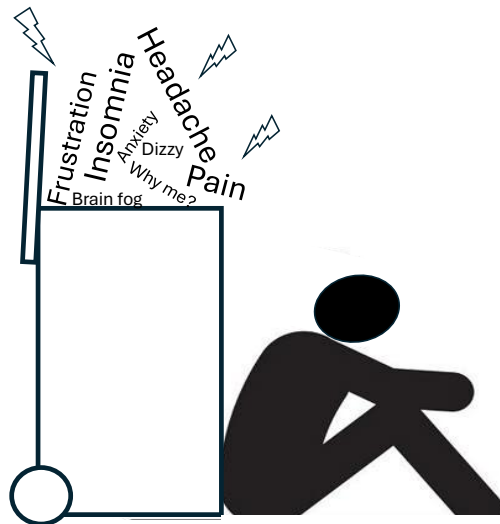


# Managing your Migraine Holistically

## The Essentials

Dr David Kernick

Exeter Headache Care



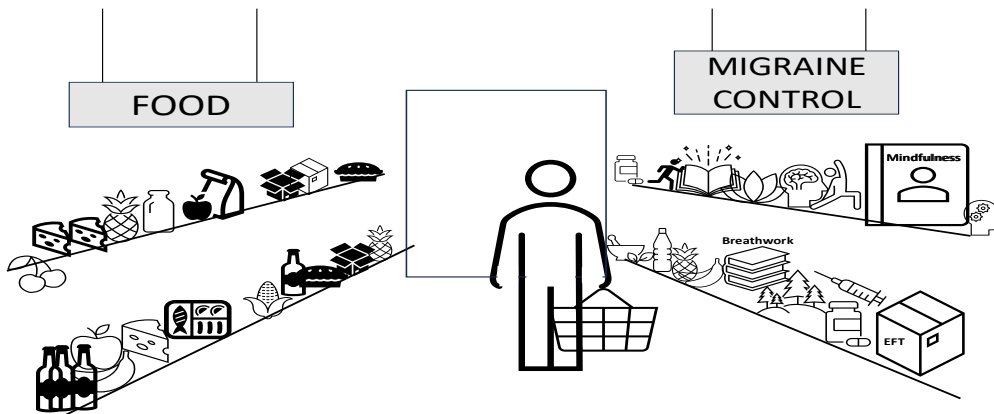
### Time to take back control

The Essentials is a concise summary of the more extensive Handbook and may be all you need to help you with your migraine. The Handbook is more detailed with extensive resources, detailed explanations and holistic practices. It is supported by online appendices and if you want to go into things in more depth. There is also a comprehensive online course. Everything is free to download but purchasing a hard copy of the handbook may be more useful to you.

Because migraine is a complex, shifting interaction of genes, environment, social and psychological factors, everyone's migraine is different. So, there are no straightforward solutions that are right for everyone.

The Essentials and the Handbook do not offer one simple solution. But more of a toolkit of approaches that you can explore with the aim of finding what feels right for you. Your body will know what it needs. Don't underestimate the healing potential that is held within it.

A useful approach is to view what is on offer as a supermarket. Have a wander down the aisle first, to get a feel of the best toolkit for you.



Look at the handbook as a supermarket shelf, not a cookbook. What feels right for you from the produce on offer?

Perhaps look at The Essentials as the Tesco Express to the Handbook's Tesco Superstore?

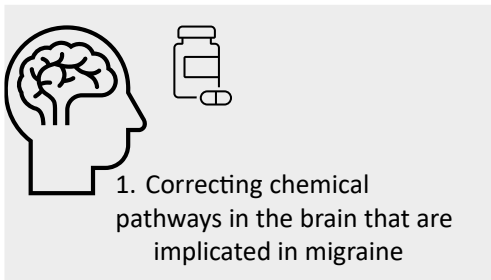


Manage your Migraine Holistically. The Essentials.

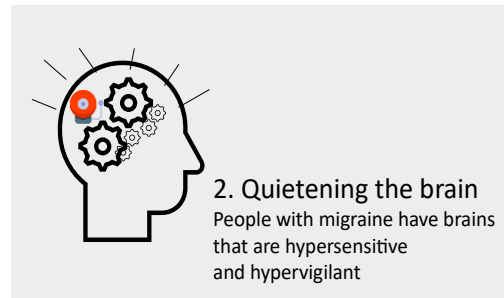


Manage your Migraine Holistically. The Handbook.

Three basic themes run through the handbook to help you to take back control:



Modern migraine drugs can be very effective, and you need to make sure you are on the treatment that is right for you



Holistic practices can help. We would probably all benefit from quietening our brains whether we have migraine or not.



Physical, psychological and social stressors can cause chronic inflammation which can make migraine and other associated problems worse. Lifestyle and holistic practices can help.

Sometimes things may be made worse by your migraine trying to tell you something you may not be wanting to hear. What you resist will persist and will be unhelpful to your progress.



# Part 1. GETTING TO GRIPS WITH THE BASICS

## 1). Some important starting points

### i.) Migraine is not just a headache

Migraine is a complex neurological condition.

- There can be symptoms in between attacks.
- It can be associated with many other physical and psychological problems.
- It can impact on how you feel about yourself and who you are.
- Unfortunately, it is often stigmatised and carries a negative label. We don't like diseases we can't see, confirm with a test, or put a number on.

### ii). It's not your fault you have migraine

Migraine runs in families, and a strong genetic link drives a susceptibility to migraine. This susceptibility interacts with factors inside and outside of the body leading to the migraine attack and its associated problems.

### iii). You are not alone

In the UK 14% of people have migraine, twice as common in females than males. It can occur at any age (11% of school age children have migraine) but is most common between 25-55 years.

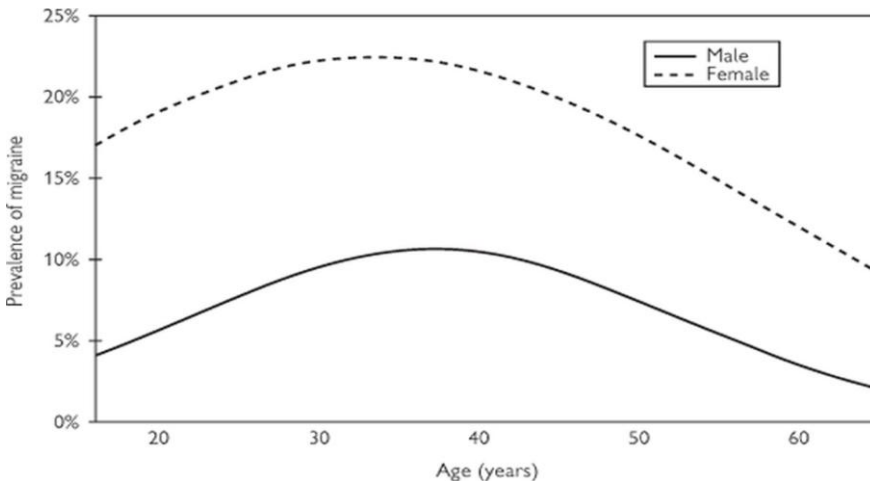


Figure 1. The percentage of the population who have migraine in England with age.

## 2). Are you on the right bus?

Migraine is classified as:

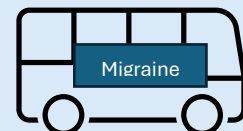
*Episodic* - distinct migraine attacks with pain free intervals

or

If a first degree relative has migraine, the chances of you having migraine are over 70%.

Migraine is number 6 in the world in terms of disability and number 2 in women under 55.

You need to make sure you are on the right bus?



Migraine is problematic headache typically lasting between 4-72 hours and associated with increased sensitivity – nausea, light, sound, movement, touch

*Chronic or persistent* – Headache on more than 15 days of the month of which at least eight days are migraine or migraine like.

Over time, episodic migraine can become more frequent transforming into chronic (more persistent) migraine. Often other types of headaches can also develop. For example, a dull background headache (often called a tension type headache) or a sharp stabbing headache. It is best to think of all of this as part of a migraine spectrum. Headache caused by overuse of medication can also add to the mix.

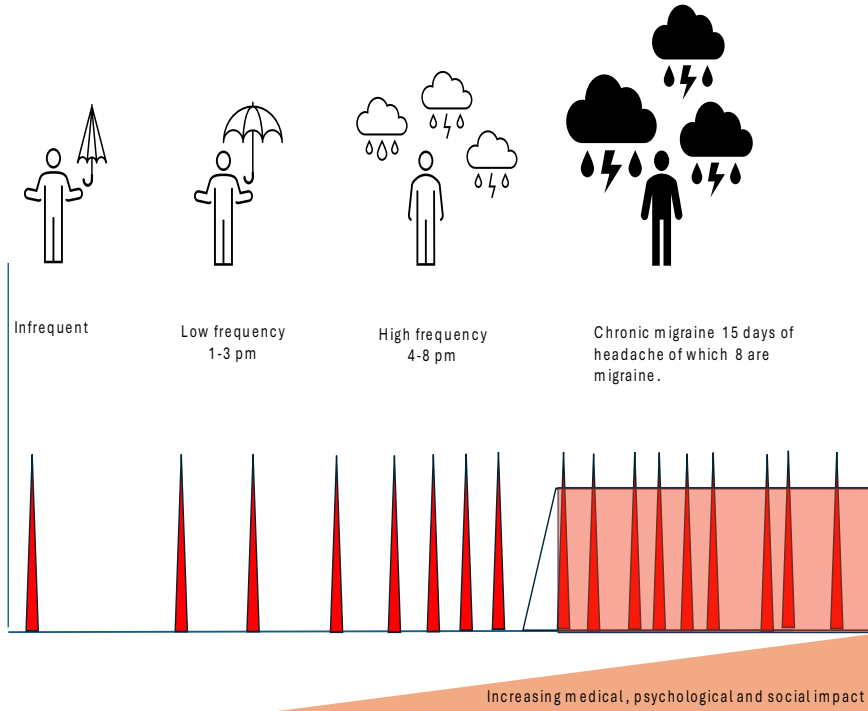
For people with occasional episodic migraine, simple medical treatments and lifestyle approaches may be sufficient. However, as migraine becomes more frequent, the focus shifts from a simple physical fix to an approach that includes a broader holistic framework that seeks to integrate a body that has become out of harmony.

are the most common symptoms.

See Handbook section 2.1 to make sure you are on the right bus.

10% of people with migraine have chronic migraine where there is headache on more than half the days of the month.

This is invariably complicated by headache from taking too many painkillers known as medication overuse headache.



Migraine is associated with other medical conditions that particularly as it becomes more common. You need to seek help from your GP if they are problematic






**Figure 1.4. With increasing frequency of attacks (red spikes), migraine can transform into chronic or persistent background headache (red shading) on top of underlying migraine, together with more medical, psychological and social problems. Medication overuse headache can also occur.**

- Mental health problems, especially anxiety and depression.
- All bowel disease and in particular irritable bowel syndrome
- Fibromyalgia
- Asthma
- Epilepsy
- Restless leg syndrome
- Poor sleep
- Vertigo or dizziness
- Lax or mobile joints
- Vascular disease
- Neurodiversity

See Handbook section 12.

### 3). What is causing my migraine?

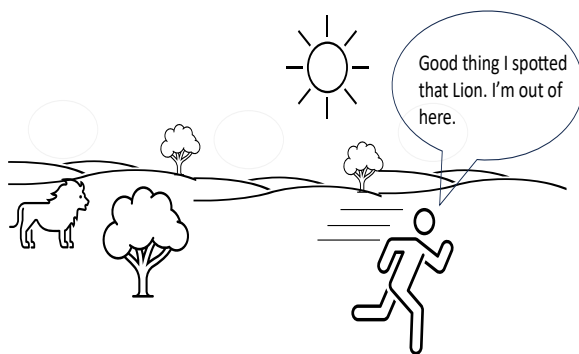
A useful framework to understand what is going on is to look at 3 factors: predisposing factors; precipitating factors; perpetuating factors.

Factor	Input	Mediated by
Predisposing factor	 Family predisposition	 Genetics
Precipitating factors		Specific triggers. Sensory overload. Changes in internal and external environment.
Perpetuating Factors	<ul style="list-style-type: none"> <li>Physical, social and psychological stressors. Unprocessed emotions. Our "stress bucket." </li> <li>Problems with energy production </li> </ul>	Mediated by chronic inflammation.  Low levels of fuel for the brain

#### i). Predisposing factors

People with migraine are disposed to two problems that are largely genetically determined. It's not your fault you have migraine. There are two problems:

##### a). A hypervigilant and hypersensitive brain.



In the environment where our brains evolved. It would be an advantage to have a sensitive brain.

But now:

Humans evolving on the plains of Africa 100,000s of years ago. Big wide skies, gentle outlines.



A cacophony of shapes, smells, sounds and demands on our attention.

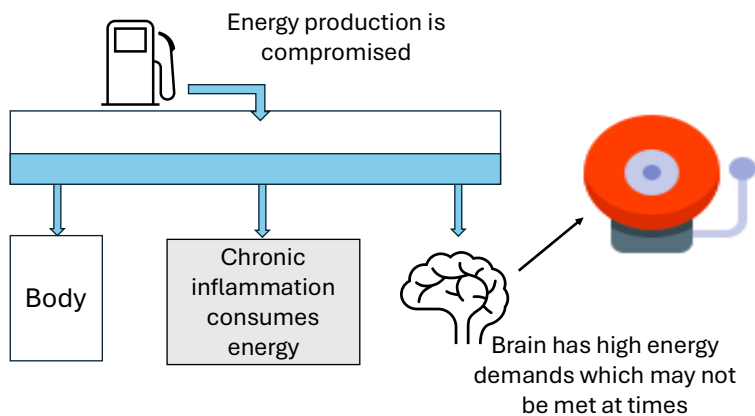
“Must just check my Facebook feed.”



Same brain, different unfavourable environment. If there is too much overload the brain shuts down.

**b). Problems producing energy in the brain**

People with migraine may not produce or store energy in the brain as efficiently which can increase the sensitivity to migraine attacks.



THE ENERGY PRODUCTION PROBLEM

**ii). Precipitating factors**

Although specific things like certain foods or chemicals can trigger migraine, much more common is when things change. E.g. hormones, stress levels, hydration, glucose levels, weather, sleep patterns. This adds additional stress and energy demands on the brain.

If a trigger is not obvious, don't waste time looking for one.

You may notice a stressful working week, but your migraine kicks in at the weekend? Or when you go on holiday?

### iii). Perpetuating factors – the problem of chronic inflammation

Why can migraine build up in frequency and become so persistent? A wide array of stressors can cause a build-up of persistent and unhelpful inflammation in the body which sensitises the migraine mechanism and consumes energy unnecessarily.

Stressors can include:

- Physical problems such as ill health, lack of exercise, poor diet, overweight. Migraine itself is a stressor.
- Psychological problems such as anxiety, depression, traumatic life events.
- Social challenges such as bereavement, rejection, work pressures, bullying, poor social circumstances, discrimination.

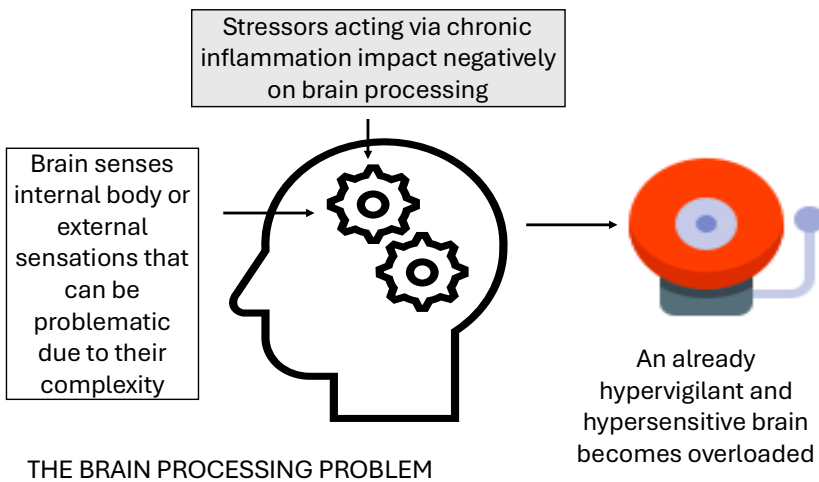
The effects of these inflammatory responses are felt not just in the brain but across the whole body – “The body keeps the score.”

Inflammation evolved to fight off a physical threat and repair any damaged tissue. Unfortunately, the response is activated with a wide range of other stressors or challenges.

Chronic inflammation consists of three elements:

1. Activation of nervous pathways.
2. Activation of hormone pathways.
3. Activation of complex cell and biochemical pathways – the cytokine system

See Handbook section 4C for further details.



See Handbook section 2.

See section 5C below to see how these factors can combine on the pathway to chronic migraine.

## 4). Understanding the migraine attack

### i). Types of migraine

As we have seen migraine can be episodic or chronic (or persistent) but it can also occur with or without aura.

**a). Episodic or chronic (persistent)**

*Episodic migraine* is headache on less than 15 days a month of which some are migraine. There are pain free intervals between attacks. The most common migraine frequency is 2-3 a month.

*Chronic migraine* is headache on 15 days of the month or more of which at least 8 days are migraine or migraine like. Here, chronic refers to being persistent and may or may not be severe. Often other types of headaches are common such as stabbing headache or the duller pain of tension type Other physical and mental health problems are common as is medication overuse headache. It is important to address these associated problems.

Approximately 10% of people with migraine will have chronic migraine.

**and**

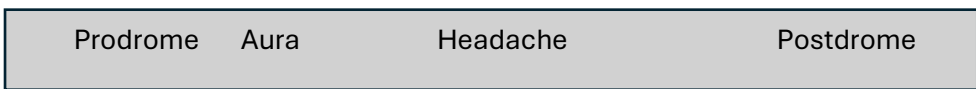
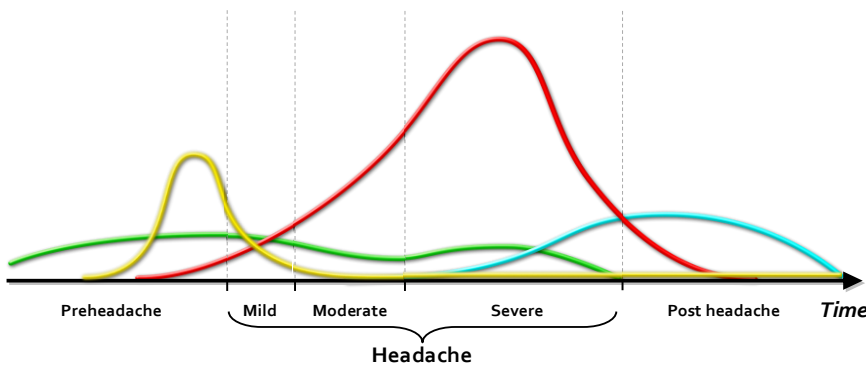
**b). Migraine with or without aura**

An aura is a passing neurological sensation caused by a wave of electricity travelling at approximately 3-6 mm per minute across the surface of the brain. It occurs in up to 30% of people with migraine.

Migraine with or without aura may fluctuate during a lifetime as can the type of aura. Auras are usually of one type but can be mixed with more than one type experienced.

**ii). The stages of a migraine attack.**

Four stages can be recognised. Not all phases will be experienced during every attack or some not at all.



Symptoms can be bothersome in between attacks. The brain is still not functioning quite normally. Problems can include brain fog, memory problems, word finding difficulties, dizziness and sensory sensitivities.

**iii). What's going on inside the brain during an attack?**

Five areas of the brain are implicated in the migraine process. However, how these processes interact to cause the migraine phenomenon is poorly understood.

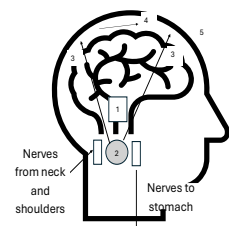
The most common aura is a visual sensation. A wide range of other sensations can occur which can include pins and needles, muscle weakness, difficulties with speech.

1. *Preheadache or the prodrome.* This is a warning sign and consists of non-specific features such as yawning, lethargy, mood change, restlessness, food cravings, thirst etc. Often prodrome features can be mistaken for triggers.

2. *The aura.* Experienced by 30% of people. Usually 30-60 minutes. Visual auras are most common. (See Handbook Table 2.2).

3. *The headache phase.* Often pulsatile in nature. Most commonly on one side of the head but can be on both sides or radiate into the face or neck.

4. *The post headache or postdrome.* Often lethargy and lack of energy but can include high levels of energy or elation.



See Handbook section 2.

### *Migraine and neck pain*

Over 80% of people with migraine experience neck or upper shoulder pain. This is due to the nerves of the ligaments and muscles of the neck and upper shoulder ending in the same area of the brain as the migraine generator.

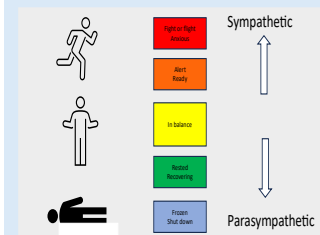
### *Migraine and the stomach.*

The nerves that control the stomach originate in the brain close to the migraine generator. When this is triggered, these nerves are activated causing nausea or vomiting. This has an important implication for treatment, as drugs taken by mouth may not be absorbed well.

### iv). Does my migraine need investigating?

Migraine rarely needs investigation. It is very rare for something serious to be behind your migraine and particularly if you have had it for some time. A major problem with brain imaging is that can show up incidental abnormalities that will cause no harm but can cause significant anxieties. Best not to go into your brain unless there is a good clinical reason for doing so.

Handbook section 4A gives more detail about the brain and in particular the autonomic nervous system.



The autonomic nervous system is important in migraine and its management

## PART II. MOVING FORWARD TO TAKE CONTROL

We can now think about managing your migraine holistically. But what do we mean by holistic?

### 1) Introduction

#### i). What is a Holistic approach?

The word Holistic can mean different things to different people. The first step is to look to the Greek origin of the word “Holos” which means “whole” and finds a derivation in the words “healing” and “health”. From the perspective of this handbook:

*Holistic theory.* This takes as its starting point the idea that everything is interconnected to everything else i.e. *one integrated whole*. Holistic theory takes its inspiration from Eastern philosophies (predominately Indian and Chinese). Here things are viewed as networks and there is a shift to an appreciation of the patterns that emerge from their interaction and the harmony between them.

*Holistic practice.* This reflects a range of overlapping practises and tools which are built upon holistic theory, focusing on the interplay between thoughts, emotions, body awareness and connection with the external world. *Healing* is seen as a reflection of the body’s intrinsic ability to help itself. This contrasts with medical practice that offers external interventions

See Handbook section 3 for a more expansive explanation of Holistic practice and 4B to explore the suggestion that the mind and body are best viewed as one complex system. This is confirmed scientifically with the finding that all organs are communicating with each other using complex mechanisms as well as with the brain.

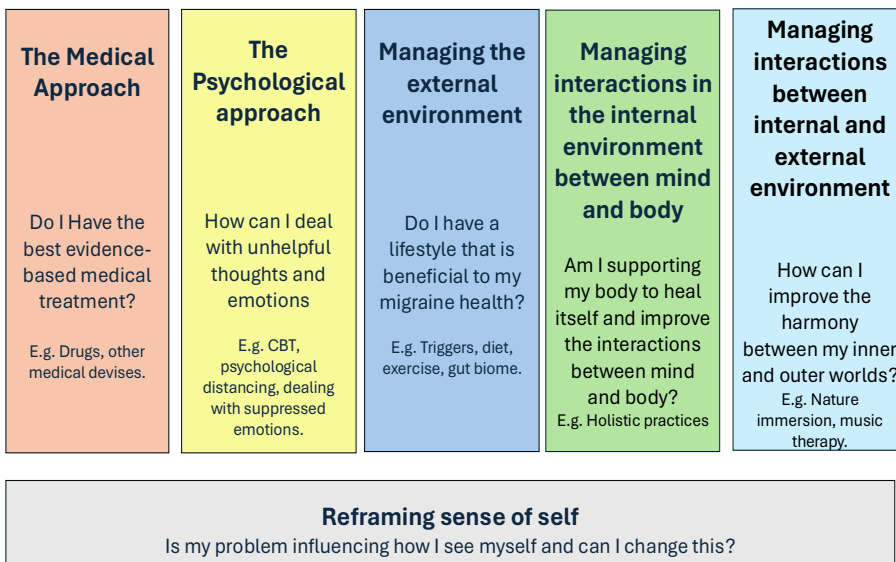
such as drugs. Holistic practices aim to facilitate interconnectedness and harmony both within us and between our inner and outer worlds.

*A Holistic approach.* This takes a different meaning and is viewed as a range of complementary ways of approaching a problem derived from different disciplines including holistic practices, lifestyle and medical management. The handbook takes a Holistic approach.

## ii). The Holistic approach of the Handbook

The five pillars of the holistic approach described in the handbook are shown below. They are underpinned by a foundation based on a more appropriate sense of how you see yourself or your “sense of self.” This can often change with migraine in ways that are not always helpful.

Some holistic practices may resonate with you more than others. Take what feels right for you and leave what doesn’t.

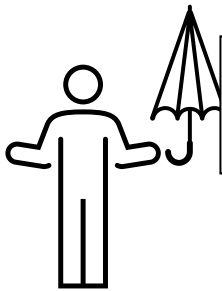


**The five pillars of a holistic approach underpinned by a solid foundation.**

## 2). Starting the journey

### i). The migraine landscape

Four landscapes can be recognised in a migraine journey. Where are you?



**In control.** I'm using effective relief or preventative medication. "It's a bit of a nuisance but doesn't impact on my life. I'm ready for it when it comes"



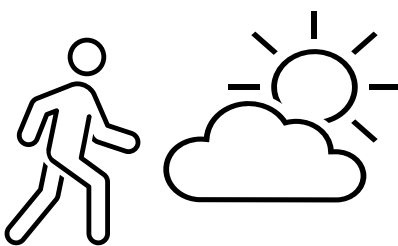
**Denial.** "My migraine is bothering me, but everyone gets a headache. It's not life threatening and it will pass. My doctor didn't take me seriously when I mentioned it last time."



**Anger.** "Why me. I've done nothing to deserve this."

**Guilt.** "It's all my fault. I'm always letting others down."

**Depression and withdrawal.** "It's difficult to keep going. It's a real struggle to manage. I feel so worthless"



**Reconstruction.** "It's time to move on. I need to do everything I can to help myself."

**Acceptance.** "There may still be challenges I have to face but I will accept them for what they are and treat myself with kindness."

No one is stopping you from taking a new journey and rewriting your story. This handbook will help you take the first steps. You do have a choice.

### ii). Taking the first steps. Journaling or keeping a reflective diary

You may find it helpful to map out where you are and keep a record of your journey. Journaling is different from keeping a diary which is a factual record of events that take place. It encourages you to write more freely, reflecting

See Handbook section 5.1.



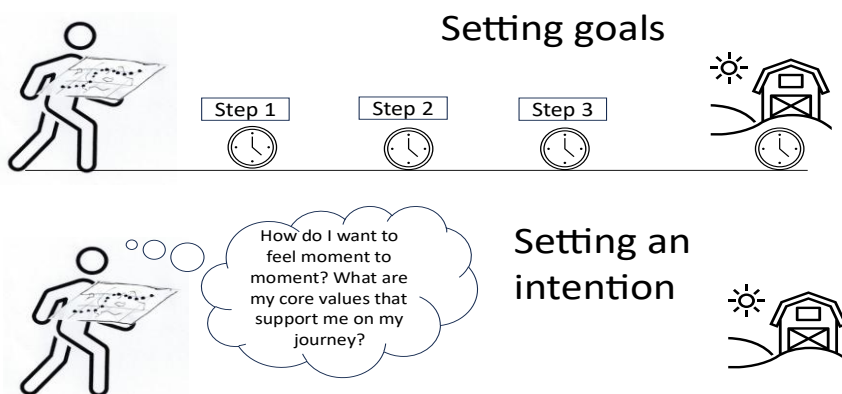
on how you feel about things and your emotions related to them helping to clear unprocessed thoughts and emotions.

See Handbook section 5.2.

### iii). Setting an intention

Our next step is to focus on where we are and how we want to start moving forward. The traditional approach is based on setting specific goals, measurable targets you aim to achieve and focus on. They usually come within a structured plan and timeline. For example, “I want to reduce the number of migraines I have each month by 50% at the end of six months.” There is nothing wrong with keeping goals, but you can be setting yourself up to fail.

Setting an intention entails creating an environment for how you want to be or feel from moment to moment, your underlying values that direct your behaviour and the kind of person you aspire to be. They're more about how you are on the journey and how you want to approach it, in the present rather than a specific future outcome in the future. It shifts the focus from the destination to the journey itself.



#### Setting goals and setting an intention.

Its important not to rush things. New practices need to be integrated before moving on.

## 3). The Medical Management of Migraine.

Interventions are either directed at the migraine attack once it has started or preventative medications that are taken on a regular basis that aim to stop the migraine attacks from occurring.

The handbook is not intended as a substitute for the comprehensive ‘product information’ leaflet found inside all boxes of medication. The ‘product information’ leaflet should always be read before taking medication. For prescribed drugs, your doctor will discuss the risks and benefits of the medication as it relates to you and answer any further questions you may



have. If you are pregnant, planning a pregnancy or on other medication, seek further qualified advice.

## i). Treatment of the migraine attack (Relievers)

### **Nerve stimulator devices**

These devices can all be used for the migraine attack and some can also be used on a regular basis to prevent migraine attacks. The evidence to support them is not as rigorous as drugs and they need to be purchased privately in the UK.

### **Anti sickness medication**

Nausea will hold up drugs in the stomach and prevent absorption into the blood stream. Always use an anti-sickness medication if nausea is present. Metoclopramide 10 mg or Prochlorperazine 5mg are the main prescribable drugs used.

### **Simple pain killers/anti-inflammatory medications**

A useful first step is paracetamol 1500mg (as a pain killer) with aspirin 900mg (as an anti-inflammatory). Higher doses help quick action but don't take more than the daily recommendation of tablets. Soluble preparations work better and can be absorbed quicker with a fizzy drink. (Many people find Coca-Cola useful). This can be a useful option prior to taking a Triptan (see below) if you are unsure how a migraine will develop. Ibuprofen 400–600mg or Naproxen 250-500mg are useful alternatives to aspirin.

### **Triptans. Migraine specific medications**

Triptans have revolutionised the management of the migraine attack. People will vary in their response and tolerability to Triptans. If you fail to respond, there is a >70% chance that an alternative triptan will be successful.

Triptans are available in the UK. in injectable, nasal or oral formulations which can be useful if vomiting is a problem when little if any medication taken by mouth will be absorbed. Sumatriptan 50 mg can be bought direct from the pharmacist.

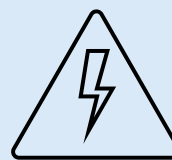
### **Gepants. Migraine specific medications**

A recently developed group of drugs used for both the attack and prevention block the action of a nerve transmission molecule that is important in migraine. (CGRP.) We will meet these drugs again in the next section.

Rimegepant 75mg is available on NHS prescription if two Triptans have failed. Gepants have similar effectiveness and are better tolerated than Triptans with fewer side effects.

## ii). Prevention of the migraine attack (Preventers).

Preventive medications are medications taken regularly and can reduce the frequency, duration or severity of migraine attacks. There are no rules as to when they should be started, but relevant factors are:



See Handbook section 6 for more details.

Prochlorperazine is available without a prescription. as a 3mg formulation that dissolves in the mouth – “Buccastem”).

Available triptans in the UK are: Sumatriptan, Rizatriptan, Zolmitriptan, Eletriptan, Almotriptan. Naratriptan and Frovatriptan may not be so effective but last longer and may have fewer side effects.

Tablets and melts that dissolve in the mouth are for convenience only and do not act quicker.

- Impact upon disability and headache-related quality of life.
- Overuse of relief medication, particularly where there is potential for medication overuse headache.
- Attitude towards taking medication on a regular basis.

See Handbook section 6.3.

### **Natural preventative therapies**

They are not available on prescription and need to be bought privately. Most recognised health shops would sell them. The evidence to support them is variable and not as strong as drugs and they can be expensive. Magnesium, Co enzyme Q10 and vitamin B2 have some evidence of support. They may work by facilitating energy production in cells.

### **Pharmaceutical drugs for prevention**

These drugs are available on prescription only. Except for CGRP pathway blockers, preventive drugs have been discovered when people have taken them for other reasons and found that their migraine has improved. They are:

*Beta-Blockers.* E.g. Propranolol. Useful if there is co-existing anxiety. Not for use if you have asthma.

*Amitriptyline.* Originally introduced as an antidepressant, it has a direct effect on migraine and is not used for its antidepressant effects. It can be useful if there is co-existent anxiety, poor sleep or depression. Nortriptyline can be used if side effects are problematic.

*Pizotifen.* Limited effectiveness and troublesome weight gain. Useful in children.

*Anticonvulsants.* Topiramate has most evidence of benefit but avoid if you are a woman of childbearing age. Side effects can be problematic.

*Angiotensin II receptor antagonists.* E.g. Candesartan. Used in the treatment of blood pressure but blood pressure drop as a side effect less likely to be a problem if your pressure is normal.

*Botox.* Licensed for chronic migraine only where three standard preventers have failed or not been tolerated. Given 3 monthly. Relatively few side effects.

*Flunarizine.* Doesn't have a UK license but is in widespread use in Europe and used by headache specialists. Useful in hemiplegic migraine.

### *Calcium gene-related peptide (CGRP) blockers*

This group of drugs are the first specifically designed for migraine prevention. Two groups of drugs have been developed

i). CGRP monoclonal antibodies (Injection)

Always read the product information in the boxes of your medication.

- Currently available in the NHS when three previous preventive medications have failed.
  - Prescribed in specialist care only.
  - When there are four or more migraine days a month.
  - Low side effect profile includes inflammation at injection site, constipation and potential increase in blood pressure.
  - Cannot be taken by mouth. Injection and infusion only.
- ii). Gepants.
- Taken by mouth.
  - Currently available in the NHS when three previous preventive medications have failed
  - GPs can prescribe in many areas of the UK but in some they remain specialist initiated. Check your local NHS formulary guidance as there is variation across the NHS.
  - Available on the NHS when there are four or more migraine days a month.
  - Effective for migraine attacks and for prevention
  - Low side effect profile

<b>Monoclonal antibody</b>	<b>Dose</b>	<b>Current UK license</b>
Erenumab (Aimovig)	140 mg monthly self-injection	Episodic and chronic migraine
Fremanezumab (Ajovy)	225 mg monthly or 675 mg three-monthly self-injection	Episodic and chronic migraine
Galcanezumab (Emgality)	120-240 mg monthly self-injection	Episodic and chronic migraine
Epinezumab	Intravenous infusion	Episodic and chronic migraine
<b>Gepant</b>		
Rimegepant (Vydura)	75mg every other day by mouth	Migraine attack and episodic migraine prevention
Atogepant (Qulipta)	60 mg daily by mouth	Prevention of episodic and chronic migraine

### **Anti CGRP drugs**

## Other preventative options

### *Occipital nerve injection.*

Local anaesthetic is infiltrated into the nerves in the back of the neck. Steroids are often added. Relief can be up to three months. Can be useful in pregnancy.

### *Acupuncture.*

Although recommended for migraine by NICE, it is unlikely to be available on the NHS, although some centres do offer a limited course. Judge effect of benefit after 6-8 weeks.

### *Visual Stress and coloured lenses.*

Visual stress (Irlen's syndrome) is a processing and visual perceptual disorder associated with several problems of which migraine is the most common. Formal colorimetric assessment and the prescription of appropriate tinted lenses can help some people. Only a few opticians will have the facility to perform this test.

Symptoms of visual stress include: screwing up of eyes with visual tasks; blurred vision; print jumbling, vibrating, moving or merging; pain around the eyes; light sensitivity especially to glare, white pages or screens; problems with car headlights at night.

## 4). Psychological approaches - dealing with unhelpful thoughts and emotions

### i). Breaking the chain of unhelpful emotional patterns.

Emotions are patterns of behaviour and internal body responses that have evolved to protect us and promote social behaviour. All emotions are helpful but they are designed to be transient – do their job and then return to normal. Unfortunately, emotions can get attached to our thoughts like a dog with a bone perpetuating an unhelpful vicious cycle that it can be hard to break. Do you recognise it?

See Handbook section 7

There are two ways to address this:

#### **a). Cognitive Behavioural Therapy (CBT)**

CBT looks at four parts that constantly influence each other:

- Thoughts – your inner conversations.
- Emotions - E.g. fear, frustration, or anxiety.
- Body reactions – muscle tension, heart rate, nausea, fatigue, pain.
- Behaviours – what you do to avoid anticipated negative consequences.

All these parts are interacting, and CBT encourages us to understand how our thoughts, emotions, body responses, and behaviours affect each other. For example, what we think about a situation can change how our body

reacts and what we do next. CBT helps us to notice unhelpful thought patterns and habits that can make migraine worse or harder to cope with and replace them with more helpful ones.

Section 7 of the Handbook gives examples of how this might help you.

### b). Mindfulness approaches.

Derived from eastern meditative practises, mindfulness takes a very different approach. It encourages us to be the neutral observers of our thoughts and emotions without judging them and without allowing ourselves to get caught up in the chains. This approach is has become widespread in many areas of medical practise.

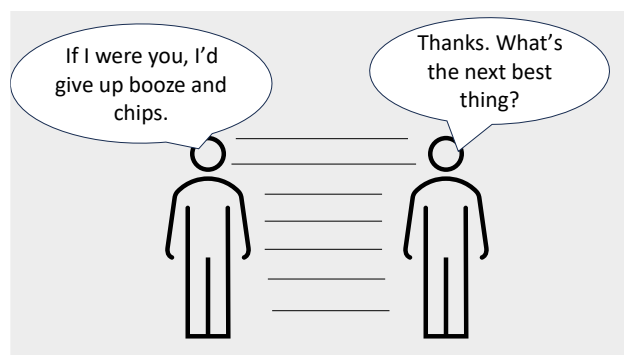
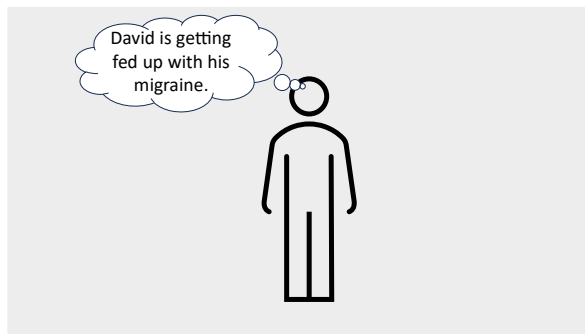
#### ii). Self talk and psychological distancing

Self-talk and psychological distancing, are approaches that seek to create space between yourself and your thoughts and emotions. It aims to give you a more balanced perspective, regulate your emotions and make more rational decisions.

It can be a useful tool for thinking clearly, managing emotions, and working through problems, helping to structure ideas and meaning and enhancing clarity of thought.

There are a number of approaches you might like to think about.

For example:

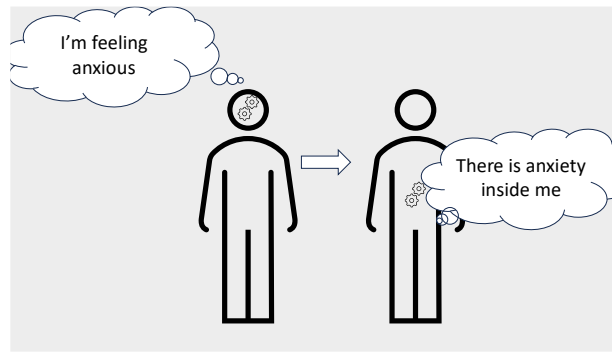


See Handbook section 9.

Will be discussed further below.

Talk to yourself in terms of an outside observer using the third person. For example, instead of saying "my migraine makes me feel so distressed" say "David's migraine is making him feel distressed but he is taking steps to address it." You could also think of journaling in this way.

Think what advice you would give to a friend facing the same problem.



Language distancing. Instead of saying “I am anxious” say “I am experiencing anxiety” or “there is anxiety in me.” Label your thoughts and emotions but don't engage or associate with them.

Some questions you might like to ask yourself to help decide if you need to move forward in this area are:

- Are any previous traumatic events harming me by manifesting in other areas. For example, drugs, alcohol, self-abuse?
- Are any previous traumatic events impacting upon others around me? For example, relationship problems.
- Is my migraine trying to tell me something?
- Do I feel at peace with myself?

### iii). The impact of suppressed emotional trauma

Many of us will experience traumatic experiences in our lifetime and these and the emotions attached to them can lay suppressed beneath the level of our consciousness. What remains in the dark will invariably shape your life and your sense of self as it expresses itself in other areas.

This unprocessed activity also consumes energy and induces chronic inflammation, both of which will exacerbate migraine. Childhood traumatic events are particularly problematic as the brain is in a vulnerable state during this phase of rapid development.

You are certainly not alone if you have experienced a traumatic event. Almost 50% of the population have experienced a significant childhood adverse event and most of us will be holding some trauma.

This is a challenging area and dealt with in more detail in the handbook.

## 5). Managing a favourable external environment

A wide range of environmental factors both within and outside of the body that impact upon migraine. These factors interact in a complex manner so it can be difficult to unpack what is relevant.

We have seen that a chronic inflammatory load can be unhelpful. Many lifestyle factors can help to address this.

### i). Keep things as constant as you can

An important starting point is that people with migraine do not respond well to changes in their environment, either internal or external. Some of these factors can be addressed, others may be outside your control. Common factors are hormonal change in females, changes in the weather, irregular eating or drinking patterns and particularly skipping a meal, irregular sleep

patterns or poor sleep, erratic stress levels, (weekend and holiday headache when stress levels are suddenly reduced). It is important to keep things as constant as you can.

## ii). Migraine triggers

How triggers work is poorly understood but they are thought to act directly on the migraine pathway in the brain. Many people spend a lifetime in the search for an elusive trigger. As triggers interact with each other, environmental factors and our current body state, their action is usually inconsistent. ***If a trigger is not obvious it is not worth consuming time identifying one.***

Food allergies act via a different mechanism. An allergic reaction is a consistent occurrence and mediated by specific allergic pathways. The role of allergy in migraine is not supported by evidence and allergy testing is not recommended.

## iii). Migraine and the diet

There are three areas to be considered. Firstly, diets that are beneficial for overall health either directly or on their effect on chronic inflammation. Secondly, diets that are claimed to reduce migraine attacks. Thirdly, diets that improve the bacteria that live in our gut.

### Eating a healthy diet.

A healthy diet reduces the chances of many diseases and in particular cardiovascular disease and diabetes. These can be more common in people with migraine. Weight has an important role to play, mediating inflammatory load.

Ultra processed foods stimulate inflammation.

It is important to keep well hydrated. A sensible intake is at least 6-8 glasses a day. The average male will require 1.5-1.8 litres a day and the average female 1.3-1.4 litres. For migraineurs, the important thing is to drink regularly throughout the day to avoid fluctuations in hydration.

Sports drinks are only of benefit to high performance situations. Avoid energy drinks – they contain stimulants. Avoid excess caffeine and drinks containing artificial colouring. There is nothing wrong with tap water!

### Migraine diets

Several migraine diets have been suggested but the evidence for benefit is poor.

### The Gut Biome

We are not alone. We co-habit with trillions of microbes and the ones that have gained increasing attention over the past few years are the residents of our gut – the gut microbiome. Rather than being passive recipients of our

Often, premonitory or warning symptoms of migraine such as craving for a specific food, may be mistaken for a trigger.

Food might be considered a trigger if headache occurred in  $\geq 50\%$  of instances within one day of exposure. A dietary diary can be useful



Diets high in Omega 3 and low in Omega 6 show the most promise. Fatty fish such as mackerel, sardines, and salmon are good sources of O3. See handbook section 9.3.

hospitality, they form an important part of our immune system and produce compounds that influence how the brain works.

Probiotics are microbes that can help to improve the biome and are marketed under several guises. It is claimed that they can help boost resilience to stress, improve mental health and cognitive decline. They remain unregulated and rigorous evidence is awaited.

Prebiotics are food that is beneficial for bacterial growth. They include complex sugars that are contained in dietary fibre and polyphenols, natural chemicals that occur in a wide range of foods. Yoghurts, kefir, kombucha, kimchi, vegetables, nuts, berries, omega 3 fats from oily fish and particularly coloured fruit and vegetables are important sources.

#### iv). Exercise and migraine

Exercise benefits migraine and has a powerful effect on inflammatory pathways, improves cardiovascular health and has been shown to improve mental health.

During an attack, exercise will make things worse and should be avoided. Rarely, exercise can trigger an attack, and this situation may need further investigation although it is unusual to find any serious problem.

#### v). Sleep and migraine

Not sleeping well is not helpful for migraine control.

The relationship between sleep and migraine is complex:

- Sleepiness can be part of a migraine attack.
- Sleep can relieve a migraine attack.
- Disturbed sleep can cause migraine.
- Irregular sleep patterns make migraine more likely. It is important to keep sleep patterns constant.

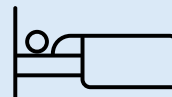
Mental health and physical problems which can affect sleep are more common in migraine. For example, anxiety, depression, restless leg syndrome, sleep apnoea.

## 6). Managing a favourable internal environment – facilitating mind- body interaction.

Medical practice infers that we take a passive position. “Take these drugs to help you.” Mind-body techniques or holistic practices ask us to take an active role in our healing. They seek to better understand the influences of our internal life and regulate it ourselves.



This is an important area and dealt with in detail in the Handbook section 8.8.



A wide range of practises have been drawn from Eastern (Indian and Chinese) approaches that have been practised for thousands of years. Many have found a way into mainstream medical practice and have or are developing an emerging evidence base to support them.

Their introduction into Western medicine and the “well-being” movement has focused on the use of holistic practices to quieten the mind, shift to a more parasympathetic (restive) mode of the nervous system, and change how the brain processes information. An important starting point is to view mind, brain and body as one system that needs to be in balance.

The handbook focusses on five exercises: therapeutic breathing; mindfulness practice; body awareness techniques; guided imagery; and emotional freedom technique. They are accompanied by a range of audio exercises you may like to try.

Here, I have simplified the theory and practice right down, which may be all you need. You may find these concepts challenging but they are becoming increasingly influential and can be very supportive as we keep up with the tread mill of modern life.

### *An important starting point to understand holistic practices*

Different holistic practices work through a number of different mechanisms (See Appendix A7). Here I want to focus on a key element often known as a state of mindfulness or “Presence”

An important starting point is to ask: are you aware of your thoughts and emotions that are continually buzzing around in your mind as you ruminate about the past and plan for the future? The key question is, if you are aware of this process, then who is the witness of this?

Our thoughts and emotions are the main component of our Ego, our sense of who we are. The Ego needs to identify with external things and always wants more - consumption, material possessions, status, bucket lists. We do need a degree of Ego to survive and thrive, but invariably our Egoic mind takes over and becomes excessive and unhelpful. Emotions, designed to direct short term action can become inappropriately attached to our thoughts like a dog with a bone. Notice how the Egoic mind labels your experiences as good or bad continually sitting in judgment, invariably creating more pain and unhappiness.

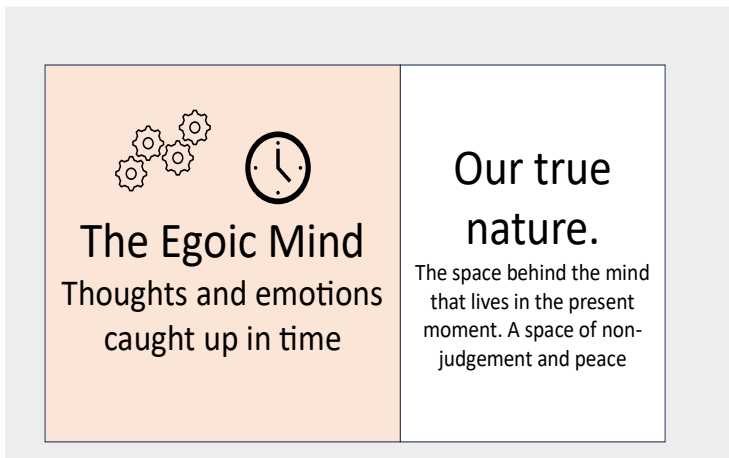
The suggestion is that the Ego is not the true you. Your authentic self or true nature arises from a space of awareness behind the mind, the witness of this Egoic activity. A place of stillness and peace. This space of awareness is known as a state of “Presence.” Literally pre sense or before making sense. That is, here we take in information and rather clamping down on it, attaching a train of implications to it, judging it and labelling it good or bad, we just accept it as it is.

An important concept is how we see the nature of time. The Egoic mind is always caught up in time, either looking back to the past or anticipating the future. In a state of presence, time is suspended and the focus is on the present moment. Ultimately, the present moment is all we have to hold onto.

These holistic practices are described in more detail in the Handbook section 9.

Holistic practices encourage us to be more attentive to this silent watcher that occupies a place of peace without judgement. By being more aware of this space we can quieten the Egoic mind.

These suggestions may be new and challenging to you. Beware of your Egoic mind mounting a strong defence. Go with how your body feels.



Our Egoic mind is not our true nature.

*A simple holistic practice. "The Exeter Integrative Practice."*

I have tried to put together a simple exercise that integrates the main components of the holistic practices described in the handbook. It may be better to do a small "micro practice" regularly than a longer holistic practice infrequently.

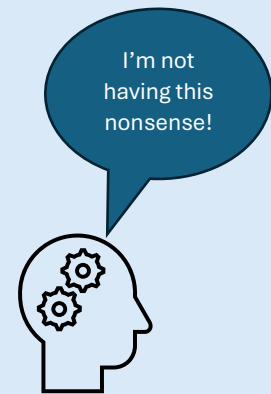
The practice combines elements of breathing, visualisation, mindfulness, tapping and self-compassion. (See section 8 below for more about self-compassion). If you only want to choose one holistic practice to focus on, this might be for you.

This is a simple five stage practice of preparation, simple breathing, mindfulness, visualisation and affirmation/self-compassion that can be applied quite generally across different applications. It may give you a better understanding of what is going on if you read the full holistic practice section first in section 9 of the handbook.

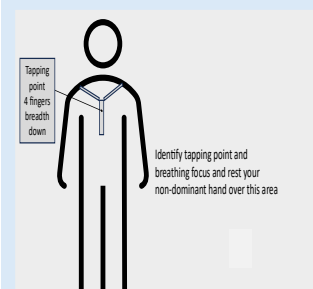
You can encourage a favourable state (for example improving confidence or encouraging a more peaceful state) or reduce the impact of an unfavourable state. (For example, dealing with unhelpful emotions, or helping during a migraine.) It is not a rigid prescription. Follow your intuition where it feels right to do so. At the end of this section there is an audio you may find useful.

### 1. Preparation.

Find a quiet position where you feel comfortable. Decide what you want to focus on. For example, perhaps you want to develop more confidence in dealing with a migraine attack, or reduce your general level of anxiety. Then identify a breathing focus/ tapping point in the middle of your breast bone above your heart space. Place your non-dominant hand over this space.



### 1. Preparation.



## 2. Establishing a regular breathing rhythm.

Breathe in and out equally to a count of four for each in breath and out breath. If you can, think of the breath rising from the bottom of your chest upwards as you breathe in (belly to chest) and let it go in one long movement when you breathe out using the natural recoil of your chest. Visualise that you are breathing into the heart space beneath your hand.

When you are ready, stop counting and just focus on the breathing you have established. Try and breath through your nose but don't worry if you cannot. Think of your breathing as in a circular motion as shown in the diagram opposite.

## 3. Ground yourself in the present moment

At the top of the in breath say "I am" and at the bottom of the out breath say "here now." If you can't say this out aloud or if it feels better to do so, say to yourself "I am" during your in breath and during the out breath say to yourself "here now." Feel these statements soaking into every part of your body.

If any thoughts come into your mind, just notice them, acknowledge without judging them, but don't follow them. Just bring yourself back to your anchor of the breathing

When you have established a peaceful rhythm and feel it is time, move onto the next step.

## 4. Visualisation

Connect and ground your decided focus using visualisation. For example, if you want to focus on confirming a value of self-kindness, imagine breathing in kindness to the area below your hand on your chest and as you breath out, breath it into every area of your body. Feel it percolated into every cell. Conversely, if you want to deal with a negative emotion or issue, breath it in from where you feel it in your body to the space beneath your hand and then breathe it away on the out breath. When you have established this and it feels right to do so move on to the next step of affirmation and consolidated with tapping.

## 5. Affirmation and consolidation of your focus with self-compassion

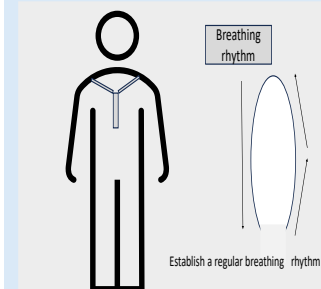
Let go of your visualisation and leaving your hand where it is, tap with as many fingers as you feel comfortable with and at a rate that is right for you. As you do so continue with you breathing rhythm and say out aloud if you can (otherwise to yourself) your affirmation statement. You don't need to co-ordinate this with your breathing, just continue with the rhythm you have established.

Start with your affirmation satatement in the form "I choose to...." And end with your self compassion statement, "... as I deeply love, honour and respect myself."

For example, "I choose to go forward with less anxiety as I deeply love, honour and respect myself" or "I choose to be at peace....", or "I choose to be more calm and relaxed....." etc.

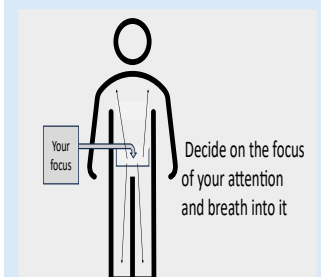
Audio Holistic practice. The Exeter IntegrativePractice.

## 2. Establishing a regular breathing rhythm.



## 3. Ground yourself in the present moment.

## 4. Visualisation



## 5. Affirmation and consolidation of your focus with self-compassion





Here I take you through a practice to ground your values based on integrating a number of practices we have already met. (6 Minutes)

<https://youtu.be/GC1VBzHIDu8>

## 7). Managing favourable interactions between internal and external environments. Looking beyond the body.

This approach sees the complex network of brain/body/environment as a living system in its own right. We are not separate from nature. We do not function as solitary units but in relationship with our external environment to which we are coupled, as we take in sensations and act upon the world. This approach finds expression in several Eastern traditions such as Hinduism and Daoism.

What does this mean from the perspective of better migraine control? The suggestion is that a better harmony with our environment helps to quieten the mind. From a theoretical perspective, the alignment facilitates information flow and enhances our ability to predict what we need to do to achieve our objectives in the world.

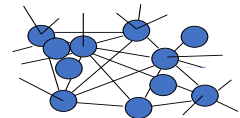
### i). Nature emersion

Evidence suggests that being amongst nature reduces negative emotions, can reduce stress, alleviate pain and restore a sense of well-being.

Heart rate and blood pressure fall, stress hormones decrease, and we are calmer and clearer minded. One study found that when patients can see trees and greenery from their hospital window they recover faster and need less pain medication than those who only look out onto a wall.

It's not just visual sensations that are important but also smells and natural sounds. Bird song is useful for reducing symptoms of stress whereas the sound of water can improve mood. It has been suggested that to maximise the benefit you need to spend at least 20 minutes at a time in nature and ideally daily. Gardening is also beneficial. Surrounded by plants may provide benefit.

Developing a sense of awe has similar benefits to nature emersion whether being in an impressive natural setting, under the stars



Insights drawing upon complexity theory and the Free Energy Principle or explored in the appendix.



See Handbook section 10.





Claims for specific Binaural beats:

- Delta (1 to 4 Hz): Deep sleep and relaxation
- Theta (4 to 8 Hz): Deep sleep, reduced anxiety, relaxation, meditative and creative states
- Alpha (8 to 13 Hz): Relaxation, positivity, and decreased anxiety
- Lower Beta (14 to 30 Hz): Increased concentration and alertness, problem-solving, and improved memory.

See Handbook section 11.1.

ii). Music therapy

Evidence suggests that music helps brain synchronisation, can help memory and mood and puts the brain into a mode of activity where its energy requirements are less. As our tastes are very subjective, the type of music will differ between individuals.

**Binaural Beats**

A related phenomena is the effect induced by “binaural beats.” This is when two separate frequencies are played and interact to form one frequency. It is claimed that they can change brain wave activity and have a positive effect on brain function. It has been suggested they can help in migraine although the evidence is poor. The most effective frequencies depend on your objective:

Binaural beats are readily available from sources such as YouTube and Spotify and are best heard through earphones. Lower frequencies are said to be more helpful in migraine.

There are no specific recommendations on time of exposure, but a pragmatic approach would be to start with 10 to 15 minutes a day extending two up to an hour a day but ultimately, it's a matter of finding out what might be right for you.

iii). Interaction with others

Social interaction has been associated with a wide range of benefits that include improved well-being, better cognitive function, improved mental health and physical benefits such as enhanced immune function. Most general practices will now have a social prescriber who can signpost you to a wide range of opportunities.

## 8). A strong foundation. Letting go of the story if it is not serving you and reclaiming your sense of self.

Migraine is more than a headache. It may stir feelings of anger, guilt, frustration, or anxiety—especially in a world that tells us we should always be happy and successful. Over time, it can affect how we see ourselves and even start to shape our identity.

If migraine is part of who you are, this section invites you to examine that identity and rewrite the story you may be caught up in. However, this section has relevance for all of us, whether we have migraine or not. We are all inevitably caught in some story that may not be serving us. We often understand ourselves through the stories we tell about our lives. But sometimes those stories become unhelpful.

Section 11 of the handbook deals with this topic in some detail but here we sketch the essentials of re-negotiating your sense of self so you can get an idea if it feels right for you. There are five elements:

#### i). Awareness and non-judgement of our unhelpful emotions

As we saw above, our emotions have evolved to direct action, not to be attached to our thoughts in an internal unproductive dialogue. Can you be aware of your thoughts and the emotions attached to them?

Can you develop the ability to adopt the stance of a neutral observer watching your emotions without judgement? Putting a judgement of good or bad on anything perpetuates its effect.

#### ii). Self-compassion

Self-compassion is about treating ourselves as we would a friend in distress - treating yourself with kindness. You can't start to be kind to others unless you are kind to yourself. This is a challenging but important concept.

#### iii). Identifying and living by your values

The suggestion a meaningful life isn't all about pleasure and the pursuit of happiness — it is grounded in values. Think about what truly matters to you. Your core values can act as your compass and give a firm foundation on which to re-negotiate your sense of self. Living by your values improves well-being and resilience.

This approach is in sharp distinction from our current focus based on emotional preferences rather than values, e.g. happiness.

#### iv). Developing a Gratitude Practice

Noticing even small things to be thankful for shifts your focus toward the positive. Even thanking your inner critic can soften its voice. You might like to think about a gratitude practice.

#### v). The impact of suppressed emotional trauma

As we have seen earlier, experience traumatic experiences in our lifetime and the emotions attached to them can lay suppressed beneath the level of our consciousness. What remains in the dark will invariably shape your life and your sense of self as it expresses itself in other areas. Is your migraine telling you something that may be best brought to the surface?

## PART III. OTHER SPECIFIC AREAS ASSOCIATED WITH MIGRAINE

### 1). Migraine and woman's health

Migraine is more common in women, and the female hormone oestrogen is responsible for most of this increased prevalence. Migraine is the leading

cause in the world in women of years lost with disability in the ages between 15-49. Women with migraine have a higher incidence of heavy periods, endometriosis and polycystic ovary syndrome although the cause for this relationship is not known.

Four areas are of importance. Migraine and contraception, migraine and menstruation, migraine and pregnancy, and migraine and the menopause.

### i). Contraception

All contraceptive methods are suitable for women with migraine apart from oestrogen containing combined hormone contraception in women who have migraine with aura.

Headache can increase during the start of combined hormone contraception, but by three months in most this will have settled.

### ii). Migraine and menstruation

People with migraine do not respond well to changes in their internal and external environments. Menstruation is triggered by a fall in the hormone oestrogen and this rapid change can lead to problems with migraine.

Most women will find their migraines are worse around the time of menstruation, but 8% of women will get pure menstrual migraine, i.e. migraine only at this time. A headache diary can be useful for identifying this relationship as many people have not made the clear association.

In addition to the normal approaches to managing migraine, other specific strategies can be considered.

### iii). Migraine in pregnancy

For most women, migraine is alleviated during pregnancy. Oestrogen levels rise and stay constant avoiding problematic fluctuations.

New headaches during pregnancy should always be taken seriously and sometimes can be a cause for concern. Medical advice should always be sought.

For pain relief, paracetamol is safe to take but anything else should be under the direction of a physician.

### iv). The perimenopause and menopause

*The perimenopause* (around the menopause) can start between the ages of 40 and 55 when periods become irregular and are associated with other symptoms such as sweating, irritability and poor sleep. This is because declining ovarian function is unable to produce stable oestrogen levels. This fluctuation can lead to worsening and unpredictable migraine.

*The menopause* is defined as cessation of menstruation for a period of one year. Levels of oestrogen are low and stable and there is reduction in

migraine, particularly in women who have migraine without aura. However, for a small number of women small oestrogen fluctuations, albeit at a low level, can continue to give rise to problems.

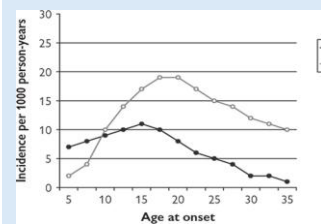
The principles of migrant management around these times are the same for migraine but additional management aims to steady oestrogen levels. The cornerstone of care is hormone replacement therapy (HRT), particularly if there are other perimenopausal symptoms. The benefits and disadvantages of HRT will be discussed by your physician.

HRT is safe in women who have migraine with aura as it replicates the body's natural oestrogen and doses are low. Topical gels or patches should be used as they maintain a stable level, unlike tablets. It is important to start on a low dose and increase slowly. Too much too soon can cause problems.

## 2). Migraine and children

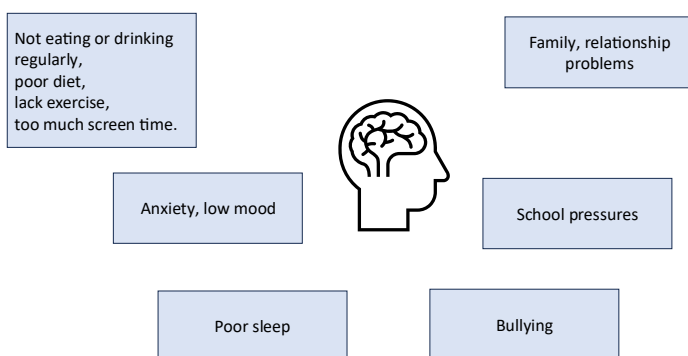
Section 14 of the handbook deals with migraine in children. 10% of children over the age of 11 years will have migraine with attacks often shorter than adults. A third of young people will grow out of migraine, for 1/3 the impact will continue unchanged and for 1/3 things will worsen as they get older.

As there is a strong genetic component to migraine, if you have migraine then there is a good chance that one or more of your children were also have the problem. Only 10% of children will have sought medical advice so the unmet need is significant. Anxiety and depression are common in young people with migraine which often sits within a complex inter relationship of other challenges that affect this age group



The most common age of migraine onset is early teens

### Things that can cause headache.



The principles of management in children and young people are similar to those for adults but the evidence base for the effectiveness of migraine drugs is poor. Children are more sensitive to changes in their environment and this is particularly important with skipping meals and not drinking regularly.

### 3). Migraine in the workplace

Migraine has a significant impact in the workplace, not just absenteeism but reduced performance when at work. It has been estimated that migraine costs the UK economy £8 billion a year. Many people are inhibited from progression in their careers by the impact of migraine.

### 4). How to manage the headache consultation

Section 16 of the handbook briefly describes the organisation of the NHS and how headache care is organised within it.

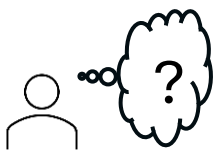
A framework is described to help you manage a headache consultation with your health care practitioner to ensure you get maximum benefit from it.

## Conclusion

Hopefully you will now have a better understanding of your migraine and your options to move forward.

Take a look at the handbook if you want a more detailed view. Perhaps think about the online course?

In the handbook, signposting is included to further information, and occasionally in important areas, scientific papers are quoted if you want to know more. For example:



Want to know more about triggers?

National Migraine Centre Heads Up

Podcast. Series 1, episode 2.

<https://www.nationalmigrainecentre.org.uk/understanding-migraine-podcast>

Martinelli D. Triggers of migraine: where do we stand? *Curr Opin Neurol* 1;35(3):360-366. doi: 10.1097/WCO.0000000000001065. PMID: 3567



A number of holistic practises are included in audio format that you may find helpful.  
For example:

Section 15 of the Handbook describes how you can manage the impact of your migraine if it affects your place of work and signposts sources of further help.





Here Georgie takes us through a visualisation to help release difficult thoughts or emotions. (8 Minutes)

<https://youtu.be/--clQ79B8KU>

Well, that's it. Hopefully you have found something useful to check out? Go with what feels right for you.



