PREVENTION AND MANAGEMENT OF DIABETES & 3-HIGHS, YOUR GREAT COMPANION!

The Newsletter of the Diabetes and 3-Highs Alliance





Is pre-diabetes reversible?

This article is provided by GemVCare.

What is pre-diabetes?

Pre-diabetes is a transitional period which the blood glucose level is higher than normal range but not arrived to the level of diabetes. The following criteria are to define this period:

- Impaired Fasting Glucose (IFG): Fasting blood glucose level ranged 5.6 - 6.9 mmol/L
- Impaired Glucose Tolerance (IGT): Oral Glucose Tolerance Test (OGTT) post-prandial 2 hours ranged 7.8 - 11.0 mmol/L
- Glycated haemoglobin (HbA1c) ranged 5.7 6.4%

Importance of early identification of pre-diabetes

A lot of diabetic persons may be unaware of their symptoms of having the disease until being diagnosed with type 2 diabetes with middle to late stage, missing out the highly effectiveness treatment period. It is therefore important for the attention of the

IN THIS VOLUME:

Is pre-diabetes reversible? - 1

Diabetes and gum disease: A bi-directional relationship - 4

5 smart tips for eating out during COVID-19 - 5

Slimming meal replacement product is not formulated for diabetes patients; Diabetes specific formula nutritional product helps to control blood glucose - 8

How to read the food label - 9 pre-diabetes period. Individuals may present with impaired glucose values as above with symptoms of obesity and metabolic syndrome. These three signs are the origin of cardiovascular diseases. Research indicated that people having heart diseases are in prediabetes condition, reflecting that the formation of coronary arteriosclerosis is prior to the development of diabetes mellitus. Thus, **the stage of pre-diabetes is a golden period to reverse or prevent the formation of diabetes as well as cardiovascular diseases**.

As most of the diabetic individuals may have no symptoms at all, for individuals who have the below diabetic risks, it is advised to inform their family doctors so to plan for relevant check-ups.

- Age 45 or above
- Overweight or obesity (Body Mass Index (BMI) equals to or greater than 23 kg/m²)
- Have record of impaired fasting glucose or impaired glucose tolerance
- Have record of hypertension
- Have cardiovascular diseases (e.g. coronary heart disease, peripheral vessel disease and stroke)
- Have cardiovascular risk factors (e.g. hyperlipidaemia, low level of high density lipoprotein (HDL) cholesterol, high level of low density lipoprotein (LDL) cholesterol, smoking and lack of exercise)
- Have family history of diabetes mellitus, particularly in first degree relatives
- Have history of gestational diabetes or polycystic ovary syndrome (for female)
- Long-term steroid users

Reversing pre-diabetes

<u>1. Regular check-ups and early treatment</u> It is advised individuals who have diabetic risks to have regular body checks so to have a higher chance of discovering abnormal blood glucose. If pre-diabetes is identified, with early treatments, regular self-monitoring of blood glucose and lifestyle modification, pre-diabetes can be reversed.

Diabetes investigation and risk assessment involve:

 Blood test (fasting and 2 hours post-prandial glucose, glycated haemoglobin, complete blood count,

liver and renal function tests, and lipid profile etc.)

 Body measurement (height, weight, waist circumference, hip circumference and blood pressure)

> Urine test (presence of proteinuria)

 Individual and family history recording, medication history recording



2. Diet & exercise adjustment

To prevent having diabetes, the basic principle is to have healthy diet with exercises. Except having a balanced diet, **it is advised to reduce the intake of refined sugar to less than 10% of the daily calorie intake**. Refined sugar is sugar manufactured instead of naturally available in food. For example, if the daily calorie intake is 1500 kcal, the daily intake of refined sugar should be less than 150 kcal (~38 g). However, the amount of refined sugar of a bottle of 500mL lemon tea (~65 g) already exceeds the limit. Thus, it is important to pay attention to packed food and drinks which contain rich amounts of refined sugar.

Moreover, it is advised to reduce intake of food with rich amount of saturated fat (e.g. lard, beef and fatty meat). Wholegrain food and vegetables are advised for more fibres and adding sense of satiety. From the perspective of exercising, it is advised to have moderate level of exercising (e.g. brisk walking and jogging) for more than 150 minutes per week.

<u>3. Weight and waist circumference</u> <u>management</u> Overweight or obesity means the Body Mass Index (BMI) equals to or greater than 23 kg/m². Central obesity means the waist circumference of female equals to or greater than 80 cm, waist circumference of male equals to or greater than 90 cm. Risk of having diabetes mellitus will increase with the increase of weight and waist circumference. These types of individuals are advised to seek dietitians advise to have diet and calorie intake control. Topping up with adequate level of exercise, the chance for reversing prediabetic condition would be increased.

Body Mass Index (BMI) (Definition for Asian)

Underweight	< 18.5 kg/m²
Normal	18.5 - 22.9 kg/m²
Overweight	23 - 24.9 kg/m²
Obese	≥ 25 kg/m²



Reference:

1. Asia Diabetes Foundation. (2018). Identify unrecognized pre-diabetes. <u>http://www.diabetesrisk.hk/am_i_pre_diabetes</u>

2. Food and Health Bureau. (2018). Hong Kong Reference Framework for Diabetes Care for Adults in Primary Care Settings (Patient version). https://www.fhb.gov.hk/pho/files/e_diabetes_care_patient.pdf.

Diabetes and gum disease: A bi-directional relationship

This article is provided by Qualigenics Medical.

What does sugar have to do with our oral health? We all know that eating sweets can cause cavities. But did you know that there may also be a relationship between diabetes – a condition in which a person with diabetes – and gum disease?

Numerous studies have shown that there exists a bi-directional relationship between diabetes and periodontal diseases. These studies describe how diabetes increases the risk and severity of gum disease, while periodontal infection can increase the risk of diabetes complications and make it difficult for diabetes patients to control blood glucose.

In fact, **patients with diabetes have almost three times the risk of developing periodontal disease**, while there is greater prevalence of gum disease among patients with type-2 diabetes as compared to nondiabetes patients.

Why is it important for people to be aware of both diabetes and gum disease? According to the latest news, both diabetes and gum disease are chronic conditions that are prevalent in Hong Kong. It is estimated that at least one in 10 persons in Hong Kong is has diabetes or is at risk of becoming diabetic. As for periodontal disease, it is one of the most common bacterial infections in humans, and a major cause of tooth loss in adults.

What can be done?

<u>1. Pay attention to the signs</u>

At the beginning, there are no obvious symptoms for either diabetes or gum disease. However, as the disease progresses, certain symptoms will come up. For patients with diabetes, they may begin to **feel thirsty all the time, experience fatigue or sudden weight loss**. For patients with gum disease, they may experience **bad breath, red and swollen gums, bleeding when tooth brushing**.

<u>2. Regular check up</u>

Regular physical and oral examinations are essential for detecting any signs of either diabetes or gum disease. If you think you may have either diabetes or gum disease, mention this to your doctor/dentist as some additional tests may be required.

<u>3. Healthy lifestyle habits</u>

Some people may be genetically predisposed to diabetes or gum disease. However, healthy habits, such as **proper brushing and stop smoking or regular exercise and a balanced and nutritious diet**, will go a long way towards preventing the onset of either of these diseases.



Reviewed by Dr. Rose Z.W. Ting, Specialist in Endocrinology, Diabetes & Metabolism and Dr. Ng Sin Tsoi, Specialist in Periodontology.

5 smart tips for eating out during COVID-19

Ms. Denise Luk Registered Dietitian

Eat smart and have a health body weight

Many of us have been working from home since the COVID-19 pandemic began and with the trend of having more take-away or instant food and less exercise, many gained weight. Having takeaway or instant food is so convenient and may be a life saviour for many who don't cook. Yet, how can we eat smart and stay healthy when eating out or ordering takeaway?

Step 1: Choose restaurants that offers healthier food options

When picking restaurants, learn more about their food choices and main cooking methods. That way we know we have healthier options to choose from.

Step 2: Pick items that are "3 Low 1 High" which refers to low salt, low sugar, low fat and high dietary fibre



Generally, fast food or ready-to-eat food has many seasonings, which is high salt, high sugar and high fat, with less vegetables. Learn more about the ingredients used in each dish for picking. Don't forget to **include your veggies** to increase the intake of dietary fibre. When in doubt, just ask or check the nutrition labelling!

Step 3: Check your portions

The portions of fast food and takeaway are generally larger. Plan out your meals and control your portions. Before digging in, portion out your food, you may share your meal with a friend or pack the extras for next meal. You don't have to finish them all in one go. You can store them safely in the fridge, if appropriate and reheat thoroughly before consuming the leftovers. Eating slowly and mindfully could also help with portion controlling.

You do not have to always order a set. You may just order a main dish (a la carte) and skip the appetizer, drinks, and dessert if necessary. Yet if you wish to order a full set, please consider ordering salads instead of soups as soups in the market are usually high in sodium or even fat, try to limit the portion.

Step 4: Choose lean meat and limit your sauce intake

Choose leaner cuts of protein and remove any visible skin and fat whenever possible **Sauces are usually high in sodium, sugar, and fat**, try to ask for "sauces on the side" and limit your intake.



IGH

Step 5: Control your intake of dessert and sugary drinks

Cakes and desserts are high in fat and sugar, and would definitely contribute to your energy intake, healthier dessert options may include fruit platter, tofu or grass jelly desserts (with less or no added sugar) are relatively lighter options.

When ordering drinks, **keep in mind to order sugar-free options** such as sugar-free lemon tea/water. Hong Kong Style milk tea has always been a popular choice, yet it is made of tea and evaporated milk, which could be a source of saturated fat, hence should not be ordered often (even if it's sugar-free).

High intake of added sugar, sodium and fat (especially saturated and trans fat) may not only affect your weight but also increases your risk of chronic diseases such as cardiovascular diseases. Try your best to eat smart and stay healthy, reduce the intake of take away food or instant food and do exercise regularly!

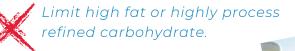
Always opt for low fat, low salt, low sugar and high dietary fibre (3 Low 1 High) options!

Pick healthier source of carbohydrates:



Choose whole grains, low fat grains and non deep fried root vegetables which is high dietary fibre and nutrient.











Choose lean meat, skinless poultry, fish, eggs, legumes and non deep-fried soy

Pick low fat protein options:



<u>Complete your meal with a source of fibre - Don't forget your veggies:</u>

^r Order steamed or blanched veggies along with your meal.

Request "sauce on the side" when ordering salads, this way you can control your dressing intake.

Adding a source of fibre to your meal would not only benefit your heart health but also help regulate your bowel movement. Most non-starchy vegetables are low in calories and high in dietary fibre, it could help make you feel full longer on less calories.



Pick dishes that are prepared by low fat cooking techniques:



Cooking methods that use less fat in the process may include steaming, blanching, boiling, baking, and stir-frying with little oil.





nit the intake of added

sugar, fat and sauces.



Common misconceptions about diet

People believe that soup ingredients have no nutritional value after being boiled. They just drink the soup and discard the ingredients.

Most of the nutrients remain in the ingredients, not the soup. Thus, one should consume the soup as well as the ingredients to obtain more nutrients. But for people with diabetes, they should be careful when consuming starchy ingredients (e.g. potatoes, carrots, pumpkin, chestnuts, dried beans, etc.), as it might affect blood glucose level. If consuming starchy ingredients from soup, one should reduce the intake of rice based on the carbohydrate exchange method.

> Source: Prevent the Preventable, Asia Diabetes Foundation (www.diabetesrisk.hk)

Slimming meal replacement product is not formulated for diabetes patients; Diabetes specific formula nutritional product helps to control blood glucose

Mr. Anson Wong Registered Dietitian

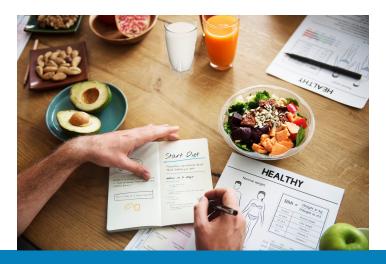
slimming meal replacement Although product claims itself as low glycaemic index (GI), the overall nutrition composition may not be suitable for diabetes patients. Anson Wong, dietitian, points out patients being studied may not be diabetes patients. Hence, we must select with caution. Some diabetes specific formula (DSF) nutritional products contain complex and slowly digested carbohydrates that require longer time to digest and absorb, resulting in blood glucose stabilization. The nutrition composition of this diabetes milk, such as fat and protein, meets the American Diabetes also Association recommendations. providing complete and balanced nutrition.

Most low GI slimming meal replacements may provide very low calories. If patient replaces usual three meals with them in a day, he or she would obtain less than 800 calories throughout the day only. Very-lowcalorie diet (VLCD) is only suitable for obese patients with BMI more than 27 and with special dietary needs. In addition, VLCD should be consumed under healthcare professional's supervision.



Having VLCD for long term will cause constipation, diarrhea, malnutrition and will even increase the risk of gallstones. Moreover, the sodium content of some slimming meal replacements is very high, which is 3 times that of DSF milk. It will increase the risk of cardiovascular diseases and the burden of kidney. This is not suitable for diabetes patients.

Dietitian suggests diabetes patients should exercise regularly and have a healthy and balanced diet. Breakfast, lunch and dinner should each account for 30% of the daily calories requirements. The remaining 10% can be obtained through snacks. Taking a 1500 calorie a day as an example, you can consume 450 calories for breakfast. Since a cup of DSF milk has 200 calories, other healthy foods such as whole wheat bread, rolled oats or hard-boiled eggs can also be consumed for breakfast. It is crucial to follow your doctor's or dietitian's recommendations to eat healthily and exercise regularly. When needed, DSF milk can be a good option as part of a healthy diet.



Common misconceptions about diet

Some believe that people with diabetes should not eat fruit after a meal.

If you do not take more than 2 servings of fruit per day and eat regular food portions at regular intervals, you can control your blood glucose level. If you are concerned about the impact of fruit intake on your blood glucose level, it is suggested you check your blood glucose level after consuming fruit.

How to read the food label

This article is provided by AXA.

There are a lot of information on food package. If we know how to interpret the information on the package, it helps the people who are having medical nutrition therapy to decide an appropriate diet plan. However, how to read the food label?

First of all, check the ingredient list. The ingredients in the list are in descending order. Suggest choosing the food with fat, sugar or salt comparatively found latter in the list. By checking the top 3 ingredients in the list, we can have a general idea about the health rating of the product. Also, please check if the products have the following ingredients which may cause potential health risks.

Palm oil

It is high in saturated fat which can increase risk of cardiovascular diseases if consumed in long-term. However, some food manufacturers avoid listing palm oil directly in the list but state "vegetable oil" instead.

Thus, consumers need to be careful in making a choice, especially biscuits, chips and instant noodle usually made with palm oil.



Shortening/hydrogenated oil

These oils contain trans fat. Trans fat increase "bad" cholesterol level and hence the risk of heart disease. Although it may show "zero" in the nutrition fact panel, it does not mean this product does not contain any trans fat. From the regulation, the product with less than 0.3 g trans fat per 100 g of products, they can show "0" in the panel.



Wheat flour

Many people misunderstand wheat product must be high fibre. The flour which is high fibre is called whole wheat / wholemeal flour.





Check if the nutrition information was listed based on per serving or 100 g.

For example, a 250 ml drink uses per 100 ml to list the nutrition information. Then, we need to multiply the information by 2.5 if you want to know the nutrients that you have consumed after finished the whole box.

If it shows "Per serving" and "100 g/100 ml" at the same time:

- When we compared same type of products with different brands, we should use 100 g or 100 ml.
- When we want to calculate how many nutrients have we consumed after having certain servings, we calculate based on "per serving".



Read the 1+7 information

What does 1+7 mean?



Energy can express in "kcal" or "kJ", if listed as kJ, then needs to divide by 4.2 to find the equivalent value in kcal.

If the food has stated any claim related to any other nutrients out of 1+7, then that nutrient content must be shown in the panel even it is not included in 1+7.

We have to check different nutrients based on our health conditions

Weight managemer	Calories (energy), fat and sugar				
Hypertension	Fat and sodium				
Cardiovascular	Saturated fat, trans fat amd sodium				
Diabetes	Total carbohydrate, fat and sugar				
Renal issue	Protein and sodium				

* Please consult registered dietitian for your daily energy requirement and recommended nutrient intake.



Based on different food categories, we decide which nutrients should we notice:

- Dairy products: Calcium (if listed in the panel) and sugar (especially for yogurt)
- Breakfast cereal: Sugar and fibre (if listed in the panel)
- Canned food: Sodium

Nutrient content claim

Low Fat	≤ 3 g total fat per 100 g of solid food or ≤ 1.5 g total fat per 100 ml of liquid
Low sugar	≤ 5g total sugar per 100 g of solid food or 100 ml of liquid
Low sodium	≤ 120mg sodium per 100 g of solid or 100 ml of liquid
High calcium	≥ 240 mg calcium per 100 g of solid food or 120 mg per 100 ml of liquid
High fibre	≥ 6 g of fiber per 100 g of solid food or 3 g of fiber per 100 ml of liquid

Traps in food label

(don't trust the nutrition claim only, please read the nutrition fact panel)

- Low fat does not mean low sugar or fewer calories. Some biscuits or chocolate drink are low fat but not low sugar.
- Low fat does not mean low sodium, e.g. ham and turkey ham.
- Less fat is not equal to low fat, it just contains less fat than original formula.
- Light does not mean low fat.
- Calcium-added does not mean high calcium.



Remarks: Health Information is provided by GemVCare.

Members of the Diabetes and 3-Highs Alliance

As a member, you will receive our regular newsletters and updated information by email including activities such as outreach program and education talk. Also you will have priority in signing up or joining these alliance activities at membership rate. Please fill in below information and submit to Asia Diabetes Foundation for becoming our members: (1) Fax: (852) 2647 6624; or (2) Post to Unit K, 4/F, Haribest Industrial Building, 45-47 Au Pui Wan Street, Shatin, N.T., Hong Kong; or (3) Email: enquiry@adf.org.hk; or (4) Scan the QR Code (Diabetes and 3-Highs Alliance www.diabetesrisk.hk/register) for online submission.



<u>е)</u> м	ember informatio	n					*Required			
Chinese	name*:							diabetesrisk.hk/register		
English r	name*:									
Age*:	□ 18-25	26-35	36-45	46-55	56-65	66-75	□76 or above			
Gender*:	□ Male	🗌 Femal	le							
Email*:		Tel no.:								
Address:										

Personal Information Collection Statement

Your hereby provided personal information will be used for the purpose of communication, survey, application, dispatch of Diabetes and 3-High Alliance's newsletters or promotion of events (which may or may not include messages or participation of other organizations or companies). Apart from personnel duly authorized by the organization, no one will be given access to your personal information. In accordance with the personal data (privacy) ordinance, you have a right to request access to and correction of your personal data provided. Request for personal data access and correction should be addressed to Asia Diabetes Foundation in writing.

Declaration

- □ I declare that all information given in this application is correct and complete to the best of my knowledge and belief. ADF reserves the right to reject any application without providing explanation to the applicant.
- □ I fully understand and agree with the "Personal Information Collection Statement" listed above.
- □ I <u>do not</u> want to receive the Diabetes and 3-High Alliance's Newsletter or activities promotion information.

Signature: _

_____ Date: __



Page 11

Diabetes and 3-Highs Alliance Member Benefits







Let's register as a member, receive a free sachet and enjoy 'buy one get one free' on your first purchase!



<SUGAR CRUSH FUN> Personalized Diabetes Management Kit and Points Redemption Scheme

Measuring blood sugar has become an important part of selfmanagement for people with diabetes. Finger pricking and taking regular readings day after day can become mundane and boring over time. To encourage and reward everyone to develop the habit of self-monitoring while making the process more manageable and enjoyable, members of "Diabetes and 3-Highs Alliance" can purchase the <SUGAR CRUSH FUN> Personalized Diabetes Management Kit at an exclusive price of HK\$ 300, inclusive of: Gochek2 blood glucose meter, lancing device, lancets (100 pcs), test strips (100 pcs). Members can also enjoy a complimentary access to the MyGem App digital health management platform as well as to win a free redemption of test strips. Limited Time Offer - Act Now While Supplies Last!







Promo code: GVC202007

For details of the points redemption scheme and terms and conditions, please scan the following QR code or contact GemVCare Customer Service at 2809 2893.





AXA provides exclusive offer for members of Diabetes and 3-Highs Alliance! Register as a member of Diabetes and 3-Highs Alliance, and you may receive a one-off **HKD400 premium <u>eCoupon</u>** for application of designated health and protection basic plan or life and savings basic plan underwritten by AXA!

Simply leave your contact information on below page, and our Financial Consultant will contact you and help you learn more about it!

https://w<u>ww.axa.com.hk/en/diabetes-and-3-highs-alliance-enewsletter</u>

*Please refer to terms & conditions for details.

Patient who has a new appointment with Diabetes Specialist at Qualigenics can enjoy a HbAlc test for free (Price: \$290) upon his/her first consultation. HbAlc is the average blood glucose (sugar) levels for the last three months. The results can give us a good indication of how well the diabetes is being controlled.

Qualigenics 確進 ed by The Chinese University of Hong Kong A Health Aware

香港中文大學支持之健康關注項目

Qualigenics Medical

Tel:

Website: http://www.qualigenics.com (Central) (852) 3607 7800 (Mongkok) (852) 2868 6020

(around 116g)

FOOD TIPS

Apes of Siuma

Equals to **1** bowl of rice

Calories: 235kcal





Jogging duration to burn 235kcal







50kG OMINS



Page 13



亞洲糖尿病基金會 Asia Diabetes Foundation

The **Asia Diabetes Foundation (ADF)** is a charitable organisation, governed by the Chinese University of Hong Kong Foundation, developed to initiate and implement medical, scientific and academic research activities to collect and translate current evidence into prevention and control strategies for diabetes and other chronic diseases. ADF is dedicated to promote informed decision making in order to enhance the sustainability, affordability and accessibility of chronic care.

Tel: (852) 2637 6624 Website: www.adf.org.hk Fax: (852) 2647 6624 Email: enquiry@adf.org.hk

About Diabetes and 3-Highs Alliance

solutions to our community.

Diabetes, hypertension or hyperlipidaemia are the top three chronic diseases in Hong Kong. Together with obesity (high body weight), underlie the 4 critical illnesses in Hong Kong people including heart disease, stroke, kidney disease and cancer. With the increase in the population of diabetes and "3-Highs", which has increased the burden on society, the "Diabetes and 3-Highs Health Alliance" is committed to raising public awareness of diabetes and "3-Highs" in order to maintain health and prevent diseases.



Members and Sponsors



Abbott founded in 1888 by operating in the form of a small pharmaceutical factory under the name of "People's Drug Store" in the United States, implemented "At one's healthiest and life to the fullest". The full range of products from nutrition and diagnostic products to medical devices and medical treatment solutions run through all ages to fulfill health needs from infants to older adults. Through more than 130 years of research experience and countless clinical evidences, Abbott has continuously launched and improved high-quality formulae to cater for the health needs of different ages around the world.





providers in Hong Kong and Macau. **GemVCare**, founded in 2014, is a Hong Kong based bio-genetic testing company specialized in diabetes. Our patented technology is based on 20+ years of big data and the world's first discovery of diabetes genes specific for Asian population. We

dedicate ourselves to diabetes prevention and providing health management

AXA Hong Kong and Macau, a member of the AXA Group, prides itself on serving over 1.3 million customers in the region. In addition to being the #1 global Property & Casualty commercial lines insurer, we are also one of the largest health protection



For more than a century, **MSD**, a leading global biopharmaceutical company, has been inventing for life, bringing forward medicines and vaccines for many of the world's most challenging diseases.

Qualigenics 確進 Health Awareness Program Supported by The Chinese University of Hong Kong 香港中文大學支持之健康開注項目 **Qualigenics** aims to integrate all aspects of specialist disease management, providing all-rounded medical treatments for patients suffering from chronic diseases such as diabetes, cardiovascular disease and related complications. As the saying goes, prevention is better than cure. This is why we put our emphasis on education and health management to raise awareness on disease prevention and control.