Weighing scales have a new ally in the battle of the bulge – the humble tape measure. Carrying fats around the waistline (central adiposity) can put people at risk of obesity-related complications even when their body mass index (BMI) is in the healthy range.

“There is no one best measure of adiposity, but it is always recommended to use more than one measure, as they show different things,” Dr Benjamin Lam, Consultant, Family and Community Medicine, Khoo Teck Puat Hospital (KTPH), observed. “BMI is more closely related to high blood pressure, while central adiposity is more closely related to metabolic diseases such as diabetes.”

Patients whose waist circumference is more than half their height are therefore advised to undergo a medical evaluation for cardiovascular risk factors, especially if their BMI exceeds the “increased” cut-off level of 23.0.

Why BMI has its limitations
While BMI is considered the benchmark for measuring a patient’s overall adiposity, it does not consider body fat distribution. This is significant because fat in certain areas of the body, particularly around the waist, has more health implications than fat elsewhere.

In addition, BMI does not differentiate between lean mass and fat mass. While this is generally not an issue except for specific groups of patients, such as athletes, it limits the accuracy of the measurement across age, gender and ethnicity.

To better understand whether the limitations of BMI can be overcome, researchers from KTPH’s Family and Community Medicine Unit carried out a study on an alternative measure of adiposity, the waist-to-height ratio.

“BMI is more closely related to high blood pressure, while central adiposity is more closely related to metabolic diseases such as diabetes.”
Dr Benjamin Lam, Consultant, Family and Community Medicine, KTPH

Obesity ranks as the fifth leading risk for death globally. (World Health Organisation, 2010)
The waist-to-height ratio, which measures central adiposity, eliminates the need for age, gender or race specific cut-offs – all patients can be evaluated by an individual cut-off common to the population. Some studies have also proposed a universal cut-off of 0.5. For this reason, it is considered superior to other measures such as waist circumference alone.

The KTPH study aimed to evaluate whether the waist-to-height ratio is really a more accurate predictor of cardiovascular disease risk as compared to other measures. In fact, according to Dr Lam who led the study, the results indicated that the best way to identify cardiovascular disease risk factors may be a combination of both BMI and waist-to-height ratio. When looking at the adiposity measurements of diabetes patients, for example, 92.6 percent of patients had an increased BMI, an increased waist-to-height ratio, or both.

Obesity has far more complications than many people realise. It is a major risk factor for a range of diseases including diabetes, hypertension, cardiac disease, stroke, and even several types of cancer. On top of that, it can affect quality of life significantly. Hence, early indicators such as BMI and waist-to-height ratio can be important for intervention purposes.

Obesity and what it brings with it
People are getting fatter everywhere, and not in a good way. The World Health Organisation describes it as a global epidemic of overweight and obesity, one that brings an array of serious health disorders, and Singapore is not spared. According to the most recent results of the National Health Survey conducted by the Ministry of Health, 10.8 percent of Singaporeans are obese based on the clinical definition of a BMI of 30 and above, and this number is rising annually.

Obesity has far more complications than many people realise. It is a major risk factor for a range of diseases including diabetes, hypertension, cardiac disease, stroke, and even several types of cancer. On top of that, it can affect quality of life significantly. Hence, early indicators such as BMI and waist-to-height ratio can be important for intervention purposes.

“Abnormally fat cells are sick cells: they produce substances that trigger inflammation and modify metabolic behaviour, contributing to the development of metabolic diseases such as diabetes.”

That excess fat may be a disease
Although obesity has traditionally been looked upon as a risk factor, health professionals are slowly beginning to consider it a disease in its own right. The American Medical Association, for example, has officially recognised it as a disease since 2013.

While labelling obesity a disease may be controversial, there is a physiological reason for it. Abnormally fat cells are sick cells: they produce substances that trigger inflammation and modify metabolic behaviour, contributing to the development of metabolic diseases such as diabetes.

“There is a pathophysiology taking place that needs to be treated,” Dr Lam says of the underlying physical processes that cause obesity-related complications. “We need to shift the popular view of weight management away from the aesthetic aspect, and start looking at it as a treatment in itself.”

The first step, he feels, is to help overweight people reduce their weight to prevent obesity-related complications. Health professionals such as dietitians, physiotherapists and doctors can provide advice on losing weight and exercising safely. Doctors can also prescribe medical treatment if needed which slimming clinics are not licensed to do.

At the same time, there is a need for greater acceptance of the medications and procedures used to treat obesity. Currently, prescriptions are limited to fat blockers and appetite suppressants, and treatments for weight management tend to receive less attention than other areas. If this can be changed, overweight and obese patients would find it easier to get medical attention and thus be more inclined to address their condition.

“We need to get people to treat obesity more seriously,” Dr Lam says. “If there is greater recognition of the condition, and if treatment is made easier to obtain, a greater number of people out there will be able to reduce their risk of developing medical complications.”

About Dr Benjamin Lam
Dr Benjamin Lam is a Consultant in the Department of Family and Community Medicine in KTPH which focuses in health screening, weight management, chronic disease management and public health education.

Having a keen interest in the areas of Obesity and Metabolic Medicine, Dr Lam did a 1-year Clinical Research Fellowship with Imperial College, London in the United Kingdom in 2013, and pursued a Master of Science in Weight Management from the University of Chester while he was in the United Kingdom.
Keeping an eye on your eyes

Every weekday, Mr Teo, 70, takes the bus to pick up his granddaughter from school. After picking up his granddaughter one day, they were about to take the bus when his granddaughter pulled him back as it was the wrong bus. Mr Teo realised that his eyesight of late was not so good so he decided to go for an eye screening. He was diagnosed with the first stages of age-related macular degeneration (AMD) which caused his central vision to be blurred.

AMD is the leading cause of blindness in individuals over the age of 65 in developed countries. It is a degenerative eye-condition that affects a tiny part of the retina at the back of your eye called the macula. People with AMD experience distorted or blurry central vision when looking directly at something. Over time, AMD may cause a blank patch in the centre of one's vision.

“It was fortunate that Mr Teo realised that his vision had reduced. He was detected to have wet age-related macular degeneration and was treated with multiple injections into his eye. If he had not approached us early the disease would have progressed to an advanced stage and would not have benefitted by treatment. He also made changes to his lifestyle which helped him reduce progression of his eye condition,” said Dr Lekha Gopal, Consultant, Ophthalmology and Visual Sciences, KTPH.

Mrs Tan Ching Yee, Permanent Secretary, Ministry of Health, had her eyes checked by Adj A/Prof Yip Chee Chew, Head and Senior Consultant, Ophthalmology and Visual Sciences, KTPH, at the annual AMD Week 2015.

Feed your eyes!

<table>
<thead>
<tr>
<th>Eating food rich in antioxidants such as Vitamins C, E, lutein and zinc can help protect your eyes from AMD.</th>
<th>Risk factors for AMD include:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Over 55 years old</td>
<td>• Female</td>
</tr>
<tr>
<td>• Fair skin</td>
<td>• Smoker</td>
</tr>
<tr>
<td>• Diet low in antioxidants</td>
<td></td>
</tr>
</tbody>
</table>

Some of the top food

<table>
<thead>
<tr>
<th>Spinach – Vitamin A, Lutein, Zinc</th>
<th>Broccoli – Vitamin C and Lutein</th>
<th>Multi-coloured vegetables and fruits – Vitamin A and Vitamin C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mushrooms – Zinc</td>
<td>Avocados – Vitamin C and Vitamin E, traces of zinc</td>
<td>Almonds and nuts – Vitamin E</td>
</tr>
<tr>
<td>Melon and pumpkin seeds – Zinc</td>
<td>Sesame seeds – Zinc</td>
<td>Eggs – Vitamin E</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Egg Yolks – Vitamin A</td>
</tr>
</tbody>
</table>

Protect your eyes

See an eye specialist as soon as possible if your vision becomes blurred or distorted. Treatment for early AMD can correct or prevent further loss of vision. It is recommended to have regular eye screenings every 2 years if you are above 55 years old. If detected early, treatment for AMD may be effective in correcting or preventing further loss of vision.

The AMD Week is organised annually by KTPH, together with private and public eye care partners, public and educational institutions, optical stores and various community centres. The aim is to educate the importance of having regular eye examinations and to seek treatment early if they have symptoms such as blurring or distortion of vision.

About Ophthalmology and Visual Sciences (OVS)
The Ophthalmology and Visual Sciences (OVS) department at KTPH provides a comprehensive range of services to manage various eye conditions. The department offers treatment and consultation for cataract, medical and surgical retina, oculoplastic and cosmetic eye conditions, paediatric ophthalmology, squint (misaligned eyes), glaucoma, cornea, uveitis (eye inflammation) and age-related macular degeneration (AMD). Seeing the challenges of an ageing population, we organise community outreach programmes to educate the public on the importance of proper eye care regularly.
For Madam Siti, who was randomised to the surgical procedure, it was a success. Just six months after the procedure, her condition had improved. She lost nearly 20 kg, was able to walk briskly without becoming out of breath, and even took up sporting activities. And most importantly, her need for medication for her diabetes was significantly reduced.

Treating obesity and diabetes at the same time

Bariatric surgery, also known as metabolic surgery, is not just a weight loss treatment. It can also be used to treat a range of conditions including diabetes, high blood pressure, renal problems, and high cholesterol. In particular, it has been successfully used to treat diabetes, prompting doctors to coin a new name for it: diabetes surgery.

“Losing weight is just one desirable effect of the surgery,” says Dr Tan Chun Hai, Associate Consultant at KTPH’s Department of General Surgery. “It also improves diabetes control significantly. Patients with a shorter duration of diabetes have a higher chance of coming off medications after undergoing surgery. Patients with a longer duration of diabetes may have their medication requirements reduced.”

A wide range of bariatric options exist today, ranging from sleeve gastrectomy to the Roux-en-Y gastric bypass. These can be done laparoscopically and have a low complication rate.

In general, bariatric surgery is recommended for patients who are morbidly obese and have multiple health problems.
co-morbidities related to obesity that significantly affect their quality of life, such as chronic joint pain and arthritis, obstructive sleep apnoea, and metabolic diseases. To reduce the risk of these co-morbidities leading to post-operative complications, patients undergo a preparatory period of up to six weeks. They have to stop smoking, go for scopes and sleep study while some may require continuous positive airway pressure (CPAP) or commence on a very low calorie diet.

The long preparation, however, is balanced off by a short recovery period. Within 24 hours patients are typically mobile, and can be discharged on the third day. They will spend two weeks on a liquid diet, slowly graduating to pureed and then soft foods. During this period and for some time following, dieticians will assist them in modifying the types of food they eat and their intake.

Thus far, bariatric surgery has had more encouraging results in comparison to medical therapy, according to Dr Tan. “A higher proportion of patients who undergo bypass surgery have resolution of diabetes and higher excess weight loss when compared to the medical arm,” he says. “Their cholesterol, blood pressure and other co-morbidities all improve.”

Looking after patients’ interests

The KTPH study has so far been able to observe 16 patients, but Dr Tan and his team members hope to recruit up to 40 volunteers so as to get more substantiation. They are looking for patients between the age of 21-65, with a BMI of 27-32, who have had Type 2 diabetes for less than 10 years and who are willing to undergo either bariatric surgery or medical therapy. The volunteers will be offered either treatment on a purely random basis.

This study has been approved by the Domain Specific Review Board (DSRB) so that the patients and doctors interest are both protected. “The entire study is designed to protect patients’ interests,” he says of his team’s methodology. “The diabetes control of participating patients will improve regardless of which group they are placed in.”

For patients whose BMI falls outside this range, concrete evidence already exists for the effectiveness of bariatric surgery versus medical therapy. It has been proven highly effective in keeping diabetes in remission for patients whose BMI is > 35. Patients whose BMI is in the 30-35 range will first be offered intensive treatment and medical therapy, and if the disease is still not well controlled, they will then be recommended for surgery. However, Dr Tan points out these figures are derived from studies involving Western populations, and when adjusted for Asian populations, the second group of patients – those who will be recommended for surgery only if medical therapy cannot control the disease – is similar to the 27-32 group that his team’s study focuses on.

“At the end of the day, we hope to gain a better understanding of how we can improve patients’ quality of life, whether this is through medical therapy or surgical means,” he says.

About the Research Study Team

The research study “Rou-en-Y Gastric Bypass vs Best Medical Treatment for BMI 27-32 Type II Diabetics - a randomised control trial” started in 2014 with Dr Anton Cheng, Senior Consultant, General Surgery, KTPH, and Prof Lim Su Chi, Senior Consultant and Head of the Clinical Research Lab, KTPH as Co-Principal Investigators. This study examines the effectiveness of bariatric surgery – the Roux-en-Y Gastric Bypass – and best medical therapy in the treatment of type 2 diabetes mellitus for patients with a body mass index (BMI) of 27-32. Motivated by the fact that obese diabetics, or diabesity, is reaching epidemic proportion, the study began in early 2014 and is looking at recruiting 40 patients, with 20 in each of the surgical and medical arm.

Dr Tan Chun Hai (right) is an Associate Consultant in the General Surgery Department in KTPH. He is also a member in this study team.
Madam Teo is scheduled for a total knee replacement (TKR) surgery. She is worried about pain control and how she will manage with her new knee.

A couple of weeks before the surgery…
Madam Teo will have to go for an assessment to check her health status before undergoing the TKR surgery. The assessment is done at the Anaesthesia Clinic where the anaesthetist or trained nurse will ask questions relating to her health, perform a quick physical examination and simple blood investigations, and an electrocardiogram or chest x-ray. If further investigations are required, this will be coordinated from the clinic. At the point, if Madam Teo has any concerns, they can be raised to the staff.

Types of anaesthesia
“The clinic will discuss anaesthetic options and risks based on Madam Teo’s health status. Recovery from anaesthesia generally depends on the type of anaesthesia she will have,” explained Dr Liaw Chen Mei, Associate Consultant, Anaesthesia, KTPH.

There are two main types of anaesthesia used - general anaesthesia (GA) or regional anaesthesia (RA).

Patients who undergo a GA may wake up feeling drowsy and giddy, and a proportion will have nausea or vomiting. As a breathing tube will be inserted when under anaesthesia, some patients may get a sore or dry throat after surgery.

The RA technique can also be done where medication is used to numb the lower half of the body. In this instance, the patient remains awake although some sedating agents can be used in very anxious patients to keep them comfortable during surgery. Patients who have a RA technique generally recover better in the immediate period post-surgery, as they avoid some GA side effects.

Post-Operation Pain Control
After the operation, to alleviate this pain, the anaesthetist recommends the use of a peripheral nerve block where nerves supplying part of the knee is numbed using medication. This technique is performed before GA or RA techniques.

With the help of ultrasound guidance, a small catheter is inserted and anchored down near the nerve and medication is continuously given after the surgery. As with any type of injection, this technique poses a small risk of bleeding and infection at the site of injection, and very rarely, nerve injury. Past experiences showed that this technique helps with reducing pain and allowing patients to undergo physiotherapy and ambulate quicker. Oral tablets are also given after the operation to help reduce the pain further.

Alternatively, the patient can opt for intravenous medications (e.g. morphine) via a patient-controlled device. This means that the patient can administer pain medications as and when it is required. Some patients get side effects such as drowsiness and giddiness, nausea and vomiting, breathing difficulties or problems with passing urine or bowel movements, though these are also generally uncommon.

Post-operatively, the acute pain service (APS) team comprising of anaesthetists and a specialist pain nurse will continue to manage any pain the patients may have.

Rehabilitation after TKR
Rehabilitation starts the next day after surgery. The rehabilitation team comprising the Physiotherapist (PT) and Occupational Therapist (OT) will assess Madam Teo. The team will take into account her medical status, physical fitness and the goals she would want to achieve after her TKR. An individualized rehabilitation programme is planned out together with her with her goals in mind.

“The PT will teach the patient the different types of exercises to ensure good circulation, improve muscle strength and range of motion especially bending the knee. If her condition is stable, she can start walking on the first day after the operation,” said Magdalene Teng, Senior Physiotherapist, KTPH.
Using a walking frame, Madam Teo will be assisted by her PT when walking. It is crucial that she performs her range of motion exercises and works on strengthening her leg as much as she can tolerate. The exercises will be progressed over the next days with the aim of her being able to walk on her own, with the help of either a walking frame or quad-stick.

Mina Han, Senior Occupational Therapist, Rehab Services, KTPH, shared, “The OT will assess Madam Teo’s ability to manage her daily living activities, such as dressing and toileting, safely. We will also be discussing with her and her family about making her home a safer and more accessible environment with some modifications such as grab bars.” Other adaptive equipment such as commodes for easier toileting may also be recommended if necessary.

The initial stages of rehabilitation may cause some discomfort and slight pain. This is common and is part of the rehabilitative process. Madam Teo will be strongly encouraged to continue with her pain medications as prescribed by her doctors. It is advised that she keeps her operated leg elevated in a straight position when resting in bed which helps with swelling control. If necessary, ice packs can be applied for 15-20 mins, 2-3 times a day.

**Recovery at home**

Madam Teo will be discharged typically after 3-4 days. She should be independent with her activities and confident with managing at home. She will be prescribed a home exercise programme to continue to improve on her knee strength and movement. She should continue to elevate her leg when resting and ice it regularly especially after exercise. It may be helpful to have someone at home to help for the initial first few weeks as she may not be fully mobile yet.

She will be reviewed in the outpatient physiotherapy department around 2 weeks after discharge. The PT will review her progress and address any concerns that she might have. It takes about 3-6 months for Madam Teo to regain full strength and walk independently without an aid. It is important that she continues with her exercises to help build up her strength.

**About the care team**

Dr Liaw Chen Mei is an Associate Consultant in the Department of Anaesthesia in KTPH. She is the Clinician Lead for the Pre-Anaesthesia Clinic. The Pre-Anaesthesia Clinic, comprising of anaesthetists and trained nurses, reviews and optimises all patients requiring anaesthesia to ensure they are as fit for surgery/anaesthesia as possible.

Ms Magdalene Teng has been with KTPH as a physiotherapist since June 2011 and is an existing member of the Singapore Physiotherapy Association. She graduates with honours from the University of South Australia and her professional interests and passion revolve around the rehabilitation of patients following various orthopaedic surgery, musculoskeletal and traumatic related conditions.

Ms Han Peishan Mina holds a Master Degree in Occupational Therapy from Brunel University, United Kingdom. She has been working with the geriatric population in the acute hospital and community nursing home since 2006. She is currently part of the KTPH’s geriatrics and palliative team, which looks into improving the quality of life of palliative patients and their caregivers.

All photos courtesy of Claudine Quek Sock Ling, Nurse Clinician, Nursing Administration, KTPH.
Mr T. S. became wheelchair-bound in his seventies after his left leg had to be amputated due to diabetic complications. Within one week of starting to use the wheelchair, he began to complain of pain in his buttocks. His daughter, who was looking after him, initially thought that he was just unaccustomed to sitting in the wheelchair all day. But then she noticed some blood-flecked discharge on the seat of his pants. On checking, she found that a large, crater-like hole had appeared in the skin of his left buttock, exposing the raw flesh.

The long hours of sitting immobile in the wheelchair, combined with poor circulation caused by diabetes, had caused Mr S. to develop a pressure ulcer, also known as a pressure sore or bedsore. Bedsores are common among elderly patients who have reduced activity or become immobile, and they can present a serious health problem if they become infected or reach an advanced stage.

Don’t let the sores grow on you

Contact areas where pressure sores can occur

- Back of head
- Shoulder blade
- Elbow
- Tailbone
- Buttocks
- Heel
- Shoulder blade
- Elbow
- Tailbone
- Buttocks
- Heel
- Ball of foot
Keeping patients’ skin healthy
Preventing bedsores requires care and attention. Firstly, bedridden or wheelchair-bound patients need to move regularly to redistribute pressure on their skin and help their blood circulation. Pressure that impairs their circulation for as little as two hours can cause a bedsore. Hence, caregivers need to ensure that patients change their position frequently – at least three times when sitting and if the patient is lying down or sleeping.

Elderly patients also need extra care as the skin becomes more fragile with age. Their skin must be kept clean and dry, and if necessary, moisturising creams or lotions should be applied. When they move around, care must be taken to prevent too much rubbing or friction on the skin. Patients who are incontinent or have trouble using the toilet should also use barrier ointment to protect the skin from being irritated by urine and other waste.

Most importantly, patients should try to lead a healthy lifestyle. Although patients with low mobility may have difficulty staying active, they should still eat a balanced diet and refrain from smoking or drinking alcohol.

Recognising the signs
Not all patients are able to tell their caregivers when they suffer from bedsores. Others may have numbness or reduced sensation in some parts of their bodies, and hence do not know when bedsores have developed. Caregivers should therefore be aware of the symptoms of bedsores. These include:

- Redness on parts of the body that are in contact with the surface on which the patient rests, especially buttocks, heels, elbows, shoulder blades, and even the back of the head
- Bruising and swelling in these areas
- Rashes or dry skin
- Cracks in the skin, scabs, or blisters

Bedsores typically begin as red patches that may feel different from the surrounding skin. If not attended to, they develop into shallow wounds that may resemble blisters. The wound will continue to deepen and become crater-like, exposing subcutaneous fat. If it continues to progress, even more tissue will be lost, sometimes exposing muscle, tendon or even bone.

Sometimes, acutely ill or terminally ill patients can develop bedsores in as short a time as two hours due to poor circulation and poor nutrition.

Getting the right treatment
While a bedsore is still in its early stages, treatment is much the same as prevention. Pressure should be kept off the wound, either by frequently changing the patient’s position or by adding more padding and cushioning to the surfaces the patient rests on. Dressings that cushion the affected part(s) of the body can also be used. The wound site should also be kept clean and dry.

If the bedsore has developed to a point where there is significant tissue loss, additional procedures may be needed. For example, the wound may have to be debrided to stimulate healing or, if the damage is severe enough to expose bone, reconstructive surgery may be needed to fill up the wound. Antibiotics may also be prescribed if the wound has become infected.

Ultimately, prevention is better than cure. The majority of bedsores develop while patients are at home, in nursing homes, or in community hospitals. Caregivers and patients alike need to be aware of the risk and play a role in maintaining their own health.
Bringing more cheers to elderly in North West

Tri-Generational HomeCare @ North West, launched by Dr Teo Ho Pin, Mayor of North West District, aims to strengthen inter-generational bonds and provide holistic care to serve the health and social needs of the elderly population.

The care teams comprising both university and secondary school students play the role of advocates to vulnerable elderly. The teams will assess the elderly’s needs, meet these needs and coordinate the care. With such social support, elderly living alone in homes will have access to resources which aid in their wellbeing.

Learning the ropes to provide care
Under AHS’ AIP programme, patients with three or more hospital admissions within six months are identified as “frequent flyers”. Community nurses will visit these patients’ homes, review their unmet needs, customise care plans and at the same time, coordinate the necessary follow-ups to better manage their conditions.

Through the Tri-Generational HomeCare @ North West, the AIP team and the NWCDC train the students on healthcare, caregiving and befriending skills. To ensure a high standard of care for the patients, the student teams will present their assessment and management plans to a multi-disciplinary team consisting of healthcare professionals from AHS (Geriatricians, Nurses, Medical Social Workers, Pharmacists and Rehabilitation Therapists) and staff from NWCDC at the start and end of each cycle.

Dr Wong Sweet Fun, Alexandra Health System (AHS)’s Programme Director for the Ageing-In-Place Programme, said, “This tripartite collaboration adds a new dimension of inter-generational relationships and addresses several social determinants of health, in line with our AIP goals.”

A total of 28 professional staff from AHS is involved in this project. This includes 15 community nurses, 6 allied health professionals (1 pharmacist, 3 rehabilitation therapists and 2 medical social workers). They are also supported by AHS’ healthcare assistants, volunteers, administrative team, as well as business analytics and design thinking teams.
Yishun Community Hospital - facts, figures and facilities

Site Area

1.16 hectare
9.28 Olympic-size swimming pools

428 beds
54 private beds
374 subsidised beds

13 wards
2 private rehab wards
7 subsidised rehab wards
2 subsidised sub-acute wards
1 subsidised sub-acute dementia ward
1 subsidised sub-acute palliative ward

15 gardens
10-Storey Inpatient Tower
Launch of bilingual cookbook – healthy tasty easy Malay dishes

Healthy dishes can be tasty and to prove it, KTPH dietitians have published an English/Malay bilingual cookbook “Resipi Sihat Masakan Melayu”. The book was launched at a Malay nutrition forum in August. At the forum, KTPH doctor, dietitian, physiotherapy and chefs shared health issues and how to prevent them and shared exercise and healthy cooking tips.

Guest-of-honour Associate Professor Muhammad Faishal Ibrahim, Parliamentary Secretary for Health and Transport (then), and MP for Nee Soon GRC, was encouraged at the crowd of 200 audiences who attended the forum. “Switching to healthier meals is a journey to be taken together as a family. Cooking tasty dishes that use ingredients such as healthier oils, whole grains, minimum sugar and salt for all the family will make it easier for everyone to commit to a healthier lifestyle and to support each other,” he said.

As shared with us by Ms Diana Chia, President, NTUC and General Secretary, Healthcare Services Employees’ Union (HSEU), in the National Day message, “As we celebrate SG50, let us build the Singapore brand of trust and assurance. Let us work together for a vibrant economy where our workers have the opportunity to progress and enjoy a fair share of the fruit of success. Together, we can build a better life for our workers and their families for the next 50 years. Happy SG50. Happy National Day.”

28 September 2015 marks the day where the family of AHS celebrated Singapore’s 50th birthday and KTPH’s 5th anniversary. Together with volunteers, partners and friends of AHS, the occasion was graced by Mr Patrick Tay, Director, Legal Service Department, NTUC.

“KTPH has gone beyond a hospital; it has become a health hub. Besides providing care to patients living in this part of the island, it has done a lot of outreach, in partnership with grassroots,” said Mr Tay in his opening address.

As Singapore and KTPH move into its next milestone, more needs to be done for our ageing population. Mr Tay’s vision is for AHS to proactively promote health and healthcare so that “we can keep the frequent flyers away and to keep everyone in Yishun very healthy”.

You can download the free copy of the cookbook at the proof is in the eating! KTPH chefs whipped up some of the recipes for the audience to try.
Heart Failure Awareness Day

Heart diseases – including heart failure – are becoming a growing problem in Singapore. Everyday 18 people are hospitalised for heart failure in Singapore. Re-admissions for heart failure is preventable. The number of heart failure patients has been increasing due to aging population and success in treating heart attacks.

Members of the Joint-Institution Heart Failure Workgroup which is made up of KTPH, National Healthcare Group Polyclinics, National University Hospital and Tan Tock Seng Hospital come together to organise the Heart Failure Awareness Day annually. The event’s aims are to raise awareness about heart failure, teach the public how they can cope with the condition and promote a healthy lifestyle which can help reduce the risk of heart failure.

KTPH is proud to host the event this year on 17 September 2015. More than 300 members of public and staff took part in the activities held at the main lobby which included a cooking demonstration, games, health checks and group exercises led by our physiotherapists.

Did you know?

**Myth 1:** Heart failure means the heart has stopped working.
**Fact:** In heart failure, the heart continues to work, just that it is unable to work hard enough to meet the body’s demands.

**Myth 2:** There is no cure for heart failure and the heart will never recover.
**Fact:** With proper treatment, many patients are able to live relatively normal lives. If heart failure is due to myocarditis (inflammation of heart muscles) and high blood pressure, it may be reversed.

**Myth 3:** I must not exercise when I have heart failure.
**Fact:** It is very important to exercise provided you are stable and relatively free from symptoms. Do not over exercise. Rest when you feel breathless, very tired or dizzy. Appropriate exercise helps to improve blood flow, increase stamina and strengthen muscles.

**Myth 4:** Heart failure is a disease of the elderly.
**Fact:** Although heart failure is more common among the elderly, it can affect young people and even children.

**Myth 5:** Heart failure cannot be prevented.
**Fact:** While some causes of heart failure cannot be entirely prevented, many causes of heart failure can be prevented. These include heart failure caused by heart attacks, high blood pressure, alcohol and drugs.

By stopping smoking, controlling diabetes, high blood pressure, high blood cholesterol, maintaining ideal weight, and keeping physically active, your risk of heart attack and heart failure can be reduced.

Stepping up your fitness before the festivities

Regular stair-climbing has been shown to be effective in decreasing body fat and increasing the strength of the lower limbs, besides being convenient and requires no specialised equipment.

Stickers are made available at no charge at our retail pharmacy. While stocks last.

You may download from
Five new species of butterflies were sighted earlier this year. Mr Simon Chan (Senior Executive, Operation Admin) tells us more.

The female Common Tiger (*Danaus genutia*) was spotted at the Medicinal Garden. In Singapore this species come in two forms, the more common orange hindwing (form *genutia*) and the rarer white hindwing with borders tinged with orange (form *intermedius*). This one had white hindwings.

A male Apefly (*Spalgis epius epius*) was spotted resting on a leaf of a shrub in the Medicinal garden. This species is interesting because it is a carnivorous caterpillar. It eats aphids for supper and is a good friend of gardeners.

A female Chocolate Albatross (*Appias lyncida vasava*) was spotted fluttering around the dense bushes at B1 nearest the Eu Yan Sang clinic. This species is a rare migrant from Malaysia. They normally visit Singapore during the months of February to June. We are trying to entice this species to stay in Singapore by planting its hostplant, Spider Tree (*Crateva religiosa*) here at KTPH.

These Yellow Palm Darts (*Cephrenes trichopepla*) were spotted at the bushes near the entrance of KTPH. The species was originally from Australia but have made Singapore their home since 1999.

Noticed the blue edges of the butterfly? Known as the Striped Blue Crow (*Euploea mulciber mulciber*), it was spotted feeding on False Dill at the Medicinal Garden. The males have blue tones on their forewings while the females have white stripes.

These Yellow Palm Darts (*Cephrenes trichopepla*) were spotted at the bushes near the entrance of KTPH. The species was originally from Australia but have made Singapore their home since 1999.

The female Common Tiger (*Danaus genutia*) was spotted at the Medicinal Garden. In Singapore this species come in two forms, the more common orange hindwing (form *genutia*) and the rarer white hindwing with borders tinged with orange (form *intermedius*). This one had white hindwings.

A male Apefly (*Spalgis epius epius*) was spotted resting on a leaf of a shrub in the Medicinal garden. This species is interesting because it is a carnivorous caterpillar. It eats aphids for supper and is a good friend of gardeners.

Noticed the blue edges of the butterfly? Known as the Striped Blue Crow (*Euploea mulciber mulciber*), it was spotted feeding on False Dill at the Medicinal Garden. The males have blue tones on their forewings while the females have white stripes.

Photos and article contributed by Mr Simon Chan (Senior Executive, Operation Admin) and volunteers
I am a 38 year old working adult and have been exercising to manage my stress. For the past two weeks, I am having difficulties sleeping at night. When I do fall asleep, my sleep is short and interrupted. I am feeling really lethargic. What are some remedies?

The general reason why people have sleeping issues is that body activity is unable to quiet down at night. The most fundamental thing you should do is to avoid doing your exercises at night, and go to bed at a regular time. In order to be functioning optimally, the body needs to be in harmony with the environment.

Patterns of insomnia and the remedies
The first pattern of insomnia is due to hyperactivity of emotions. Patients exhibiting this pattern would also experience irritability, giddiness or headache and pain in the flanks. This pattern is usually directly linked to unmanageable stress.

The second pattern is due to poor nourishment, caused by poor nutrition or weak digestion, leading to pale complexion, heart palpitations, absent mindedness, fatigue and excessive perspiration.

The third pattern is due to imbalanced digestion, where sufferers experience bloating, acid reflux, frustration, and/or bitter taste in the mouth.

From the Chinese medicine perspective, any or a combination of these patterns could be the underlying reason for your sleep issue. Acupuncture is one way that could help with this condition and it involves needles that are placed and manipulated in specific points in the body. These points are mostly found on meridians or channels that are linked to functions in our body. Acupuncture aims to correct imbalances that manifest as symptoms like the ones you described. Generally, points on the head and limbs will be selected, but would vary slightly based on the different patterns exhibited.

Modern research has shown that acupuncture affects our nervous system, and it triggers the release of chemicals like serotonin and endorphins. These are our natural painkillers and substances that relax us, and at the same time, promote the sense of wellbeing. It is recommended to undergo treatment in the afternoon or evening as compared to the morning. Your condition has been on-going for two weeks, which is considered relatively short and easy to rectify.

You can also try doing foot soaks before sleep. There are various acupuncture points on our foot and calf. A warm foot soak promotes circulation to these points and stimulates them to ease the mind and promote better sleep.

Reply by Ms Melissa Ong, Acupuncturist, Specialist Outpatient Clinic, KTPH

Here is a chance to ask any question you may have about various health topics or health conditions. Write in to AHA@alexandrahealth.com.sg with your full name and address and receive our special Alexandra Health dragonfly thumb drive if your letter is published.
Continuing Medical Education for Doctors

Continuing Medical Education (CME) plays an important role in keeping medical professionals current with changes in medicine.

Khoo Teck Puat Hospital organises regular Continuing Medical Education Programmes to update you of the latest trends and practice.

Venue: Kaizen 1 or Auditorium
Khoo Teck Puat Hospital,
90 Yishun Central S768828
For more information, please call our
GP Engagement Office at 6602 3016

Scheduled CMEs for 2016*

<table>
<thead>
<tr>
<th>Date (Sat, 1pm - 5pm)</th>
<th>Presenting Department</th>
</tr>
</thead>
<tbody>
<tr>
<td>9 January 2016</td>
<td>General Surgery (Colorectal)</td>
</tr>
<tr>
<td>16 February 2016</td>
<td>Gastro</td>
</tr>
<tr>
<td>13 February 2016</td>
<td>Ophthalmology</td>
</tr>
<tr>
<td>27 February 2016</td>
<td>DDR Annual KTPH Sports Imaging Seminar</td>
</tr>
<tr>
<td>19 March 2016</td>
<td>Sports Medicine</td>
</tr>
<tr>
<td>26 March 2016</td>
<td>Geriatric</td>
</tr>
<tr>
<td>2 April 2016</td>
<td>Cardiology</td>
</tr>
<tr>
<td>9 April 2016</td>
<td>Diabetes Centre Symposium</td>
</tr>
<tr>
<td>16 April 2016</td>
<td>ENT</td>
</tr>
<tr>
<td>23 April 2016</td>
<td>Psychological Medicine</td>
</tr>
<tr>
<td>28 May 2016</td>
<td>General Surgery (Upper GI)</td>
</tr>
<tr>
<td>9 July 2016</td>
<td>General Surgery (Breast)</td>
</tr>
<tr>
<td>23 July 2016</td>
<td>Endocrine</td>
</tr>
<tr>
<td>30 July 2016</td>
<td>Urology</td>
</tr>
<tr>
<td>20 August 2016</td>
<td>DDR</td>
</tr>
<tr>
<td>3 September 2016</td>
<td>Orthopaedic Surgery</td>
</tr>
<tr>
<td>10 September 2016</td>
<td>Renal</td>
</tr>
<tr>
<td>17 September 2016</td>
<td>Family Medicine</td>
</tr>
<tr>
<td>1 October 2016</td>
<td>General Surgery (Endocrine)</td>
</tr>
<tr>
<td>8 October 2016</td>
<td>Nutrition and Dietetics</td>
</tr>
<tr>
<td>22 October 2016</td>
<td>General Medicine</td>
</tr>
</tbody>
</table>

*Info correct at time of publishing.

For an updated listing, please visit https://www.ktph.com.sg/gpcme.