

REDUCE DIABETES RISK THE NATURAL WAY

Barley and spice and all that's nice and calming may be your strategy for keeping this chronic lifestyle disease at bay

BY MELODY CHONG

You've probably read about white rice being the latest insulin saboteur that could increase your risk of developing diabetes. While minimising the intake of processed carbohydrates (including white rice), sweet drinks and junk food, and maximising your level of activity are good rules to go by, there are other diabetes-fighting allies you can recruit to help prevent this chronic condition.



Besides cutting down on the intake of white rice, there are other ways you can keep diabetes at bay. PHOTOS: ISTOCK

BARLEY SOLUTION

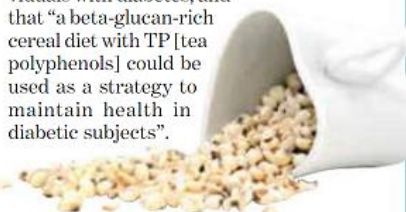
Barley as a "cooling" drink in traditional Chinese brews, yes. But as a food that could protect you from diabetes? As a whole grain rich in beta-glucan, barley may just deliver on that note.

In the May 2013 issue of *Nutrition Journal*, researchers noted that indicators of inflammation tended to be reduced in people with a high intake of whole grains like barley. Inflammation makes the body less responsive to insulin and increases the risk of insulin resistance, according to the *Scientific American*.

Inflammatory chemicals called cytokines are produced by fat cells and higher levels of cytokines are often seen in overweight people with Type 2

diabetes, said Jaclyn Reutens, a dietitian from Aptima Nutrition and Sports Consultants. "Those levels of inflammation in fat cells exacerbate insulin resistance and worsen the problem," she said.

A study in the *Journal of Food Science* reported that beta-glucan, which is found in barley's soluble fibre, may benefit individuals with diabetes, and that "a beta-glucan-rich cereal diet with TP [tea polyphenols] could be used as a strategy to maintain health in diabetic subjects".



SPRINKLE ON THE SPICES

Dietary research has largely focused on how fat, sugar and refined carbohydrates can affect the risk of diabetes. But what is also getting on the health radar is the use of spices for the compounds they contain that may activate enzymes and stimulate insulin receptors.

Ginger, which has been used as a staple ingredient in Asian food for centuries, is traditionally known for its digestion-aiding, anti-inflammatory and anti-nausea properties. A 2014 study published in the *Complementary Therapies in Medicine* journal found that taking three 1g capsules of ginger powder daily for eight weeks could improve insulin sensitivity and cholesterol levels that may contribute to diabetes risk.

Turmeric is another familiar spice and it has been used for thousands of years in Ayurvedic medicine. But recently, its active compound curcumin has been extensively studied. In a study involving 240 Thai adults with prediabetes, those who were given 250mg of curcumin daily for nine months did not develop diabetes as compared to the 19 subjects from the placebo group who did.



GET A PERFECT NIGHT'S REST

There's a sleep sweet spot when it comes to minimise the risk of diabetes: Six to eight hours of sleep. A Yale University study of 1,709 men found that those who regularly got less than six hours of shut-eye doubled their diabetes risk; those who slept more than eight hours tripled their odds. Sleep that is too little or too long puts your nervous system on alert. Over time, this heightened state interferes with hormones that regulate blood sugar.

UNWIND DAILY

When you are stressed, "your body goes into a fight-or-flight mode, raising blood sugar levels to prepare you for action", said Professor Richard Surwit, author of *The Mind-Body Diabetes Revolution* and chief of medical psychology at Duke University. Chronically high blood sugar levels may cause your body to become insulin-resistant over time.

Simple relaxation exercises can help, according to a study conducted at Duke University. Yoga, meditation and walking are some activities you can do regularly to unwind.

EAT YOUR CHILLIES

These hotties do more than heat up your tastebuds. Chilli's two active ingredients, capsaicin and dihydrocapsaicin, were found to have the potential to lower blood glucose and insulin levels in a study by the University of Tasmania's School of Human Life Sciences and published in the *American Journal of Clinical Nutrition*.

The researchers found that eating a meal containing chillies lowered post-meal blood glucose and insulin concentrations. High levels of glucose and insulin are linked to an increased risk of developing diabetes.



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