

# Is Your Diabetes a Pain in the... Head?

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# An Explanation of the Diabetes Headache

What is causing your diabetes headache? Is it your blood sugars? Your new treatment? What exactly is going on?

You've recently been placed on insulin for management of your diabetes. Your head is pounding. You have a history of migraines. Is the headache caused by your diabetes, or is it a migraine?

Well, sometimes it can be hard to tell. However, diabetes can certainly contribute to diabetes headaches.

It is important to note that having diabetes does not mean that you'll get headaches. However, the more your blood sugar levels fluctuate, the more likely you are to have headaches related to your diabetes.

When your blood sugar has a rapid drop, your brain senses that it doesn't have enough glucose to function properly and the blood vessels in your brain can then spasm, causing a headache.

When your sugars quickly climb too high, you will feel that familiar lack of concentration and sluggishness (like a food coma). If this goes on too long, your body will try to eliminate excess sugars through increased urination, which can cause dehydration. And, as we know, dehydration can cause headaches.

## Hypoglycemia and Hyperglycemia

- **Hypoglycemia** is when your blood sugar level is at or below 70 mg/dl. However, if your blood sugar levels are consistently high, you may have symptoms of hypoglycemia at a higher level. Symptoms of hypoglycemia include headaches (of course!), shakiness, sweatiness, dizziness, anxiety, confusion, and hunger.
- **Hyperglycemia** is when your blood sugar level is at or above 180 mg/dl. A headache is a common symptom of hyperglycemia, although often you may have no symptoms associated with hyperglycemia. However, symptoms typically become more apparent the higher the blood sugar level.

When your blood sugar levels vacillate between euglycemia (normal blood sugars), hyperglycemia, and hypoglycemia, you are even more likely to have the classic diabetes headache.

Why? Because "fluctuations in blood sugar trigger headaches due to the response of blood vessels in the brain as a result of other hormones, such as epinephrine and norepinephrine. In other words, those blood sugar ups and downs trigger headaches stemming from hormone changes."

### How Do We Treat and Prevent Diabetes Headaches?

First of all, it is extremely important to understand how to treat a low blood sugar level. The "rule of 15" applies:

- Keep your blood sugar meter handy and check your blood sugar as soon as possible. If it is not available, do not waste time trying to find it jump to the next step and treat the symptoms instead.
- If your blood sugar is 70 mg/dl or below (or you are symptomatic without your meter), consume 15 grams of carbohydrate immediately. Examples include four ounces of juice or regular soda, eight ounces of milk, several hard candies (look at the label!), three to four glucose tablets, or one piece of fruit.
- Wait 15 minutes, then recheck your blood sugar. If it is not above 70 mg/dl, consume another 15 grams of carbohydrate and recheck again in 15 minutes.

It is also worth mentioning that if you have extremely low blood sugars that require emergency treatment (READ: you can't treat them yourself), you need to do two things.

- 1. Ask your physician for a prescription for a glucagon emergency kit (for instructions on how to use it, click here)
- 2. Keep track of your blood sugar levels and insulin doses because you likely need a readjustment of your doses.

## **Additional Ways to Treat Your Diabetes Headache**

- Over-the-counter painkillers can help once the headache has started. If the headaches are frequent, you will want to talk to your doctor about stronger medications and the possibility of any other underlying factors that could be the cause.
- Ice packs can also help once the headache has already begun.
- Keeping hydrated is a great way to help ward off headaches. Be sure to get the proper amount of water each day. Eight glasses is still considered to be the minimum amount of water needed per day. But, remember, if you are in hot weather or exerting a lot of energy during exercise or sports, you will need to consume more than that.

Next page: More ways to treat a diabetes headache, and other possible causes of diabetic headaches.

## Additional Ways to Treat Your Diabetes Headache

- If you think your headache is due to hyperglycemia and your sugars are over 240 mg/dl, it would be a good idea to call your doctor and check in. You may need some adjustments in your diet or medicines.
- Exercise regularly. Regular exercise not only helps keep your blood sugars in check, but it can help cut down on stress in case that is the underlying factor of your headaches.
- Follow your diet. Following a "diet" can be scary, but I'll bet your dietician will find a way for you to incorporate your favorite treats now and then, while still minimizing blood sugar fluctuations that cause headaches. The best thing to do to keep diabetic headaches at bay is to follow the proper diabetic diet. Your doctor and/or a dietician can help you determine the best diet for you and what to eat when you're eating out with diabetes.

Having type 2 diabetes can be overwhelming at times and that there can be a lot to remember. Once you have a good plan in place for doing that, you will find that you will have many more diabetes headache-free days.

# Reduce Diabetes Headaches by Getting Your Blood Sugars on Track

A great way to reduce the fluctuations from happening in the first place is getting your blood sugars on track.

This means checking your blood sugar levels regularly and taking your insulin as prescribed. Whether you are prescribed just one dose daily (a basal insulin), just mealtime insulin, or both types of insulin, the insulin only works if you are taking it. Often the doses are incorrect if you take the doses sporadically.

For example, if you only take your doses a few days per week, we may continually increase your doses. Then

when you take your doses daily, you may require less insulin, causing a low blood sugar level – and the dreaded diabetes headache.

#### Other Headache Causes

While diabetes itself can cause headaches, there are also many other culprits, and just because you have diabetes and a headache, doesn't mean you have a diabetes headache. Let's take a look at a few of the other causes of headaches.

#### Weather

Changes in weather have long been known to cause headaches. Whether it's a drastic temperature change or an oncoming storm, many people swear by the fact that these atmospheric changes cause them headaches.

The "weather headache" is believed to be caused by an imbalance in brain chemicals, particularly serotonin.

#### **Hormones**

Hormones also play a part in headache pain. In females, this is particularly true as estrogen controls chemicals that are responsible for pain sensation in the brain.

A drop in estrogen can trigger a headache. These drops can occur due to menstrual cycles, pregnancy, perimenopause or menopause. Oral contraceptives and hormone replacement therapies can play their part in headaches as well.

### Lack of Sleep

Not enough sleep can cause an increased expression in the proteins that regulate chronic pain and in the facial nerves that play a role in migraines. Many people that suffer headaches have a hard time sleeping yet that lack of sleep can cause a headache. This catch-22 makes for tough times.

Too much sleep can also cause a headache, so it is suggested to keep a similar sleep pattern, even on the weekends.

### Sinus Problems or Allergies

Recent studies show that true sinus headaches are rare and most people that complain of them are getting migraines. As sinus cavities swell, shrink or become inflamed by irritants, they can be the cause of headache pain when there is a bacterial infection in the sinuses.

Allergy headaches are relatively common and usually consist of pain in the front of your head along with pain in the face, ears or teeth. By finding out what the allergy is and treating it, you can help alleviate allergy-related headaches.

### Dehydration

It's a well-known fact that dehydration can cause headaches. Your body is made up of nearly 60 percent water, so staying hydrated is vital to keep it functioning correctly.

It is thought that when your body is lacking in water, it can cause a shrink in brain volume. This then pulls the brain away from the skull triggering pain. Dehydration is also a symptom of diabetic sugar issues, as you will see below.

#### **Stress**

Stress has long been known to be a cause of headaches. These headaches are usually physically caused by the tightening of muscles in the back of your neck and scalp, teeth clenching, skipping meals, taking certain medications and sleeping/sitting in an awkward position for too long.