



## Troubleshooting Your Fast

### Should I Ease into Fasting or Jump In?

It's just a personal preference. It's like going into a pool. Some people wade in slowly in the shallow end and others like to cannonball into the deep end. Generally, people who are older or have more medical problems and medications should take things slower. Side effects do develop during this period where your body is adapting to changing fuels.

Your body can use two different types of fuel, but not at the same time, much like a hybrid car that can use either gas or electric power. Your body can switch between using glucose, a type of sugar, or fat. Whether you use dietary fat or body fat, the metabolism is the same.

Your body can store glucose in the form of glycogen in the liver. During fasting, glycogen stores enough energy for about 24 hours. If you are eating an average North American diet with 50% carbohydrates, with three meals a day and snacks, and rarely fast more than 24 hours, your body will fuel itself almost exclusively on sugar.

If you normally burn sugar, it can take a few weeks before your body efficiently metabolizes fat for energy. During this switch-over period, you might experience some flu-like symptoms like headache, lethargy and mental fog. This is sometimes called Keto Flu because a ketogenic diet, which is very low in carbohydrates also forces the body to burn fat. Lower carbohydrate diets lower the hormone insulin, which causes the body to excrete salt and water, which can make symptoms worse.

One strategy to minimize these symptoms is to start by eating a low carbohydrate, moderate protein diet. You reduce the dietary intake of carbohydrates, which are chains of sugar, forcing the body to adapt to using fat for energy. When you start fasting longer, your body won't have any trouble switching from the fat in the food to the fat from your own body.

Start by having three meals a day with no snacks. Gradually lower the amount of refined carbohydrates in your diet. Drink plenty of fluids and don't try to restrict salt. Magnesium supplements are often useful for cramping or constipation. Now you are ready to fast.

### Constipation

You should expect the number of bowel movements to decrease during fasting. Less food going in means less coming out. That's normal. It's only constipation and uncomfortable if there is stool inside that won't come out. If there is nothing inside, it shouldn't be uncomfortable. During fasting, many people have less stool in their intestines, so they shouldn't feel any discomfort despite the lower frequency of bowel movements. If you do feel constipated, make sure to stay well hydrated. Try taking a fiber supplement such as psyllium husk in water, which will add stool bulk. Magnesium citrate may also help get your bowels moving.

### **Hair Loss**

Temporary hair loss can occur with any significant dietary change, and with rapid body fat loss, so this isn't exclusive to fasting. The good news is that it is a temporary phenomenon, and as weight loss stabilizes, hair loss stops and regrowth begins. Try incorporating an extra 20 grams of dietary protein daily, although weight loss efforts may slow a tad. Always talk to your doctor to make sure the hair loss is not due to any other medical reason.

### **Bad Breath or 'Keto Breath'**

When starting to fast, you may notice a strange metallic taste or foul breath. It's a side effect of fat metabolism, either from dietary fat or body fat so it's actually kind of a good thing. Fatty acids are converted into ketones, some of which are exhaled and some excreted in the urine. One of the ketones, called acetone, is the same chemical found in nail polish remover. This is what causes the strange taste in your mouth. You may also note a white film on your tongue. These are nuisances, but not dangerous. The bad breath may persist until weight stabilizes.

Drink plenty of water. Maintain good oral hygiene and brush your teeth and tongue regularly. Oil pulling with coconut oil is sometimes helpful – See our handout on how to oil pull.

### **Elevated Heart Rate**

When you are fasting, the hormone insulin goes down, but other hormones, called the counter-regulatory hormones go up - counter because they are opposite of insulin. This includes noradrenalin, which activates the sympathetic nervous system, our fight or flight response.

As part of this generalized activation, your heart rate may increase, and this can last for a few weeks. Most of the time, this is merely an incidental finding. In rare cases, it may trigger abnormal heart rhythms or palpitations. In this case, you must stop fasting immediately and talk to your doctor.

### **Rash**

Occasionally people experience an intense itchy rash, and we're not exactly sure why it occurs. You can try drinking one to two tablespoons of raw, unfiltered apple cider vinegar in one cup of water every day for two weeks. You can also add one cup of berries for a week and then scale back to half a cup of berries for another week. Any of the over the counter antihistamine medication may also help the symptoms. The rash should be self-limited, but if it persists, scale back or speak to your physician.

## **Diarrhea**

Loose bowel movements are also commonly seen when starting to fast. But it usually only lasts for a week or two. It is thought that the body is trying to get rid of all this excess water, and by dumping more water in the stools, you get a little bit of loose stools. Make sure you are not taking too much magnesium supplements, some of which are laxatives.

You can add fiber to bulk up the stools and lessen the symptoms. Add one to two tablespoons of psyllium husk to one cup of water and let sit together for 15 minutes or so and then drink.

## **Gout**

Gout is caused by high levels of uric acid that precipitate in the joint. Fasting increases uric acid, so may aggravate gout, although this is rare. This effect only lasts for one or two months if fasting consistently. Stopping and starting a fasting protocol may also cause flares. Lime juice in water or cherry root extract may help alleviate symptoms. Also talk to your doctor about whether medications are necessary.

Build up your fasting protocol slowly and be consistent. Start with three meals a day with no snacks and gradually increase the fasting duration every two to three weeks, giving your body plenty of time to get used to it.

## **Heartburn**

Acid reflux from the stomach into the esophagus is often called heartburn. It sometimes flares up when you start fasting, but only appears to be aggravated for the first week or two, as the body adapts. Being overweight also aggravates this condition because of the increased intra-abdominal pressure which is forcing the acid up. As you lose weight, heartburn symptoms often improve, but during the process of losing that weight, it may get worse. If you have a history of acid reflux and take medication for it, follow your doctor's instructions, even while you're fasting. There are, however, some natural remedies that you can try.

Avoid certain foods that commonly trigger heartburn, like alcohol, caffeine, and chocolate. Try adding one to two tablespoons of lemon or lime juice to water throughout the day (3 times a day). Lots of people also tell us they get relief by adding one to two tablespoons of raw, unfiltered apple cider vinegar to water too. Chamomile tea at night sometimes helps settle them, as does ginger tea. Start fasting slowly and gradually build up.

### **Insomnia**

Trouble sleeping is also a common side effect of fasting which is due to the increase in hormone noradrenaline. Usually, this is only a problem for one to two weeks. You may try going to bed later or getting up earlier until your body adapts. Try not to stay in bed tossing and turning the whole night. A relaxing bath or foot soak with Epsom Salt at nighttime three or four hours before bed can sometimes help.