

DOWN IN THE DUMPS

Depression or Just Feeling Low?

Henry Lew, psychologist, National Healthcare Group Polyclinics, delves into the minds of two women who are purportedly down in the dumps and sets the record straight on what is and what is not depression.



Photo Credit: Juriah Mosin

Depression is a word that is often used loosely to refer to someone who is sad and feeling low. Most of us experience 'depressed' moods at one point or another, but it may not necessarily be depression. Depression is much more than just feeling unhappy, miserable or despondent.

The following are samples of recorded conversations of someone who is suffering from depression (Mdm Tan) and another who is experiencing a "depressed" mood (Ms Jones):

Depression as a result of the loss of a loved one is normal and allows one to feel and overcome grief. It also provides an opportunity for reflection. For others, depression may sap the energy and affect them so strongly that they cannot function effectively, for example, their productivity decreases at work and they may not even be able to take care of themselves.

“ Depression may sap the energy and affect them so strongly that they cannot function effectively...their productivity decreases at work and they may not even be able to take care of themselves. ”

These individuals may have problems responding to their medical treatment or they may develop other chronic illnesses.

Physical effects of depression include aches and pains, weight-loss, constipation, loss of appetite, no interest in sex. Measures that may help one to cope with depression include establishing a routine of pleasant activity, for example, walking in the park every morning at the same time and talking to friends.

If the situation does not improve, however, it would be advisable to seek help from a professional counsellor, social worker and psychologist. Sometimes, it may be necessary to consult a psychiatrist or doctor for treatment and medication.

Scenario	Depression? X or ✓
Mdm Tan: "I have been feeling very tired lately... I don't know why. I just do a bit of housework, yet I feel tired. Sometimes I just leave them undone, like the dishes... I can leave them overnight or for one day before I wash them. I am so useless, am I not? Cannot even do a bit of work, so lazy of me. I lie in bed for hours before I fall asleep. I have cut down on the amount food I eat. Sigh....I try to occupy myself reading or watching TV but I cannot even concentrate. Sometimes I even forget where I put my things or what I am supposed to do. I don't feel like going out or mixing with my friends. They won't understand me... It is too tiring to go out. I don't see any point in life. Sometimes I wonder why I have to carry on living. I think about my past and I cry uncontrollably...At other times I get irritable ... I don't know what is happening to me...I have been like this for the past six months and I have lost my job because I am not able to wake up to go to work.	Fatigue ✓ Low self-esteem ✓ Difficulty sleeping ✓ Loss of appetite ✓ Concentration problem ✓ Problem with memory ✓ Withdrawal ✓ Thoughts of suicide Low mood/emotional/irritable ✓ Cannot carry out daily tasks effectively ✓
Ms Jones: I cry sometimes since my husband passed away. Initially, I had difficulty sleeping, but it is getting better. For the first few weeks I had no mood to work, so I took a few days off. Slowly though, I am able to get back to work. Now, I am all right. I spend my time walking my dog or taking care of my children. It is sad and I need time to get over it, but I believe I will be able to do well.	Getting better X Ability to manage negative emotions and carry out daily tasks X

YOU ARE NOT ALONE

Diabetes Support Group

Members of the Diabetes Support Group break the silence to tell Praveen Kaur, diabetes nurse educator of Diabetic Society of Singapore, how they have benefited from being a part of the 'family'.

Living with a chronic illness like diabetes can be overwhelming. At times, you may feel that no one understands the stress that you are experiencing. If prolonged and unchecked, these feelings of anxiety, stress, and isolation can become obstacles in your quest for wellness.

But you don't have to be alone, urge members of the Diabetes Support Group who have received comfort and encouragement from others in the same boat.

"The other members share our pain and encourage us to cope better with diabetes and they give us suggestions and practical tips which we may not be aware of," says Mdm How, a pre-diabetic.

Mdm Sin, who has had diabetes for more than a decade, finds the support group helpful and knowledgeable as well as geared towards the unique and individual needs of the members. She says, "As a member, you will learn the latest methods of diabetes self-management and treatment through discussions, seminars and workshops."

Mdm Yik agrees. "The support group has given me the opportunity to learn more about diabetes, especially from

those who have had it for a long time," she shares. In fact, she adds, "those who have joined the support group have discovered that the biggest experts on a disease are often those who live with it daily."

One compelling reason to join a support group is the assurance that "someone else knows what I am going through" and this helps to alleviate

Those who have joined the support group have discovered that the biggest experts on a disease are often those who live with it daily.

their pain and struggle with diabetes, says Ms Rathi Jayabalan, diabetes nurse educator, Diabetic Society of Singapore. "It is especially so for people who have just discovered they are suffering from the condition and may feel a little lost in the beginning," she observes.

For this reason, Mr S Mahaindran, a newly-diagnosed diabetes patient with a heart problem, believes that it is important for a person with diabetes to be given the opportunity to share his or her views with others. Which

is why he enjoys the support group sessions held on the first Friday of every month. "I get to air my views on the educational topics discussed," he says enthusiastically.

Dorothy, who is diagnosed with type 1 diabetes, is equally grateful for the opportunities to open up to others in similar situations and where the environment is friendly and welcoming. She says, "The support group provides a congenial atmosphere so it is easy to share and talk about your condition."

Apart from being able to share stories and tips with other members, Dorothy also enjoys the support and guidance from a dedicated and caring team of diabetes nurse educators. "They help teach us self-care survival skills to manage diabetes, so that we can be in control of our own lives and not be controlled by the disease," remarks Dorothy, with a smile.



Many people with diabetes develop some form of complication over time. This results in poor health and quality of life, leading to unemployment and a myriad of financial, emotional and psychological problems. Ms Chionh Lay Kheng, diabetes nurse educator, Diabetic Society of Singapore, says it is time to stop making excuses.



Photo Credit : Ronald Hudson

TIME to ACT

My team of nurse educators and I have had to counsel many patients who had already developed complications. Some patients confessed that they had not complied with their medication routine because they were too busy with their work. They did not control their diet and led sedentary lifestyles. Many blamed it on the lack of time to learn to manage their diabetes.

Most patients who are suffering these complications regret not paying more attention to their health. One such patient is Mr Ng Moh Teck (not his real name), aged 56.

Mr Ng developed complications due to poor glucose control. Like many busy Singaporeans, he was always on the go, making business deals and engaged in a lot of social entertainment. One day, to his horror, he realised his toes were pale in colour and rushed to the hospital emergency unit to seek treatment.

He also had blurred vision for a long time, but had not taken any action. He was diagnosed as having severe diabetic proliferative retinopathy (bleeding of the blood vessels in the eye).

Mr Ng paid dearly for ignoring the signs. He had to undergo amputation of two toes and laser surgery for his eyes.

Asked how he felt about having to face the music, Mr Ng said, "Had I paid more attention to my diabetes, I would

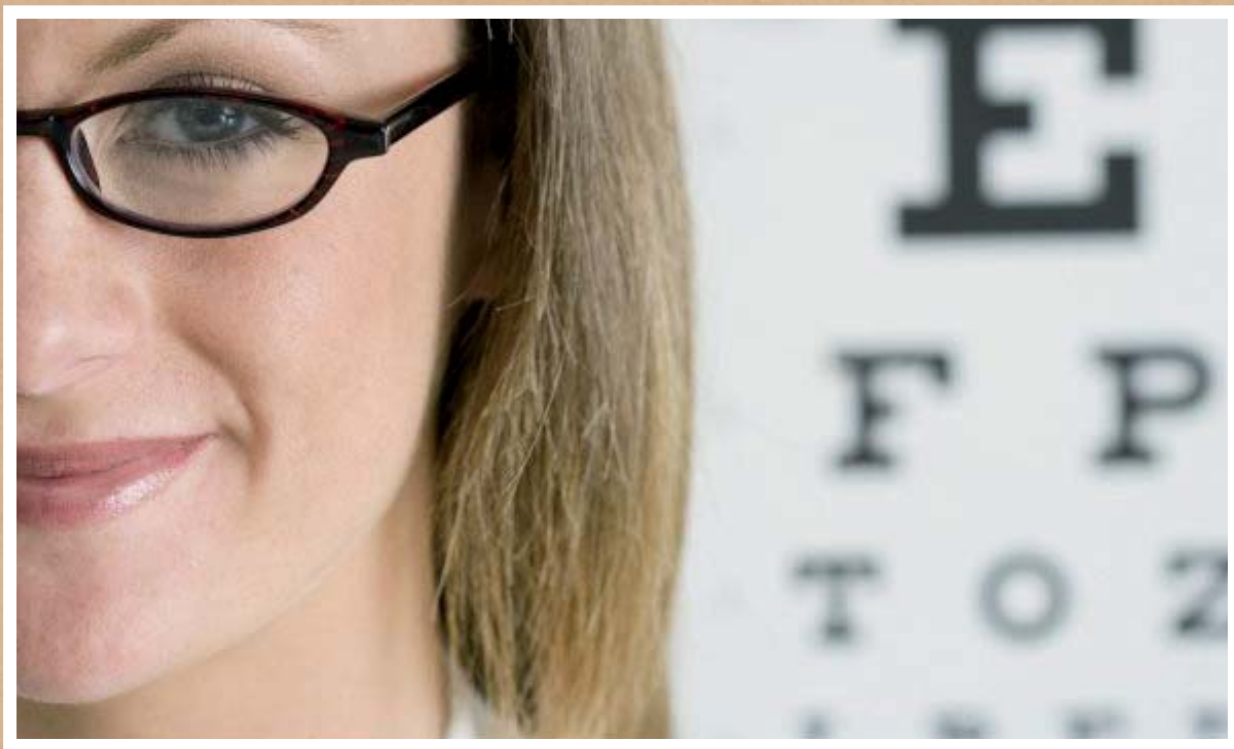
not have developed complications like these. Now I feel very weak. I have spent so much of my hard-earned money on treatment and surgeries. I hope people will learn from my lesson and take good care of their health, or they will regret it later."

Complications can lead to unemployment, hospitalisation and even physical handicap. Some patients develop blindness in one or both eyes. Others have had to amputate their toes and lower limbs. Kidney failure, stroke or cardiovascular disease are also some of the known complications.

We have seen countless heart-wrenching cases where people have lost the ability to function, thus causing more distress to their life and family. If you have diabetes and have the will to lead a healthier life, why not start taking charge now? Spare some time to attend diabetes education programmes or counselling sessions, which will truly benefit you and your family in the long run.

Stop making excuses, such as no time to check my blood sugar, no time to exercise, no time to attend diabetes education. If you want to achieve good quality of life, it is never too late. Take control of your diabetes now.

To find out more about empowering yourself to manage your diabetes, please contact your diabetes nurse educator or doctor without delay.



Treating Diabetic Retinopathy

Diabetic retinopathy may cause only mild vision problems and even no symptoms, initially. However, it can eventually result in blindness. Dr Vivien Lim, registrar, Singapore National Eye Centre, sheds light on this condition.

Diabetic retinopathy, a leading cause of blindness in adults in the world, is a complication of diabetes that results from damage to the blood vessels of the light-sensitive tissue at the back of the eye (retina).

Stages of diabetic retinopathy

Diabetic retinopathy progresses from mild non-proliferative abnormalities characterised by increased vascular permeability, to moderate and severe nonproliferative diabetic retinopathy (NPDR) characterised by vascular closure, to proliferative diabetic retinopathy (PDR) characterised by the growth of new blood vessels on the retina. Macular

edema characterised by retinal thickening from leaky blood vessels can develop at all stages of retinopathy.

Treatments available

Usual treatments for diabetic retinopathy are aimed at destroying abnormal blood vessels causing leakage in the back of the eye, which is the underlying cause of eye damage and vision loss. Aside from good blood sugar control, there are several treatments available for diabetic retinopathy, including laser photocoagulation and vitrectomy to remove blood and/or fibrous scar tissues from the eye.



Aspirin

The Early Treatment Diabetic Retinopathy Study (ETDRS) investigated whether aspirin (650 mg/day) could retard the progression of retinopathy. After examining progression of retinopathy, development of vitreous hemorrhage, or duration of vitreous hemorrhage, aspirin was shown to have no effect on retinopathy. With these findings, there are no ocular contraindications to the use of aspirin when required for cardiovascular disease or other medical indications.

Lipid lowering therapy (statins)

Dyslipidaemia has been shown to increase the risk of macular hard exudate deposition and macular edema. There is a potential role for lipid-lowering therapy (statins) as an adjunct in the medical management of diabetic retinopathy.

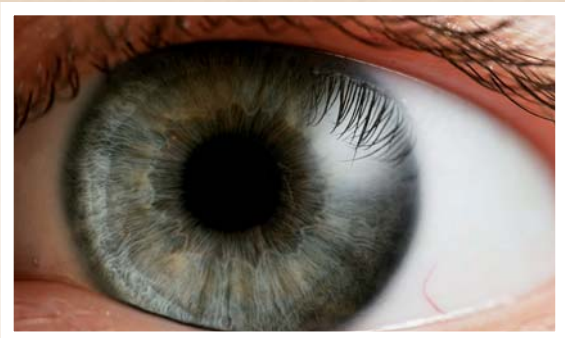
New Treatments for Diabetic Retinopathy

Several new medicines are now becoming available for the treatment of diabetic retinopathy.

Intravitreal injection of VEGF inhibitors

VEGF (vascular endothelial growth factor inhibitors) is a biochemical produced by blood vessels when they are exposed to high levels of glucose, and plays a critical role in the development of the abnormal new blood vessels characteristic of proliferative diabetic retinopathy (PDR), the most serious form of this eye disease. The trade names of these anti-VEGF agents are Macugen (pegaptanib), Lucentis (ranibizumab) and Avastin (bevacizumab).

Macugen and Avastin have both been shown to improve visual acuity and reduce retinal thickening due to diabetic macular edema, whereas Avastin and Lucentis have been shown to cause regression of neovascularization due to PDR. Avastin is far less costly than the other agents and is FDA approved for the treatment of metastatic colorectal cancer in combination with chemotherapy. However it, is not approved for use in the eye; nonetheless, many ophthalmologists are using Avastin 'off-label'—that is, for conditions other than the one it was approved for to treat PDR because it appears to be safe and effective. Studies have shown regression in the abnormal new



vessels and resolution of macular edema after intravitreal injections of these anti-VEGF agents. Anti-VEGF agents, such as Lucentis, are FDA-approved, albeit far more costly.

Intravitreal injection of triamcinolone

Intravitreal injection of corticosteroids (triamcinolone acetonide) is a treatment modality in the management of diabetic

my eyes



macular edema. Promising results in the short term for improving the vision in eyes with chronic diabetic macular oedema unresponsive to conventional laser treatment, reducing macular thickness, and inducing reabsorption of hard exudates, have been described in studies.

Triamcinolone is injected into the vitreous cavity by way of a very tiny needle under topical (eyedrops) anaesthesia. However, visual recovery may be limited and the effect may last only three to six months after the treatment. Complications such as glaucoma, cataract and endophthalmitis have, however, been

described. In view of these reported complications, caution is advised in the use of this technique.

Other clinical trials on corticosteroids include a sustained-release drug delivery device surgically implanted inside the eye to allow constant release of the medication. In two larger multicenter clinical trials using sustained-release steroid drug delivery devices, the Oculex Study is evaluating dexamethasone and the Bausch and Lomb Study is testing fluocinolone acetonide.

Novel therapies for treatment of diabetic retinopathy

Protein kinase C (PKC) is a family of proteins implicated in the development of diabetic macular edema, and PKC inhibitors may help forestall this disease. Ruboxistaurin (Arxxant) is the first such drug shown to prevent vision loss from macular edema in patients with moderate to severe non-proliferative diabetic retinopathy. PKC has however not been approved for mainstream use yet.

Although new drugs for diabetic retinopathy hold great promise, it must be remembered that excellent metabolic control and timely laser treatment are still the current "gold standards" for managing this serious eye disease.



Photo Credit : Pusicmario

Flower Power

By Janie Chua, Dietitian,
National Healthcare Group Polyclinics

Cauliflower Potato Soup

Serves 4

Ingredients

- 1 tbsp soft margarine
- ½ cup onion, chopped
- 2 cups cauliflower, chopped
- 2 cups potato, peeled and diced
- ½ cup carrot, shredded
- 1 tsp caraway seeds
- 3 cups low fat chicken broth
- ½ tsp salt
- Pepper, season to taste

Methods

1. Melt margarine in large saucepan and add onion. Cook until lightly browned or fragrant.
2. Add cauliflower, potato, carrot, and caraway seeds, stirring constantly for 4-5 minutes.
3. Add remaining ingredients and bring to a boil. Reduce heat, cover and simmer about 15 minutes or until vegetables are tender.
4. Remove lid, and blend mixture into puree.
5. Replace lid and simmer another 20-30 minutes.
6. Serve hot with pepper.

Nutrient Analysis Per Serving	
Energy	105Kcal
Carbohydrate	13g
Protein	5g
Fat	3g
Saturated fat	0.4g
Cholesterol	13mg
Dietary fibre	3g
Sodium	420g

Carbohydrate Exchanges = ~ 1 exchange



Tangy Marinade

By Janie Chua, Dietitian,
National Healthcare Group Polyclinics

Grilled Orange Chicken

Serves 4

Ingredients

4 skinless boneless chicken breast halves

½ cup orange juice

2 tbsp orange rind

½ cup lemon juice

2 garlic cloves, minced

½ tsp salt

½ tsp pepper

Methods

1. Place chicken in shallow baking dish. Mix orange juice, lemon juice, orange zest, garlic, salt and pepper together.
2. Pour marinade over chicken, mixing well, turn chicken to coat with marinade. Cover and refrigerate for 1 hour.
3. Grill or broil chicken until meat is cooked. Actual cooking time will vary depending on heat of the grill, distance from broiler heat and thickness of chicken.



Photo Credit : Shadow216

Nutrient Analysis Per Serving	
Energy	79Kcal
Carbohydrate	4g
Protein	13g
Fat	2g
Saturated fat	0.5g
Cholesterol	27mg
Dietary fibre	0.2g
Sodium	525g

Carbohydrate Exchanges = ~ 1 exchange

DEAR DIETITIAN

GO WITH THE GRAIN



Photo Credit : Socrates

Dear Dietitian,

Q: I love drinking barley water to reduce "heatiness". However, recently I have been told by my friends to stop doing so as barley water also contains sugar. Is it true?

A: Barley is a grain that has a rich source of both soluble and insoluble fibre. The beta glucan soluble fibre found in barley has been shown to lower total and LDL cholesterol. It is also beneficial in maintaining blood sugar levels. The insoluble fibre in barley also aids in preventing constipation. Beta glucan fibre are also present in other food, such as oats and whole grain cereals.

Your friend is not wrong. Drinking one glass of barley water alone will give you about 6g of carbohydrate mainly in the form of simple sugars. However, the barley grains also contain carbohydrate, but mainly in the form of starch. When you drink the barley water with the barley grains, the fibre in the grains ensure that the starch cause a blood sugar rise in a more controlled manner. So, if you want to get the full benefit of the fibre, you need to include the grains in your barley drink.

You may still continue with your favourite drink, but bear in mind the following:

- Make your own barley water using artificial sweeteners, e.g. Equal or Sweetico, instead of rock sugar.
- Remember to take the barley grains along with the water for the added benefit of the fibre.
- Have your barley water and barley grains as a mid-meal snack separately from your main meals, especially if you already had a substantial portion of carbohydrate at your main meal.
- (Please get advice from a dietitian about the amount of carbohydrate suitable for you at each meal if you have diabetes).

IS BUTTER BETTER?



Dear Dietitian,

Q: I am somewhat confused. Some people tell me I should eat butter instead of margarine as margarine contains trans fat. But I have always thought butter is high in saturated fat, which increases bad cholesterol (LDL).

A: There are mainly four forms of fat in our diet – saturated, monounsaturated, polyunsaturated and trans fat. Only saturated and trans fat have negative effects on our blood cholesterol level.

Saturated fat is found in high amount in food like fatty meat, butter, coconut, palm oil and most deep-fried stuff. Saturated fat increases the LDL or "bad" cholesterol in our body

Trans fat is formed as a by-product in a process called hydrogenation during the manufacture of semi-solid fats such as hydrogenated oils, margarine and shortening. Some consider trans fat more dangerous as it increases LDL as well as lowers the HDL or "good" cholesterol in our body. Trans fat should be <1% of our daily intake. Based on a 2000kcal diet, you should have <2g trans fat a day.

Butter is not healthier than margarine because it contains higher amounts of saturated fat and cholesterol. Hard margarine though, may contain more trans fat than butter. The Health Promotion Board of Singapore is working with local manufacturers to reduce the trans fat content of their products. Look out for soft margarine with the Healthier Choice symbol, as it contains none or less than 0.05g trans fat per serving. Health-wise, choose soft margarine, which is lower in cholesterol, saturated and trans fat per serving compared to butter.

However, do not forget one teaspoon of margarine or butter will still provide you with about the same amount of calories, so just put a thin layer if you are trying to lose weight.

This issue's resident dietitian is Ms Ong Fang Yi, dietitian, National University Hospital. Email your questions addressed to the Editor, Diabetes Singapore, Diabetic Society of Singapore. Fax 6553 1801

You are never too old to exercise, and it is the cheapest way to good health, coaxes Cindy Ng, senior physiotherapist at Singapore General Hospital. She shows you how to pump up your fitness level, gradually.



Exercise in the Golden Years

Exercise is for everyone. Even the elderly and patients with chronic illnesses such as heart disease, high blood pressure, diabetes, and arthritis can exercise safely. In fact, many of these conditions can be improved with regular and safe exercise.

As one ages, the muscles undergo structural and functional changes. For most people, these muscle changes start from the age of 40 and may cause frailty and disability in later years.

Our body composition also changes as we age. The percentage of fat free mass or muscle mass decreases and this may indirectly cause metabolic diseases such as diabetes, hypertension and hyperlipidemia (increased bad cholesterol or triglycerides and low density lipoproteins LDL).

Exercises such as aerobics or resistance training can help to build muscle proteins and retard the degeneration of muscles. With stronger muscles, joints are also protected from injuries. Balance training also helps prevent the elderly from falls.

Brisk walking, cycling, low impact aerobics and line dancing are just some of the aerobic exercises that the elderly can participate in to build up their fitness level. For amateurs, walking continuously daily at their own pace for at least 15 minutes will be a good start, increasing five minutes every two weeks until they are able to walk briskly non-stop for 30 minutes covering a distance of 2.4km. For those working out in the

Predicted maximum heart rate = $208 - (0.7 \times \text{age})$

Strengthening exercises can be easily done at home using elastic bands or free weights. It is important to train both the leg and shoulder muscles. For example, sit on a chair with an ankle weight strapped at the lower leg and then straighten the knee, one to three sets of eight to 15 repetitions on each leg.

“As one ages, the muscles undergo structural and functional changes. For most people, these muscle changes start from the age of 40 and may cause frailty and disability in later years.”

gym, you can use the formula below to calculate one’s maximum heart rate.

For a start, you can exercise at 60 to 70% of your predicted maximum heart rate. However, if you are taking any heart medication or have any symptoms of chest pains or joint pains or have past medical history of heart condition, you should consult a cardiologist and an exercise physiologist to tailor a suitable exercise programme in the gym.

An example of dynamic balance training is *taiqi*. Home exercise can be as simple as doing a quadriceps stretch without holding to a

support. Balance training has been shown to reduce falls in the elderly by improving proprioception, which trains the elderly to cope with different terrains.

Exercise, therefore, has many benefits for the elderly and can be done easily without much cost, even at home. In fact, some physical activity is better than none and there is no age limit!

The benefits of exercise for the elderly are legion.

Regular exercise:

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

References:

Carroll S & Dudfield M. (2004). What is the relationship between exercise and metabolic abnormalities? A review of the metabolic syndrome. *Sports Medicine*, 34(6), p371-418.

Hurley BF & Roth SM. (2000). Strength training in the elderly: Effects on risk factors for age-related diseases. *Sports Medicine*, 30(4), 249-268.



◀ **Hip extension in standing**

Attach a 1kg weight at the ankle. You may need to support yourself by holding onto the wall or a chair. Extend one leg backwards while keeping your body upright. Do one to three sets of eight to 15 repetitions.



◀ **Hip abduction in standing**

Attach a 1kg weight at the ankle. You may need to support yourself by holding onto the wall or a chair. Extend one leg sideways (abduction) keeping the knee straight and body upright. Do one to three sets of eight to 15 repetitions.

Wall push-up ▶

Place both hands on the wall about shoulder-width apart, standing about one arm's length away from the wall. Lean forward without moving the feet, bending the elbows. Do one to three sets of eight to 15 repetitions.



◀ **Knee extension in sitting**

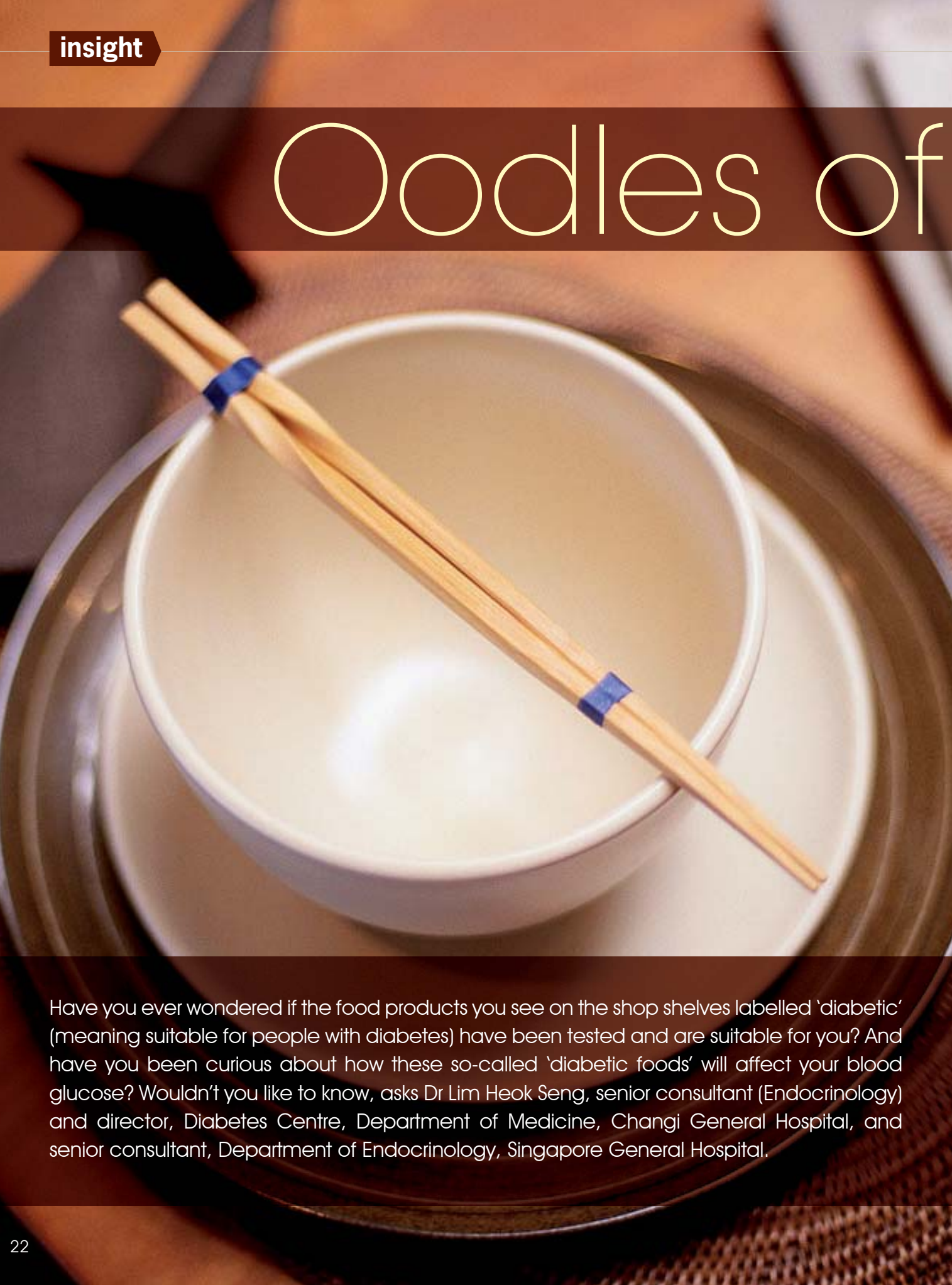
Sit upright on a chair. Attach a 1kg weight at the ankle. Keep knees at right angle. Straighten the knee slowly. Hold for five to 10 seconds. Do one to three sets of eight to 15 repetitions.

Knee extension in high sitting ▶

Extend or straighten the knee using an elastic band for resistance.



Ooodles of



Have you ever wondered if the food products you see on the shop shelves labelled 'diabetic' (meaning suitable for people with diabetes) have been tested and are suitable for you? And have you been curious about how these so-called 'diabetic foods' will affect your blood glucose? Wouldn't you like to know, asks Dr Lim Heok Seng, senior consultant (Endocrinology) and director, Diabetes Centre, Department of Medicine, Changi General Hospital, and senior consultant, Department of Endocrinology, Singapore General Hospital.

Good Health



Photo Credit : Ye Liew

When the 'inventor' of one such product, who also happens to be a doctor, approached me to initiate a clinical study on her product, Diabetrim® (a scientifically engineered noodle product for diabetes), I thought it was a good opportunity to find some answers for myself!

We, therefore, did a simple clinical study at the Diabetes Centre and Clinical Trial and Research Unit (CTRU) of Changi General Hospital to put Diabetrim® to the test; to see what this food product actually does to the blood glucose in 30 adults with type 2 diabetes.

In the study each of the participants was given Diabetrim® noodles to eat as breakfast on one day and a well-established ordinary wheat-based noodles on another day. The ordinary wheat noodle was used as a comparison, that is, as the 'control' noodle. Our hospital kitchen prepared the two different noodles in the same portion size, with the same soup, the same amounts of vegetables and minced chicken and made them look 'alike'. The study was a 'single blind study' because only we knew which noodle was the ordinary one and which was Diabetrim® noodle while the participants did not.

In order to avoid undesirable confounding factors we selected only participants who had been on diet only or sulphonylurea diabetes pills only for their diabetes. On the morning of the tests, the diabetes medication was withheld.

We checked the blood glucose level of the participants before they ate each noodle and again one hour and two hours after the start of the meal which had to be consumed within ten minutes (not difficult, considering that the noodles were so deliciously prepared!).

The objective was to look at all these 'before meal' and 'after meal' blood glucose to determine what the rise in blood glucose was with Diabetrim® noodle compared to that with the ordinary wheat noodle.

The study gave very interesting results upon analysis. We found that the rise in blood glucose after the meal was much less with Diabetrim® noodle. At one hour the rise was only 2.1 mmol/L (36mg/dL) for the Diabetrim® noodle compared to 4.5 mmol/L (81mg/dL) for the ordinary wheat noodles. This represented 54 percent less.

At the two hour point the rise was 1.4 mmol/L (25mg/L) for the Diabetrim® noodle whereas it was 3.4 mmol/L (61mg/dL) for the control noodles, that is 59 percent less.



The reason for the difference lies in the composition of Diabetrim® noodle. It has less calories, carbohydrate and fats, but more protein and fibre per 100 gram compared to the control noodle. Although we were not comparing noodles with similar amounts of nutrient composition we were comparing one noodle with another. You may say that we were not comparing



like with like but we were comparing noodles with noodles. To be sure, the manufacturer of the control noodle used in the study does not claim it to be special for people with diabetes.

The lesson really is that Diabetrim® noodle passed our test. Another lesson is that if you choose foods that have lower carbohydrate and higher fibre content you are more likely to have a smaller blood

glucose rise after eating it.

From the viewpoint of doctors treating diabetes, managing the diet of Asian patients with diabetes has always been a challenge both for the patients and for the doctor because practically all our staple foods (e.g. rice, noodles and breads) are carbohydrate based. As we know, carbohydrate foods, after digestion, turn into glucose which is then absorbed into the bloodstream. When people with diabetes eat carbohydrate staples several times a day, their blood glucose after each meal may rise to unacceptably high levels. All these daily 'spikes' in blood glucose will cumulatively raise their HbA1c which is a measure of the average blood glucose over two to three months.

Hence, controlling the after-meal blood glucose by food modification will bring down the HbA1c. A good target for HbA1c is a value below 7% (provided the treatment to achieve it does not cause frequent hypoglycaemia or low blood glucose). Studies have shown that maintaining this strict target can reduce the risk of diabetic complications

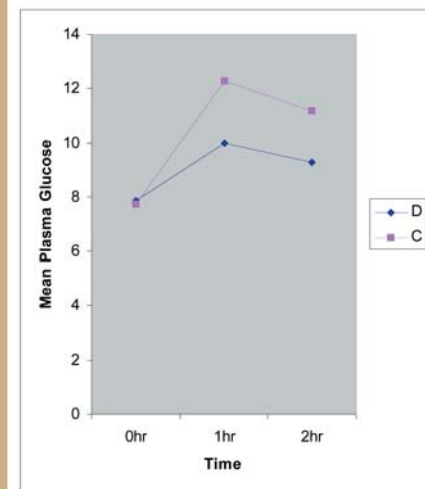


such a kidney, retina and nerve damage, heart attacks and strokes.

My innovative doctor friend is, of course, delighted with the results.

As far as I am concerned, one can eat 'anything' one likes but my advice is that if you have diabetes, check your blood glucose before and after taking that food or snack. See for yourself how it matches your diabetes medications (including insulin) and what it does to your blood glucose. Try something else or a smaller portion of the same if your blood glucose is above the acceptable target.

Plasma Glucose Excursion after ingesting Noodles



D Diabetrim® noodle
C Control Noodle

While I was able to test one 'diabetic' product, the question still remains for me regarding all the other products out there that are similarly labelled. So, perhaps the next time you use a 'diabetic' product, check your blood glucose before and after taking it. Perhaps it will indeed do wonders for your glucose control...or perhaps it will do nothing at all. Wouldn't you like to know?





DIABETES CHECKS ON WHEELS

The long-awaited Mobile Diabetes Care and Education Centre will soon roll out onto the streets and hit the heartlands in May.

The mobile centre which offers services such as diabetic retinal screening, diabetic foot screening, blood sugar level checks and patient diabetes education will be launched on 18 May by Mr Khaw Boon Wan, Minister for Health, at a special event called Healthy Lifestyle Day @ Causeway Point from 9.00am to 4.00pm.

To DSS vice-president and endocrinologist Dr Kevin Tan, the Mobile Diabetes Care and Education Centre, made possible by a generous donation of \$200,00 from the Lee Foundation, heralds a significant milestone in the history of the Society.

He said, "As opposed to our 'fixed' centres at Ang Mo Kio, Boon Keng and Jurong, we are now able to bring the expertise of our diabetes nurse educators deeper into the heartlands. We hope to make diabetes detection more easily available to the masses and diabetes education and support more accessible. The end-product is hopefully a reduction in the burden of diabetes in the community."

"While the mobile centre will help to broaden our services in the heartland, it will also foster closer working relationships with the grassroots organisations who can help to spread the word about diabetes management," added DSS president Mr Yong Chiang Boon.

"The mobile centre also brings subsidised comprehensive services closer to home and this helps cut the need to travel, saving time, money and energy"

"The mobile centre also brings subsidised comprehensive services closer to home and this helps cut the need to travel, saving time, money and energy," he emphasised.

Ms Angie Lee, diabetes nurse educator, is excited about the launch of the mobile centre. "The services on board will definitely be welcomed by the elderly, especially those with ambulatory problems and anyone who has difficulty visiting our three diabetes education and care centres due to the condition or lack of transportation," she said.

The mobile centre will also focus on diabetes education.

Most diseases are surrounded by a number of myths. Ms Lee explained, "This stems basically from ignorance or lack of proper information. Similarly, diabetes too has given rise to a number of imaginary beliefs."

"There are still many among the public who are ignorant about diabetes and how it can affect their lives. Diabetes is a chronic, life-long condition that can lead to both acute and long-term complications such as accelerated health disease, stroke, kidney failure, loss of nerve sensation, loss of limbs and sight. It is imperative to debunk some of these widely prevailing myths and present the facts about this 'sweet killer'," stressed Ms Lee.

She added, "Education is vital in order to prevent diabetes or to reduce the rate of complications. Through diabetes education, the public, people with diabetes and the care givers will be equipped with the essential knowledge to make appropriate lifestyle modifications."

For more information about the Mobile Diabetes Education and Care Centre, please ring 6398 0282.