The Migraine Miracle Guide to Migraine Triggers

by Josh Turknett, MD
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How to Trigger a Migraine, Part One: The Classic View

In my 3 part series on the nature of migraines, we covered the ins and outs of just what migraines are. To sum up, they’re a bizarre, excruciating, and masochistic phenomenon in which the brain hijacks its own pain sensing circuitry.

But how does all of it get started to begin with?

As most of you know, migraines don’t just happen. They’re triggered. Though there are many variables to consider, the most powerful triggers are environmental, products of diet and lifestyle. Many of these triggers are well established, culled from the experiences of millions of migraine sufferers over many decades. In this post, we’ll cover these classic triggers, and how significant a role each plays in sparking a migraine.

Migraine Triggers: Why Everything Matters

One of the common misconceptions about migraines is that they are typically triggered by one thing. So many migraine sufferers, list of common triggers in hand, search in desperation to find that one thing that keeps causing their headaches. Most of the time this leads to frustration, as on one occasion you may note a migraine to have occurred after a glass of wine, while on another you drink a glass with no problem.

The truth is, with migraines, everything matters. It’s almost never any one thing that flips the migraine switch. Rather, it’s the culmination of multiple factors that sends you past your threshold into the land of throbbing headed misery.

The Flying Basket Analogy

In the book, I provide the analogy of a migraineur flying in a hot air balloon basket with multiple balloons attached, as well as multiple weights (represented as sandbags) to demonstrate visually how all of this works. More balloons make you fly higher, more weights make you fly lower. If you reach a certain altitude -- your migraine threshold -- the switch is flipped and the migraine process begins. How close you are to your threshold for triggering a migraine is thus determined by the number and size of the balloons pulling you up and the number and size of the weights pulling you down.
In this model, a bigger balloon will make you fly higher than a smaller one, just as certain migraine triggers may raise your risk more than others.

**The Big Balloons**

The following are the balloons that, for most migraineurs, will raise their risk significantly. These tend to be big triggers for just about everyone:

**Big Balloons You Can Control:**

1. **Alcohol**
2. **Sugar**
3. **Erratic sleep**
4. **Frequent Use of Headache Medication**, aka Rebound headaches (a subject I'll get to soon)
5. **Stress** (I didn’t say “stuff you can easily control”, mind you)
6. **Processed foods**, especially when containing MSG
Big Balloons You Can't Control:

1. **Family History** - Your DNA, which you can thank your parents for, plays a significant role in how easily you can trigger a migraine in your brain. Yet, being genetically predisposed towards migraines in no way condemns you to a life of head pain. It just means you have to pay more attention to all this stuff than someone without a strong family history.

2. **Hormones** - This one applies primarily to women, as it is well established that migraine risk is heightened during the peri-menstrual period and the early part of pregnancy. On the upside, the latter part of pregnancy (late second and third trimester) is associated with a substantial reduction in migraine risk.

Variably Sized, Idiosyncratic Balloons

These balloons are ones that vary considerably in their respective size from one person to another. For some, they can result in a major risk increase. For others, they may be trivial.

Variably Sized Balloons You Can Control:

1. **Strong Odors** - Strongly-scented manmade chemicals are the biggest offenders here (perfumes, scented lotions, organic solvents, etc.). For the ultra-sensitive, just a whiff of perfume is all it takes to send them over the edge.

2. **Sunlight** - This is a very specific trigger for a small minority of folks. Fortunately, it’s not just any old sunlight that does it, which would be terribly unfortunate. Rather, it seems to be sunlight that’s coming in at an oblique angle that’s the real problem (i.e. - driving to work during dawn or dusk with the sun shining on the horizon in your peripheral vision).

3. **Rapid Changes in Barometric Pressure** - Some migraineurs note a marked increase in risk any time a weather front comes through.

4. **Artificial Sweeteners** - Aspartame and Saccharin are the worst offenders here.

5. **Heavy Exertion** - For some, intense exercise virtually guarantees a post-exercise headache. For others, it doesn’t pose a problem.

6. **Sex** - A small number of unfortunate souls experience migraines shortly after intercourse (not surprisingly, these are often the same folks who experience headaches after heavy exertion...)

7. **Medications** - One question I always ask of folks who’ve experienced a recent surge in migraine activity is whether they’ve begun any new medicines. Here, the biggest offenders include:
- Asthma inhalers (albuterol)
- Oral Birth Control Pills
- Over the Counter Stimulations (No Doz, Vivarin, energy drinks)
- Prescription Stimulants (methylphenidate)
- Nitrates/Nitroglycerin (for heart disease)
- Erectile Dysfunction Medication (sildenafil, vardenaﬁl, tadalafil)
- Acne Medication (isotretinoin)

8. **Processed and Preserved Meats** - in general, this includes any type of meat product you can buy that doesn’t require you to cook it (salami, pepperoni, jerky, etc.)

**The Smaller Balloons**

The following factors may raise migraine risk some, but typically don’t do so to the same degree as the previous items.

1. **Sinus Congestion** (typically from an acute or chronic sinus infection)

2. **Caffeine**

3. **Chocolate** (though it’s not clear whether chocolate plays a role in triggering migraines, or whether migraineurs just crave chocolate in the prodrome phase, giving the illusion that the consumption of chocolate triggered a headache)

4. **Aged Cheese** - hard, strongly flavored cheeses are the primary issue here.

5. **Milk** - Lowfat and skim milk are the primary offenders. The removal of the milkfat in these products concentrates the milk sugars, which results in a rapid rise in blood sugar when consumed.

6. **Citrus Fruits**

7. **Bananas**

8. **Onions and Fermented Vegetables**

9. **Nuts**

10. **Fresh Yeast Bread**
11. Dehydration

A lot to take in, isn’t it?! As I said previously, most of these factors are relevant to some degree for everyone, and their effects are additive. Going back to our flying basket, here’s how things might look after a migraine is triggered by the culmination of stress and frequent use of headache relief medication in a person already genetically predisposed to migraine:

![Diagram showing factors contributing to migraine risk]

All of this means that:

a) **it’s almost always not any one thing that triggers a migraine, but several things adding together to bring you over the threshold.** Yet, even though many things may have contributed to a given migraine, it’s often the final trigger that pushes you past your threshold that gets the blame.

b) **the factors that trigger a given migraine may vary from one migraine to the next.**

And this is why finding your own most significant triggers can pose such a challenge (check out my previous post on [finding your migraine triggers](https://www.mymigrainemiracle.com), or the [migraine trigger tracker app](https://migrainetracker.com) if you have an iOS device to help you meet that challenge)

But wait, there’s more!

The above list summarizes the classic, conventional triggers for migraine. For years, these were the triggers I and my patients focused on. And they’re the triggers that virtually every migraine specialist will focus on.

Yet, the most powerful and significant trigger of all is not here - despite the fact that without it, migraines would likely be relegated to the pages of medical oddities. It’s **the one trigger**
whose elimination has the potential to end your migraines for good, and will be
the topic of Part 2.
In part 1 of this series, I discussed the classic view of migraine triggers. This is important information for sure, and has helped a great many migraineurs over the years.

But it’s not the whole story.

As some of you may know, when I adopted an ancestral style diet four years ago, I didn’t expect it to have any impact on my migraines. I shouldn’t have, because the textbooks didn’t say that I should.

But they went away. Entirely.

What’s more, they were going away for thousands of others who’d changed their diet likewise. When I incorporated these principles into my neurology practice, they started going away for my patients, too.

Clearly we’d been missing something all these years.

Migraine as a Disease of Civilization

Many of the diseases that are prominent in humans today are virtually absent in indigenous hunter gatherer populations. In these societies, people eat largely as humans did before agriculture and the dawn of civilization. As such, the diseases brought about by our modern, agriculturally and industrially based diets are collectively known as the "diseases of civilization".

This includes things like diabetes, high blood pressure, heart disease, and cancer.
And it includes migraine.

In other words, humans that eat like hunter gatherers, that eat as humans have eaten for almost the entirety of our evolutionary history, don’t experience migraines. Humans that return to this way of eating don’t get them either.

Migraines, then, are not an inevitable part of human existence. They are a feature of our biology that’s only expressed when we eat foods outside the bounds of our evolutionary experience.

Eating foods that our biology isn’t designed for is what transforms our brains into a perpetual state of migraine readiness.

The primary generating force for migraine - the trigger of all triggers - is not our genetics. It’s not the hand we’ve been dealt by our DNA. Rather, it’s the modern diet, as a whole.

All this time, like the story of the blind men and the elephant, we’ve been focusing on the small details when it comes to migraine, and in doing so have totally missed the bigger picture.

The Revised Model

With this newfound knowledge in mind, let’s revisit our flying basket from part one. In the book, I did this by representing an ancestral diet as a disproportionately large weight that keeps us so far away from the migraine threshold. Another way to represent this concept, however, is to represent the modern diet as a disproportionately large trigger balloon:
Either way we want to view it, the central point is that we've overlooked the biggest trigger factor in the classic, textbook view of migraine. And, once we incorporate it, we find that it renders many of our classic triggers almost inconsequential by comparison. With the modern dietary pattern always attached to our migraine risk basket, we're always hovering dangerously close to threshold. Without it, we're much further away.

Altogether, this means that many of the previous triggers primarily matter within the context of a modern, industrially based diet. In the absence of this diet, all but the biggest trigger factors fade into obscurity.

The Perfect Storm

It is the sum total effects of refined carbohydrates (sugar, wheat flour, etc.), high doses of gut-disrupting toxins (plant lectins, gluten), and industrial oils in the standard, evolutionarily-discordant, western diet that ultimately sets the stage for migraine. The combination of impaired metabolic flexibility (the ability to shift readily from glucose to fatty acids as a fuel source) and diet-induced inflammation wrought by these foods that creates the perfect storm for migraine generation.

This is the elephant we’ve been missing.
So how could it be we’ve missed this for so long, you ask? How is it that, after all these years of study, we’ve managed to overlook the most important thing of all when it comes to migraine?

To answer that question, consider the case of lung cancer. It is now well established and widely accepted that cigarette smoking is the primary cause of lung cancer in the world today. If everyone were to stop smoking tomorrow, future rates of lung cancer would plummet.

We know this because when we study people who get lung cancer, we find those with the disease are far more likely to have a history of cigarette smoking than people without it. **It’s the differences in behavior between those who get lung cancer and those who don’t that allowed us to discover its primary cause.**

But what if everybody smoked cigarettes? If this were the case, some people would still be getting lung cancer, and some people wouldn’t. Yet, if we were to once again try to find its primary cause by looking for differences in behavior between those who got the disease and those that didn’t, smoking wouldn’t make the list. Instead, we may find other differences between the two groups like obesity, genetic mutations, or arsenic exposure that, while perhaps playing a minor role in the development of lung cancer, were not its major precipitant.

We would miss the elephant.

And, by missing the elephant, we’d end up spending all of our time treating factors that were only a tiny part of the lung cancer story, ignoring the root cause of it all. As such, our efforts to stop lung cancer would fall well short.

This is what has happened with migraines (and it’s what has happened for the other diseases of civilization as well, for that matter). **Our modern diet is the elephant when it comes to migraine,** yet we’ve been unable to see it because everybody eats this way. But now we can see it. Our perspective has now been broadened by the growing numbers of people reclaiming their health by returning to a traditional human diet, allowing us to finally see what had been right there in front of us all this time.

Now that we do see it, we finally understand how to defeat migraine at its root cause.

**And, with this newfound knowledge in hand, we have the opportunity to end migraine once and for all.**
A Visual Guide to Migraine Triggers
(font size as relative importance)

STANDARD
WESTERN DIET

ALCOHOL SUGAR ERRATIC SLEEP STRESS
FAMILY HISTORY HORMONES
PROCESSED FOODS FREQUENT MIGRAINE
MEDICATION USE CURED MEATS

STRONG ODORS SUNLIGHT WEATHER CHANGES EXERTION
SEX MEDICATIONS

NUTS ONIONS CITRUS FRUIT SINUS CONGESTION CAFFEINE CHOCOLATE
AGED CHEESE MILK BANANAS NUTS FRESH YEAST BREAD DEHYDRATION
Finding Your Migraine Triggers

“Migraine diaries” are considered to be an integral part of migraine treatment. In theory, this makes sense. Knowledge is power, right?

Problem is, most migraine diaries are too detailed to be useful, and as a result most people don’t end up using them for long, if at all. They typically ask you to record all sorts of minutiae that a) you don’t feel like recording in the midst of a migraine, and b) won’t ultimately translate into fewer migraines.

In my mind, headache diaries have one primary goal: to help you identify your most significant migraine triggers. Enter the “Trigger Tracker” worksheet. Using the worksheet is simple: each time you experience a migraine, you record the date and then answer a series of yes and no questions about the events leading up to the onset of the migraine.

In short order, you’ll likely start noticing certain triggers that are common to many of your migraines. These are the ones to go after first. This type of knowledge can be a powerful weapon in your migraine battle.

As you may well know, I advocate an ancestral diet as the most powerful weapon. However, if you’re still not quite ready to go all in or are following an ancestral diet and still having the occasional breakthrough, using the trigger tracker worksheet can really help.
How to use the Migraine Trigger Tracker worksheet

Migraines are set in motion in response to dietary and lifestyle factors. While the genes we inherit may render us more prone to experiencing migraines, it is our environment that ultimately triggers them. Understanding the role of diet and lifestyle then presents a great opportunity for taking control over our migraines, if we can figure what those diet and lifestyle factors are. Figuring those factors out, however, can be challenging, and many migraine sufferers, despite their best efforts, end up giving up in frustration. In large part, this is because migraines are almost never triggered by any one thing, but rather are the end result of many different factors that add together. This may even present the illusion that migraines occur for no reason at all, leading to feelings of helplessness and loss of control.

This trigger tracker worksheet is here to help. Each time you experience a migraine, answer the yes and no questions on the following page on the trigger tracker worksheet. Remember to record the date on the top of each column. Over time, you will likely start to see certain triggers that are common to many of your headaches. By then minimizing or eliminating your exposure to them, you can significantly reduce the risk of future migraines.
Questions for the Trigger Tracker Worksheet

Mark an x in the corresponding row on the Trigger Tracker Worksheet for each item for each yes answer to the questions below.

1. Stress - Have you been especially stressed out over the past day or two?

2. Sleep - Has there been any recent change in your sleep habits (less sleep than usual, more sleep than usual, going to sleep at a different time, etc.)?

3. Rebound - Have you taken any medication to relieve a headache within the past 48 hours?

4. Odor - Have you been exposed to any strong odors (perfume, organic solvent, or other man-made chemicals) within the past couple of hours?

5. Caffeine - Have you drank a caffeinated beverage within the past couple of hours?

6. Sugar - Did you eat any sweets (i.e. any foods with added sugar, including soft drinks) with your last meal or snack?

7. Sweeteners - Have you consumed any foods with Aspartame or other artificial sweeteners (diet soda, etc.) within the past couple of hours?

8. Alcohol - Have you consumed an alcoholic beverage within the past 24 hours?

9. Menstruation - Is menstruation about to start or recently finished (within two days on either end)?

10. Weather - Has there been a major change in the weather pattern over the past 24 hours (large change in temperature, strong storm, etc.)?

11. MSG - Did you eat any foods with Monosodium Glutamate, aka “MSG”, at your last meal (typically added to packaged snack foods and Chinese food)?

12. Preserved Meats - Did you eat any processed or preserved meats with your last meal or snack (salami, pepperoni, beef jerky, etc.)?

13. Nuts - Did you eat any nuts (almonds, pecans, etc.) with your last meal?

14. Aged Cheese - Did you eat any hard, aged cheese with your last meal or snack?
15. **Milk** - Have you drank any low or nonfat milk within the past couple of hours?

16. **Exertion** - Did your headache occur within one hour of intense exercise?

17. **Depression** - Are you experiencing any symptoms of clinical depression (loss of interest in usual activities, excessive sleep, irritability, loss of appetite).

18. **Missed Meal** – Did your headache occur after missing a meal or waiting longer than usual to eat?
# The Trigger Tracker Worksheet

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[www.mymigrainemiracle.com](http://www.mymigrainemiracle.com)
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