Healthy mum, healthy baby

Experts say a woman’s health, nutrition and mental well-being will affect her child’s disposition to mental, developmental and chronic disorders

Shabana Begum

For the last five months of her pregnancy, Mrs Veronica Ten had to pinch her fingers at least 11 times a day.

She had to monitor her blood sugar levels every few hours, including before and after meals.

The business development manager—who gave birth to her first child in 2018—was diagnosed with gestational diabetes, or diabetes during pregnancy, when she was four months pregnant.

Mrs Ten, who is overweight, above the age of 35, or have the disease running in their family face a high risk of getting gestational diabetes.

The petite 27-year-old fell under none of those categories. She eats healthy, avoids snacks and dislikes sugary foods, so she was shocked when she was diagnosed with the condition.

“Despite poking my fingers multiple times a day, I never got used to it. It was painful, and sometimes I had to pinch my fingers a few times to make blood appear,” said Mrs Ten, now 31.

Gestational diabetes can save the needs of obesity, Type 2 diabetes, heart disease and even neurodevelopmental disorders in a child.

Professor Chong Yap Song, dean of the National University of Singapore’s Yong Loo Lin School of Medicine, said the gestational diabetes cohort study, led by Prof Chong, found a few years ago that gestational diabetes affects one in five pregnant women in Singapore—a one of the highest rates worldwide and double the estimated global figure of 7 to 10 percent.

This finding from the study, Growing Up In Singapore Towards Healthy Outcomes (Gusto), which has been tracking the health of more than 1,000 pregnant women and their children since 2009, she said, backs claims that gestational diabetes affects only high-risk women.

“We were routinely missing half the women with gestational diabetes because we were not testing those who were not high-risk,” said Prof Chong.

By 2018, the Ministry of Health released guidelines recommending that all pregnant women be screened for gestational diabetes in their second trimester.

The first guidelines on exercise for pregnant women, released early this month, say that healthy women with uncomplicated pregnancies should do moderate-intensity aerobic and resistance training workouts for at least 2½ to 3 hours a week. Such exercises include jogging, swimming and stationary cycling.

“Singapore women do enter pregnancy with a suddenly higher body mass index than average. And there is a tendency for them to put on more weight in pregnancy than they should,” said Prof Chong.

Professor Tan Kok Hian, the head and senior consultant of the perinatal audit and epidemiology unit at KK Women’s and Children’s Hospital, said that in the hospital, more than 30 percent of pregnant women are overweight and more than 25 percent put on extra weight during pregnancy.

Gestational diabetes goes away after birth, but that does not mean the struggle is over.

The Gusto study found that four in 10 of the mothers who had gestational diabetes became pre-diabetic or diabetic within five years. Many of them were in their 30s.

“Pre-diabetes is a bit of a warning test for these mothers’ endocrine system. If the excess hormones and weight gain in pregnancy cause your blood sugar levels to go up, it means that your blood sugar control is already not fantastic,” said Prof Chong.

But gestational diabetes is easy to manage and avoid as long as lifestyle changes are made, he added.

The advice is almost clichéd, but eating clean and exercising are the best ways to reverse gestational diabetes and its ill-effects.

“Many pregnant women are too worried to exercise. It is okay to exercise during pregnancy,” Prof Tan stressed.

Mr Randall Su, 32, who welcomed his first child this month, said his wife did 15 minutes of yoga at least thrice a week.

“The routine also surprisingly helped her to maintain good posture throughout her pregnancy, with no back pain,” added the product specialists.

Prof Tan added that there is no need to eat for two as pregnant women need to take in only 15 percent more calories.

Another tip from Prof Chong is to make breakfast the biggest meal of the day and to start with foods that do not increase blood sugar levels much, such as fruit and whole grains. “Such foods programme your metabolism to make you feel less hungry for the rest of the day, and also release sugars slowly,” he said.

Most mothers would start thinking about motherhood only when their pregnancy tests come back positive, but science shows that even before conception, a woman’s health, nutrition and mental well-being will shape her child’s quality of life.

The first 1000 days—from conception to age two—will set the stage for the child’s long-term health.

Said Prof Tan: “The fetus and infant at these stages of development are most susceptible. If the fetus is exposed to an adverse womb environment, causing damage to the tissue, poor or excessive nutrition, or infections, the baby would be more susceptible to chronic diseases.”

But it is not just the mum’s physical health that can impact the child.

The Gusto study found that about 40 percent of pregnant women had clinical depression or high levels of depressive symptoms.

Prenatal depression was shown to affect their newborns’ height and weight—a part of the brain that produces negative emotions—thus predisposing the children to mood disorders.

When the Gesto children turned four, they underwent a school readiness assessment to test their competence in areas such as numeracy and phonics.

Children of mums with high depressive symptoms did not perform as well as their peers, said Prof Chong.

Similar to tackling gestational diabetes, Prof Chong believes all pregnant women should undergo screening for anxiety and depression.

But addressing mothers’ mental health requires a whole-of-society approach, noted Prof Chong.

“I can tell a mother: ‘Make sure you’re healthy. Have good emotional health and be in a good place mentally.’ But you can’t say that to a mother from a low-income family whose partner is incarcerated, for example. Other environmental factors should be taken care of also."


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Shahara Began

Since her own is with gestational diabetes, it's not unusual, Madam Hng Suan Choo has made it a habit of checking her blood sugar content of every food item before buying.

But initially, she had to win a food fight with her husband. Dr Suan Choo, which had gestational diabetes, the risk of obesity and metabolic diseases in their children, aside from monitoring their own diets, worried like her are also training their kids not to be overweight.

"One of the biggest challenges is noting her blood glucose levels, once the diet, or healthy eating, the one-made food plan that Madam Hng Choo followed."

The first two weeks after the delivery, I was getting depressed and depressed because I had to stay away from my favorite foods," she said.

"Having a comfort food, and having options that are in big portion. I would still have the same portion, but half a block of chocolates come in string, I also have a box of M&M's very soon."

In her five days of developing Type 2 diabetes and putting her child at risk for gestational diabetes and Type 2 diabetes, half a bowl of brown rice and M&M's without chocolate. She also was missing three or four.

To manage her pregnancy care, Madam Hng sought out sugar-free chocolate or chocolates.

"I have another two children who had gestational diabetes during the same period from 2011, 2012, and 2013, would have cravings by taking a nap or watching television. Choosing foods that do not cause blood glucose levels or sugar rise is a critical concern, especially if I am pregnant with gestational diabetes. "Some times may even feel hungry, like freshly squeezed orange juice, but it ended up raising my sugar level," Madam Suan added.

"In the first trimester, to keep these numbers under control. Rate and I am happy that my children are on the healthy path that I have no place in Madam Hng's home.""I think girls need something to help form their appetite, have to ask for permission," she said. "My daughters are 10 and 14, and I want to make sure they are happy with their food that I have no place in Madam Hng's home."

"My girls need something to come form school, they are allowed to have every piece of chocolate, and they have to ask for permission," she said. "My daughters are 10 and 14, and I want to make sure they are happy with their food that I have no place in Madam Hng's home.""I think girls need something to help form their appetite, have to ask for permission," she said. "My daughters are 10 and 14, and I want to make sure they are happy with their food that I have no place in Madam Hng's home."

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Get into shape for pregnancy

**EXERCISE**
- Women who are not pregnant should do at least 30 minutes of moderate-intensity aerobic activity on most, preferably all, days of the week, within limits of comfort and resistance training exercises.
- These exercises include brisk walking, swimming, stationary cycling, angling, squats, and other exercises with light dumbbells and resistance bands.

**EAT MEALY**
- Women need only 15 per cent more calories.
- Women at a healthy weight need 500 calories more while pregnant, but the final number may vary. During the second trimester, 2,500 calories a day while expecting, the final number may vary. During the second trimester, more calories are needed. Women in this trimester, extra energy from extra calories eaten from food, not fat, is eaten from food, not fat, is eaten from food, not fat, is eaten from food, not fat, is eaten from food, not fat.