

# Are your kidneys okay?

A 10-second urine test is your first defence against chronic kidney disease

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A SIMPLE test using a 'dipstick' in your urine sample can reveal the health of your kidneys in just under 10 seconds. This hassle-free screening is done using a specially coded test panel on a plastic strip.

Senior Consultant at the Singapore General Hospital's Department of Renal Medicine Associate Professor Lina Choong (photo) says, "The test will detect if there is any protein in your urine. The presence of protein means there could be a problem in your kidney, which needs to be looked at. Early detection means early treatment and we can prevent potentially serious kidney problems."

This reminder comes as Singapore commemorates the 3rd World Kidney Day on March 13.

## Kidney damage caused by disease is irreversible

As the filtration system for the body, kidneys remove waste and toxins. The pair of bean-shaped organs also balances fluid and many important substances in the body. Located below the ribs toward the middle of the back, a kidney can be damaged through an accident or a disease.



Professor Choong who is the Hospital's Director of Dialysis explains, "Once your kidneys are diseased for a prolonged period, irreversible damage may occur. You

will be diagnosed with what's known as Chronic Kidney Disease or CKD. Treating this in the early stages can slow its progression. While there is a proportion of cases where the disease is minor and only observation is required, CKD is often silent, meaning you will not have any symptoms. An assessment will need to be done to judge its severity."

There are five stages in the progression of CKD. "The various stages refer to the kidney's glomerular filtration rate. This simply means how efficient your kidney is in removing waste products. At stages 1, 2 and 3, we can slow down the disease progression. The patient will need an appropriate diet, lose weight if needed, cut down on his salt intake, exercise regularly and be started on the appropriate medication."

The aim is to prevent his condition from progressing to kidney failure, as Professor Choong explains.

"If he reaches stage 4, we will have to prepare him for dialysis. At stage 5 means his kidneys have none or very little function where he will need to be on dialysis or undergo a kidney transplant."

## High-risk individuals should be screened

Local data shows that the majority of CKD cases here are linked to diabetes and high blood pressure. If not properly treated and controlled with medication, both conditions can lead to complications in the kidney, says Professor Choong.

"Kidney disease leads to heart disease as well. There is a 10 times higher

risk of getting heart disease compared to others without CKD. So if you currently have diabetes and high blood pressure, you should be screened with the simple urine dipstick test. You can do this at any polyclinic or your family doctor's. Early detection and treatment will reduce your risks of kidney failure and heart disease."

## Youngest patient was just 13

Professor Choong cautions that CKD does not just affect a selected population although some may have higher risks. "Anyone can get CKD and at any age too. My youngest patient was just 13 when he was diagnosed with stage 1 CKD. A routine screening in school detected protein in his urine."

If CKD is treated early, the need for dialysis can be delayed. "Disease progression can be slowed. Untreated kidney disease especially if associated with high blood pressure has been shown statistically in a local study to progress to the need for dialysis in just three years. When treated, many patients can go



on for 10 to 20 years before needing dialysis."

As CKD is a 'silent' disease, Professor Choong urges high-risk individuals to be vigilant on their health of their kidneys.

"Early kidney problems do not present any symptoms. So you may not even know until it's too late."

## Are you at risk of getting Chronic Kidney Disease?

See your doctor for a urine dipstick test if you

- are above 50 years
- are a smoker
- are overweight
- have diabetes
- have high blood pressure

## Five stages of Chronic Kidney Disease

Stage	What to expect
1	Start medication Watch your diet and cut down on salt intake Exercise regularly Lose weight if overweight
2	
3	
4	Prepare for dialysis
5	On dialysis / Undergo kidney transplant

## Lifestyle changes kept him off dialysis machine

Programming analyst Jeffrey Ong considers himself a lucky man. His diabetes-related chronic kidney disease is not serious enough for him to be hooked up to a dialysis machine, thanks to a strict diet control and regular check-ups. It is an achievement that the 68-year-old is proud of, particularly when many in similar situations have failed.

"It is already quite good that I can still maintain my health. A friend around my age also had diabetes. Like me, his kidneys were also affected. But his condition was so serious that within a year, he already said goodbye."

When Mr Ong was first diagnosed with diabetes three decades ago, he paid little attention to his diet. "The doctor gave me medicine and told me to eat cut down on fatty food and take less sugar and salt. In the beginning I



followed his advice but after a while, I returned to my old habits."

For Mr Ong, that meant having supper every night and often indulging in his favourite braised pork trotters, laksa and fried Hokkien mee. Smoking 30 sticks of cigarettes a day was a must. He continued living this way even after his blood pressure shot up and he became overweight by 20 kg.

The wake-up call came in March 2001. "I started having heart problems. A scan showed three arteries were blocked.

As the damage was extensive, I had to undergo a heart bypass. Fortunately, I came out of that all right. The doctors also said I had serious problems with my kidneys. A blood test confirmed it."

Mr Ong was referred to Associate Professor Lina Choong, a Senior Consultant in the SGH Department of Renal Medicine. "Dr Choong told me if I don't control myself and change my lifestyle, I would need dialysis. I need long-term medication to prevent my kidneys from worsening."

To better understand his condition, Mr Ong read and learnt all he could about the topic. Armed with facts coupled with sheer determination to stay away from a dialysis machine, he made drastic changes to his lifestyle. Through self-discipline and support from his family, Mr Ong now weighs just 60 kg. His diabetes and high blood pressure are controlled with medicine.

"I had my last cigarette seven years ago. These days, I eat mainly organic food and fruits. At home, we have steamed fish and vegetables. I can't remember the last time I had satay, laksa or sweet desserts. So far I've lost about 20 kg. Every morning, I meet a group of 30 friends for 45 minutes' of tai chi as a form of exercise. We only take a break if it rains, otherwise public holiday or not, I will join them. Now every three months, I come to SGH and see Dr Choong for a review, a blood test and stock up on my medicine."

Having learnt the importance of early intervention for chronic conditions like diabetes and kidney disease, Mr Ong hopes others can learn from his experience.

"Don't take your health for granted, even if you are now young. Take care of yourself. If you have diabetes, see your doctor regularly and follow the 'rules'. Early stage of kidney disease has no symptoms so you must go for regular check-ups."