

StarSpecial

THE STAR, TUESDAY 16 AUGUST 2022

YOUR HEALTH



Caring for your body

A good and balanced diet helps to keep you in shape.

Liver health is vital for overall well-being

THE liver is one of the largest solid organs in the body. It has many essential metabolic functions which are responsible for carbohydrates metabolism, producing glucose and detoxing the body. It stores nutrients and excretes bile, which is necessary to digest and absorb the nutrients in food properly and it also helps carry away waste and break down fats in the small intestine during digestion.

Bile by-products enter the intestine and leave the body in the form of faeces. All the blood leaving the stomach and intestines passes through the liver. Blood by products are filtered out by the kidneys and leave the body in the form of urine. Liver dysfunction can lead to liver disease, metabolic disorders, diabetes and cancer.

According to the World Health Organization's internal agency for research in cancer, it was found that in Malaysia, liver cancer is the sixth most common cancer and also ranked the fourth most common cause of death.

Besides cancer, other liver-related diseases which are caused by viruses include hepatitis A, B and C. An estimated 325 million people worldwide live with hepatitis B and/or C, and for most, testing and treatment remain beyond reach.

MSU Medical Centre consultant physician and endocrinologist Dr Rohaya Abdul Razak explains, "In general, there are different causes



Dr Rohaya Abdul Razak.

problems which include genetic and autoimmune. However, more commonly, a variety of factors can damage the liver, such as viruses, alcohol use, obesity and diabetes.

The prevalence of non-alcoholic fatty liver disease in the general population of Malaysia is also increasing. Over time, conditions that damage the liver can lead to scarring (cirrhosis), which can lead to liver failure, a life-threatening condition. However, early treatment may give the liver time to heal.

"Liver disease doesn't always cause noticeable signs and symptoms. If signs and symptoms do occur, it may include skin and eyes that appear yellowish (jaundice), abdominal pain and swelling, swelling on the legs and ankles, itchy skin, dark urine colour, chronic fatigue, nausea or vomiting, loss of appetite and

tendency to bruise easily among others," she shares.

Among the major causes of liver diseases or problems are:

- **Infection** – parasites and viruses can infect the liver, causing inflammation that reduces liver function. The viruses that cause liver damage can spread through blood or semen, contaminated food or water, or close contact with a person who is infected. The most common types of liver infections are hepatitis viruses including hepatitis A, hepatitis B and hepatitis C.

- **Immune system abnormality** – diseases in which the immune system attacks certain parts of the body (autoimmune) and can affect the liver. Examples of autoimmune liver diseases include autoimmune hepatitis, primary biliary cholangitis and primary sclerosing cholangitis.

- **Genetics** – an abnormal gene inherited from one or both parents can cause various substances to build up in the liver, resulting in liver damage. Genetic liver diseases include hemochromatosis, Wilson's disease, and Alpha-1 antitrypsin deficiency.

- **Cancer and other growths** – these include liver cancer, bile duct cancer and liver adenoma.

Other common causes of liver disease are related to lifestyle including chronic alcohol abuse, fat accumulation in the liver (non-alcoholic fatty liver disease,

NAFLD), certain prescription or over-the-counter medications, obesity, type 2 diabetes, tattoos or body piercings, injecting drugs using shared needles, blood transfusion, exposure to other people's blood and body fluids, unprotected sex or exposure to chemicals or toxins.

Complications of liver disease vary depending on the cause of liver problems. Untreated liver disease may progress to liver failure, a life-threatening condition. There are many ways to have a healthy liver. Examples include:

- Maintaining a healthy weight (within ideal body mass index, BMI 18-23 kg/m²)
- Eating a balanced diet
- Exercising regularly
- Avoiding use of illicit drugs or products which are harmful to the liver
- Drinking alcohol in moderation
- Avoiding contaminated needles
- Practising safe sex
- Avoiding contact with other people's blood and body fluids
- Following directions on all medications
- Getting vaccinated. There are vaccines for hepatitis A and B.

While it may be impossible to manage all risk factors, consuming certain foods and drinks may help promote liver health and prevent liver diseases. Below are a few general tips for a healthy liver:

- Eating food with fibre, eg: fruits, vegetables, wholegrain bread, rice

"Over time, conditions that damage the liver can lead to scarring (cirrhosis), which can lead to liver failure, a life-threatening condition."

Dr Rohaya Abdul Razak

and cereals. It helps your liver work at an optimal level

- Drinking lots of water to prevent dehydration, preferably plain water. It helps your liver to function better
- Avoiding foods high in fat, sugar and salt

"The liver plays an important role in the body. While it largely takes care of itself, you can help maintain liver health by consuming certain foods and drinks. Choosing foods that are good for the liver can help a person avoid potential health issues in the future," urges Dr Rohaya.



Made in Germany 



Linola
Lotion
with essential linoleic acids

- Protects dry skin
- Normalises moisture deficiencies
- With lipids to regenerate skin barrier

Skin Care
200 ml
DR-WOLFF
est. 1905
MADE IN GERMANY



Linola
Shower and Wash
with essential linoleic acids

Family Size
500 ml
MADE IN GERMANY

Suffering from Dry, Rough and Itchy Skin? Stop scratching!

Painfully dry skin can have many causes. Hot weather, dry air (e.g. air conditioning) or frequent bathing all put stress on our body's largest organ which may result in a damaged skin barrier. When the skin barrier is damaged, it can no longer retain moisture. The skin starts to dry out which triggers a feeling of tension and itch. Scratching makes it worse.



Damaged skin barrier = Dry, itchy & sensitive skin

Gaps in the protective skin barrier cause the skin to lose moisture & lipids.



Intact skin barrier = Protected skin

Linoleic acids help to restore & stabilize the protective barrier. The moisture content is regulated.



Scan & Shop

Pair with Linola Shower & Wash to further protect your skin during shower.

- Contains essential linoleic acids
- Skin-friendly pH of 5.5
- 24-hour moisture depot







Subang Jaya Medical Centre

FIRST IN MALAYSIA!

A NEW GENERATION OF DIGITAL PET/CT PLATFORM - DISCOVERY MI GEN2

For optimal care from detecting disease to treatment planning and assessment.

Fast Scans & Low Radiation Dose

Exceptional Image Quality & PET Quantitation Accuracy

APPROVED BY THE MEDICAL RADIATION SURVEILLANCE DIVISION OF MINISTRY OF HEALTH



Now at only

RM2,300 per scan

*Terms & conditions apply.

KKLIU 1215/2022
TARIKH TAMAT TEMPOH: 31 DISEMBER 2024

For more information, +603 5639 1250 / +6019 628 4130

Subang Jaya Medical Centre subangjaya_medicalcentre Subang Jaya Medical Centre www.subangjayamedicalcentre.com

Part of Ramsay Sime Darby Health Care Group
+603 5639 1212

Understanding the need for essential linoleic acids to restore dry skin

DRY skin or medically known as xeroderma, is one of the most common skin problems. It is frequently accompanied by a feeling of tightness and is also inelastic and tends to result in painful cracks. In addition, there is often pronounced itching, which tempts the affected individual to scratch. However, this causes further damage to the skin and the scratch marks create ideal entries for germs.

Dry skin primarily occurs on the face, feet, elbows or shins but can also affect the entire body. Some common causes of dry skin are age, excess bathing or the use of harsh hygiene products.

Understanding dry skin

Our skin has a natural barrier that prevents it from losing too much moisture. This barrier is made up of corneocytes as well as:

- a thin lipid film on the skin, which alleviates the harmful influence of water on the skin
- structural lipids rich in linoleic acid, which link the corneocytes; and
- natural moisture factors, which help to stabilise the skin's moisture content

Together with the corneocytes, all these form a protective structure, similar to a wall which prevents bacteria and harmful substances from penetrating the skin.

If the structural lipids and moisture retention factors are stripped away due to frequent bathing, showering or swimming, or are no longer produced in sufficient amounts such as with ageing or atopic eczema, the corneocytes separate from one another, creating gaps in the skin's

Protect your skin against barrier breakdowns and the depletion of moisture and natural oils with constant replenishment of essential components.

protective barrier.

Whether because of internal or external causes, the result is always the same – dry, flaky or rough skin that is increasingly susceptible to inflammation, itchiness and eczema.

To protect the skin against barrier breakdowns and the depletion of its moisture and natural oils, constant replenishment with essential components of healthy skin is vital. Linoleic acids are particularly important in this aspect.

As early as 1937, results showed that the constant supply of linoleic acid onto skin helps naturally repair the protective skin layer and seals the moisture within. Since the body cannot produce this special polyunsaturated fatty acid on its own, like a vitamin, it must be taken on a regular basis

to maintain healthy skin.

Exactly for that purpose, Dr August Wolff, a pharmaceutical company from Germany started developing a product range of creams and lotions more than 80 years ago to easily supply the skin with essential linoleic acids. Linola, named after its key ingredient, is a head-to-toe range for dry and sensitive skin.

Linola is not just another run-of-the-mill range of product. Out of the many essential fatty acids available, linoleic acid was chosen specifically as it is one of the longest chain essential fatty acids available for the skin. The longer the chain, the better it is for your skin's natural barrier. Linoleic acid can be found in sunflower oil, thistle oil and wheat germ oil.

Linola Lotion and Linola Shower and Wash with essential linoleic acids can help repair

“To protect the skin against barrier breakdowns and the depletion of its moisture and natural oils, constant replenishment with essential components of healthy skin is vital.”

the skin barrier and protect it from excessive moisture loss. The products contain linoleic acid and are free from harmful minerals and silicones. These are suitable for very rough, dry, cracked and sensitive skin – common complaints of people living with dry skin. Most people living in a hotter climate like Malaysia who are used to frequent washing or showering can use Linola Shower and Wash to protect the skin from barrier breakdown and the depletion of lipids.

Today, it is the preferred skincare range by paediatricians in Germany.

Wholly formulated and produced in Germany, Linola products are available at Caring pharmacies, Shopee and Lazada.

■ For more information, visit www.linola.my



BCoL

Stay Healthy, with Your Daily Energy & Health Booster!

Time Release Formulation

Combination of Different Nutrients

Formulated & Manufactured in Canada

Zinc, Choline, Inositol, Selenium, E, Colostrum, Biotin, Time Release, 45 Tablets

MAL1812603NCR

MegaLive BioSciences Sdn Bhd (852015-W)
 1st Floor, No. 13, Jalan Selasih, Taman Semarak,
 09000 Kulim, Kedah Darul Aman, Malaysia.
 Tel: +604 491 8168
 Email: info@megalive.com.my

This is a supplement product advertisement.
 Ini adalah iklan produk suplemen kesihatan.
 此为辅助品广告。

KKLIU 0209/2022
 Expiry Date: 31/12/2024

Relief for dry mouth

DID you know that each person produces between 1-1.5L of saliva per day? Our saliva consists mainly of water (99.5%), mineral salts and proteins.

Dry mouth, or xerostomia, is the decrease in saliva in the oral cavity, due to increased consumption or reduced production. This can lead to negative effects on several aspects of oral function, such as decreased sense of taste and difficulty chewing, altering eating habits and difficulty with speech. Some of the most common causes for dry mouth include ageing, dehydration, side effects of medications, radiotherapy or chemotherapy.

Relief for dry mouth

Individuals with dry mouths may experience dryness, cracking and redness on their tongues, and a burning sensation in their mouths. The lips may also start peeling, causing more discomfort to the individual.

Xerolacer Mouthwash contains a unique formula to provide relief for dry mouth. It has a combination of sodium and potassium mineral salts that acts as saliva substitutes to restore the ion balance of saliva and maintain isotonic saliva. Coupled with aloe vera leaf juice as a moisturiser, it refreshes and soothes the mouth, as well as stimulates more saliva secretion, making Xerolacer Mouthwash a great travelling companion for those struggling with dry mouth throughout the day.

High fluoride concentration to prevent tooth decay

Oral dryness favours the accumulation of plaque. When there is no salivation, the tissues of the oral cavity may develop sores and become infected, increasing dental caries due to the lack of antibacterial enzymes that are naturally present in saliva. Xerolacer Mouthwash has a high fluoride

concentration of 1,500ppm. The high fluoride concentration protects against dental caries by increasing the strength of the teeth's enamel, as well as providing an anti-plaque and remineralisation effect.

Vitamin E and provitamin B5 to strengthen gum health

Gum diseases such as gingivitis and periodontitis also occur frequently in individuals with dry mouth. Combined with vitamin E and provitamin B5, the formulation helps to strengthen gum health as an extra layer of protection for dry mouth users. The combination of vitamin E and provitamin B5 together with aloe vera leaf juice also helps provide relief to heavy oral conditions such as sore throat and mouth ulcers.

Xerolacer Mouthwash is recommended for daily use in adults or children aged 12 and above, especially those who are at risk of dry mouth such as elderly group. Individuals who spend long hours under the sun or in hot environment are also recommended to use Xerolacer Mouthwash. It is convenient to use – rinse your mouth with 10ml of undiluted mouthwash for one minute after brushing your teeth.

This product is available at GP clinics, dental clinics and pharmacies nationwide.

■ For more information, call 03-7727 6390, email info@yypsah.com or visit www.facebook.com/LacerMY.



Maintaining youthful beauty

NMN, or nicotinamide mononucleotide, has recently become a new buzzword in youthful beauty. It is used to build nicotinamide adenine dinucleotide (NAD+), which is one of the most abundant molecules in your body.

What is NAD+?

Found in all living cells, NAD+ is involved in hundreds of metabolic processes. Your cells cannot live without it, and neither can you. Besides energising your body by increasing cellular energy production for bodily functions, NAD+ also helps repair damaged DNA to maintain cellular health. It boosts antioxidant protection by regenerating glutathione to prevent damages caused by free radicals. It also sharpens your mind by improving cognitive function and concentration.

Falling levels of NAD+

Unfortunately, as you get older, NAD+ levels in your body naturally decrease, causing a decline in energy metabolism and cellular functioning. This, in turn, drives the ageing process, leading to increased susceptibility to age-related conditions, or even shortened lifespan.

Boost NAD+ levels naturally

Supplementing with NAD+ precursors can effectively boost NAD+ levels in your body. But the big question is: which



Supplementing with NAD+ precursors can help boost NAD+ levels in your body.

is the best?

NAM, compared to other NAD+ precursors such as NMN and NR, reigns supreme in efficiency due to its faster rate of absorption and incorporation into NAD+.

Turn back the hands of time with Herbs of Gold NMN+. It features RiaGev, a patented ingredient which contains NAM and D-ribose in an optimised ratio to boost the levels of NAD+ in your body, keeping you young and healthy.

This informational article is brought to you by Herbs of Gold.

■ For more information, call 1800 183 288.



SUPERFOODS contain an enormous variety of nutrients that can transform you from the inside out and help you to achieve a radiant complexion. The right selection of superfoods can speed up the recovery of many skin woes. Here are a few examples of foods labelled as 'superfoods' to factor into your diet to achieve clearer, glowing skin.

Avocados

This buttery fruit, yes avocado is a fruit and not a vegetable, contains high levels of healthy oils and vitamin E. Avocados are replete with several essential antioxidants and vitamins that can help nourish your skin from within and impart a natural glow. They act as a natural supplement to help improve barrier function and hydration. Aside from adding the fruit to your diet, you can also use its flesh as a face mask to procure those essential fatty acids, which help keep your skin supple and soft.

Salmon

Salmon is packed with healthy fats, protein, B vitamins, potassium, and selenium, making it a highly nutritious superfood. It is known as one of the best

sources of omega-3 fatty acids, which work wonders on the skin. The fatty acids in salmon contribute to the production of collagen, a protein that helps keep the skin foundation strong and wrinkle-free. It is recommended to limit your intake to 100g a week as overconsumption can put you at risk of developing mercury poisoning.

Sweet potatoes

Sweet potatoes are root vegetables that are loaded with many nutrients, such as Vitamin A and C, fibre, and potassium. Because of their high levels of vitamin A, sweet potatoes have been known to help reduce oil production in the skin and are also used to treat acne. Sweet potatoes are an excellent source of beta-carotene, an antioxidant that is great for the eyes.

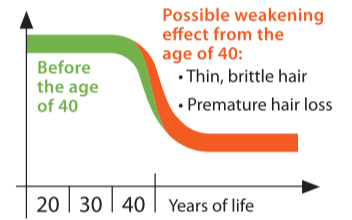
Yoghurt

With yoghurt being an excellent source of getting stronger bones but also clearer skin. Greek yoghurt contains a healthy amount of good fats and much-needed protein, contributing to that glow. Yoghurt is



Plantur 39 with Caffeine helps to reduce hair loss

From the age of 40, women may experience thinning hair and increased hair loss. This can be truly worrisome as it can affect the daily life and self-confidence.



German scientists have innovated Plantur 39 Scalp Tonic and Shampoo, containing a Phyto-Caffeine Complex with caffeine, zinc, niacin and phytoflavones that helps to strengthen and protect the hair roots from the consequences of ageing and therefore helps to reduce hair loss.



Leave-on Scalp Tonic for added protection

To supply the hair follicle with valuable caffeine, daily use is important.

After washing the hair with Phyto-Caffeine Shampoo for 2 minutes, apply the Phyto-Caffeine Tonic directly to the scalp and massage in gently. Do not rinse out the tonic.



Advancements in the field of nuclear medicine

THERE are plenty of reasons patients may be deterred from seeking a specific treatment or undergoing a particular diagnostic test in medicine. Any kind of treatment or diagnostic procedure that is rare or not widely used may cause anxiety to any patient and the word 'nuclear' is not the most compelling in trying to remove their hesitance. While nuclear medicine is not a new speciality and has been around for about 100 years thanks to the discovery of radium by Marie Curie, it is not an option that is frequently used in the medical field. Nuclear medicine has a unique niche in medicine in that its utility is meant for very specific indications.

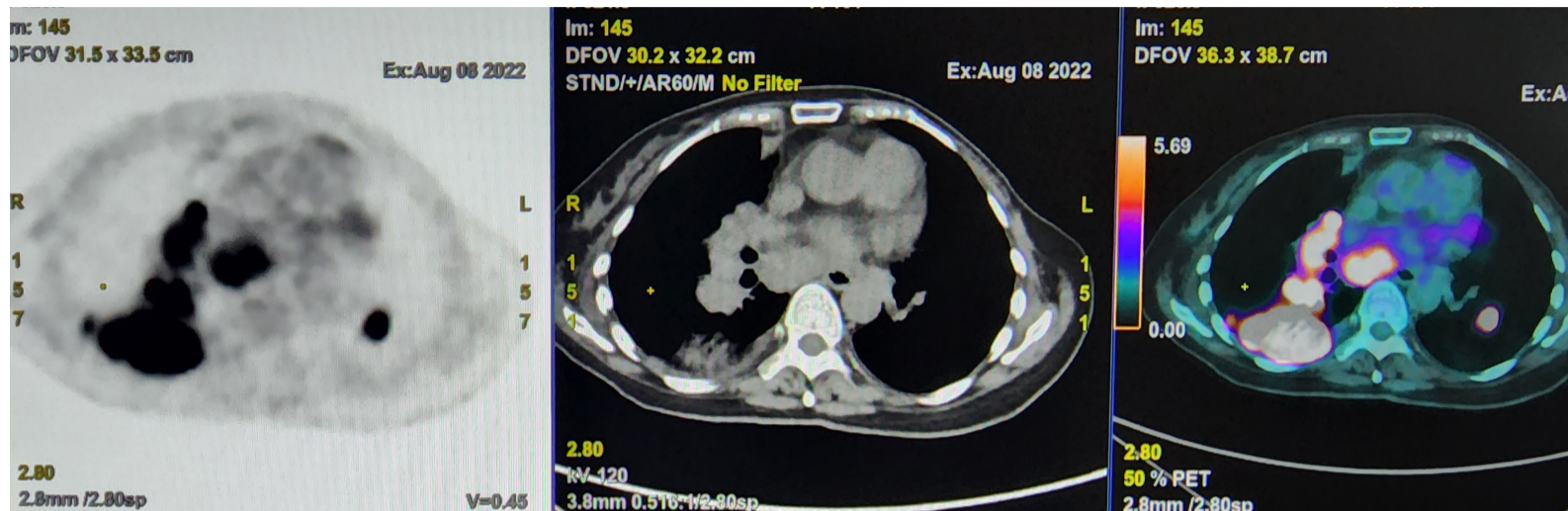
Nuclear medicine can be defined as a speciality in medicine that uses radioisotopes to diagnose and treat diseases and medical conditions. Though most of the workload in nuclear medicine is diagnostic scans, it is also used in treating several medical conditions, especially in certain cancers at a therapeutic capacity.

There are two reasons radioisotopes are used in nuclear medicine. First, radioisotopes emit ionising radiation that can be detected at minute amounts, and at higher levels of radiation is able to destroy cancer cells and diseased tissues. The second reason is that radioisotopes have identical chemical characteristics as non-radioactive isotopes and therefore can be attached with the appropriate chemicals that have specific characteristics in the human body. This combined molecule of radioisotopes and a particular chemical or pharmaceutical compound is known as a radiopharmaceutical.

The properties of the radioisotopes and radiopharmaceuticals as mentioned allows for early detection of specific conditions and the ability to treat certain cancers while minimising the effects on healthy tissue.

Technology playing a vital role

Among the latest developments in nuclear medicine is theranostics, short form for therapeutic diagnostics, that utilises the same or similar pharmaceuticals. By attaching it to a particular radioisotope, doctors can diagnose a particular cancer and determine if it will respond to nuclear medicine therapy by employing another radioisotope to



A digital PET/CT scanner allows for faster scans, reduces dosage radioisotopes use and improves lesion detection compared to older analogue PET/CT scanners.

initiate the annihilation of those cancer cells. At present, theranostics are used mainly in the treatment of Neuroendocrine tumours and prostate cancer but may be employed in other cancers as new pharmaceuticals are developed.

Positron emission tomography (PET) scanner and a computed tomography (CT) are highly utilised scanners in nuclear medicine. They are used as a pair for better imaging outcome.

Conventional medical scans such as CT scan, X-rays, ultrasound and MRI detect anatomical or structural changes in the human body to detect disease and to assess treatment response.

The main difference with PET/CT is that it attempts to detect physiological or functional changes to diagnose a condition and evaluate treatment response. As physiological changes occur earlier in the development of a particular disease, it stands to reason that diseases are able to be detected earlier before there are any significant anatomical changes that can be detected on conventional scans.

To put it in simpler terms, consultant nuclear medicine physician at Subang Jaya Medical Centre (SJMC) Dr Yogendren Letchumanasamy says, "The difference between a PET/CT and a traditional CT scan is that a traditional CT scan can only show you the form of the abnormalities. It can neither tell you the function nor the aggressiveness of the abnormalities. However, with a PET/CT, you can determine the form and the function of the abnormal cells, thus allowing doctors to come up with a better course of treatment."



Dr Dharmendra Harichandra.

Dr Yogendren continues to explain that earlier treatment means improving the chances of patient recovery and survival. For a cancer patient, the treatment response to a particular regime can be assessed earlier to determine the effectiveness of the treatment, allowing oncologists to modify the treatment earlier and thus improving the overall outcome for the patient.

Precise treatment can save lives

Nuclear medicine is now in the era of precision medicine where treatments are tailored according to the patient's cancer and condition. Another consultant nuclear medicine physician at SJMC Dr Dharmendra Harichandra says, "Nuclear medicine technology allows not only the early detection of cancer and the extent of the cancer in a person, but it allows for a continuous assessment of the patient's response to a particular treatment regimen."



Dr Yogendren Letchumanasamy.

He explains the practice of using a standardised treatment plan for all patients of a particular cancer is slowly dying out. In the future, every patient's treatment will be tailored specifically to each case, with nuclear medicine scans playing an important role in fulfilling this objective.

Besides this, nuclear medicine allows for a semiquantitative analysis of the disease state, and this allows for a more precise and objective evaluation of the disease and the treatment response. For instance, prior to treatment, a tumour will pick up FDG, a radioactive glucose according to its metabolic activity. The more active the tumour is, the higher the glucose uptake. This glucose avid disease focus has a greater potential to grow and spread. This activity can be measured on the PET/CT scan.

After the course of treatment, the cancer can be evaluated again. A drop in the glucose uptake or complete resolution of the metabolic activity indicates the treatment is effective and can be continued to kill the cancer cells.

"While cancer is the main workload for nuclear medicine, there is a growing role for nuclear medicine in non-oncologic conditions such as epilepsy, dementia and other neurological conditions."

Future expectations in the advancement of nuclear medicine in Malaysia

Both doctors express that part of their future expectations has been fulfilled with the availability of the Digital PET/CT scanner. Dr Dharmendra says, "A digital PET/CT scanner allows for faster scans, reduces dosage radioisotopes use and improves lesion detection compared to the older analogue PET/CT scanners. This allows for more patient comfort as the scanning time is effectively halved. The reduced dose of radioisotopes reduces radiation exposure to the patient and improved lesion detection allows for a more precise diagnosis. All these features will also ultimately reduce the cost for the patient."

While cancer is the main workload for nuclear medicine, there is a growing role for nuclear medicine in non-oncologic conditions.

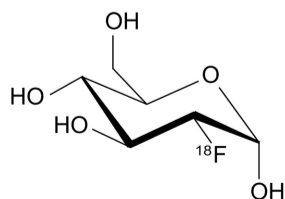
A particular field that both doctors agree they would like to see nuclear medicine grow is in the field of neurology, with the management of epilepsy, dementia and other neurological conditions.

■ For more information, call 03-5639 1212/1818.

What are radiopharmaceuticals?

Radiopharmaceuticals or radiotracers, as defined by National Cancer Institute, is a drug that contains a radioactive substance and is used to diagnose or treat diseases including cancer. It is also called a radioactive drug. By using radiopharmaceuticals during a PET/CT scan, the physician is able to separate regular cells from the active tumour.

FDG: Fluorodeoxyglucose



F18 is a radiotracer used to detect glucose accumulation in the cells with increased metabolism. Glucose accumulation is a tell-tale sign of abnormal and possibly

cancerous cells as cancer cells tend to consume glucose at a faster rate.

Ga 68 PSMA: Prostate-specific membrane antigen or PSMA is a unique cell surface marker expressed by almost all prostate cancers. When PSMA is used with Gallium Ga 68 (a form of radioisotope) and is injected into the body, this radiotracer will attach itself to where the prostate cancer is located.

Ga 68 DOTATATE: Ga 68

DOTATATE is used to detect a neuroendocrine tumour in both adults and children. Tyrosine-3-octreotate (TATE) is a type of protein commonly found on the surface of neuroendocrine tumours. By binding this to the dodecane tetraacetic acid (DOTA) to become a somatostatin receptor, the radiotracer attaches itself to neuroendocrine tumour cells in the body.

How phyto-caffeine complex helps reduce hair loss in women

WOMEN in their early 40s will experience some form of hair loss. This is the time when hormone levels in their bodies change and premature hair loss begin. Hair loss, in this case, is not about hair falling out in clumps; losing 50 to about 100 hairs every day is normal, but about normal hair being gradually replaced by finer, thinner hair. This process is called miniaturisation.

Women may notice that their part is getting wider, the scalp starts showing through or the ponytail becomes thinner. Over time, new hair growth may even cease completely.

Is caffeine really able to help reduce hair loss? According to German scientist Dr Adolf Klenk who conducted years of research on the ingredient, it can.

In collaboration with the dermatological institute of the University Clinic Jena, Dr Wolff R&D has discovered effective properties of caffeine, which can help prevent the negative impact of testosterone on hair roots. This led to the development of a phyto-caffeine complex included in the Plantur39 range of two hair type specific shampoos and a scalp tonic.

How does the phyto-caffeine complex penetrate and nourish the hair follicles?

The scalp has about 120,000 hair



The Plantur39 range includes both tonic and two shampoos for four different types of hair.

follicles that serve as storage for active ingredients. During hair washing, the phyto-caffeine complex penetrates quickly all the way into the hair roots. A study has proven that after two minutes, the components of the shampoo had penetrated into the hair follicles to unfold its protective effect. The caffeine was still detectable after 24 hours.

Does it mean that daily hair washing is required to ensure a continual stream of nutrients?

To ensure that the hair roots are protected throughout against testosterone attack and a sufficient supply of energy can be guaranteed, regular application is required. The Plantur39 Phyto-

Caffeine Shampoos activate the hair roots in a sustained manner, thereby creating the support for healthy hair growth. Alternatively, Plantur39 Phyto-Caffeine Tonic can be used to provide the hair roots with sufficient growth nutrients. Apply the Phyto-Caffeine Tonic directly to the scalp and massage in. Do not rinse.

What other nutrients does the Plantur39 range contain to support hair growth?

Apart from caffeine as its main active ingredient, phyto-caffeine complex contains zinc and niacin to support hair growth and phyto

flavones. The Plantur39 Phyto-Caffeine Tonic contains phytoestrogen genistein from the soy plant. Both Plantur39 Phyto-Caffeine Shampoos contain phytoflavones from white tea which helps to promote the resistance of the scalp and hair follicles.

Are there any benefits in massaging the scalp with coffee??

Caffeine can be absorbed by hair follicles. However, caffeine from coffee alone is unable to penetrate hair follicles. It requires a special carrier base (galenic) that transports the active ingredients to the target location where they are able to develop their effect. With the unique galenic of Plantur 39

products, a method has been developed to effectively transport the caffeine all the way into the hair follicles.

Will drinking coffee help in preventing hair loss?

By drinking coffee, caffeine passes through the digestive system and is only absorbed by the body much later. Even then, only a minute quantity reaches the scalp and hair roots. Even drinking 50 cups of coffee a day would not be enough to have any effect on the hair. The best thing to do is to apply a carefully dosed and specially formulated phyto-caffeine complex that is proven by science.

The Plantur39 range is available at Caring, Watsons, Shopee and Lazada.

The above information is based on the following research:

1. Investigation of the penetration and storage of a shampoo formulation containing caffeine into the hair follicles by in vivo laser scanning microscopy published in *Laser Physics Letters* 2007, 4 464-468.

2. Effect of caffeine and testosterone on the proliferation of human hair follicles in vitro published in *International Journal of Dermatology* 2007, 46 27-35.



REGISTER NOW To Lock Your Appointment Date!

ENDOSCOPY PACKAGE

Endoscopy is a non-surgical procedure that allows doctors to examine your digestive to identify any diseases related to your oesophagus, stomach, small bowel, colon, rectum and canal.

OGDS

RM1,199

COLONOSCOPY

RM1,899

CLINIC HOUR

Monday - Friday 8:30am - 5:30pm
Saturday 8:30am - 12:30pm

+603 5526 2600

24 HOUR

Emergency

+603 5526 2800

www.msumedicalcentre.com

Caring · Healing · Educating KKL1U 0993 / 2022 Expiry Date: 31st December 2024

MSU MEDICAL CENTRE University Drive, Off Persiaran Olahraga, Seksyen 13, 40100 Shah Alam, Selangor

B vitamins for better energy

TO supplement the body with energy, people usually consume supplements containing ginseng or Tongkat Ali. However, there are types of vitamins that help with the production of energy in the body, vitamin B.

There are eight types of B vitamins according to the Malaysia Recommended Nutrient Intake which are vitamin B1 (Thiamin), vitamin B2 (Riboflavin), vitamin B3 (Niacinamide), vitamin B5 (Pantothenic Acid), vitamin B6 (Riboflavin), vitamin B7 (Biotin), Vitamin B9 (Folic Acid) and vitamin B12 (Cobalamin).

All these vitamins in general are referred to as vitamin B complex. Vitamin B complex is responsible for the production of energy as it helps with the metabolism and catabolism of carbohydrates, protein, fats and alcohol.

Other than this, vitamin B1 is also essential for normal growth and development and proper functioning of the heart, nervous system and digestive systems. Vitamin B5 helps in converting food into fuel, which the body uses to produce energy.

Vitamin B6 acts as a regulator of the action of steroid hormones such as androgens, progesterone and oestrogen. Vitamin B9 helps with red blood cell production while vitamin B12 aids in red blood cell formation.

Supplementation of B vitamins

Adequacy of all these vitamins is essential in maintaining energy, however, vitamin B and C are categorised as water-soluble vitamins, unlike vitamin A, D, E, K which are fat-soluble vitamins. Water-soluble vitamins cannot be stored in the body, hence, when it comes to supplementation, it is necessary to



Vitamin B1 is essential for normal growth and development and proper functioning of the heart, nervous system and digestive systems.

have time-release formulation.

Time-release formulation allows the nutrients to release slowly in the body throughout the day. This ensures the body has sufficient energy throughout the day.

Consumption of a well-balanced diet and exercise must go hand in hand to ensure the body receives the required nutrients. Sufficient nutrients throughout the day are essential in preventing diseases and allowing the body to be energetic.

Talk to your healthcare professionals to know more about B vitamins that are suitable for your daily consumption.

This health article is brought to you by MegaLive.

■ For more information, call 04-491 8168 or visit www.megalive.com.my.



Goodness from food

> FROM PAGE 5

also rich in zinc and has anti-inflammatory properties. Additionally, it contains probiotics that will help restore your skin's natural barrier. Its active anti-bacterial and anti-fungal properties can also help prevent breakouts of acne.

Prunes

Prunes are high in manganese, iron, and plant phenolics that function as antioxidants and help protect the cell membranes from free radical damage. The vitamins and minerals present in prunes help in maintaining healthy skin. This dried-up fruit also helps slow down the ageing process and delays the development of wrinkles. The many minerals in prunes not only make it a healthy snack but also plays a role in giving your skin that much-needed glow.

Bananas

In bananas, potassium and manganese are found in abundance, which are essential

elements for making our skin soft and healthy. Manganese helps in increasing the amount of collagen in the skin. Potassium in bananas helps maintain the flow of both oxygen and blood to the skin cells, enhancing blood flow and provides brightness to the skin. Bananas are also known to fasten the rate of healing of the skin. Bananas are high in vitamin C as well, which is beneficial in brightening the skin.

Blueberries

Blueberries contain loads of vitamins, fibre, and minerals. The blue colour of blueberries comes from flavonoids which are multi-active components used in common cosmetics primarily for antioxidant and soothing actions. Blueberries are one of the best superfoods you can eat for your skin. This is because they are high in antioxidants that combat cell damage left by free radicals. Free radicals are known to speed up the ageing process, so popping a couple of these delicious berries in your mouth a day can help keep the wrinkles away.

The Ultimate Solution to Youthful Beauty

Turn back the hands of time with **Herbs of Gold NMN+**. It features RiaGev™ which has been clinically proven to boost the natural production of NMN and NAD⁺ in the body.

- ENERGISES THE BODY
- REPAIRS DNA
- BOOSTS ANTIOXIDANT DEFENCE
- SHARPENS THE MIND

NMN+

Proprietary blend of nicotinamide

Net Weight / Berat Bersih: 30 sachets

Hot selling in Japan, Hong Kong, Korea, China, USA

1st NMN product in Malaysia*

*in pharmacy channel

Ask a pharmacist for advice.

Brought to you exclusively by

Herbs of Gold Sdn. Bhd. (1056572-U)
1800-18-3288 herbsofgold.com.my

Xero Lacer

MOUTHWASH

REFRESHING AND SOOTHING TO YOUR MOUTH

Now available in clinics & pharmacies near you!

Y.S.P. INDUSTRIES (M) SDN.BHD. (199001001034)
Ordering Line: 1 800 88 3027 Product Info Line: 1 800 88 3679 Website: www.ypsah.com

A Subsidiary of **Y.S.P.SAH®**

LacerMY