

FITNESS & WELL-BEING



Empty threat

Skipping meals or eating unhealthily can make you irritable and even damage your relationships, writes **Sasha Gonzales**

Skipping meals isn't just bad for your health. As it turns out, it can have a detrimental effect on your relationships, too. According to recent study that appeared online in the Proceedings of the National Academy of Sciences, researchers found that lower levels of blood sugar may cause married people to argue with, confront and act more aggressively towards their spouses.

In the study – which involved 107 married couples – voodoo dolls were used to measure the participants' anger with their spouses. Brad Bushman, lead author of the study and professor of communication and psychology at The Ohio State University, found a connection between the participants' blood glucose levels and their feelings towards their wife or husband.

"When [the participants] had lower blood glucose, they felt angrier and took it out on the dolls representing their spouse. Even those who reported they had good relationships with their spouses were more likely to express anger if their blood glucose levels were lower," says Bushman.

In another experimental task that was conducted as part of the study and that measured the

participants' actions towards their spouse, researchers also uncovered a clear link between low blood sugar levels and aggressive behaviour.

According to Bushman, the study shows how one simple, often overlooked factor – hunger caused by blood glucose levels – may play a role in marital arguments, confrontations and possibly even domestic violence. "Hangry" – a combination of the words "hungry" and "angry" – was the slang term coined to describe this condition, of being hungry to the point where negative emotions take over.

Miles Price, a functional nutritionist at Life Clinic in Central, agrees that our diet can affect our emotions. Glucose is our brain's main source of energy. When this supply is diminished, those parts of the brain that control our mood and behaviour send out primitive signals that set off a stress response, triggering feelings of irritability, anxiety or sadness.

It's a survival mechanism, says Anita Cheung, an integrative nutritionist and director of wellness centre i-Detox.

"When we are hungry, a hormone called ghrelin is secreted in our stomach lining. This hormone travels to the brain, signalling us to eat. Various reactions, such as the

secretion of stress hormones then take place to ensure that we do eat. If we don't, our blood sugar level drops and we become anxious and irritable."

Once we start eating, our ghrelin levels start to decline, which results in a reduction of anxiety.

An Australian study carried out a few years ago by scientists from the CSIRO, South Australia University and Flinders University, and published in the *Archives of Internal Medicine* revealed that people who stuck to a low-carbohydrate, high-protein and high-fat diet were grumpier than people who ate a low-fat, high-carbohydrate diet.

Both groups experienced weight loss, but those participants who limited their intake of potatoes, bread and pasta were also found to harbour greater feelings of hostility and be more depressed, tense and anxious.

The key to regulating your blood sugar level, and hence, stabilising your mood, then, is to eat regularly, say, every three hours and to minimise your intake of stimulants like coffee.

If you cannot have five to six small meals a day, then be sure to eat three main meals and a couple of healthy snacks in between. Drinking water frequently throughout the day will also ensure your body is kept

hydrated so you don't feel emotionally out of sorts.

Says Cheung: "If you skip a meal, especially breakfast, your blood sugar can drop a great deal pretty quickly. And drinking stimulating beverages like coffee may increase your stress response, which in turn can cause blood sugar fluctuations."

Try not to wait until you are too hungry to eat, and don't be tempted to reach for refined carbohydrate foods like candy bars, white starches, cookies and cakes. These foods can cause your blood sugar levels to spike and crash, leaving you in an energy slump and wreaking havoc on your emotions.

Instead, choose high-fibre foods that will fill you up and slow the entrance of sugar into your bloodstream, and high protein foods that will satisfy your hunger – think lean meat, skinless chicken breast, fish, eggs

and beans. Healthy fats like avocado, nuts and olive oil are also good additions to a meal. Your body needs carbohydrates for energy. But go for complex carbohydrates like oats, and starchy root vegetables like sweet potatoes, and make sure to consume these as part of a balanced diet.

It's also important to be mindful of why you are eating. Feeling irritable, anxious, irrational or angry does not automatically mean that you need to eat something.

Paul Currie, an appetite behaviour expert and professor of psychology at Reed College in Portland, Oregon, suggests asking yourself if your mood is due to the fact that you're hungry or if you're feeling that way because of something that is going on in your life.

Many people snack on unhealthy foods to comfort themselves, and this can lead to weight gain and eating disorders if not kept in check. Once you are aware of what's triggering this stress response in your body, you can

make better choices to deal with it.

Adam Friedman, a naturopathic physician from the Integrated Medicine Institute, says that when we feel irritable or angry, it's more likely due to a craving for sugar rather than real, actual hunger. This craving is caused by an addiction to simple carbohydrate foods.

"The body believes it is starving because the glucose that was coursing through its system has since been removed by insulin, and now it's looking for more," he says.

"Like a junkie in need of a fix, your brain sends out the very same signals [anxiety, irritability

and anger], creating the same sense of urgency so that you will find more sugar. The simpler the carbohydrate the faster the insulin response will be.

"That's why it's important to choose foods that don't trigger such reactions, and by doing so you'll reduce or eliminate the cravings."

So the next time you feel on edge, don't take it out on your spouse. Restore your good mood with a healthy treat. Friedman suggests organic raw almond butter on a piece of organic 85 per cent dark chocolate.

Cheung recommends low-GI whole fruits like berries, and beverages sweetened with low-GI coconut sugar. "Compared to simple carbohydrate snacks like cookies and candy, these are more blood sugar-friendly and are less likely to cause unhealthy food cravings," she adds. life@scmp.com



If you skip a meal, especially breakfast, your blood sugar can drop quickly

ANITA CHEUNG OF I-DETOX

