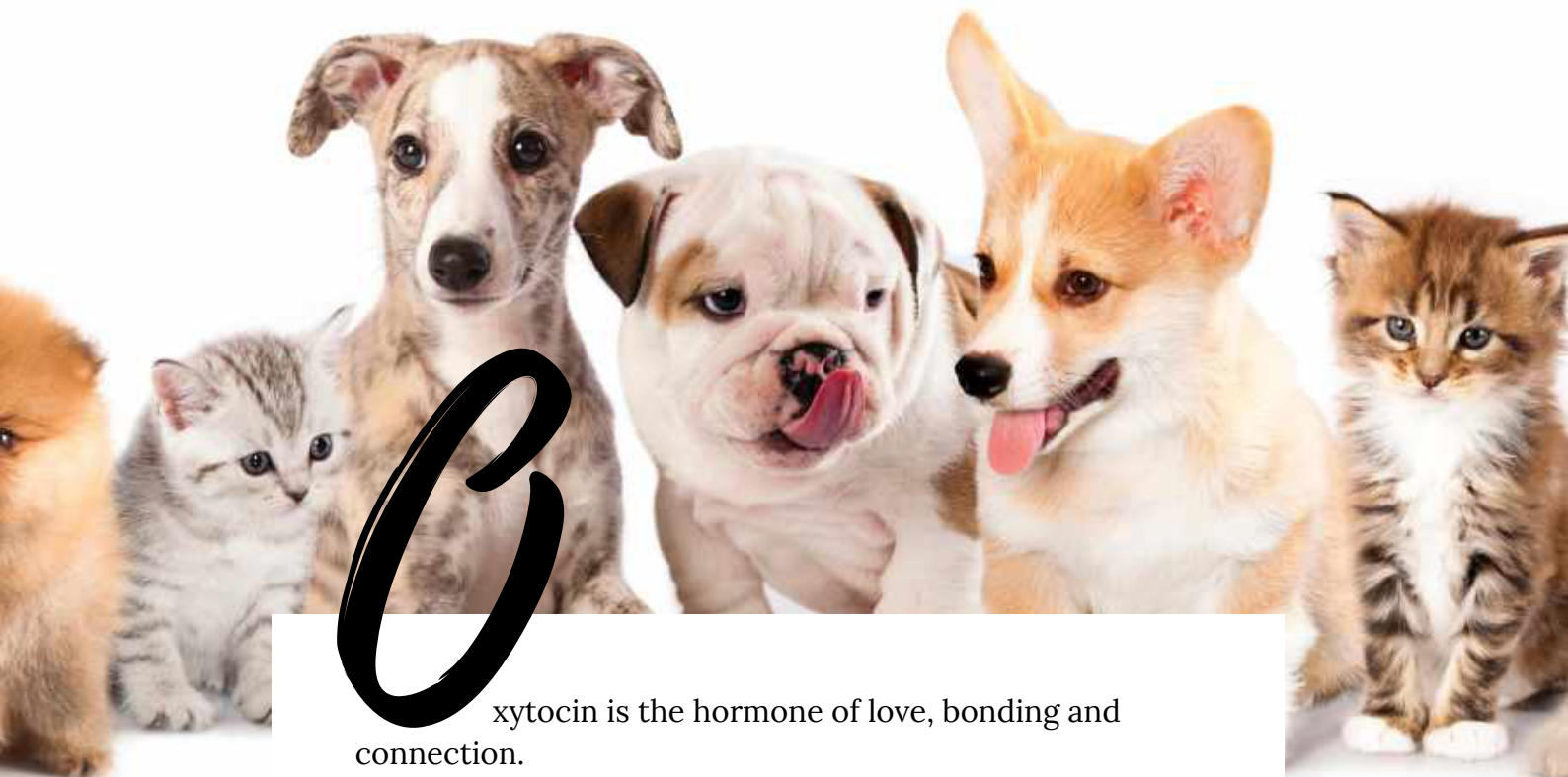
The effects of this are increased glucose production (see above!) decreased muscle mass, oestrogen/testosterone imbalances, low libido and, well, just burnout.

Finally, cortisol is directly related to another common menopausal symptom: weight gain - it triggers **fat-storing** enzymes, it raises blood sugar levels and it increases appetite.

*"It's a lose-lose situation!"*







Oxytocin is the hormone of love, bonding and connection.

It is produced by the hypothalamus in the brain and also by the heart, uterus and ovaries.

It is the **arch enemy** of cortisol and helps to counter balance the negative effects of cortisol.

Oxytocin helps us form **connections and bonds** with others. It is the hormone that floods us during childbirth.

It helps regulate body weight and appetite - we have no appetite when we are in the heady days of falling in love!

Oxytocin can be anti-ageing because it increases cell regeneration but research shows that chronic sugar intake can reduce oxytocin levels.

Ways to increase oxytocin levels include:

*cuddling and hugging*  
*warm up in a sauna or steam room*  
*sex/intimacy*  
*socialising*  
*being generous*  
*love your pet*

# *What can we do to fix these hormones?*

As you've probably realized, if we can rebalance the three hormones that I've written about here, then we can indirectly rebalance the hormones we associate with menopausal symptoms - estrogen, progesterone, testosterone and DHEA.

Lifestyle and diet can greatly improve all the symptoms discussed and help us master the menopause.

I recommend that you:

- *cut out/reduce sugar, whether it be refined or natural*
- *eat complex whole grain carbs*
- *buy organic animal products*
- *eat plenty of dark green vegetable, then eat some more*
- *include a lot of healthy fats, plant based if possible*
- *eat a more alkaline diet*

# *So, which foods are acid forming and which are alkaline?*

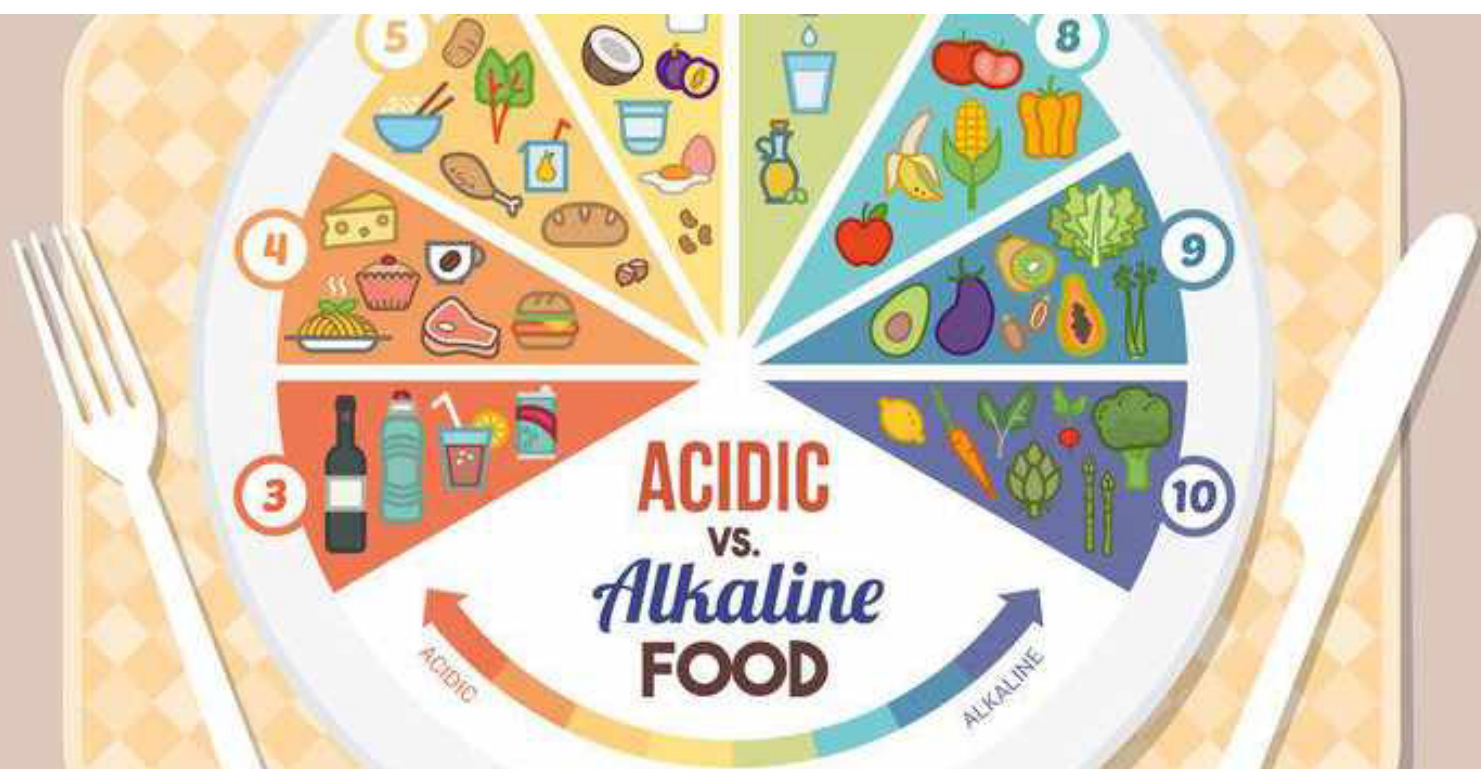
You probably already know which way this is heading!

In general, vegetables, fruits, nuts, seeds, some vegetable oils, herbs and spices are **alkaline forming**.

Meat, poultry, dairy, sugar, processed foods, caffeine, alcohol are the most **acid** forming.

Within this broad categorisation there are some foods which are particularly good or particularly bad or somewhere in-between and getting the right balance of these foods helps to create a "menopause diet."

To be honest, you should probably follow these rules most of the time; there are just specific reasons why you should pay particular attention around this stage of life and make particular tweaks, depending upon your symptoms.





## *And the benefits are?*

### *Alkalinity improves bone health*

One of the ways that your blood maintains its near neutral pH is to draw on alkaline minerals that we have stored in our body.

Unfortunately this can mean drawing drawing on the calcium and magnesium reserves in our bones, thus demineralising and weakening the bones, possibly leading to osteoporosis.

### *Alkalinity prevents magnesium deficiency*

Magnesium is involved in activating vitamin D which is involved with calcium absorption. Magnesium deficiencies can also lead to anxiety, sleep issues and headache

### *Alkalinity can help balance your hormones*

The right diet can help optimise the main players (insulin, cortisol, oxytocin) and as these become balanced many other hormones come into balance more quickly. This means you can experience fewer mood swings and hot flushes.

### *Alkalinity reduces pain*

Acidosis (too many acid forming ingredients) is a "stress" for our systems and we respond to stress with inflammation. This can cause joint and muscle pain. In addition, it is now known that muscle fascia has hormone receptors in it that enable it to be strong and flexible (we all know that our tendons and ligaments become more flexible with the elevated progesterone levels in pregnancy.) Hormonal decline during the menopausal years causes fascia to become weaker and results in those aches and pains!

### *Alkalinity improves detoxification*

Acid forming foods are inflammatory and mucus forming. These conditions can overload the body with toxic chemicals, mucus, bacteria, old faecal matter and more. In the menopause years this can explain hot flushes, fatigue, poor concentration etc...

### *Alkalinity maintains muscle mass*

By maintaining potassium and magnesium which are required by muscle cells.



# *How you eat your food is just as important as what you eat.*

## AN ACUPUNCTURIST'S PERSPECTIVE

### TRADITIONAL CHINESE MEDICINE (TCM) PLACES A MUCH BIGGER EMPHASIS ON DIET AND LIFESTYLE AS CONTRIBUTORS TO OUR HEALTH AND WELLBEING.

As an acupuncturist trained in TCM, nutrition is extremely important to us. Most of my clients receive nutritional advice as well as acupuncture, even if the symptom they presented with didn't seem particularly related to diet and nutrition. Thankfully there are many signs of change in Western healthcare as regards diet and lifestyle.

Food can be categorised in TCM according to its warming (**Yang**) or cooling (**Yin**) effect on the body. This definition, however, does not refer to the temperature at which the food is eaten but more to its **energetic effects** on the body.

Yin and yang are probably, in part, a reflection of the **acid-alkali** properties that we know of today. A bit of chemistry: when we refer to **acidic or alkaline forming foods**, we are referring to the digested food and its effects. This can be different to the pH we might have tested with litmus paper at school.

Another important aspect of how we eat food is not often considered by ourselves. But TCM advises us to **avoid** too much **cold and raw** food. It is far better to make soups, stews and casseroles so that we can be kind to our digestion and, importantly absorb more nutrients. So, no need to live on salads!

A stressful lifestyle can also conflict with an alkaline diet and reduce some of its benefits because chronic stress causes **inflammation** in our system which can lead to acidosis, sometimes indirectly - we often crave sugar when our stress hormone, **cortisol**, is elevated!

**TOP TIP** to start the day correctly: drink a large glass/pint of warm water with lemon juice. Try to have this at least half an hour before you eat or drink anything else. Surprisingly, lemons are an alkaline-forming food.



# Thank You...

....for taking the time to read this, I hope it has helped to start you off on the right track in terms of understanding how nutrition can make the most amazing difference to your life.

TCM considers the Mind, Body and Spirit as a whole. No symptom is considered in isolation; we like to get to the root of the problem.

We firmly believe that everything that happens in our body is influenced by how we fuel it. An acupuncturists approach is to combine the best of their TCM learning with nutritional therapy to enable as many people as possible to create the best version of themselves.

So, what are you waiting for...

*....get eating and healing!*

