**DID YOU KNOW?** 

# You could reverse your diabetes!

STAR HEALTH DESK

Type 2 diabetes is a chronic disease occurring when the body does not process blood sugar correctly. It either does not produce enough insulin, or it resists insulin. Millions of adults in the world are at high risk for developing this condition. The best way to prevent or manage type 2 diabetes is through diet, exercise, and maintaining a healthy weight.

However, certain rare genetic mutations may offer protection against developing diabetes. A study published in Nature Genetics discovered 12 proteintruncating mutations on the SLC30A8 gene that are associated with a 65% reduction in type 2 diabetes risk. These variants were present in less than 0.1% of the population. They inactivate one copy of the

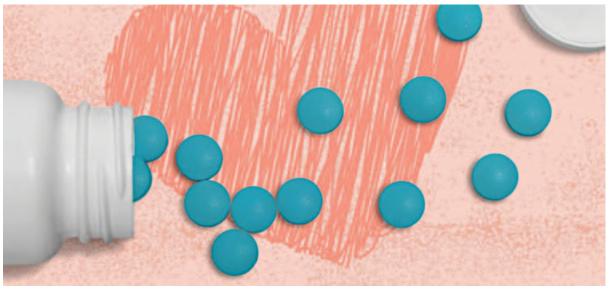


SLC3048 gene, suggesting that future treatments for diabetes could target the SLC3048 gene as well.

Again, diabetic retinopathy is a leading cause of blurred vision and blindness but can often be reduced with proper glucose management. Understanding the molecular mechanisms that cause eye damage will go a long way to helping doctors treat the

For example, although high glucose is known to cause diabetic eye damage, there is some evidence that periods of low glucose make diabetic retinopathy worse. The authors of a new study published in Cell Reports tease out a cascade of molecular events that may explain this observation.

This research suggests that stabilising glucose levels may be as important as lowering them, especially for those already experiencing eye damage.



## **BLOOD THINNERS**

### Tips for taking them safely

STAR HEALTH DESK

If you are taking a blood thinner prescribed by your doctor to prevent blood clots, it is important to take

Avoid bumps and falls: The blood thinner keep clots from forming in vour heart or blood vessels can help prevent a heart attack and stroke. But because these drugs make it hard for you to stop bleeding, a minor injury can turn serious. Avoid contact sports and other activities where you are likely to get hurt. Walk, swim, or do other, safer exercises instead.

Stick to a schedule: Take your medicine at the same time each day. Some blood thinners do not work right if you are not consistent. Use a pill organiser or the calendar to remind yourself. If you forget, take it as soon as you remember. Do not skip a pill. If you do not realise until the next day that you missed a dose, ask your doctor what to do. Do not

Know your medicines: Before you bring home any new prescription or over-the-counter medicine, check with your doctor or pharmacist to make sure it is safe to take with your supplements can change the way

their side effects. For example, if you take a pain reliever or cold medicine with aspirin in it, your bleeding risk could go up.

Cut carefully: Blood thinners can turn a tiny cut into a major bleed. Wear gloves when you work with knives, garden shears, or other sharp tools. Be extra careful when shaving. Use an electric razor, if possible, so vou can not nick vourself. Don't trim your nails too close to the skin. When you do cut yourself, apply pressure until the bleeding stops. If t does not, get medical help.

Watch your vitamin K: Too much can make a common blood thinner called warfarin less effective. You should talk to your doctor about how much of food containing vitamin K is safe for you to eat.

Get tested: While you are on certain blood thinners, you may need regular blood tests to measure how fast your blood clots. The results help your doctor decide whether to change your dose or switch you to another drug.

Alert your medical team: Tell every doctor you visit that you take blood blood thinner. Even vitamins and thinners, especially before you have a medical procedure or when you

some blood thinners work or add to get a new prescription. They need to know you are at extra risk for bleeding.

> Be gentle with your teeth: Your gums are delicate, so clean your mouth with a lighter touch. Use a soft toothbrush, and do not scrub. Choose a waxed dental floss; slide it carefully between your teeth. Let your dentist know you take blood thinners. They will take extra care during check-ups and may also give you medicines to reduce bleeding during dental procedures.

> Watch for side effects: Sometimes blood thinners might cause:

- Bleeding gums
- Bruises you can not explain
- Dizziness • Heavier-than-normal periods

• Red or dark brown urine or stools Call your doctor if you notice any of the above cases.

**Keep supplies handy:** Have a stash of bandages and dressings at home. Always carry some with you, in case you get a cut. Special powder can stop a bleed quickly and keep it under control until you are able to get medical help. You can buy these products without a prescription at your local drugstore. And they are safe to use while you are on blood

#### HAVE A NICE DAY The psychology behind social media

DR RUBAIUL MURSHED

Tim Berners-Lee, the inventor of the world wide web (www) talked about its first 30 years, the rise of the toxic internet, and whether Facebook needs to be broken up.

By now scientists proved that social media triggers the same center in our brain, which is responsible for rewards. In other words, the center of pleasure. Every time we see a bigger number of likes, our brain initiates a huge increase in the hormone called dopamine. But, why do people show off on Facebook? Sometimes, people with an ego usually feel the need

to impress others with how powerful or beautiful, or how qualified they are(!) and their ability to demean others. Some researchers think it is due to 'insecurity' - a common reason behind showiness when trying to prove that they are important.

Some may consider it as an 'attentionseeking disorder'. Some want too much attention from their colleagues, friends, or close ones. This could be a mental illness, known as 'Histrionic Personality Disorder' (HPD) marked by uneven emotions, a distorted self-image, and a desire to be noticed. They often behave improperly to get attention. Attention-seeking behaviour may breed from jealousy, low confidence, or as a result of a personality disorder. The main characteristics of a histrionic personality are - constantly seeking attention, and being irritating in situations where they are not the center of attention.

As we started with Berners-Lee, he quietly recalled his reaction to the Web's recent abuses. He was sad and said, "Actually, physically-my mind and body were in a different state." It is really painful to watch his creation so distorted.

E-mail: rubaiulmurshed@shomman.org



### Nutritional effects on pregnancy

pregnancy, nutrition is more important than ever. Because a pregnant woman needs more of many important nutrients than a normal, non-pregnant woman. It should be noted that a lactating woman requires additional nutritional support. Therefore, the selection and consumption of healthy foods will help to give birth to healthy babies, i.e., babies with proper body weight and proper physiological functions. This also helps to maintain the health of pregnant women.

During pregnancy, one should take in some special nutrients, such as more folic acid, iron, calcium,

DR MUHAMMAD TOREQULISLAM
8 TAWHID ISLAM
Both normal, pregnant, and lactating women should get 600 lactating women should get 600 IU (international units) of vitamin D per day. Adequate water intake (hydration) is also an important concern during pregnancy.

In pregnancy, the body needs more water to stay hydrated and support the life inside the womb. So, drinking quality mineral water or enough fluids every day is very important.

However, we should keep in mind that taking too many of these supplements might be harmful. Vitamin A, for example, causes birth defects at extremely high levels, whereas vitamin D causes an increase in bone fracture rates. Other substances to avoid during pregnancy include: alcohol, fish



and vitamin D. It is because folic acid prevents certain birth defects (e.g., brain, spine, or spinal cord). Normally, 400 mcg (micrograms) are needed per day, but during pregnancy and the lactating period, 600 mcg/day are required. Iron is another important mineral for the babies' growth and brain development.

Pregnancy increases the amount of blood in the mother's body; therefore, more iron is needed for the mother and for the growing baby. A pregnant woman should get 27 mg (milligrams) of iron a day. During pregnancy, calcium reduces the risk of preeclampsia (a serious medical condition that increases sudden blood pressure). This mineral also builds up the bones and teeth of babies. Pregnant adults and teenagers should get 1,000 and 1,300 mg of calcium a day, respectively.

Vitamin D helps calcium absorption, thus ensuring its proper functioning in our bodies. containing high levels of mercury and contaminated foods (e.g., refrigerated smoked; hot dogs; unpasteurised milk or juices; storemade salads, etc.).

Moreover, drinking high amounts of caffeine is also harmful for the fetus. Less than 200 mg of caffeine (about 12 ounces of coffee) has been recommended as a safe dose during pregnancy. As a result, when selecting and

purchasing diets for a pregnant lady, more consideration should be given. Consultation with a physician is highly suggested to guarantee a balanced diet and obtain particular vitamins and mineral supplements.

Dr Muhammad Toregul Islam is an Assistant Professor of Pharmacy at the Bangabandhu Sheikh Mujibur Rahman Science and Technology University. E-mail: dmt.islam@gmail.com

Tawhid Islam is a student of Pharmacy at Bangabandhu Sheikh Mujibur Rahman Science and Technology

E-mail: tawhidislam2021@yahoo.com



**WORLD TB DAY 2023** 

74 million lives saved since 2000 by global efforts to end TB

10.6 million people fell ill with **TB in 2021** 

#### 1.6 million people died of TB in 2021

World TB Day 2023, with the theme 'Yes! We can end TB!', aims to inspire hope and encourage highlevel leadership, increased investments, faster uptake of new recommendations of the World Health Organisation (WHO), adoption of innovations, accelerated action, and multisectoral collaboration to combat the TB epidemic.

This year is critical, with opportunities to raise visibility and political commitment at the 2023 UN High-Level Meeting on TB. The spotlight of World TB Day was on urging countries to ramp up progress in the lead-up to the 2023 UN High-Level Meeting on TB.

WHO also issued a call to action with partners urging Member States to accelerate the rollout of the new WHO-recommended shorter all-oral treatment regimens for drug-resistant

World TB Day is observed annually on March 24 to raise awareness about TB and efforts to end the global epidemic, marking the day in 1882 when the bacterium causing TB was discovered.



They only need proper affection, care and comprehensive management to unleash their potential

- Developmental Assessment & Therapy
- \* Psychological Assessment
- \* Special Clinics for Child Development

