

The Most Effective Migraine Treatment

...Which also happens to be natural & free.



.....

migraineepal.com



MigrainePal was founded in 2013 by Carl Cincinnato. Carl previously worked at several Fortune 500 companies whilst battling chronic migraine. His condition gradually worsened until he could experience 6 separate attacks per week.

After 25 years of failed treatments, therapies and thousands of dollars, Carl decided to replace his medical team and get the facts. He also began to share his experience with others as his condition progressed.

MigrainePal is a now community of thousand's of migraine patients who are going through a similar journey. Today, Carl's migraine frequency is down from 6 a week to 1 every few months.

The mission is ambitious but clear - to prevent 1 million migraine attacks. To find out more visit migrainepal.com/about

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Executive Summary

Several independent studies with a total of over 10,000 migraine patients have been reviewed to determine the most effective natural treatment for migraine.^{1 2 3}

Overall, the most effective treatment is first by a narrow margin. The second most effective treatment is an injection of Sumatriptan. However, given the significant cost and availability constraints of Sumatriptan injections, this natural and free alternative should be strongly considered as both a preventative and acute migraine treatment.

Another interesting finding is this treatment's involvement as key migraine trigger when not taken in appropriate quantities.¹ This asserts that the treatment is intrinsically involved in the control of the migraine condition.

The key finding across the studies was that *sleep* is the most effective treatment. Findings also show that when sleep is significantly disrupted it is also one of the top triggers for migraine.

Results

The following charts are taken from a survey of migraine sufferers who have chosen to openly self-report their experience¹.

Over 290 treatments were evaluated from over 7,000 participants. In the chart below, sleep is compared to the top 4 medicinal treatments.

Figure 1. How effective is your treatment?

Treatment	Much worse	Slightly worse	No improvement	Moderate Improvement	Major improvement
Sleep	2.2%	2.6%	27.2%	48.3%	19.7%
Sumatriptan (Imitrex) Injection	11.5%	5.6%	15.0%	23.1%	44.9%
Sumatriptan (Imitrex/Imigran) Oral Tablet	8.9%	5.6%	23.1%	31.0%	31.4%
Ibuprofen (Advil, Motrin)	2.6%	5.0%	56.8%	32.0%	3.6%
Acetaminophen/Paracetamol (Tylenol)	3.6%	5.6%	74.6%	14.7%	1.4%

What does this table show?

This chart shows the effectiveness or efficacy of each migraine treatment. Each respondent was asked to evaluate what happened after each treatment. For example, did they feel:

- a. Much worse
- b. Slightly worse
- c. No Improvement
- d. Moderate Improvement
- e. Major Improvement

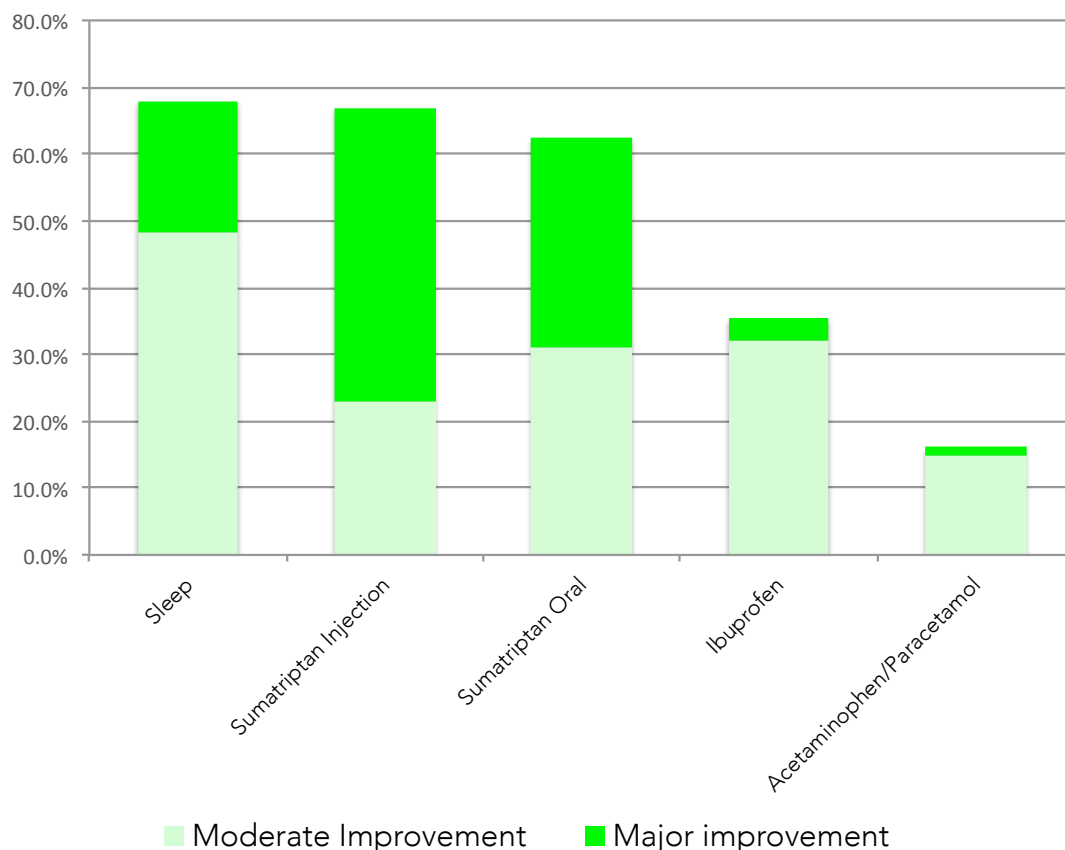
What is the Fig.1 table telling us?

1. Sleep & Sumatriptan Injection are both good treatments for migraine and deliver similar results.
2. But Sleep & Sumatriptan differ in a few key areas:
 - a. Sumatriptan Injections have almost five times as many people who get worse after using it versus sleep.
 - b. Sumatriptan Injections are expensive (anywhere from \$50-\$100 per injection) and not well stocked by pharmacists. You need a prescription, and often they are not on your benefits scheme so you are completely out of pocket.
 - c. Sumatriptan Injections has a very impressive proportion of people who get a major improvement. Almost half of all migraine patients (44.9%) who use it say that get a "major improvement" from it. Clinical research from Cochrane confirms that Sumatriptan is the overall best performing medicinal option for migraine.⁴ Figure 2 below charts the proportion of moderate to major improvement for each treatment.
3. The Sumatriptan Injection does not perform the same as the Sumatriptan oral tablet. There is a notable decline in performance. The injection

delivers a major improvement for 44.9% of people vs 31.4% with the oral tablet. This is again consistent with clinical studies.⁵

- a. This illustrates that injections are a more effective route of administration than oral tablets for Sumatriptan. It may also hint at the importance of timing. As injection is fast acting versus tablets which need to be absorbed through the stomach.

Figure 2. Moderate & Major improvements from treatments



4. The other interesting fact is Ibuprofen and Acetaminophen (Paracetamol). These two are most common painkillers taken typically for mild complaints such as headache. But they are still regularly used by a large number of those with migraine for acute migraine attacks.

These have been included here to illustrate how poorly they perform compared to migraine-specific. They deliver less than half the benefit of the other options shown here.

If you are interested in learning more about the evidence for the most effective migraine treatments [click here to read more on our website](#).

The rest of the eBook will help you better understand sleep and its role in your migraine condition.

Why this matters?

“... Eliminating sleep problems as a trigger (can) only help any migraine patients”

- Headache: The Journal of Head and Face Pain. May, 2006.

Not only is sleep one of your best treatments. It is also one of the best preventative measures to keep your migraines at bay.

Migraines are a neurologic disease where the brain is not functioning optimally. Sleep is a restorative brain function. It helps the body to heal itself.⁶

7 8

The reason many of us may be experiencing a lower migraine threshold or more frequent migraine attacks is that we are not getting enough quality sleep, *consistently*.

The Force Multiplier

Sleep is what sometimes referred to as a FORCE MULTIPLIER. What this means is that it magnifies what you're feeling that day either for the good or for the bad.

I.e. If you've had a good night sleep, and you wake up with only a few minor triggers for example: hunger; bright lights and a stressful day; because of your good night sleep you can go ahead and conquer the day.

However, if you had a poor night sleep those triggers are multiplied. The hunger, bright lights and stress suddenly become threatening. You may feel

vulnerable and even anxious as a result, which could lead to a migraine attack.

Why is sleep so important?

Beyond your migraine condition, sleep is essential for good health, yet many of people do not get enough sleep. Surveys conducted by the National Sleep Foundation between 1999 and 2004 reveal that at least 40 million Americans suffer from over 70 different sleep disorders. 60% of adults report having sleep problems a few nights a week or more.

Here are a few reasons why sleep is so important:

1. Protects your mental health

- a. Sleep helps your brain work properly.
- b. Good sleep improves learning and problem solving skills.
- c. Sleep deficiency is linked to depression and suicide.

2. Protects your physical health

- a. Ongoing sleep deficiency is linked to an increased risk of heart disease, kidney disease, high blood pressure, diabetes, stroke.
- b. Increases your risk of obesity.
- c. Your immune system relies on sleep to stay healthy. You may have trouble fighting common infections if you're sleep deprived.

3. Improves your quality of life

- a. Adequate sleep helps you function well throughout the day. If you're not well slept, you are often less productive at work or school.
- b. You may take longer to finish tasks, have a slower reaction time and make more mistakes.

4. Improves your safety

- a. Damage from sleep deficiency can occur in an instant (such as a car crash) or it can harm you over time.
- b. Ongoing sleep deficiency can raise your risk of several chronic health issues.

Bad sleep behavior

1. Missing sleep or consistently staying up late
2. Disrupted sleep, getting up or eating throughout the night
3. Changing your sleep-wake cycle for example sleeping in or getting up early can lead to migraine attacks.

Apply your knowledge

If you now agree that you could benefit from more consistent and better sleep, this section provides practical steps to get better sleep.

Trigger causes

It is often over-simplified but we know that any of the following can be a trigger from sleep:

- Too little
- Too much
- Disrupted
- Poor quality
- Irregular sleep routines
- Jet lag

How do you know if this is an issue?

- Are you refreshed or tired when you wake up?
- Do you get sleepy during the day and feel the need to nap?
- Do you have difficulty falling to sleep?
- Are your migraines getting worse?

Steps to improve sleep:

1. Set up a sleep routine

Keep a regular sleeping routine or schedule and minimize disruptions during the weekend.

- Try waking up at the same time each morning. Get into a habit of doing this.
- Keep this time through the weekend.
- Go to bed when you feel tired. Ideally this should occur at the same time more and more.
- Don't worry about perfection, strive for progress and adapt as required.

2. Avoid stimuli

Turn off the TV, computer, and phone. The content and noise stimulate the brain, but the light itself plays tricks on the pineal gland of the brain which controls our circadian rhythm.

- The influence of light on our physical bodies is strong. In the winter, light is used to trick the pineal gland in the brains of animals so springtime activities such as early shedding of their winter coat and breeding can be induced. Although people do not shed their coat nor breed seasonally, the effect of changes in the human brain is similar.
- Keeping screens on can result in reduced levels of the hormone Melatonin that assists our bodies in restful sleep.
- Melatonin levels decrease as we age, and sometimes adding this as a supplement can help some Migraine patients regain a healthy sleep pattern.
- Beware, Melatonin supplementation is not enough to ignore the television rule... it only assists.
- Interestingly, blue light was found to be particularly stimulating to the brain and one of the worst colors to be exposed to if you're trying to calm the brain into sleep mode. All LED devices have blue light within their spectrum such as phones, computer screens, and TVs.
- Cover up all light sources. Digital clocks, nightlights, computer lights all wreak havoc with the pineal gland and our circadian rhythm.
- Turn clocks to the wall, cover computer lights with black electrical tape or specially made light buffering stickers and turn off the nightlights.
- Cover windows with light blocking drapes or liners available at most department stores.

3. Be careful with napping

Be smart about napping.

- Not only can a nap itself act as a trigger, but it can cause insomnia, yet another sleep trigger for some migraine patients.
- Nap only when necessary, and try to make those naps count.

4. Bed is for sleep and making love. That's it.

The bed is for bedtime.

- This means sleep and cuddles. Just as Pavlov's dogs learned to associate being fed with the ringing of a bell (they began to salivate at the sound, even when there was no food present) your body will begin to unconsciously associate the act of going to bed with physical changes needed to fall asleep.
- After a period of time, your body makes these adjustments more easily and sleep comes easier and faster at bedtime and is more restful.

5. Temperature

Keep the bedroom cool.

- The body falls asleep easier when relaxing is coupled with a lowering of the body temperature.
- To make this effect even stronger, take a hot shower before bed and multiply the temperature lowering effects.
- Even those normally cold-blooded migraine patients usually benefit from lowering their body temperature while going to sleep and sleeping slightly cool.

6. Don't overeat before bed

Eat your last meal 4 hours before you plan to go to bed.

- This gives your body plenty of time to empty your stomach before you go to bed.
- This also helps to eliminate reflux issues as well. Because of the neurologic nature of the disease, migraine patients often don't empty their stomachs especially well.
- Don't overeat and keep that last meal free from spicy or acidic foods as these too may cause problems with digestion as well as sleep.

7. Be careful what you drink

Avoid excessive fluids 2-4 hrs before bedtime.

- Keep the acid low (no soda, no acidic juices etc).
- No caffeine for 6-8 hrs before bedtime.
- This will help keep stimulant levels low, minimize reflux and keep bathroom breaks to a minimum during sleep.

No alcohol before bed.

- While the depressant action of alcohol may initially make it easier to fall asleep, your body loses the ability to get into deeper sleep states required for restful and restorative sleep.
- Alcohol before bed usually results in waking in the early morning hours, and this can act as a trigger for many migraine attacks.

8. No smoking, please

Don't smoke before bed.

- Nicotine is a stimulant and causes multiple symptoms that can keep your body from easily slowing down into sleep mode.

9. Get a hit of magnesium

Magnesium is a mineral responsible for relaxing muscles in your body.

- This relaxation works on skeletal muscles as well as the involuntary muscles that line our blood vessels.
- A percentage of migraine patients are deficient in Magnesium and find that daily supplementation of Magnesium (such as Magnesium Citrate powder that dissolves in water) for 3-6 months may help reduce the frequency or severity of their attacks.
- Magnesium is easily absorbed through the skin, and many find relief with a warm Epsom salt (another form of magnesium) bath just before bed. Magnesium taken orally or topically usually relaxes the body and helps to induce sleep.

10. Exercise

Exercise during the day.

- Beyond tiring your body, exercise acts to balance your body's oxygen levels and metabolic processes as well as the neurotransmitters and hormones that are frequently imbalanced in the brains of those who suffer migraine.
- Regular exercise is often prescribed by headache specialists but sometimes neglected by patients who fear it will make their migraine

attacks even worse. Often it is the opposite.

11. Sleeping position

Fix your sleeping position

- Laying on your back can help with a number of daily problems ranging from acid reflux to chronic neck and back pain.
- It does however make you more likely to snore if you are prone.
- The worst position for those who already experience mild back or neck pain is lying on the stomach.
- Using a pillow when lying on your stomach puts a strain on the spine and neck muscles.

12. Quality and quantity

Improve your quality of sleep

- The hours of sleep during the night hours (whilst the sun is down) count more than sleep taken during the light hours.
- i.e. if sunrise is at 6am and you sleep 9 hours from 12 midnight to 9am, this may not be better for you than 8 hours sleep from 10pm to 6am.

Watch-outs

Lookout for sleep disorders which may be making it more difficult to get restorative sleep. Some examples include:

- Bronchitis
- Snoring
- RLS (Restless Leg Syndrome)
- Sleep apnea
- Reflux problems such as GERD or LPR
- Pain (including headache disorders and Migraine)
- Menopause
- Medication reactions
- Endocrine disorders
- Anxiety or depression
- PTSD (Post Traumatic Stress Disorder)
- Bladder or continence problems such as IC (Interstitial Cystitis) or BPH (Benign Prostatic Hyperplasia)
- Vitamin deficiency
- Excessive light or heat
- Poor sleep habits

"In fact, head pain in the morning is a sign of sleep apnea and one 2005 study reported that more than 30 percent of patients with recurring head pain and other sleep apnea symptoms saw their head pain diminish after the sleep apnea was treated.

Another 2005 study of 1,283 migraine sufferers found that more than half had trouble falling asleep and staying asleep sometimes.

In that study, 38 percent slept an average of six hours nightly and half of the study subjects said that sleep disturbances triggered migraines."

- Chateau, O. Migraine and sleep disorders. migraine.com. Nov 2010.

Research suggests that not just sleep position, but sleep itself, can play a role in musculoskeletal pain, including neck and shoulder pain. In one 2008 study, researchers compared musculoskeletal pain in 4,140 healthy men and women with and without sleeping problems. They found that people who reported moderate to severe problems in at least three of these four categories were significantly more likely to develop chronic musculoskeletal pain after one year than those who reported little or no problem with sleep. ⁹

One possible explanation is that sleep disturbances disrupt the muscle relaxation and healing that normally occur during sleep.

Additionally, it is well established that pain can disrupt sleep, contributing to a vicious cycle of pain disrupting sleep, and sleep problems contributing to pain.

Frequently Asked Questions (FAQs)

1. Sleep is not a “real” treatment, so how am I supposed to apply this?

Over 60% report of US adults report having sleep issues of some kind. Sleep in itself is a multi-million dollar industry with vitamins, drugs and all sorts of treatments designed to help an individual get more sleep. However, if you follow most or some of 12 steps outlined above, you will discover mostly free options to take control and improve your sleep.

2. I’m an insomniac, always have been, so how will this work for me?

For chronic sleep conditions that have been ongoing for months or years some of the behavioral advice listed in the 12 steps are still worth implementing. If you find little success despite faithfully implementing many of the above steps then a deeper level of intervention may be required to help reset your sleeping habits. Visiting a sleep specialist at your city’s sleep clinic or getting a referral from your doctor is usually a good option. But too often this is rushed in search of quick-fix pill or device-solution which are often accompanied by expensive specialist fees, before implementing behavioral changes which may bring about lasting improvements.

3. I have a new-born baby which is keeping me up, how can you manage sleep in that environment?

There will be periods of time in your life where sleep will be disrupted, no matter how diligent you plan to be. If you’re a mother of 3 kids under 10. Traveling overseas regularly and struggling with jetlag. We will all come

across these challenges at some point in our life. Expecting a good night sleep in this scenario is not realistic and so we should not allow ourselves to get stressed or worried about that. Rather, we should prepare around the fact that this in some situations it is inevitable and to put in place strategies to minimize the impact as much as possible.

For a newborn, it may be taking turns with your partner each night. Or taking short naps during the day at the same time as your baby. For an jetlag, it may be taking an extra day to adjust to the time difference, sleeping tablets for the plane or melatonin supplements to minimize the effect of jetlag.

4. I don't have time for more sleep?

Every one of us only 24 hrs in a day. Opera, Obama and you. How we choose to spend that 24 hrs is our choice. Like exercise, we often have to make for the things that are important but not urgent. Otherwise the things that are urgent but not important such as TV, emails, phone calls get in the way. You need to strike a balance.

5. Lots of successful people have minimum sleep, why should I change?

Two very successful and high achievers come to mind. The first is Margret Thatcher was famous for working long hours as Prime Minister of Britain for over 20 years. It was apparently not uncommon for her to get by on as few as 4 hours sleep per night. Later in her life, she suffered dementia and several strokes which eventually lead to her death.

The second is Bill Clinton, former US president was renowned for sleeping 5-6 hours throughout his presidency. He had heart surgery in 2004. To be precise it was a quadruple-bypass heart operation. Since then he has changed his sleeping habits significantly.

Chronic under-sleeping is similar to smoking. You might not see or feel any immediate side effects. You might even hear one or two stories of people getting away with their entire life. But chances are if you get migraines you're not one of them.

More Resources

1. Get some help from technology with apps to help track and monitor your sleep.
 - At the time of writing the free go-to apps for sleep are Sleep Cycle on iOS or SleepBot for Android.
 - FitBit is a wearable device to help you track your sleep by wearing a wristband device. They also track your exercise.
 - Alternatively a search for "Sleep" in your app store will review a number of options. Be sure to read the reviews before making your selection.
2. Check out the Sleep foundation at <http://sleepfoundation.org>
3. For more serious or chronic cases of sleep deprivation or insomnia, it is worth visiting a sleep specialist or sleep clinic in your area.

Appendix:

Methodology

A review of independent studies with an aggregative of over 10,000 migraine patients have been reviewed to determine the most effective treatment for migraine.^{1 2 3}

The most effective treatment was determined based on both the effectiveness of the treatment and the number of people using the treatment. More weighting is given to the treatment effectiveness. All sample sizes were greater than 200 for statistical significance.

Sources:

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