EXERCISING WISDOM

8 USEFUL THINGS YOU DIDN’T KNOW ABOUT MAGGOTS IN WOUND HEALING

NOVEL KIDNEY THERAPIES

5 STEPS TO A HEALTHIER FAMILY

WORLD DIABETES DAY 10 NOV 2013

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References:

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NOTE FROM THE DSS PRESIDENT

LIVING WELL WITH DIABETES. IT’S IN YOUR HANDS

SELF-CARE DIABETES MANAGEMENT WORKSHOPS (MANDARIN)

HEALTH TALKS; HEALTH WALKS; PUBLIC FORUM; DSS DIARY

HEALTH SCREENING: A GOOD LIFE WITH DIABETES

LEE FOUNDATION DIABETES CARE PROGRAMME

CARE CORNER

GETTING TO KNOW DIABETES

APA ITU KENCING MANIS?

FEATURES

USEFUL THINGS YOU DIDN’T KNOW ABOUT MAGGOTS

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THE ROLE OF THE KIDNEYS AND EMERGING NOVEL THERAPIES IN DIABETES

HEARTWARE

THE OTHER PERSON’S PERSPECTIVE

COOKOUT!

QUICK AND EASY SQUID

PAN-FRIED MACKEREL

HERBAL CHICKEN

SILKY AND SPICY TANGHOON DELIGHT

THE LIGHTER SIDE

5 STEPS TO A HEALTHIER FAMILY

ARE YOU GETTING ENOUGH NUTRIENTS TO EXERCISE?

SHAPE UP

EXERCISING WISDOM

DIABLOGUE

THE RIGHT CALL

COVER PHOTO: KATE ZHU
HOW IS YOUR CONTROL?

World Diabetes Day 2013 will be held at SUNTEC City Exhibition and Convention Centre on Sunday, 10 November. Its theme “How Is Your Control?” hopes to inspire those with diabetes to manage their condition well to avoid complications; it also hopes to encourage those already doing well to keep up the good work and learn about new practices.

One aspect of keeping diabetes under control is keeping the weight off and watching your diet. There are a variety of ways to do that:
- Continue to consume fewer calories.
- Eat a low-fat diet.
- Include high levels of activity in daily life.
- Watch less than 10 hours of TV per week.
- Exercise, on average, about 30 minutes a day or 150 minutes a week.

Some people with diabetes use the glycaemic index (GI) as a guide in selecting foods — especially carbohydrates — for meal planning. The glycaemic index classifies carbohydrate-containing foods according to their potential to raise your blood sugar level. Foods with a high glycaemic index value tend to raise your blood sugar faster and higher than do foods with a lower value.

It can be difficult to follow a glycaemic index diet on your own. For one thing, most foods aren’t ranked by glycaemic index. Packaged foods don’t generally list their GI ranking on the label, and it can be hard to estimate what it might be. Still, basic principles of the glycaemic index diet may help you better manage and control your blood sugar level:
- Choose high-fibre foods, such as whole grains, fruits and vegetables.
- Choose fresh or raw foods over canned and processed foods.

The glycaemic index diet has potential benefits because it:
- Controls appetite and delays hunger cues, which may help with weight management.
- Helps regulate blood sugar level throughout the day.

So, how is your control? If it isn’t as good as it should be, now is a good time to formulate a plan and start a new lifestyle or behavioural change goal. Come to World Diabetes Day 2013 and you and your caregivers will receive lots of help to get you going with better diabetes management. I hope to see you there!

Yong Chiang Boon
President, Diabetic Society of Singapore

SPECIAL ANNOUNCEMENT
On behalf of DSS Management Committee, we wish to offer our heartiest congratulations to Mdm Helena Wee, Diabetes Nurse Educator, on being conferred PBM by His Excellency, The President of the Republic of Singapore.

Diabetic Society of Singapore HQ
Blk 141 Bedok Reservoir Road #01-1529
Singapore 470141 T: (65) 6842 6019 / 3382

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Diabetic Society of Singapore is a non-profit organisation affiliated to the International Diabetes Federation and the National Council of Social Service. DSS gratefully accepts donations of any amount to help fight diabetes. All donations are tax exempt. Cash donations must be made in person at our HQ. Cheque donations should be made payable to Diabetic Society of Singapore. You may also make online donations via www.sggives.org/diabetes.
This year’s one-day retreat for adults with diabetes was held at the Monarch Room 1, Butterfly Park, Sentosa Island.

To help participants gain a better understanding of diabetes and boost their confidence in effective diabetes self-care management techniques, they were led through talks, quizzes, workouts and interactive games.

We were privileged to have as our speakers Dr Ben Ng, consultant endocrinologist from Changi General Hospital, Mr For Wei Chek, dietitian and manager, Mt Alvernia Hospital, Ms Stephanie Tan, physiotherapist and clinical coordinator, LIFE Centre Singapore General Hospital, and Ms Juliana Lim, member and support group volunteer. Together with diabetes nurse educators P Ramesh and Ling Ying, they illuminated the fact that healthy lifestyle regimes can be interesting and fun as well.

There were two other important takeaways:
• forging a good social networking platform for participants to communicate, interact and share their experiences and views on diabetes with other participants.
• “If you can’t fight it, control it.”

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Health Promotion Board

Workshops
Diabetes Self-Care Management (Mandarin)
5, 12, 28 Jun and 3 July
AWWA SAC
Bik 123 Ang Mo Kio
6, 13, 20 and 27 August
Thye Hwa Kwan SAC
Bik 118 Bukit Merah View

Self-Care Management Workshops (SCMW) went offsite when Tsao Foundation collaborated with DSS to do a series of talks in Mandarin at their senior activity centres.

Run by our new team of dynamic diabetes nurse educators, the workshops were a hit with the participants who were mostly elderly retirees and homemakers.

For enquiries on future workshops, please contact DSS at 6842 6019.

FOR THE LATEST ON DSS EVENTS, LOG ONTO www.diabetes.org.sg
For enquiries, please contact 6842 6019.
Health Talks
Diabetes & Ramadan

To prepare people with diabetes for the fasting month of Ramadan, DSS held talks on Saturday, 15 and 29 June for them and their caregivers to help them manage their health through blood glucose monitoring and diet for diabetes and weight management.

Rohanah Pagi, senior nurse clinician with NHGP, together with Dr Radiah Salim, a family doctor, and Ms Siti Saifa, a lecturer with the School of Applied Science in Temasek Polytechnic, presented the talks in Malay at the Bedok DECC activity room.

The event was sponsored by sanofi-aventis Singapore Pte Ltd while Almawaddah Mosque in Compassvale Bow collaborated with DSS for health talks for their beneficiaries.

Health Walks
Kent Ridge Park Tour

The Kent Ridge Tour, postponed from 29 June due to the haze, finally went ahead on Sunday, 8 September despite a cloudy morning.

Our tour guide, Mr Tham Pui San, also an avid nature artist, took us through the canopy walk, elevated 16 metres at the centre and which links the 47ha Kent Ridge Park to Reflections at Bukit Chandu – once known as Opium Hill and the site of one of the last battles of Singapore in World War II – and Hortpark.

With the highest lookout point of 61m at the ridge, the park offered a superb view of the off-shore islands and a sanctuary one can retreat to. We also enjoyed free entry into the museum! What a treat!

DSG DIARY

On 20 July, DSG members gathered at Botanic Gardens MRT station while a nurse recorded their blood glucose level. Juliana, the DSG organiser, introduced us to many new faces, some of whom were polytechnic students who were there for project work.

We walked leisurely into the Botanic Gardens from Cluny Park gate. We chatted about healthy eating and the benefits of physical activities in controlling blood sugar levels. We made our way down the Palm Valley and reached Ginger Garden. Some members strolled through the cave behind the waterfall and we caught them on camera! We continued our walking towards Swan Lake and reached Tanglin gate. The students were very energetic and engaged everyone in their nutrition project and applications through the walking activity.

Public Forum
Getting to know Insulin – Its Facts & Myths

Despite the slight haze, many tuned in to hear Dr Ben Ng, Ms Aeslia Hussain and Ms Lock Poh Leng dispel some of the myths about insulin and its treatment.

DSS would like to thank the speakers for their time and presence, main sponsors Novo Nordisk Singapore Pte Ltd and Medtronic International Ltd as well as goodie bag sponsors Gardenia Foods Singapore Pte Ltd and Soyjoy.

It is embarrassing to have Yellow-Brownish, Thickened, Disfigured and Stricken nails!

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• Exfoliates dead skin & Rejuvenates skin
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Health Screening

The following outreach health screening programs were conducted:

- **06 Jul**: Malabar Muslim Jamaath Organization Family Day 2013 at Madrasah Aljunied at Jalan Kubor
- **07 Jul**: Health Screening for Indian Muslim Social Service Association held at the Daud Malikur Mosque at Yishun Ave 2
- **21 Jul**: Yew Tee Free Medical Screening Drive at the constituency office at open void deck B1k 674 Choa Chu Kang Crescent
- **09 Aug**: KDS Health Day at Khalsa Darmak Sabha Sikh temple at 18 Niven Road
- **25 Aug**: Medical Health Fair by Hindu Endowment Board at Sri Sivan Temple at Geylang East Ave 2
- **29 Sep**: Public Health Screening at Thomson Shunfu RC at Blk 313 Shunfu Rd

DSS thanks all nurses from Singhealth Polyclinics, Hindu Endowment Board and the Muslim Health Professionals for volunteering with us.

### A Good Life with Diabetes

#### Is diabetes getting you down?

Did you know that some emotions can actually get in your way of taking care of your own health?

Join our DSS special education session at our upcoming World Diabetes Day 2013 event on 10 November and learn to think more positively and develop practical ways to cope with the highs and lows of having diabetes.

Register your interest through DSS hotline 6842 3382 before 5 November 2013 (limited seats)

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### Lee Foundation Diabetes Care Programme

This Financial Assistance (FA) programme was launched in 2005 to help needy people with diabetes manage their conditions to prevent complications. Beneficiaries are provided with free diabetes-related medial supplies.

To date, 1,787 people with diabetes have benefited from this programme. Supplies such as test strips, lancets, pen needles, syringes and swabs will be provided, subject to requests from their doctors.

During subsequent visits, patients will be given brief counselling sessions and their past blood sugars readings checked by nurse educators.

Please ring 6842 3382 for more information.

#### What some of our existing FA patients say:

- "Very grateful to DSS... much better control of diabetes... beneficial to those who cannot afford... FA patients should fully utilise the supplies given to control and monitor their sugar levels." Mr Jayapahab, 65, type 2 diabetes.

- "A cost-saver, and a good way to monitor sugar levels with the supplies given." Mdm Noor Jahan, 62, type 2 diabetes, beneficiary since 2011.

- "As a single parent, the FA programme has helped to ease my financial burden in terms of costs for DM consumables." Mother of newly diagnosed type 1 diabetes patient, Jacky, 17.

- "FA supplies are useful in self-monitoring of sugar levels, for better control of diabetes." Mr Lim Chin Huat, 42, type 1 diabetes amputee.

- "FA supplies are by far the best way to control sugar levels through monitoring." Susan, whose 7-year-old daughter has Type 1 diabetes.

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- **M** eets the accuracy requirements of ISO 15197:2003
- **P** riceed within reach
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GETTING TO KNOW DIABETES

by Tan Ling Ying, Diabetic Nurse Educator, Diabetic Society of Singapore

Diabetes is a disease that exists in the bloodstream containing excessive glucose.

The reasons for diabetes are:

• The body produces too little insulin, or
• Insulin’s function fails.

Insulin is produced by the pancreas, and it is needed to move glucose in the bloodstream to the body cells for use or storage. Diabetes will occur when insulin does not function properly.

If diabetes is not treated properly, it will lead to complications such as eye, kidney, and nerve diseases, heart disease, and others.

Diabetes is a lifelong disease. It cannot be cured but can be controlled with:

• Weight control
• Diet that is suitable and healthy (reducing salt, oil, sugar by increasing vegetable consumption)
• Medication or injection (insulin)
• Regular exercise
• Giving up smoking
• Controlling high blood pressure
• Controlling cholesterol
• Doctor consultation
• Regular medical check-ups

Regular medical check-ups are important with a schedule as follows:

| Test                         | Time
|------------------------------|-----|
| Eye photography (retina)     | Once a year
| HbA1c                       | Once a month
| Blood glucose                | Once a month
| Urine glucose concentration | Once a month
| Kidney disease               | Once a year
| Blood pressure               | Every 2 months
| Body mass index (BMI)        | Every 3 months
| Education                     | Every 3 months

Apa itu kencing manis?

Orang yang mengidap penyakit kencing manis tidak boleh menggunakan sepenuhnya gula yang terdapat dalam saluran darah mereka. Ini kerana hormon insulin berkurangan dalam badan atau tidak berfungsi sepenuhnya. Insulin adalah hormon dari kelenjar bermama pancreas dan ia diperlukan untuk menggerakkan gula melalui saluran darah kedalam sel tubuh badan untuk digunakan atau disimpan. Penyakit kencing manis akan berlaku apabila abah insulin tidak berfungsi dengan baik.

Jika penyakit tidak diurus dengan baik, ia akan membawa kepada komplikasi seperti kerosakan mata, ginjal dan urat saraf, penyakit jantung dan lain lain.

Penyakit kencing manis adalah penyakit sepanjang hayat. Ia tidak boleh diubati tetapi boleh dikawal dengan:

• Kawalan berat badan
• Diet yang sesuai dan sihat (mengurangkan garam, minyak, gula dengan memasukkan makanan sayur sayuran)
• Ubat yang di makan atau yang di suntik (insulin)
• Bersenam secara tetap
• Berhenti merokok
• Mengurangkan tekanan darah tinggi
• Mengurangkan kolesterol darah
• Konsultasi doktor
• Menjalankan pemeriksaan secara tetap

Pemeriksaan secara tetap memang penting dengan mengikut jadual seperti berikut:

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<td>HbA1c</td>
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<td>Kolesterol darah</td>
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Pencerminan

Diabetes Singapore Oct - Dec 2013

Apa itu kencing manis?

Translated by Rodiah Hashim

Diabetes Singapore Oct - Dec 2013

Apa itu kencing manis?

Translated by Rodiah Hashim
It was not until the French Revolution that Emperor Napoleon's surgeons documented the beneficial effects of maggots on battle wounds. They discovered that wounded soldiers from the battlefields who had maggots in their wounds tended not to die from septic shock. In fact, wounds that contained maggots were cleaner and had better healing and recovery potential. Let's take a look at eight things about maggots you probably didn't know. You might have a new-found respect for these little creatures!

**#1**
Maggots are fly larvae, or immature flies that have hatched from eggs laid by females flies. The life cycle comprises four stages: egg, larva (maggot), pupa and adult.

**#2**
Within 24 hours, the egg hatches and the fly enters the maggot stage. The maggot gorges itself with food until it is ready to enter the pupae stage, after which an adult fly emerges.

**#3**
Maggots only feed on unhealthy tissues by removing of slough, infected and necrotic tissues such as diabetic ulcers, pressure ulcers, venous stasis ulcers, neuropathic and ischemic ulcers, infected postsurgical wounds and malignant wounds. Magnets leave healthy tissue untouched yet stimulated for growth and granulation. The process of removing unhealthy tissue is called debridement. The procedure is called Maggot Debridement Therapy (MDT).

**#4**
Studies have shown that maggots require oxygen and food to survive. They don't have teeth. They use hooks to move over the surface of the wound secreting a powerful mixture of proteolytic enzymes which break down dead tissue, liquidising it. The maggots will then 'suck up' this liquid, ingest and digest the bacteria (including Methicillin-resistant Staphylococcus Aureus or MRSA) within the devitalised tissue in the wound, thus killing them in their gut.

**#5**
The maggot's secretions, excretion and the action of 'micromassage' (mechanically stimulating tissue) will alter the pH of the wound to approximately 8 to 8.5 due to the production of ammonia (excreted), thereby inhibiting the bacterial growth by destroying a wide range of pathogenic bacteria including MRSA, group A and B streptococci, gram-positive aerobic and anaerobic strains. Because of this amazing ability, MDT has become an extremely potent tool against antibiotic-resistant bacteria.

**#6**
Medical grade maggots that are hatched from eggs laid by laboratory-reared flies are of the Lucillia Cuprina variety. The infected eggs will go through a sterilisation process and become sterile eggs. Next, the sterile eggs will be placed into sterile vials (container) to be sent for patient application. Maggots are a safe, effective and even low-cost method for the treatment of non-healing wounds.

**#7**
Can maggots turn into flies in wounds? Thankfully, no! The next stage of the life cycle for the maggot before it becomes a fly is the pupae stage. This process takes eight days. Maggots can only pupate in dry areas and not in a moist wound. Therefore, the maggots will not turn into flies while inside the wound.

**#8**
In Singapore, approximately 700 diabetics undergo lower limb amputations every year as a result of diabetic foot complications.

In medieval times, maggots, the larva of flies, were regularly found in festering wounds, feeding on the decaying flesh. At first glance, the repulsion of this activity would cause a frantic removal. However, ancient tribesmen realised that, if left alone, these maggots cleaned the wound rather nicely.

With the rise in the prevalence of type 2 diabetes, a huge rise in diabetic foot ulcers and non-healing wounds associated with diabetes has become a common sight in hospitals around the world. Coupled with infections of antibiotic-resistance (MRSA), clinicians are finding it more and more challenging to heal difficult wounds. Unfortunately, the outcome of some of these wounds is amputation, the removal of the limb with necrotic non-healing wound. In Singapore, approximately 700 diabetics undergo lower limb amputations every year as a result of diabetic foot complications.

It was not until the French Revolution that Emperor Napoleon's surgeons documented the beneficial effects of maggots on battle wounds. They discovered that wounded soldiers from the battlefields who had maggots in their wounds tended not to die from septic shock. In fact, wounds that contained maggots were cleaner and had better healing and recovery potential. Let's take a look at eight things about maggots you probably didn't know. You might have a new-found respect for these little creatures!
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FEATURE

The role of the kidney and emerging novel therapies in diabetes

by Dr Ng Jen Min, Ben, Consultant Endocrinologist, Dr Tay Tunn Lin, Associate Consultant in Endocrinology, Dr Clarissa Nah, Internal Medical Resident, Changi General Hospital

Diabetes is increasing at an alarming rate here in Singapore. Just last year, diabetes-related problems were amongst the most common reasons for Singaporeans visiting polyclinics. People with poorly controlled diabetes are at increased risk of developing potentially serious and life threatening complications such as kidney failure, stroke, heart disease and blindness.

Fortunately, with the right medical and lifestyle management, these complications can be prevented. Though exercise and diet are one of the cornerstones of diabetes management, more than 80% of people with diabetes eventually need some form of medical therapy to keep their sugars under control.

At the present time, there are numerous medications available for the treatment of people with type 2 diabetes. These range from an assortment of different oral medications and injectable treatments. These treatments work in various ways to address the high blood sugars such as increasing insulin release in to the blood stream, enabling the muscles and other parts of the body to take up sugar more effectively and reducing the amount of sugar absorbed from the intestines.

Despite the various medical therapies that are available, many people still suffer from diabetes complications as a result of high sugar levels and it is clear that more agents that can help to reduce blood sugar levels are needed.

Hopefully from early next year, there will be a novel class of drug for type 2 diabetes patients available in Singapore – the sodium glucose cotransporter-2 inhibitors (SGLT-2). Its major difference from other medications currently used in diabetes is that it works in a different way from other medications to reduce blood sugar, i.e., by blocking a glucose transporter, called sodium-glucose cotransporter 2 (SGLT-2), in the kidney and causing the body to remove more glucose from the urine.

How is the kidney involved with blood glucose levels?

It is well known that the kidneys play a crucial role in regulating the water and electrolytes (such as sodium and potassium) in the system and also in removing the toxins from our body.

However, an often overlooked fact is that the kidneys play a very important role in sugar balance as well.

The kidney is involved in sugar balance via several mechanisms. One of the most important mechanisms lie in the reabsorption of sugar from the urine back into the blood stream. When we eat food, sugar from the food is absorbed into our blood stream and then distributed across the body to important organs such as the brain which then converts this sugar into energy. However, a substantial proportion of this sugar passes through the kidney when it is filtered. Up to 180g of sugar (that's four and half cans of cola) is filtered through the kidneys every day. In a normal person, almost all the sugar is reabsorbed back into the body. This process of sugar reabsorption is enabled via a special ‘gate mechanism’ called the sodium glucose cotransporter.

What are SGLT-2 inhibitors and how do they work?

The active ingredient in SGLT-2 inhibitors has been made to be very similar to a compound called phlorizin which can be found in the root bark of the apple tree. Scientists have known about phlorizin since the early 1800s. However, the potential sugar reducing effects have only been used for medicinal purposes, and only very recently.

Simply put, these novel agents work by inhibiting the sodium glucose transporter 2 (SGLT-2) which is responsible for the reabsorption of sugar in the kidney. By inhibiting SGLT-2, sugar which enters the kidney from the body passes through the urine without being reabsorbed back into the blood stream. That way, an individual on SGLT-2 treatment ‘loses’ sugar from the kidney and that results in a lower blood sugar level in his or her body.

This way, not only does the individual’s own sugar level drop (as it is passed out via urine) but it also has the added advantage of weight loss as the accompanying calories in the sugar are similarly passed out in the urine.

Research studies have shown patients on SGLT-2 inhibitors to have better sugar control with the added benefit of weight loss and a drop in their blood pressure. In addition to this, it does not increase insulin activity in the body, SGLT-2 inhibitors have not been found to cause hypoglycaemia or low blood sugars. Furthermore, SGLT-2 inhibitors can be used safely in combination with many other diabetic agents without cross reaction.

However, some participants in the clinical trials reported some problems with genital infections likely as a result of the high sugar content in the urine.

SGLT-2 inhibitors have the potential to aid clinicians in the battle against diabetes mellitus. It has been proven to be effective in lowering HbA1c levels and is a welcome addition to the current array of therapies available.

Despite the potential benefits of this form of therapy, this treatment may not be suitable for all people who have diabetes, so please consult your doctor to discuss on whether this is a suitable drug for you.

In summary, SGLT-2 inhibitors are a new, medication for sugar control which can be used on its own or in combination with current drugs, and it has shown much promise. It has already been approved in Europe where it is currently being prescribed.

This drug may be available in Singapore as early as the first quarter of 2014. If you need more information, speak with your doctor. Just like any new drug in diabetes, its long term effects are still under surveillance, though it appears to be an effective option in managing blood glucose.
the other person’s PERSPECTIVE
by Henry Lew, psychologist

For family members and caregivers, looking after an elderly patient can be full of challenges. For the elderly person transiting into the role of a patient, receiving help from others can be equally difficult.

Among the many families whom I have come across in my work, both caregivers and elderly patients obviously love each other a lot and more often than not have good intentions and each other’s interests at heart.

However, very often, the demands of the illness create a rift between them. They inadvertently begin to exhibit disdain for each other.

We look at what each side might be feeling and thinking and struggling with in three different situations and offer some practical advice and tips on how any unpleasant feelings and friction can be minimised or avoided.

### SITUATION 1: Medical Appointments

**The medical says**

“I don’t understand why there are so many medical appointments. I am confused about the various appointment dates. I also feel rather lost when I reach the clinic as I have to navigate around a few stations within the clinic. I don’t want to trouble my family too much and I feel bad about the inconveniences I cause them.”

**The psychologist says**

Recognise that as our loved ones age, it is normal for them to experience some decline in memory. In most cases, it is not because they do not understand; it could be because they have forgotten the reasons for the appointments. Be patient if they ask again and again. Give them time to absorb and clarify.

Try to get support from friends, extended family or the community to help the elderly get to their appointments without undue stress.

### SITUATION 2: Lifestyle Changes

**The elderly says**

“I don’t mean to create more problems. It’s not that I don’t care about myself or deliberately forget to take my pills on time. I get tired easily these days. I don’t have the energy to get back to exercise. I don’t want to disappoint my family, too.”

**The psychologist says**

“I have been trying my best to remind him as best as I can. I even prepared the pill boxes but he continues to be inconsistent with his oral medication. Although he tells me he is trying, I cannot help but feel that he is not even trying. I am lost!”

Create an environment that facilitates the behaviour change. In the case of medication, a timetable, a post-it note, etc, may be essential to help the elderly remember his medication pill box.

Incorporating changes into his daily life routine may facilitate the new habit. For example, asking the elderly to go for brief walks before he buys/eats his breakfast.

### SITUATION 3: Everyday Tasks

**The elderly says**

“I really don’t mean to mess things up. Since my hands and legs started to go numb or painful frequently, I am not as good with some household chores. But I still want to help out in the home. I don’t want to feel useless.”

**The psychologist says**

“I would rather complete the tasks for him than have him injure himself. And it is so much faster for everyone if we do it ourselves.”

Generally, the elderly should be encouraged to continue tasks within their abilities. This continuity helps boost their self-confidence and sense of accomplishment. However, if they have problems with balance, tasks that may pose a risk of falling should be avoided.
Quick & Easy Squid
serves 2
by Thomas Leow

METHOD OF PREPARATION
1. Marinate the squid and chill for 3 to 4 hours.
2. Fry the squid in a non-stick pan, rolling it in the pan for about 3 minutes or until the squid is no longer transparent.
3. Garnish with the chopped coriander stem.

INGREDIENTS
- Medium-sized squid: 2
- Canola Oil (optional): 1 tablespoon
- Marinade:
  - Oyster Sauce: 1 tablespoon
  - Thai Fish Sauce: 1 teaspoon
  - Lime Juice: 1
  - Chopped Garlic: 1 tablespoon
  - Cut Green Chilli Padi: 1
  - Cut Red Chilli: 1
  - Sugar: 1 teaspoon
  - Chopped coriander stem: 1 tablespoon

Herbal Chicken
serves 4
by Thomas Leow

METHOD OF PREPARATION
1. Wash and clean the chicken.
2. Pat dry with paper towel.
3. Place chicken into a deep bowl or pot.
4. Add all the six herbs and chicken stock powder.
5. Drizzle the Chinese rice wine over the chicken. Add a cup of water.
6. Put the dish into a steamer and steam for half an hour under medium to high heat or in slow cooker for 3 hours.
7. Remove the dish when done and garnish with spring onion. Serve hot.

INGREDIENTS
- Herbal Chicken serves 4
- Chicken: Half
- Water: 1 cup
- Chicken stock powder: ½ teaspoon
- Chinese rice wine: 1 teaspoon
- Herbs:
  1. Wolfberries: 1 teaspoon
  2. Ligusticum Wallich: 3 to 5 pieces
  3. Liquorice Root: 3 pieces
  4. Polygonatum Rhizoma: 7 to 8 pieces
  5. Rhizoma Dioscorea: 3 pieces
  6. Radix Codonopsis: 5 pieces
- Garnish:
  - Spring onion: 1 stalk

Pan-Fried Mackerel
serves 2
by Thomas Leow

METHOD OF PREPARATION
1. Marinate the fish inside and out, rubbing in the ingredients, then chill for 1 to 2 hours.
2. Remove the fish from the marinade and save the marinade for later.
3. Roll mackerel in beaten egg and then in flour.
4. Add 2 teaspoons of canola oil to the pan and gently pan fry the fish for 4 to 5 minutes on each side.
5. Drizzle the Chinese rice wine over the fish. Add a cup of water.
6. Put the dish into a steamer and steam for half an hour under medium to high heat or in slow cooker for 3 hours.
7. Remove the dish when done and garnish with spring onion. Serve hot.

INGREDIENTS
- Faughni Mackerel (Ikan Tembung): 2
- Canola oil: 2 teaspoons
- Egg, beaten: 1
- Plain flour: 1 tablespoon
- Marinade:
  - Turmeric Powder: 1 teaspoon
  - Chilli Powder: 1 teaspoon
  - Sweet bean sauce: 2 tablespoons
- Garnish:
  - Sliced Purple Onion: 1 bulb
  - Cut Green Chilli: 1 teaspoon
  - Cut Red Chilli: 1 teaspoon
  - Lime: 1
  - Coriander Leaves: 2 tablespoons

Recipes and photos courtesy of Hooked on Heads Restaurant. Tel: 6455 4948

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Silky and Spicy Tanghoon Delight
serves 4

by Chef Yen Koh

INGREDIENTS
- Tanghoon, unsoaked 250g
- Fresh Pork 240g
- French Beans, sliced into strips 120g
- Onions, sliced 80 nos
- Carrots, sliced into strips 60 nos
- Garlic, minced 10g
- Taukwa, cut into strips 120 pcs
- Water 1 cup
- Sesame Oil 2 teaspoons
- Special Dark Soya Sauce 1 teaspoon
- Black Pepper Sauce 3 tablespoons
- Soya bean Oil 1 tablespoon
- Premium Oyster Sauce 1 tablespoon

METHOD OF PREPARATION
1. Add oil to pre-heated pan. Stir-fry the garlic and onions until fragrant.
2. Add the vegetables and cook for 1 minute, then add pork and taukwa and cook for 2 minutes.
3. Season with black pepper sauce and other sauces. Add the water to form a flavoured sauce.
4. Add tanghoon and allow sauce to be absorbed for 2 minutes.
5. Give a final stir and add sesame oil.

HOT TIPS
- Heat oil until hot before stir-frying, as this will shorten cooking time and reduce the amount of oil absorbed by the ingredients.
- Use unsaturated oils (e.g., sunflower oil, canola oil, olive oil) instead of saturated oils (e.g., ghee, butter, blended vegetable oil) to reduce your risk of heart disease.
- Cooking carrots and tomatoes helps to release their phytochemicals, thus making it easier for the body to absorb the nutrients.

Stir-frying is a healthier cooking method as it requires a short cooking time, thus reducing the amount of oil being absorbed by the ingredient.

This dish uses soya bean oil, which is a healthier choice as it contains unsaturated fat.
C

3

children need lots of varied nutrients to help them grow, especially during the major period of growth and physical development—the first few years of life and in the teenage years. But when they take in more calories than they burn throughout the day, the result is weight gain.

Overweight and obesity in childhood have a significant impact on physical and psychological health. Poor food habits will lead to increased body weight and diabetes. Prevention of obesity is important so that children do not experience the added burden of health issues such as obesity and diabetes.

Parents always want their children to be happy, safe and healthy. Overweight and obesity in childhood can be predicted and you can learn to head them off with natural options. Here are five to start you on the right track!

5 STEPS TO

by Kohila Govindaraju, freelance nutritionist

A HEALTHIER FAMILY

Eating is the time for rejuvenation of the body and spirit and a great time to connect with your children. Faced with any kind of stress, your body will naturally shut down the digestion functions.

In the short term, stress can shut down appetite. But if the stress persists, it is a different story. Cortisol, a stress hormone, will ramp up the motivation to eat more! So, encourage children to relax and enjoy the food. Eating in a state of relaxation will not just enhance your enjoyment, but your digestion and metabolism too!

It is important to understand what percentage of your child’s foods and drinks are high in sugar and fat, low in fibre, highly processed and contain artificial colours.

Teaching children good eating habits will help them develop healthier bodies and grow as balanced adults. If you offer only healthy foods, that is what they will eat. If you dine on fast foods, that will be their choice for the day!

Children who drink sodas erode their tooth enamel and are also more likely to be obese. Many commercial drinks are marketed as healthy drinks just because they are fruit-based and contain energy boosters. In fact, they are loaded with sugars, artificial sweeteners, phosphoric acid and caffeine that not only erode the tooth enamel, but also decrease bone density.

School-age children today are living in a technological world. Their access to TV, video games, is increasing with decreasing time for physical activity. Fast food, sodas, vending machines make it too easy for kids to make bad food choices, without the guidance of a parent. Parents should talk to the child about healthy food, cook healthily, encourage them to participate in cooking, and exercise daily and invite the child to join you. Turn the television off, while dining!

As children move into the teenage phase, their metabolic rates soar and you will be amazed to see how much they eat. While this higher consumption of food is not always bad, parents should offer healthier versions of favourite snacks such as low-salt baked chips, and nuts in shells for them to crack open them.

Childhood obesity is caused by an imbalance in calorie intake and calorie utilised. Participating in physical activities helps children and adolescents increase muscle and bone strength, expending energy helps them maintain a healthy weight.

Distance running, swimming, biking are best for burning calories and promoting cardiorespiratory fitness. Weight-bearing activities such as jumping rope, walking, playing soccer and basketball help to promote the growth of strong bones during childhood and adolescence and prevent osteoporosis in adulthood. Physical activity can also reduce the symptoms of depression and anxiety and improve mood!

References


References


Like adults, children of school age should need to eat healthy, and balanced diet. The American Academy of Paediatrics recommends feeding a minimum of five times a day to fulfil their needs. Ideally, children need three meals and two snacks, a day: breakfast, morning snack, lunch, afternoon snack, and dinner.

Snacking is a great strategy for boosting and sustaining energy. It keeps blood sugar levels even and facilitates digestion. It also helps you to keep the energy levels to stay more constant throughout the day and your moods more consistently pleasurable! Be more consistent with the time you eat your meals. Do not allow grazing all day on favourite foods. Here are a few quick snack ideas:

• A sandwich with a piece of fruit.
• Baby carrots, baby corn, cucumber and celery sticks
• Handful of nuts, raisins
• Wheat crackers/wholemeal bread
• Yoghurt low fat
• Banana, apple or pear

The Lighter Side

How often does your child eat?

Breaking the fast provides much needed fuel, for the day.

Are mealtimes relaxed or rushed?

Get some exercise!

Your children eat what you expose them to

A HEALTHIER FAMILY

by Kohila Govindaraju, freelance nutritionist

A HEALTHIER FAMILY

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5 STEPS TO
Are you getting enough nutrients to exercise?

**FOODS YOUR BODY NEEDS**

**CARBOHYDRATE**
Carbohydrate is the main energy source and the main fuel for working muscles. Carbohydrate is broken down into glucose during digestion and is used for energy. The remaining glucose is either stored as glycogen in the muscle and liver or is converted to fat if excess calories are consumed. Examples of carbohydrate include rice, noodles, bread, oats, plain biscuits, chappati and starchy vegetables such as potato, lentils, etc.

Small frequent meals with evenly distributed carbohydrate throughout the day help to control your blood glucose level and provide adequate fuel for the body. Excessive intake of carbohydrate can lead to high blood glucose. Most people do not need to add extra carbohydrates to their meal plan unless they are exercising for more than an hour each time.

Consult your diettitian to work out your meal plan and the amount of carbohydrates you need per day.

**PROTEIN**
Protein is essential for muscle growth and repair. An adult needs to consume two to three servings of meat and alternatives daily (half a serving from dairy or other high-calcium products) according to the Singapore’s Healthy Diet Pyramid Guidelines.

Examples of one serving meat and alternatives include:
- one palm-sized (90g cooked) of lean meat/fish or poultry
- two glasses low fat milk
- two small blocks of soft bean curd
- two slices of cheese
- ¼ cup (120g) of cooked pulses (peas, beans, lentils)

Individuals with diabetes should be prepared to treat hypoglycaemia (low blood glucose) during or after exercise. If you are using insulin injection, it is important to balance your insulin doses with the food intake and exercise level.

**When you experience hypoglycaemia during or after exercise**

Treat it immediately. Use the same process as you would any other time of the day:

1. Consume 15g glucose or simple carbohydrate:
   - three teaspoons sugar or honey
   - half a glass (125ml) of fruit juice
   - half a can of soft drink (not diet)
   - glucose tablets (follow package instructions)

2. Recheck blood glucose level after 15 minutes.

3. If still low glucose level, repeat step 1 and 2.

4. Once blood glucose returns to normal, eat a snack if your next planned meal is more than an hour away.

If hypoglycaemia occurs regularly when you exercise, seek advice from your healthcare provider about adjusting your treatment plan.

**Exercise**
No snack is required for less than an hour of exercise.

If exercising more than an hour, you may need additional carbohydrate snack during the activity to prevent low blood glucose. Examples of snacks:
- half a banana
- a handful of raisins

Continue to drink enough water to keep your body well hydrated.

**FLUIDS**
Water is the best rehydration fluid and works well for exercises less than an hour each time. Drink plenty of water before, during and after exercise.

Monitor your urine colour. Clear or light coloured urine indicates adequate hydration while dark urine indicates dehydration.

Drink adequate water to keep your body well hydrated.

**During exercise**
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**When you experience high blood glucose**

This may happen during or after exercise especially when doing high-intensity exercise that increases the stress hormone levels.

If the blood glucose is high before exercise, check the blood or urine for ketones. Avoid vigorous activity if tested positive for ketones. It is fine to exercise if tested negative for ketones and you feel well.

Discuss with your diettitian regarding your exercise regime and meal plan if in any doubt.

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EXERCISING WISDOM

by Cindy Ng, principal physiotherapist, Singapore General Hospital

Exercise is for everyone. In fact, exercise is a poor man’s plastic surgery for his health. It is a known fact that regular exercise helps to improve one’s quality of life. The benefits of exercise for the elderly are plenty:

- Strengthens the heart
- Improves the circulation
- Reduces the blood pressure
- Increases good cholesterol levels
- Reduces bad cholesterol levels
- Increases energy
- Reduces stress
- Improves sleep
- Strengthens bone
- Strengthens the muscles and joints
- Reduces body fat
- Improves quality of life & functional capacity

As one ages, the muscles undergo structural and functional changes. These muscle changes start in the fourth decade of one’s life and may cause frailty and disability in later years. It is also a known fact that our body composition changes as we age. The percentage of fat free mass or muscle mass tends to decrease with age and this may indirectly cause metabolic diseases such as diabetes, hypertension and hyperlipidaemia (increased bad cholesterol or triglycerides and low density lipoproteins). As such, exercises like aerobic or resistance training can help to build muscle proteins and thus retard the degeneration of muscles. With stronger muscles, joints are also protected from injuries. Balance training can also help prevent falls in the elderly.

Brisk walking, cycling, low impact aerobics, swimming and line dancing are just some of the aerobic exercises that the elderly can participate to build up their fitness level. For beginners, start by doing some brisk walking continuously daily at your own pace for at least 15 minutes, increasing by five minutes every two weeks until you are able to walk briskly non-stop for 30 minutes covering a distance of 2.4km. In fact, the American College of Sport Medicine recommends at least 150 minutes of walking per week. For those exercising regularly, you can add variation to your routine by having strength training once to twice a week as well as some balancing exercises. However, should you be taking any heart medications or have had any symptoms of chest pains or have past medical history of heart condition, you should consult a cardiologist and an exercise specialist to tailor a suitable exercise program in the gym.

An example of dynamic balance training is taiqi. A home exercise can be as simple as doing a one leg stand which can be progressed to doing it with the eyes closed. Balance training has been shown to reduce falls in the elderly by improving proprioception, which trains the elderly to cope with different terrains.

Stretches are equally important to ensure we remain flexible even in our golden years. Stretches should be done before and after exercises, preferably once or twice and holding the stretch between 10 and 15 seconds. Stretches are best kept between 10 and 15 seconds. Stretches should be done before and after exercises, preferably once or twice and holding the stretch between 10 and 15 seconds.

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Julley! That is Ladakhi for ‘hello’, ‘goodbye’ and ‘you are welcome’. I travelled to the Himalayan mountain ranges north of India, to an area known as Ladakh. I was there with 21 other non-medical volunteers as part of a Global Clinic initiative to perform visual assessments on the people in the remote area of the Zangskar Valley, the western region of Ladakh. Global Clinic is a non-profit organisation comprising medical and non-medical volunteers based in Singapore. This part of the trip lasted from 30 August to 4 September 2013. Although the areas we were visiting have motorable roads, they are very far from proper medical services.

We set up our assessment areas in any accessible and sheltered location we could find - medical centre on the first day, run only by medics (no doctors except in the capital Leh); a live-in nomadic school on day two (nine months in a year, the nomadic tribes leave their children in the school to get an education while the tribe moves with their livestock); a tribal tent on the third day.

These areas are very remote. Desert-like conditions, harsh sun, sand storms, terrible winters and lack of clean drinking water lead to many having severe eye problems such as eye infections, red eyes, and glaucoma. We assessed those with severe eye problems and recommended a visit to our medical and surgical team which comes once a year to Leh. For the others, we provide sunglasses, prescription glasses, eye drops, etc. Most importantly, we educate them on eyecare.

From 5 to 8 August 2013, 12 members of the team (including myself), climbed one of the world’s highest trekitable mountains, Stok Kangri, which is 6153m Above Sea Level (ASL). One of the real dangers of trekking is Acute Mountain Sickness (AMS). We trekked for one day to Ma Komo (4500m ASL), where we stayed the night. Then we trekked for half a day to the Base Camp of Stok Kangri (4980m ASL). We stayed the night to acclimatisate to this altitude. The next day, we set off for the summit - nine hours up to the top.

For a diabetic, distinguishing between AMS symptoms and hyperglycaemia (low blood sugar levels) can be challenging. So is checking your sugars periodically; you cannot feel your fingers and toes due to the cold. The cold also interferes with the functions and battery life of most electrical gadgets. I kept my glucometer and insulin close to my under my jacket to keep them from freezing.

My plan for this trip, after reading blogs of other diabetics who have done similar expeditions and testing the theories on Bukit Timah Hill, was to take one-third my daily doses of fast acting and long acting insulin and to keep eating snack foods (e.g. trail mixes of nuts and berries) every two hours. This plan did not work very well. Firstly, unlike in a marathon, you do not burn that much energy during a long trek. Your sugars may get low, but by eating a normal meal and halving your insulin dosage, you can complete the trek without getting ‘hyper’. Do note that this depends on the speed of the individual or group. Secondly, does your expedition package include meals? This is important because we had a very good cook for the 12 of us doing this climb and every meal was a feast. This increases the risk of being hypoglycaemic (high blood sugar levels).

Lastly, trying to figure out if your sugars are low during the climb or you are experiencing the symptoms of AMS. When I was about 6100m ASL, I felt dizzy and could not focus my thoughts or actions. To a diabetic, this sounds like a low blood sugar level for which the remedy is to eat. However, on the mountain this could be AMS. One miscalculated step because of my compromised faculties and I could end up with broken bones (or worse). So, at 53m from the peak, I made my decision to turn back. The immediate remedy for AMS is to go down to the last altitude where you had none of the AMS symptoms.

When I got to about 5200m ASL, I vomited. The greater oxygen levels in the air allowed me to think clearly and I took six additional units of fast acting insulin. My final sugar levels at base camp was 9.7 mmol/litre. This proved that my sugars were actually higher than normal, hence I was overcompensating with my food intake, and that I was experiencing AMS symptoms. That night I had diarrhoea, confirming AMS. I made the right call to turn back, after all.

I did not reach the peak but the view from 6100m ASL was simply breathtaking. Too bad most of the cameras ran out of battery power due to the cold! But then I have a good reason to try for 6153m ASL all over again.
WORLD DIABETES DAY SINGAPORE 2013

HOW IS YOUR CONTROL?
Helping You Manage Your Diabetes Well!

Date: Sunday, 10 November, 2013
Venue: Suntec Singapore International Convention & Exhibition Centre (Level 3)
Time: 9:00 a.m. to 4:00 p.m.

Guest-of-Honour
A/Prof. Muhammad Faishal Ibrahim,
Parliamentary Secretary,
Ministry of Health

* Have your HbA1c tested for free! (first come, first served)
* Then see our panel of experts - nurse educators/dietitians/pharmacists/psychologist
* Bring your diabetes medicine for advice from our pharmacists
* Share your diabetes issues with our nurse educators
* Learn how to eat right from our dietitians
* Exhibition & Sale of Diabetes-Related Products
* Free Goodies Packs to participants (while stocks last)
* Have your eyes tested (Diabetic Retinal Photography) if you have diabetes
* Have your feet checked if you have diabetes by our team of podiatrists (PAS)

Feeling Down with Diabetes?
Learn to be inspired positively in our special education session.

Join us @“A Good Life with Diabetes”
Limited seats. Register with DSS at 6842 3382

For more information, please contact Diabetic Society of Singapore (DSS)
6842 3382 or 6842 6019
www.diabetes.org.sg