The Cancer Issue
Prevention
Treatment Options
Understanding Cancer

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Raffles HealthNews
A PUBLICATION BY Raffles Medical Group

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LIVEWELL

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It can be frightening thinking about cancer, and I have seen many cases of patients coming to my clinic with ‘cancer anxiety’. Do I see patients first presenting with symptoms of cancer in the GP setting? Yes, I have been in the practice long enough to have seen my fair share of normal working class patients walking in with symptoms that have turned out to be cancer.

I remember the young expat lawyer who presented with fainting attacks during meetings that turned out to be a brain tumour; the CEO who complained about a lump in his neck, which was in fact, a Nasopharyngeal Carcinoma, and the restaurant manager who discovered that he had lung cancer through a routine pre-employment check-up. All these cases have seared themselves into my memory, but I have also seen countless worried patients who insisted for investigations and specialist consultations to reassure them that they do not have a life-threatening neoplasm.

In our cover story, find out how to prevent cancer and when should you screen for cancer (pages 10 to 13). We also debunk some of the common myths on cancer (pages 16 to 17), and food that can prevent or cure cancer (pages 28 to 29). Learn how exercise can help prevent cancer and improve cancer survivorship on pages 36 to 37.

If you are unsure about the next step after being diagnosed with cancer, read pages 22 to 23 for a step-by-step guide on how to make decisions for cancer treatment. Our experts also share information on latest treatment technology (pages 30 to 31). Nutrition plays an important part in recovery. Find out what are some essential nutrients and recipes that are suitable for cancer patients during and after chemotherapy (pages 25 to 27).

Although cancer is the leading cause of death across the globe, the risk of developing cancer can be reduced by practising healthy lifestyle habits. The sooner a cancer is diagnosed and treatment begins, the better the chances of recovery.
New Docs on the Block

Dr Neo Wee Thong
Specialist in Diagnostic Radiology
Raffles Radiology

Dr Neo’s area of specialty is in minimally-invasive imaging guided procedures, and he also has special interests in interventional oncology and hepatobiliary interventions.

Dr Neo received the Academic Medicine Development Award (AMDA) for further subspecialty training in interventional radiology in 2014, and received training in advanced imaging-guided interventions with a particular focus in the area of oncology and hepatobiliary.

Physician Teo Pei Si
Raffles Chinese Medicine

Physician Teo was trained in Biomedical Science and Chinese Medicine under a joint programme by Nanyang Technological University and Beijing University of Chinese Medicine. She underwent a two-year clinical stint in Beijing’s Dongfang Hospital.

Physician Teo’s clinical interests lie in the use of herbal medication and acupuncture for gastrointestinal conditions such as gastritis and irritable bowel syndrome, women’s health and menstrual issues; dermatological conditions and respiratory issues such as post-viral cough and chronic obstructive pulmonary disease. She has experience in managing sub-health problems related to obesity, chronic fatigue syndrome, migraine and insomnia.

Raffles Connect: Your Comprehensive Healthcare Platform

Raffles Connect offers a comprehensive suite of services to its patients by leveraging Raffles Medical Group’s digital assets, such as the electronic medical record system.

Raffles Connect allows you to book medical appointments with a Raffles doctor, access your personal health records, stay updated of your health progress and retrieve information about your previous appointments. With the touch of a button, you can get connected to emergency services, purchase health supplements, and select Raffles health services conveniently. Through the personalised ‘Health Advisor’, get empowered with knowledge on healthy living and travel health.

Another important feature is the round-the-clock telemedicine service. You can video consult a Raffles doctor who has access to your medical records anytime, anywhere. What’s more, your prescribed medication will be delivered directly to your doorstep via the one-stop paperless and cashless platform. Your medical certificates or referral letters will also be emailed to you for a seamless experience.

DOWNLOAD THE RAFFLES CONNECT PLATFORM!
We are pleased to announce the opening of Raffles Hospital Chongqing. With this development, we are now in 14 cities across Asia, including eight cities in China, namely Beijing, Shanghai, Chongqing, Tianjin, Dalian, Nanjing, Shenzhen and Hong Kong SAR.

Raffles Hospital Chongqing is Singapore’s first international tertiary hospital in China, and it is owned and operated by Raffles Medical Group. It is a 700-bed hospital with two tower blocks connected by a podium. When fully opened, the Hospital will offer a full complement of specialist services with state-of-the-art medical technology and centres of excellence in gastrointestinal surgery, obstetrics & gynaecology, paediatrics, cardiovascular surgery, neuroscience and oncology.

The medical panel and management comprises a mix of reputable local professionals and top international talents in the healthcare industry including specialists, physicians, nurses, allied health professionals and managers from Singapore, Hong Kong, Taiwan, Malaysia, Australia, Canada, Britain and Europe.

The Hospital draws on established expertise, systems and service standards of Raffles Hospital Singapore where possible. The spaces and processes are designed around its patients to accord comfort, convenience, safety and privacy. Patient-centricity and personalised care are central to the experience in the Hospital. Services are integrated and seamless. In addition, patients can have peace of mind as services offered are evidence-based, audited and peer reviewed.
Raffles Pillow Angels

Many less-privileged elderly tend to use old, stained and flat pillows since changing them is low in priority to them.

On the morning of 26 January 2019, 35 staff of Raffles Medical Group partnered with Bethesda Care Services to deliver pillows and pillow protectors to elderly residing in the east of Singapore. The elderly were delighted to receive the pillows with waterproof anti-dust protectors just before the lunar new year.

“It was heartening to see the smiles on our elderly clients when they received the pillows and protectors. It was lovely too to see your staff gather in enthusiasm; some even came as families with young children and in coordinated outfits. Many of them had to travel quite a distance to come and support the event,” said Ms Jeslyn Koh, Senior Social Worker of Bethesda Care Services.

Shop for a Cause

To spread the Christmas cheer, Raffles Medical Group’s staff and their family members spent their Saturday morning on 15 December 2018 shopping for a cause. The group purchased food, toiletries and other necessities for residents of Zion Home For The Aged as well as 30 low-income families who are beneficiaries of Bethesda Care Services. The team then delivered the items to Zion Home and led the residents in singing Christmas carols. The morning ended off with the team mingling with the residents over refreshments and presenting them with a gift pack each.

Carolling at Raffles Hospital

On 14 December 2018, the East Coast Choir delighted the visitors, patients and staff of Raffles Hospital with their joyful festive tunes. They sang popular favourites including “Rudolf the Red Nosed Reindeer”, “Jingle Bells” and “We Wish You a Merry Christmas.”

Some patients even got out of their beds to join in the carolling session! We thank them for spreading the Christmas cheer to our patients.
Need help understanding health insurance? Approach our friendly advisors from Raffles Health Insurance in their newly-opened enquiry office. We will be able to advise you on the recently launched Raffles Shield and the benefits of integrated shield plans.

Raffles Shield is a Medisave-approved Integrated Shield Plan (IP) that provides coverage for hospital and surgical expenses. It comprises MediShield Life, a national health insurance plan administered by the Central Provident Fund Board, and an additional private insurance coverage administered by Raffles Health Insurance that enhances the basic coverage provided by MediShield Life.

Visit the Raffles Health Insurance’s office that is conveniently located at Raffles Hospital Level 1 (near the concierge counter). You may also contact our advisors at 6311 1564 or shield@raffleshealthinsurance.com.

Feedback Goes E

Your feedback, whether about how we can improve or what we have done well, is valuable to us.

As part of our effort to go green, we have replaced our hardcopy feedback forms with online survey forms for our GP clinics, Health Screeners, Dental clinics, Raffles Chinese Medicine clinics, Specialist Outpatient Centres and 24-hour Emergency Department.

With a more accessible feedback system, we have been receiving 45 per cent more feedback monthly since the conversion in August 2018. Following this success, the Group will be launching online surveys to its hospital wards this year.

Accessibility in Buildings

As a healthcare organisation, we understand the importance of building accessibility. As such, we have embarked on a voluntary Building and Construction Authority Universal Design (BCA UD) certification scheme for our new buildings in Singapore. UD buildings have user-friendly provisions to ensure safety and accessibility for all, including barrier-free accessibility for those with disability.

Last year, Raffles Holland V Mall was accorded the BCA UD certification as it was deemed to have UD features such as braille / tactile handrails and indicators, non-slip nosing flooring, proper way finding signage, stepless entry to mall, bicycle parking lots, handicap toilets, baby changing room as well as persons with disability evacuation lobby.

Raffles Specialist Centre is in the midst of getting certification for BCA UD certification with similar features as the Raffles Holland V Mall.
Cancer is the leading cause of death in Singapore. It currently accounts for a third of all deaths here on this island. Approximately one in four of us will develop cancer in our lifetime. As our risk of developing cancer increases with age, and you may have heard that our population is living longer, trends in cancer will continue to increase. Incidences of breast cancer among women have trebled since 2011, and there has been a six-fold increase in prostate cancer among men in that period.

There are numerous types of cancers affecting both young and old that are too many to mention. Find out how to reduce your overall risk of developing cancer, and how screening can help detect cancers.
Preventing Cancer by Taking Action

There are things in life that you can control and certain things you cannot. You cannot alter the genes that you have inherited from your parents, and certain cancers are inherited. If you have a particularly strong family history of certain types of cancers, do consider going for regular check-ups and screenings. You can also make changes to your lifestyle. It would significantly reduce your risk of developing cancer.

1. Don’t Smoke

   When you think about smoking and cancer, the first thing that would probably pop up in your mind is lung cancer. However, did you know that smoking has been linked to several other types of cancer namely mouth, larynx, pancreas, bladder, cervix and kidney? Trying to quit smoking is notoriously difficult, but there are many ways of stopping; from nicotine receptor blocking medications to nicotine substitutes like gums or patches.

2. Eat a Healthy Diet

   Lots of fresh fruits and vegetables in the diet is helpful. Avoid eating too much carcinogenic food such as processed meat, salted fish, burnt or heavily barbequed food, and red meat. In Asia, we have a particular inclination towards eating preserved meats and fishes. They are high in nitrates and have been linked to certain types of cancers.

3. Don’t Get Obese

   Obesity has been linked to cancers through several mechanisms. Chronic low-level inflammation which is associated with obesity, can over some time cause DNA damage that result in disease. Fat tissue also produces excess quantities of the female hormone estrogen that is associated with increased risk of gynaecological and breast cancers. Obesity also increases blood insulin and insulin-like growth factor -1 that may be related to colon, kidney, prostate and endometrial cancers.
Avoid Sunlight

Over the years we have seen a gradual increase in the incidence of skin cancers in both men and women. They now represent the sixth and seventh most common types of cancers respectively. Stay out of the sun if you can. Wear protective clothing, sun shades and hats, and bring an umbrella are some methods to stay in the shade. Wear sunblock if you think you will spend some time being exposed to the sun. This advice goes out to parents who accompany their kids to sporting classes like football, tennis and swimming.

Avoid risky behaviours

Risky behaviours such as having multiple sexual partners, engaging in unprotected sex indiscriminately, and using intravenous drug expose you to viruses like HIV, hepatitis B & C and Human Papilloma Virus (HPV). All of which have been linked to an increased risk of developing cancers.

Get vaccinated

Some cancers have been linked to certain types of infections. A hepatitis B carrier has a higher risk of developing liver cancer. The HPV is linked to cancers of the cervix, and head and neck. Vaccinations against these viruses are available to both men and women. Ask your doctor for advice.
Screening for Cancer

So how do you take control of your health through screening? Is it okay to screen for cancer at an early age? What kind of schedules are there?

You are worried anxious and concerned. That pain in the throat does not seem to be going away after three weeks, and you want to get it checked out. That lump in your arm appears to be growing. Is it cancerous? What do you do?

The first person you should consult would be your Primary Care Physician: this is your GP, Family Doctor or Company Registered Doctor. He / she should take the time to listen to your worries, ask you specific questions and carefully perform an appropriate physical examination. If he / she feels that further tests are needed, a discussion with you about the next course of action will be done.

It is best that you follow the national guidelines on cancer screening:

When should you go for cancer screening?

<table>
<thead>
<tr>
<th>26 TO 29 YEARS OLD</th>
<th>30 TO 39 YEARS OLD</th>
<th>40 TO 49 YEARS OLD</th>
<th>50 YEARS OLD AND ABOVE</th>
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<tr>
<td>Screen for cervical cancer through a PAP smear once you reach 26 years old, or if you are sexually active. A routine PAP smear should be done every three years.</td>
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<td></td>
<td>Screen for colon cancer through faecal immunochemical testing (FIT) and a colonoscopy. FITs are done annually. Colonoscopy is done once every five to 10 years.</td>
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<tr>
<td>Breast cancer screening should start at 30 years old through monthly self-breast examination. Mammograms should be done every two years from 50 years old. Speak to your doctor to assess your risk of breast cancer and if you need to do mammograms at an earlier age.</td>
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Is a Full Body Checkup Necessary?

A note of caution for patients who are incline to do a ‘full medical check-up’ with all the cancer markers involved. Cancer markers are biomarkers. They can be measured in the blood, urine or body tissues that can be elevated in the presence of certain types of cancers. Very often in a health screening setting, these are done through a blood test along with other tests like your cholesterol, sugar and kidney function.

Cancer markers done through a health screening do indeed pick up cases of otherwise unknown cancer. However, vast majority of the time, elevated levels are false positives. False positives in the context of cancer markers are elevated results where there is no cancer. It is a false alarm.

Of course, as you can imagine this can lead to unnecessary anxiety and worry in an individual. He or she may also be subjected to follow-up tests and examinations that can be inconvenient, costly and possibly invasive. If you still feel that you will benefit from a cancer marker screening, be mindful of the potentially harmful effects of false positives.

You should also be aware of false negatives. A false negative is when a test fails to pick up an abnormality. False negatives give you a false sense of security. You cannot avoid false negatives and positives as there are no perfect tests.
In this 21st century that we live in, cancer is a growing global burden. One in five men and one in six women worldwide develop cancer during their lifetime*. The top three global cancer incidences in both male and female remain as colorectal, breast and lung. Together, these three cancer types account for one third of the cancer incidences and mortality burden worldwide.

*Source: WHO – latest cancer data released on 12 September 2018

In Singapore, colorectal cancer is the top cancer in men and second in women, while breast cancer is the top cancer affecting women. This is followed by lung cancer – the second most common cancer in men and third most common in women.

## Colorectal Cancer

This is also known as cancer of the colon and rectum – the last part of the gastrointestinal tract. When food enters the colon, water is absorbed and bacteria converts food residue into faeces. The rectum is where faeces are stored before being passed out through the anus. Polyps may form on the inner wall of the colon and rectum. However, some polyps may turn cancerous and should be removed if detected.

### What You Can Do

“If you have an average risk of colon cancer, consider screening when you reach 50 years old. Those with a family history of this cancer should consider screening earlier,” advised Dr Wong Kutt Sing, Specialist in General Surgery & Consultant, Raffles Surgery Centre.

Watch “An Insight into Colon Cancer” to learn more.

### Signs and Symptoms

- Blood in stools
- Change in bowel habits
- Persistent abdominal pain
- Lump in the abdomen
- Unexplained weight loss
- Anaemia

### Risk Factors

- Persons who are / have:
  - 50 years and above
  - Family history of colorectal cancer or polyps
  - Inflammatory bowel disease
  - High animal fat diet
  - Sedentary lifestyle
  - Smokers
  - Metabolic syndrome
  - Obese or high BMI
Lung Cancer
Known as a silent killer, lung cancer often does not present any symptoms until advanced stage. The risk of a smoker contracting this cancer is 15 to 25 times more than a non-smoker.

**Signs and Symptoms**
- Persistent cough
- Blood in phlegm
- Wheezing
- Weakness and fatigue
- Shortness of breath
- Hoarseness
- Chest pain
- Bone pain

**Risk Factors**
- Smoking
- Exposure to second-hand smoke
- Exposure to carcinogens
- Family history of lung cancer

**What You Can Do**
“If you are a smoker, the best way of reducing your cancer risk is to quit smoking. It is never too late to quit. Quitting at any age can significantly lower the risk of developing lung cancer. Lung cancer screening has been shown to save lives, and if cancer is found at an early stage, it can be treated successfully,” said Dr Chin Tan Min, Specialist in Medical Oncology & Consultant, Raffles Cancer Centre.

Breast Cancer
As the most common cancer among women, it is estimated that one in 14 women before 75 years old will develop breast cancer in Singapore. Breast cancer occurs when cancer develops in the breast tissue, and it usually originates from the cells lining the milk ducts and glands.

**Signs and Symptoms**
- A lump or thickening in the breast
- Change in size or shape of breast
- Skin changes around the breast
- Pain felt in the breast
- Bloody or unusual nipple discharge
- Retracted or inverted nipple

**Risk Factors**
- A family history with one or more close relatives diagnosed with breast cancer
- Previous breast biopsy showing atypical hyperplasia or lobular carcinoma in-situ
- Early menstruation (ie. before 12 years old)
- Late menopause (ie. after 55 years old)
- Women on long-term use of combined hormone replacement therapy
- Having the first child after 30 years old

**What You Can Do**
“As a form of prevention, conduct regular self-breast examination on your own. For women who are 50 years old and above, go for a mammogram screening once every two years. Those between 40 and 49 years old, should consider doing an annual screening,” advised Dr Lynette Ngo, Specialist in Medical Oncology & Consultant, Raffles Cancer Centre.
Watch “Breast Self-Examination” to learn how this technique can save your life.
Cancel Out the Cancer Myths

We would have heard of the following statements being told to us but how true are they? We obtain help from our experts in debunking them. By Ashley Tuen

#1 “Dyeing your hair will cause cancer.”

Some studies have shown that people who are regularly exposed to hair dyes at work might have a higher risk of developing cancer.

“Early hair dye formulations contained chemicals that caused cancer in animals,” shared Dr Tan Siew Kiang, Specialist in Dermatology & Consultant, Raffles Skin and Aesthetics.

Though researchers have tried studying a link between the use of hair dye and cancer, results are however, not conclusive to determine the relationship.

#2 “Eating microwaved foods means eating radiation.”

Your food is heated or cooked when microwave ovens supercharge water molecules in food. As explained by the World Health Organization (WHO), as long as microwave ovens are used in accordance with the manufacturers’ instructions, they are safe for heating and cooking food.

Practise microwave safety by using only containers or bowls with “microwave-safe” labels. Plastics that aren’t meant to be microwaved can melt and leak chemicals into food.

#3 “Your mood affects your recovery from cancer.”

A cancer patient is likely to experience varying emotions – sadness, fear or anger, but there is no scientific evidence to show that mood increases the risk of cancer or die from it because of a negative attitude.

#5 “Eating sugar will worsen your cancer.”

It doesn’t and neither does depriving cancer cells of sugar slow down their growth. All cells, including cancer cells, depend on blood sugar for energy. However, consuming large amounts of sugar can lead to weight gain, increasing the risk of obesity and diabetes and in turn, the risk of cancer.
#4 “Sleeping with your phone beside you will cause brain cancer.”

Though some research have suggested that there’s a slight increase in the rate of brain tumours since the 1970s, mobile phones were not in use then. Rather, the increase is more likely related to other factors, such as improvements in diagnostic imaging.

However, there is limited evidence at this point to suggest that cell phone radiation is a cancer-causing agent.

#6 “It hurts more to undergo cancer treatment.”

This feeling possibly arose because of extreme side effects that patients experience while undergoing chemotherapy and radiation therapy.

“It may be true that there are side effects arising from chemotherapy and radiation therapy, but these are usually temporary, and there are good medications that can counteract the side effects of treatment. It is always a balance between the side effects from treatment and relieving the symptoms such as pain caused by cancer. The doctor can usually titrate the treatment to achieve a fine balance,” explained Dr Chin Tan Min, Specialist in Oncology & Consultant, Raffles Cancer Centre.

#7 “Surgery or tumour biopsy will cause cancer to spread.”

Needle or core biopsies have been the standard of practice for nearly 40 years, and it is still safely practised in all developed countries, including United States, Europe and Singapore. It has never been associated with any increase spread of tumour to other organs (metastatic spread). There have been a few cases where there is seeding of tumour at the puncture site on the skin, but this is very rare, and has never affected long-term survival. Thus, needle and core biopsy remains the gold standard for the diagnosis of many types of cancer,” advised Dr Anthony Tang, Specialist in General Surgery & Consultant, Raffles Breast Centre.

#8 “My family has no history of cancer, so I am safe.”

In Singapore, the estimated lifetime risk for developing cancer is approximately one for every four to five people. Cancers can also be caused by genetic changes and environmental factors. Other factors influencing your risks include your lifestyle and dietary habits.
Haematopoietic Stem Cell Transplantation (HSCT) is a process that provides the recipient with haematopoietic stem cells (HSC) to produce new and healthy blood cells; forming a new immune system in the process to help fight blood cancer. We ask Dr Yvonne Loh, Specialist in Haematology & Consultant, Raffles Cancer Centre as she shares more on this cancer treatment.

What are some of the blood cancers that HSCT can treat?
Acute myeloid leukaemia, acute lymphoblastic leukaemia and other acute leukaemias. In addition, some cases of chronic myeloid or chronic lymphocytic leukaemia may require HSCT, as well as lymphomas, myeloma and myelodysplastic syndromes and myeloproliferative neoplasms.

Types of HSCT

**Allogeneic**
HSC are obtained from a donor who can be related (sibling), voluntary unrelated, haploidentical or half-matched family member (sibling, parents, children) or umbilical cord blood.

**Autologous**
HSC are obtained from the patient and stored. Following chemotherapy to kill cancer cells, the stem cells are infused back into the patient to allow for a quicker recovery of blood count.

**WHAT IS IT?**

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<th>Autologous</th>
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<td>Suitable donor identified through the Human Leukocyte Antigen (HLA) system.</td>
<td>Patient is given chemotherapy and granulocyte-colony stimulating factor (GCSF) injections to mobilise blood stem cells in the peripheral blood. Chemotherapy usually lasts one to five days depending on the regimen. GCSF is then given over the next five to 10 days to harvest HSC via apheresis.</td>
</tr>
<tr>
<td>Donors undergo health checks to ensure that they are healthy to donate and do not carry infectious diseases.</td>
<td>HSC are counted, tested and then frozen in liquid nitrogen in the lab.</td>
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<td>Patient undergoes conditioning chemotherapy / radiotherapy to prepare the body to receive donor's HSC and eradicate cancer cells.</td>
<td>Patient is given time to recover from this process (usually about one to three weeks) to allow the body to receive conditioning regimen (preparative regimen) to eradicate cancer cells.</td>
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<td>Donor’s HSC harvested concurrently either from the bone marrow directly or the peripheral blood via apheresis.</td>
<td>The HSC are thawed and infused into the patient, and will grow within two to three weeks.</td>
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<td>The collected HSC is then brought to the lab for counting and testing. Next, they are infused into the patient, like a blood transfusion. After a period of two to four weeks, the stem cells grow and become new red blood cells, white blood cells and platelets.</td>
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**WHERE ARE SUITABLE STEM CELLS OBTAINED?**

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<tr>
<td>Peripheral blood, bone marrow, umbilical cord.</td>
<td>Usually peripheral blood. In uncommon cases, the source may come from the bone marrow.</td>
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**WHAT ARE THE STEPS INVOLVED?**

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How does the process work?

There are three types of transplantation processes: myeloablative, non-myeloablative and reduced intensity.

- **Myeloablative**
  - High intensity chemotherapy / radiotherapy
  - Autologous transplant regimens are usually myeloablative as they are meant to eradicate residual cancer cells. Allogeneic HSCT is sometimes performed with a myeloablative regimen.
  - Better control of the cancer, but may increase the side effects of the transplant.
  - Often used for patients below 50 years old.

- **Non-myeloablative**
  - Low doses chemotherapy and radiation
  - Aims to prevent the rejection of donor cells when they are infused.
  - Little direct anti-cancer effect.
  - Technique is better utilised on patients whose blood cancer is already in remission, at low levels, or in non-malignant disorders like inherited immune deficiencies or marrow failure syndromes.

- **Reduced Intensity Conditioning**
  - Falls in between the two types of transplantation processes
  - Uses some anti-cancer chemotherapy and anti-rejection drugs.
  - Utilised mostly in older patients needing a transplant but are unable to tolerate the high intensity myeloablative regimen.

What are the risks and complications of HSCT?

Common complications are infection due to bacteria, viruses or fungi. Graft-versus-host disease (GVHD) in allogeneic HSCT is where the new donor-derived immune system does not recognise the recipient as its new “home” and attacks the recipient’s own cells / tissues. This can manifest as a rash, severe diarrhoea or liver inflammation.

Patients need to be on many medications after the transplant to prevent infections and GVHD. They also require close monitoring for three to six months.

The biggest hurdle for blood cancer is actually the relapse of the underlying cancer, even with the transplant. HSCT aims to reduce the likelihood of a relapse, and though it does, it can never fully prevent a relapse in all patients.

- Dr Yvonne Loh

Patients need to adhere to the treatment plan and drugs given. The transplant gives them the best chance of cure but the road to recovery can be a long one. Relapse after transplant remains the biggest and most common problem, and studies are currently ongoing to reduce this through the use of medications or other interventions.
Can TCM Cure My Cancer?

By Queenie Ho

Having questions and doubts on how Traditional Chinese Medicine (TCM) complements your cancer treatment? Physician Tay Jia Yin, Raffles Chinese Medicine, shares more on TCM and cancer treatment.

TCM View of Cancer

From the perspective of TCM, cancer is the manifestation of an underlying imbalance in the body.

There are multiple causes of cancer and these are closely related to environment, unhealthy diet and lifestyle, and emotional stress. These factors affect blood and Qi (vital energy) flows, and if they occur over a long period, a local accumulation of pathological waste products will induce abnormal tissue growth in the body.

Each cancer patient may have a different imbalance causing the same type of cancer.

There is no single formula for all types of cancer. TCM practitioners need to identify the individual patterns of imbalance before prescribing a suitable treatment.

Eight guiding principles are used to analyse symptoms, and put particular conditions into groups – cold and heat, inside and outside, too much or not enough, and yin and yang. Once a comprehensive picture of the pattern of disharmony is formed, a treatment plan will be formulated to restore balance.

Role of TCM Treatment for Cancer

TCM has increasingly become popular for cancer care. The treatment principles are combined in various ways to address a cancer within the context of an integration of Chinese medicine and conventional treatment. While western medicine treatments such as chemotherapy and radiotherapy are aimed at killing cancer cells, TCM treatment considers the underlying condition of the patient and the long history of gradual debilitation and the deficiencies that are current at presentation.

TCM treatment principles include:
- Dispel pathogenic factors by strengthening the patient’s immunity
- Activation of blood circulation
- Removal of heat toxins
- Softening and dissolving hard masses

A treatment plan is then formulated to attack the cancerous environment from different angles. Treatment may include herbs that act to protect and rehabilitate normal function, and potentiate the action of western medicine treatment.

TCM may also assist in supportive and palliative care by reducing the side effects of conventional treatment; minimising disability and improving the quality of life.
Managing Cancer with TCM

TCM treatment methods, including acupuncture, herbal medicine and dietary therapy, are useful adjuncts to aggressive western cancer care.

TCM treatment can alleviate the symptoms after chemotherapy or radiotherapy, such as fatigue, mouth sores, nausea, vomiting, loss of appetite, diarrhoea and constipation, just to name a few. Dietary and lifestyle changes will be recommended to promote healing and reduce the recurrence of cancer.

Herbal Medicine

- Synergistic action against cancer cells
- Relieve side effects of chemotherapy and radiotherapy
- Strengthen the body’s immunity while simultaneously regenerate and repair the cells in the body

Acupuncture

Alleviate chemotherapy-induced nausea and vomiting, fatigue, cancer pain, anxiety and insomnia

A Word of Caution...

Self-medication with TCM herbs can be harmful as herbal components may react with radiotherapy or chemotherapy to adversely affect the cancer patient’s health. To enable proper management of your condition, it is important to consult your primary care physician before seeking advice from a licensed TCM practitioner.
Cancer treatment decisions:

5 steps to help you decide

Courtesy of the Mayo Clinic News Network

Partnering with your doctor to make decisions about your cancer treatment may make you feel more confident as you begin your cancer treatment. Find out how to get involved.

You’ve just been diagnosed with cancer. Your mind is reeling. And now your doctor wants you to sort through cancer treatment options and help decide on a plan.

But how do you decide on a cancer treatment plan? Here are five steps to guide you in becoming a partner with your doctor in determining and guiding your cancer treatment.

Step 1: Set your ground rules
Before exploring treatment options, establish some ground rules. You’ll be more comfortable with any cancer treatment decisions you make if you:

• **Declare how much you want to know.** While most people want to know exactly what their treatment is and their survival chances, others don’t. If you don’t want to know all the details or need someone else’s help, let your doctor know.

• **Declare how you want to make your treatment decisions.** You might want to take the lead in the decision-making process or turn all decisions over to your doctor. You can also choose to share the decision process with your doctor.

• **Have realistic expectations.** Your doctor can give you estimates about what you can expect to get from each type of treatment. Communicate your preferences with your doctor.

• **Keep the focus on you.** Don’t pressure yourself into a particular treatment option if you are not comfortable.

• **Accept help.** You’ll need support throughout your treatment. Support can come from your doctor, your friends and your family. It might help to write down your expectations and preferences before meeting with your doctor. That might help you better express your hopes for and feelings about your cancer treatment.

Step 2: Decide on a goal
Deciding what you want out of treatment can help you narrow your treatment choices. Are you hoping for a cure, stabilisation or solely symptom relief?

Depending on your cancer type and stage, your goals for treatment might be:

**Cure.** When you’re first diagnosed, it’s likely you’ll be interested in treatments that cure cancer. When a cure is possible, you may be willing to endure more short-term side effects in return for the chance at a cure.

**Control.** If your cancer is at a later stage or if previous treatments have been unsuccessful, you might adjust your goal to controlling your cancer. If this is your goal, you might not be willing to endure the side effects of harsher treatments.
**Step 5: Communicate with your doctor**

Effective communication with your doctor is the best way to make sure you are getting the information you need to make an informed decision. To make communicating with your doctor easier, try to:

- Speak up when you do not understand.
- Write your questions in advance.
- Record your conversations for reference.
- Bring someone with you to take notes. Then you will have another person you can talk through your treatment decisions with.
- Keep copies of your medical records.
- It may take a few conversations before you and your doctor feel as if you are on the same page.

**Step 4: Analyse the benefits versus the risks**

Compare the benefits and risks of the different cancer treatments to decide which treatments fall within your goals. Rate the treatments you are considering based on the pros and cons of each. Some aspects you will want to consider for each treatment include:

- Side effects.
- How treatment affects your life.
- The financial costs of treatment.
- Your health in general.

Your personal values and goals will make a difference in what treatments are best for you. Only you can decide what type of treatment will fit best in your life. You don’t have to make a choice and stick with it.

**Step 3: Research your treatment options**

To make a reasonable treatment decision, keep in mind the type of cancer you have, its stage, and what treatment options are available and how likely these treatments are to work under these circumstances. Talk to your doctor about trustworthy websites, books and patient education materials to supplement your discussions.

**Other things to keep in mind**

As you are making your treatment decisions with your doctor, keep these points in mind:

- Take your time. Although a cancer diagnosis might make you feel as if you have to make immediate decisions to begin therapy, in most situations you have time to make choices. Ask your doctor how much time you have to decide.

- You can always change your mind. Making a treatment decision now does not bind you to that option. Tell your doctor if you are having second thoughts. Significant side effects may make you want to change your treatment plan.

- You can seek a second opinion. Do not be afraid of offending your doctor if you want to get a second opinion. Most doctors understand the need for a second opinion when facing a major decision.

- You don’t have to be involved with treatment decisions. If you prefer, tell your doctor you would rather not be involved in the decision-making process. You can always get involved later when you feel more comfortable with the situation.

- You don’t have to have treatment. Some people choose not to have treatment at all. People with very advanced cancers sometimes find they would rather treat the pain and other side effects of their cancer so that they can make the best of the time they have remaining.

If you choose not to be treated, you can always change your mind. Forgoing treatment doesn’t mean you’ll be left on your own — many ways of controlling side effects exist.

**Which treatment is best for you?**

There is no 100 per cent right or wrong answer. But being involved with your treatment plan may give you greater peace of mind and can let you focus your energy on what you need to do most — keeping yourself healthy throughout your treatment.
Our treatment programmes include:

- TCM Internal Medicine
- TCM Gynaecology
- TCM Orthopaedics
- TCM Neurology
- TCM Paediatrics
- TCM Dermatology
- TCM Ophthalmology
- Pain Management
- Fertility
- Menstruation Irregularities
- Stroke Rehabilitation
- Cancer Complementary Care
- Wellness
- Facial Rejuvenation and Weight Management

Raffles Chinese Medicine (RCM) is the Traditional Chinese Medicine (TCM) unit of Raffles Medical Group. We aim to offer our patients the benefits of TCM that are established, safely administered and managed according to modern quality standards.

At Raffles Chinese Medicine, we take a holistic approach to your health and wellness. In keeping with Raffles’ collaborative Group Practice philosophy, our physicians work closely with our western medicine specialists to co-manage patients. This is our way of integrating eastern and western medicine, with the ultimate goal of providing the best care for our patients.

Our team will work with you to develop a treatment programme that is tailored to your needs. Throughout the programme, we will constantly assess your response and update the programme accordingly to ensure the best outcome for you.
There are a handful of side effects that cancer patients may suffer when undergoing chemotherapy. Constipation, hair loss, nausea and loss of appetite are some of the commonly suffered ones. If you know of someone who is having troubles with eating, Ms Kesslyn How, Nutritionist, Raffles Diabetes and Endocrine Centre, shares with you some nutritious post-chemotherapy food recipes that are easy to prepare. By Shermaine Lee

**Tropical Smoothie**

- ½ cup liquid (can be water, milk, soymilk or nutritional feeds)
- 1 banana
- 1 cup papaya
- Ice cubes

**Steps**

In a blender, blend all ingredients together until smooth.

**Nutrition**

Papaya contains enzyme papain that aids in digestion.

Banana contains pectin, which is a soluble fibre that helps to draw water from intestine, making stools soft.

**Hair Loss**

- 1 cup baby spinach
- 2 eggs
- Cheese
- Salt and pepper for taste

**Spinach Omelette**

**Steps**

In a bowl, beat the eggs and stir in baby spinach with cheese. Season with salt and pepper for taste. Add one tablespoon of olive oil to pan and cook the egg mixture until partially set.

Flip with a spatula and continue to cook for two to three minutes.

Reduce to low heat and continue to cook till desired doneness.

**Nutrition**

Spinach is rich in iron. Hair follicles are made of cells that require haemoglobin. Hence, iron deficiency can result in hair fall and slow hair growth.

Eggs are high in protein and rich in biotin; both are essential nutrients to promote hair growth.

**General Loss of Appetite / Nausea**

- ½ box silky tofu
- Fat free broth
- ¼ cup carrots
- 1 pear
- 1 onion
- 1 tablespoon olive oil

**ABC Pear Tofu Soup**

**Steps**

Heat oil in medium saucepan over medium-high heat till hot. Sauté onion till translucent. Mix in carrots and pear, and cover the pot for 10 minutes.

Add broth and tofu, and continue to cook till carrot and pear are very soft, approximately 30 minutes. Uncover pot, allow the soup to cool slightly before putting into a blender to make a puree soup. If soup is too thick, add broth or water as desire. Season to taste with salt and pepper.

**Nutrition**

Tofu is an easily digestible protein source.

Bland food makes it easier to consume. Strong aroma and flavours can make nausea worsen.
Chemotherapy is a powerful cancer treatment that usually takes a toll on the patient’s body. Not only does chemotherapy kill rapidly dividing cancer cells, it also harms healthy cells in the process, thus weakening the body’s immune system. Hence, it is important to have a good diet plan in place during your treatment as your body needs all the nutrients it can get to fight cancer, and eating well after chemotherapy to rebuild your body.

Ms Kesslyn How, Nutritionist, Raffles Diabetes and Endocrine Centre, shares the following:

**Antioxidants**

*How the nutrient works*
Antioxidants are substances that may delay our body cells from damaging by free radicles. Free radicles are by-product of the body metabolic processes.

*Recommended kinds of food*
- Oranges, bell peppers for vitamin C
- Whole grains, nuts and seeds for vitamin E
- Seafood, eggs for selenium
- Carrots, tomatoes for carotenoids

**Carbohydrates**

*How the nutrient works*
Carbohydrates are our main source of energy. It gives the body the fuel it needs for physical activity and proper organ function.

*Recommended kinds of food*
Whole grains (eg. bread, brown rice, quinoa, oats), noodles, bee hoon, potatoes and sweet potatoes

**Fats**

*How the nutrient works*
Fats is a rich source of energy that helps to insulate our body and transport fat soluble vitamins such as A, D, E and K through the blood. Choose healthier fats such as mono- & poly-unsaturated fats food. Reduce saturated and trans fat that may increase the bad cholesterol, and increase risk of cardiovascular diseases.

*Recommended kinds of food*
Olive oil, canola oil, flaxseeds, chia seeds, almonds, walnuts and salmon

**Fibre**

*How the nutrient works*
Side effects of chemotherapy may include constipation, and there are two types of fibre that can help with constipation. Insoluble fibre helps to move food waste out of the body quickly, while soluble fibre binds with water in the stool to help keep stool soft.

*Recommended kinds of food*
Fruits, vegetables, whole grains and lentils

**Protein**

*How the nutrient works*
Protein is needed for growth and restoration of the body tissue, and it keeps our immune system healthy. Post chemotherapy patients need extra protein to heal tissues and fight infection.

*Recommended kinds of food*
Fish, tofu, egg, lean poultry, red meat, peas and lentils

**Phytonutrients**

*How the nutrient works*
Phytonutrients are chemicals in plant-based foods that may promote health, and are found in plants such as fruits and vegetables, or foods like tofu or tea.

*Recommended kinds of food*
Orange, pumpkin, broccoli, eggplant, berries, soy products, tomatoes and citrus fruits
**Addressing Your Concerns**

**Am I getting enough nutrients from the food I eat? Do I need to consume health supplements?**

A balanced and varied diet is the best way to get a healthy supply of vitamins and minerals. Health supplements may be necessary for some circumstances under doctors’ supervision. For example, hormone therapy (often used for breast and prostate cancer) can weaken the bones. Hence, doctors may prescribe supplements such as calcium and vitamin D that are important for bone strengthening. Illnesses may reduce the efficacy of the body to absorb nutrients from food. Hence, doctor may also consider giving multivitamin and mineral supplement. It is therefore important to talk to a health professional if you are considering taking nutritional supplements.

**Are there any safety considerations that cancer patients should observe before eating / purchasing health supplements?**

Some health supplements may cause skin sensitivity and severe reactions when taken during radiation treatment. Chemotherapy patient may also face a higher risk for drug interaction when taking supplements, especially those with high antioxidants. Antioxidants might interfere with cancer cell killing treatments decreasing the effectiveness of the treatment. It is advisable to consult the doctor before consumption.

**What are some tips for healthy eating after cancer?**

Have a well-balanced diet consists of half a plate of vegetables, one quarter lean protein and one quarter wholegrains.

If your appetite is small, try:
- Eating five to six small meals a day instead of three big meals
- Drinking smoothies, milkshakes, juices, soups if you don’t feel like eating solid food

If your appetite is good, try:
- Eating more whole grains, fruits and vegetables
- Low fat foods and drinks

**Foods chemotherapy patients should limit**
- Sugary and fatty food
- Red meat (pork, lamb, beef) [less than 500g per week]
- As little processed meat as possible (none is best!)
- Alcohol intake to one drink a day for female, two drinks for male

**Tip:**
Focus mainly on natural and wholesome fruits, vegetables and whole grains. They are often high in fibre and antioxidant that help to protect our health. Avoid mouldy grains and cereals as they may be contaminated by aflotoxins.
Can I Eat This?

By Queenie Ho

You have heard a lot about diets and food that cause, prevent or even cure cancer. We find out how true these hearsays are.

Alcohol

Drinking any type of alcohol raises your risk of developing cancer. The less alcohol you drink, the more you reduce your risk. If you choose to drink, keep it to less than one drink a day for women and less than two drinks a day for men.

Note: one drink is equivalent to:
- 5oz (142ml) of wine (12 per cent alcohol)
- 1.5oz (43ml) of spirits (40 per cent alcohol)
- 12oz (341ml) of beer / cider (5 per cent alcohol)

Superfoods

Superfood is often used to describe foods with supposed health ‘superpowers’. Some popular superfoods are acai, pomegranate, blueberries and green tea. However, this term should be treated with caution as there is no evidence for any one particular food that makes a major difference to cancer on its own. The key to good health is to include a variety of food in a healthy and balance diet.

Alkaline Diet

An alkaline diet consists of fresh fruits, vegetables, roots and tubers, nuts and legumes, and only small amounts of meat and dairy products. It claims to help with weight loss, increase energy levels and reduce risks of heart disease and cancer.

The theory of an alkaline diet is that blood is slightly alkaline and we should eat food that matches the chemistry of our blood. A high-acid diet upsets the balance of your blood, so eating a more alkaline diet will protect you from diseases.

The truth is, our body is a complex system that ensures blood stays in its healthy, slightly alkaline range. If your blood becomes too acidic or too alkaline, your body automatically corrects this on its own. Your blood may become slightly more acidic or alkaline after eating certain foods, but it will stay within the healthy range without a special diet.

Nonetheless, there is no harm having a plant based diet as studies have shown that there are benefits in having a more plant based diet and limiting red meat.
Closely related to the myth that sugars ‘feed’ cancer cells, ketogenic diet focuses on high-protein and low-carb, which cuts out carbohydrates to starve cancer cells of glucose. However, there is currently no evidence that the ketogenic diet alone will treat cancers. If you are considering a ketogenic diet, you should talk to your health professional before embarking on it.

Organic produce are grown without using artificial fertilisers, pesticides or other chemicals. However, there is currently no strong evidence to support the idea that organic foods can help protect against cancer compared with produce that is grown conventionally. So, when it comes to eating well for cancer prevention, the bottom line is to enjoy fruits, vegetables, whole grains and pulses however you can – fresh, frozen, canned, conventional or organic are all good for you! However, it is advisable to soak organic fruits and vegetables before consumption to remove possible residues.

Ms Bibi Chia, Principal Dietitian, Raffles Diabetes and Endocrine Centre, said that there is no miracle food that can prevent or cure cancer. You can reduce your risk of cancer or cancer recurrence by:

- Eating a balanced diet with a variety of fruits and vegetables, and whole grains
- Limiting your intake of refined sugar and processed foods
- Staying physically active
- Maintaining a healthy body weight
- Avoiding smoking and limit your alcohol intake
Advancing Cancer Treatments With Technology

By Ashley Tuen

Stories of painful cancer treatments and their side effects have been widely shared. Have you ever wondered if it’s possible to just have localised treatment so that we don’t end up harming the other cells?

We speak to Dr Daryl Tan, Specialist in Haematology & Consultant, Raffles Cancer Centre, on the technologies that aid the treatment of cancer.

Personalising Cancer Vaccines

Development is underway for creation of therapeutic vaccines for tumours. DNA sequences of tumours and healthy cells are compared before identifying and selecting cells that are likely to incite a reaction from the immune system.

Vaccines are given in the form of messenger RNA, providing the cells with instructions to create a particular cancer antigen. Human DNA is not edited.

CAR-T Cell Therapy

The first FDA approved CAR-T therapy for children and young adults with B-cell acute lymphoblastic leukaemia was made available in August 2017. Taking immune T-cells from patients, T-cells are genetically engineered to produce receptors to target a specific antigen. These cells are grown and injected back to the patient where they recognise and kill cancerous cells. Clinical results have shown impressive results for some patients but also strong side effects in others.
Gene Editing

A recent system, known as CRISPR-Cas9 is believed to be much faster and simpler, and could improve therapies such as CAR-T. The DNA is changed by adding, removing or altering at particular points of the gene.

A guide RNA is created to match the identified DNA to be modified. Cas9, which is an enzyme, is added together with the cell and cuts the DNA at a specific location. The guide RNA programmes the cells to attack only cancer cells and cloaks the cells so that the body doesn’t reject it. Enzymes will proceed to repair the cuts and the DNA is thus edited.

Proton Beam Therapy Programme

X-ray energy is used in conventional radiation therapy, but both healthy and cancerous cells are affected by radiation while the goal is to only radiate targeted cancer cells. With proton therapy, protons are raised to a higher energy level and proton beams stop after releasing their energy within their target. There is greater control over proton beams, ensuring that higher doses of radiation can be more safely delivered to tumours with less risk to healthy tissue.

Proton therapy has been shown to be beneficial in treating many kinds of tumours, including brain, breast and lymphomas.

Photodynamic Therapy

With the help of medication, cancer cells and other abnormal cells are vulnerable to high-intensity light energy. One of the most common types of cancer treated with this technique is skin cancer. Other cancers include small-cell lung cancer and esophageal cancer.

A photosensitising agent is injected into the bloodstream where it is absorbed by all body cells, but stays longer in cancer cells. After 24 to 72 hours, most of the agent has left the healthy cells but remains in cancer cells. The tumour is in turn exposed to light. The agent absorbs the light, produces an active form of oxygen and destroys nearby cancer cells.
A Positron Emission Tomography combined with computerised tomography (PET-CT) scan is a diagnostic procedure used to effectively differentiate between healthy and abnormal tissue. It helps to test for a variety of medical conditions such as cancer, heart disease and brain disorders. Dr Andrew Tan, Specialist in Nuclear Medicine & Consultant, Raffles Nuclear Medicine Centre, shares more.

A radioactive drug, which is known as a tracer, will be administered either via injection or inhaled. Most commonly used is a glucose analogue that will travel through your bloodstream and collected in your organ and tissue.

Abnormal cells typically appear as bright spots on the scans because these cells have a higher metabolic rate compared to normal ones. These spots reveal higher levels of activity or tracer accumulation, and details about how your tissues and organs are functioning.

You would need to:
• Fast from food four to six hours before your appointment
• Empty your bladder
• Inform your doctor if:
  - You are afraid of enclosed spaces
  - You suspect that you might be pregnant
  - You are breastfeeding
  - You ever had a bad allergic reaction

How does it work?

Benefits in Detecting Cancer

From the scans, doctors can determine if:
• A cancer has spread to other parts of the body
• A particular cancer treatment is effective
• A cancer has recurred

Before the Scan

Possible Risks

After the Procedure

The risk is generally low because the amount of radiation exposure is small. However, the tracer might:
• Cause a major allergic reaction, in rare instances
• Expose your unborn baby to radiation if you are pregnant
• Expose your child to radiation if you are breastfeeding

Avoid close contact with young children below five years old for the rest of the day.

Drink plenty of fluids to flush out the tracer from your body system.

You may carry on with your usual activities after the procedure unless indicated by your doctor.

Watch this video to find out what to expect for a PET-CT scan at Raffles Hospital.

Raffles Hospital
Colon Cancer Screening

Early detection can save your life.

In Singapore, Colorectal Cancer is the **most** common cancer in males and the **second most** common cancer in females.

If you are aged 50 and above, take a few minutes today to test for Colorectal Cancer. It can save your life.

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**Did you know?**

- Both men and women are at equal risk of developing Colorectal Cancer.
- Colorectal Cancer often starts with no symptoms.
- People with a first-degree relative* who has Colorectal Cancer have two to three times higher risk of developing it.
- Colorectal Cancer is very treatable and highly curable if detected early.

*parent, sibling or offspring

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Pick up your Faecal Occult Blood Test (FOBT) Kit at any Raffles Medical clinics or Raffles Hospital.

For more information, please call 6311 1152 or email surgerycentre@rafflesmedical.com.

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* Terms and conditions apply.
EXERCISE THAT CANCER AWAY

By Magdalene Lee

Do you know that something as simple as staying physically active can help prevent cancer and improve cancer survivorship? Here is all you need to know about cancer and exercise.

A sedentary lifestyle is linked to increased cancer risks.

If you spend long hours sitting down and lying down doing nothing (even if you are working your brain by swiping your mobile phone or watching television), you are at higher risk of chronic conditions, including cancer, heart disease and diabetes, and premature death. A study by National Cancer Institute in 2016 shows that regular exercise can reduce the risk of many types of cancer. Persons who are active physically (90th percentile) were found to have lower rates of 13 types of cancer than those who were physically inactive.

13 cancers*

- **42%** Esophageal Adenocarcinoma
- **26%** Lung
- **22%** Gastic Cardia
- **20%** Myeloid Leukaemia
- **16%** Colon
- **13%** Rectal
- **10%** Breast
- **27%** Liver
- **23%** Kidney
- **21%** Endometrial
- **17%** Myeloma
- **15%** Head and Neck
- **13%** Bladder

* Comparing the most active to least active groups trial
Regular exercise has plenty of benefits, as you would know. According to Dr Lynette Ngo, Specialist in Medical Oncology & Consultant, Raffles Cancer Centre, exercise lowers your risk of cancer through these effects on your body:

- Reduce inflammation
- Improve immunity system function
- Increase natural antioxidants in body
- Reduce hormone levels of insulin and oestrogen
- Prevent obesity and its harmful effects
- Change the metabolism of bile acids
- Reduce time for food to travel through the digestive system

After diagnosis, many cancer patients may suffer from weight gain, poorer quality of life, cancer recurrence or progression and survival rates. Studies have shown that exercise can help cancer survivors.

**Weight Loss**
A reduction in physical activity and the side effects of cancer treatment often lead to weight gain after a cancer diagnosis. A study showed that weight gain leads to poorer cancer survival rates.

**Quality of Life**
Exercise can improve your overall health-related quality of life and manage issues such as body image / self-esteem, emotional well-being, sexuality, sleep, social, anxiety, fatigue, and pain. A 2012 study on physical activity in cancer survivors found that exercise reduces fatigue and depression, and improves physical functioning, social functioning, and mental health.

**Recurrence, Progression, and Survival**
Being physically active after a cancer diagnosis is linked to better cancer-specific outcomes for several cancer types including cancers of the colon, liver and lung as well as non-Hodgkin’s lymphoma.
You are at your physical peak. Your body is more adaptable and your muscles will recover more quickly. It is important to instil good physical habits that will more likely become part of your lifestyle later.

Combine both anaerobic (strength and resistance training) with cardio exercises in your regime. Include stretching for healthier postures and looser muscles. Consider this time as building the foundation for the years ahead.

As family and career commitments peak in the 30s, it is easy to slip into leading a sedentary lifestyle.

If finding spare time is your biggest challenge, improvise by deliberately including deskercises while working, simple daily activities such as taking short walks during lunch breaks, climbing the stairs, doing some squats while playing with your kids.

Try exercise snacking. That is to chop down hours of working out in the gym into short 10 to 30-minute workouts (eg. high-intensity training) that you can do daily to get your heart rate up. Doing something is better than not moving at all.

Most people tend to find themselves putting on weight more easily at this age. Losing weight seems to be more difficult. With bone mass and density on the decline, doing weight resistance exercise is essential to optimise calorie burning and increase resting metabolism.

Include cardio and a more intensive exercise programme such as running and cycling. Also, engage in workouts that help to build your core strength to combat those chronic pains or stiffen muscles developed due to habitual movement patterns during your younger days; whether active or passive.
In Your 50s

Depending on your health conditions, chronic illness would have likely caught up with many by this age. For women, decline in bone density hits them the most as oestrogen level dips and puts them at higher risk of heart diseases.

Commit to doing strength training to maintain bone density and slow down ageing. Focus on building strength in your hips, legs and shoulders to better support your body frame. Include weight bearing exercises such as walking to maintain your mobility. Try tai-chi that can help you with your balancing.

In Your 60s

Experiencing stiffer joints is a common factor and you may tend to decrease your physical activity to minimise discomfort. However, mobility and flexibility exercises that involve large and controlled range of motion in the upper back, shoulders, hips and ankles will be particularly useful.

Try doing yoga and balancing exercises. Maintain an active lifestyle with cardio exercises like brisk walking and aqua aerobics. Add strength training to your regular regime to maintain and improve overall physical function.

In Your 70s and beyond

By this age you may be tempted to believe that you’re too old to exercise, and think that rest is best. However, our chronological age is not a good indicator of our biological age. Some may still feel as fit as someone who is much younger than them.

Even though you may require a longer time to warm up and rest between sets, incorporating cardio, strength and balance exercises will help to prevent falls and frailty.

Remember, fitness level declines once inactivity sets in. Find an activity that you enjoy and stay active.

Are you convinced? Here’s what you need to do!

For health benefits to kick in, Dr Lynette Ngo, Specialist in Medical Oncology & Consultant, Raffles Cancer Centre, an avid sportswoman herself, suggests:

- 150 minutes of moderate-intensity aerobic physical activity weekly, or
- 75 minutes of vigorous-intensity aerobic physical activity weekly, or
- An equivalent combination of moderate- and vigorous-intensity activity weekly.

Try these to get you started. Dr Ngo adds that you should vary your exercises so you would not feel bored.

- Sign up for the National Steps Challenge and start clocking steps daily.
- Take the stairs rather than the escalator or the lift.
- Walk or cycle to your destination, go for a stroll after dinner.
- Park a little distance away from your destination to work and take a short walk.
- Walk to your colleague’s workstation to discuss matters in person.
- Date your family or friends for a lunchtime workout.
- Dance, Zumba, just move!
- Join a gym or a sports team.
- Window shop if weather does not permit you to exercise outdoors.
- Use a stationary bike or do sit-ups, leg lifts and push-ups while watching TV.
**Q:** What are colon polyps and their chances of being cancerous?

**A:** Polyps range from benign to pre-cancerous, and range from a few mm to 2 to 3cm or even larger. Most cancers begin as polyps and change over time (approximately three to 10 years). Benign polyps are usually small, looks smooth and like normal colonic lining. Pre-cancerous polyps are larger and their lining looks abnormal. They are distinguished during colonoscopy using narrow band imaging (NBI) techniques.

*Dr Ng Chin*
Specialist in General Surgery & Consultant
Raffles Surgery Centre

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**Q:** It is widely believed that an acidic diet contributes to cancer. How true is this?

**A:** It is a myth. Our stomach itself is very acidic, with a pH level of 3.5 or below so that digestion of food can take place. It is likely that the only time “acidic” foods are thought to be harmful is when they stimulate and increase gastric reflux, such as fatty foods, caffeine, spicy, and carbonated beverages.

*Dr Lynette Ngo*
Specialist in Medical Oncology & Consultant
Raffles Cancer Centre

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**Q:** A study showed that ladies who snack more at night, especially high carbohydrates foods are at higher risk of contracting breast cancer. How true is this?

**A:** The causality between high carbohydrates foods and breast cancer is still not proven. Breast cancer here could be caused by other reasons. For example, having late night supper could mean they are working late into the night and are highly stressed. It could be the high level of stress that’s increasing the risk, and not the supper.

*Dr Anthony Tang*
Specialist in General Surgery & Consultant
Raffles Breast Centre

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**Q:** Pancreas have the worst prognosis of cancer. Why so?

**A:** With the pancreas located deep in the abdomen, pancreatic cancer may not cause obvious symptoms until it is quite advanced. Also, symptoms are quite non-specific, contributing to late diagnosis in most cases. The pain experienced is similar to gastric pain, causing patients to easily dismiss them and delay diagnosis. The location of the pancreas causes it to not be routinely screened or imaged, allowing tumours to grow undetected for a period of time.

*Dr Lim Lee Guan*
Specialist in Gastroenterology & Consultant
Raffles Internal Medicine Centre
Cheers! Do you get that reddish glow or also known as Asian flush after drinking alcohol? That doesn’t mean you have good blood circulation but rather, an intolerance that can lead to complications. Limit your drinks and if the reaction is severe, seek medical attention immediately.

It’s a happy occasion! Raffles Fertility Centre is the first in Asia to introduce Evie – a fertility method that uses the slow release insemination technique. Clinical trials have shown that it doubles the success of pregnancy as compared to standard intrauterine insemination (IUI) for women under 35 years old.

Pictured here is the first Evie baby to be born in Asia, Damiam Verheyan with his parents, Mr Wouter Verheyen and Dr Fanija Panovska as well as gynaecologist Dr Seng Shay Way (left).

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