

Introduction

Lifestyle Prescriptions were developed by the Health Promotion Board to assist healthcare professionals, in particular, primary care physicians, in providing concise lifestyle advice to patients without restricting the physician's individual clinical judgement.

When healthcare professionals present patients with various options for managing their lifestyles, patients feel more confident in participating in the care process because they trust their doctors and the treatment they are receiving.

The recommendations are based on the best available evidence at the time of development, drawing references from the MOH's Clinical Practice Guidelines and Care Protocols for diabetes, hypertension and lipid disorders. They seek to highlight lifestyle recommendations specific to the medical condition, in addition to those for individuals with no chronic conditions.



Lifestyle prescriptions are presented under the lifestyle domains of: **nutrition and healthy eating**, **physical activity**, **weight management**, **mental well-being** and **smoking**. To facilitate recall, we have approached lifestyle prescriptions from the perspective of:



Quantity

How much should I

eat or do?

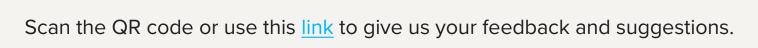


Quality
What types of food and activity should I eat or do?



Timing
When should I eat or carry out the activity?

We have also included a model to guide how doctors might fit lifestyle prescriptions into their busy practice to better support their patients.





Abbreviations

PA	Physical Activity
Carbs	Carbohydrates
Vegs	Vegetables
BP	Blood Pressure
T2DM	Type 2 Diabetes Mellitus
CVD	Cardiovascular Disease
CAD	Coronary Artery Disease

CHD	Coronary Heart Disease
TG	Triglycerides
LP	Lifestyle Prescription
NC	Nurse Counsellor
PCC	Primary Care Coordinator
PCN	Primary Care Networks
HCS	Healthier Choice Symbol



Quick Glance

The following table provides a summary of lifestyle prescriptions (LPs). Use hyperlinks to navigate to the respective page(s) for more details. The list of LPs for each category is presented such that the prior recommendations apply to that category too.

For example, the LPs for 'Type 2 Diabetic at Risk of Hypoglycaemia' patients include prior prescriptions for 'No Chronic Conditions', 'Pre-Diabetic' and 'Diabetic' patients.



Patient Category	Nutrition & Healthy Eating			Physical Activity			Weight Management	Mental Well-Being
	Quality	Quantity	Timing	Quality	Quantity	Timing		
No Chronic Conditions	Use My Healthy Plate • Substitute ≥20% of refined carbs with wholegrains • Choose lean protein, fresh produce, and healthier oils and fats	 Reduce salt and sugar intake Increase soluble fibre intake 	For older adults, include protein as part of every meal				Reduce weight by 5 to 10% over 6 to 12 months Following BMI control Care Protocol: Green segment expenses elf-directed Reduce weight by of slip of	 Manage stress Aim for 7 hours of sleep each day Practise mindfulness Consult healthcare team if they experience anxiety or depression (For
<u>Pre-diabetes</u>	 Substitute ≥50% of refined carbs with wholegrains Pair wholegrains with protein and vegs 					Include post-meal activity	Orange segment • Well-controlled chronic diseases: Consider referral to structured community programmes	Hypertension) Manage psychosocial triggers
Type 2 Diabetes Mellitus		Reduce carb portion	Consider meal timing and spacing	Perform exercise assessment Avoid certain exe complications			Poorly-controlled chronic diseases*: Refer to PCN for support on controlling chronic condition Red segment Consider referral to tertiary weight management programmes	
Type 2 Diabetes Mellitus at Risk of Hypoglycaemia	Exercise caution if drinking alcohol	Keep carb portion constant	Eat regular meals		 Gradually increase PA levels Stop exercising if blood glucose is low and follow 15/15 rule 	Check blood glucose levels before and after exercising		
High-Normal Blood Pressure	Use lower-sodium alternatives							
<u>Hypertension</u>	Include DASH diet components	Limit sodium intake to 2000mg per day (about 1 tsp of salt)		 Perform exercise pre-participation assessment Take caution when lifting heavy weights Gradually increase PA levels 				
Intermediate Risk of 10-Year Coronary Artery Disease	Choose healthier fats	Limit saturated and trans fat as well as cholesterol intake	Gradually increase PA levels					
High-Very High Risk of 10-Year Coronary Artery Disease	Consult healthcare team for condition-specific dietary requirements			Perform exercise prassessment	e-participation			

For patients who smoke, advise them to quit smoking.

These BMI values are based on Asian cut-offs.
*Individuals who have either not reached their
individualised treatment targets or have established
complications of their chronic condition(s).





Aim: Promote health and reduce risk of chronic diseases

Nutrition & Healthy Eating

Use My Healthy Plate as a guide to eat a variety of foods in the right amounts:



- □ Aim to substitute ≥20% of refined carbs with wholegrains.
- □ Eat a variety of animal- (e.g. lean meat/poultry, fish, egg, dairy) and plant-based (e.g. tofu, nuts, bean, legumes) protein as part of a balanced diet.
- (For older adults) Include protein as part of every meal.
- ☐ Choose fresh produce, including fruit and vegs, over processed foods.
- ☐ **Include soluble fibre** (e.g. oats, barley, lentils).
- □ Choose healthier oils and fats.
- □ Reduce salt and sugar intake.

Physical Activity & Weight Management

Aim for 150-300 minutes of moderate-intensity aerobic exercise spread out over 5-7 days per week.



Able to speak in short sentences but not sing

- ☐ **Do strength training** exercises at least 2 days per week.
- ☐ Limit amount of time spent being sedentary, particularly recreational screen time, by engaging in PA of any type.
- ☐ (Green segment, BMI < 37.5) Encourage self-directed activities.
- ☐ (Red segment, BMI ≥ 37.5) Consider referral to tertiary weight management programmes.

Mental Well-Being

Manage stress by making time for relaxation and seeking help from supportive people.



Practise deep breathing and guided imagery



- ☐ Aim for **7 hours of sleep each day**.
- □ **Slow down** and be in the present moment.

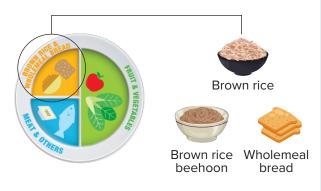


Aim: Prevent progression to Type 2 Diabetes Mellitus

Recommendations for 'No Chronic Conditions' apply.

Nutrition & Healthy Eating

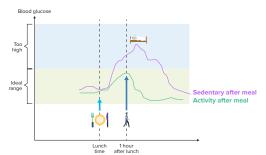
Use My Healthy Plate as a guide to eat a variety of foods in the right amounts:



- □ Aim to substitute ≥50% of refined carbs with wholegrains.
- Pair wholegrains with lean protein and non-starchy vegs.
- □ **Limit sugar intake** to no more than 5 tsp of sugar per day (e.g. a cup of kopi or teh has 4-5 tsp sugar, a bowl of chendol has 6.5 tsp sugar).

Physical Activity & Weight Management

Include light activity (e.g. walking) 1 hour after meal.



- ☐ Aim for 150-300 minutes of moderate-intensity aerobic exercise spread out over 5-7 days per week (able to speak in short sentences but not sing).
- Do strength training exercises at least 2 days per week.
- □ Limit amount of time spent being sedentary, particularly recreational screen time, by engaging in PA of any type.
- ☐ (Green segment, BMI < 37.5) Encourage self-directed activities.
- \square (Red segment, BMI \geq 37.5) Consider referral to tertiary weight management programmes.

Mental Well-Being

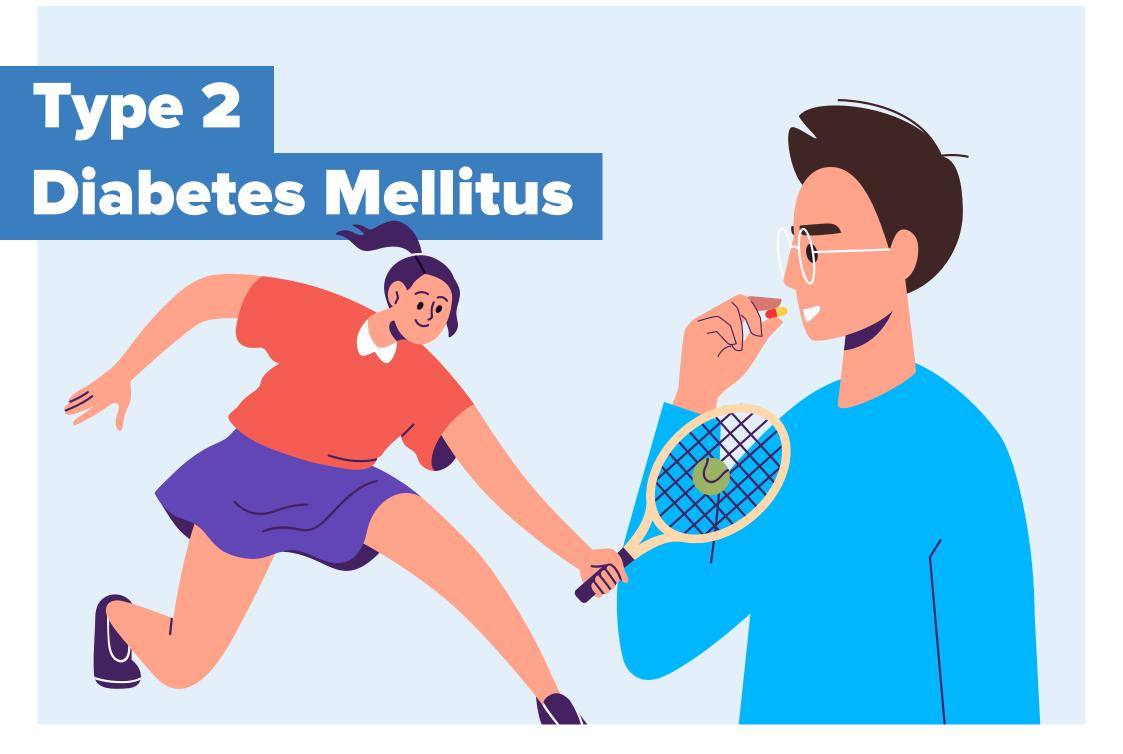
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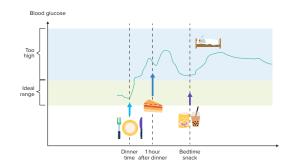


Aim: Optimise blood glucose levels to prevent complications

Recommendations for 'Pre-diabetes' apply.

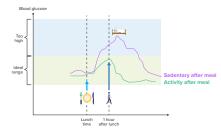
Nutrition & Healthy Eating

- Have a smaller portion of carbs.
- □ **Space out meals** at 3-5 hours apart to allow blood glucose to return to baseline.
- Avoid eating carb-based foods close to a meal or bedtime to avoid 'stacking' of blood glucose.



Physical Activity & Weight Management

- Perform exercise pre-participation assessment before starting any exercise more vigorous than walking.
- ☐ **Include light activity** (e.g. walking) 1 hour after meal.



- (Diabetic retinopathy) Avoid heavy lifting and straining activities.
- (Peripheral neuropathy) Use appropriate footwear. Observe daily foot care.
- ☐ **(Foot ulcers/disability)** Modify activities according to ability.
- ☐ (Orange segment, BMI 18.5 to <32.5)
 Consider referral to structured community programmes, or (Red segment, BMI ≥32.5) to tertiary weight management programmes.
- (Poorly-controlled) Refer to PCN for support on controlling chronic condition.

Mental Well-Being

- Manage stress by making time for relaxation and seeking help from supportive people.
- ☐ Aim for **7 hours of sleep each day**.
- □ **Slow down** and be in the present moment.
- Consult healthcare team if they find it hard to cope with their illness and life challenges.



Type 2 Diabetes Mellitus at Risk of Hypoglycaemia



Aim: Avoid seriously low blood glucose levels

Recommendations for <u>'T2DM'</u> apply.

Nutrition & Healthy Eating

Eat about the same amount of carbs at each meal to maintain steady blood glucose levels throughout the day. Do not skip carb-containing meals.



Breakfast



Lunch



Dinner

☐ For those who choose to drink, self-monitor and manage delayed hypoglycaemia after drinking alcohol.

Physical Activity & Weight Management

- Gradually increase PA levels from what they are already doing, for both duration and intensity.
- □ Check blood glucose levels before and after exercising. Follow 15/15 rule if blood glucose is low. Have 15g of fast acting sugars, and check blood glucose 15 mins later.



Half glass of sweetened drink



3 soft candies (sugar-containing)

- ☐ **Stop exercising** if they experience symptoms of hypoglycaemia.
- ☐ (Orange segment, BMI 18.5 to <32.5)
 Consider referral to structured community programmes, or (Red segment, BMI ≥32.5) to tertiary weight management programmes.
- ☐ (Poorly-controlled) Refer to PCN for support on controlling chronic condition.

Mental Well-Being

 Consult healthcare team if they find it hard to cope with their illness and life challenges.





High-Normal Blood Pressure*



Aim: Prevent progression to hypertension

Recommendations for 'No Chronic Conditions' apply.

Nutrition & Healthy Eating

Substitute regular salt and seasonings with lower-sodium alternatives. Use herbs and spices to flavour dishes.



(Patients with chronic hyperkalemia) Consult healthcare team before including potassium salt in their diet.

Use My Healthy Plate as a guide to eat a variety of foods in the right amounts:



- Choose fresh produce including fruit and vegs.
- Choose healthier oils and fats.

Physical Activity & Weight Management

☐ Aim for 150-300 minutes of moderate-intensity aerobic exercise spread out over 5-7 days per week.



Able to speak in short sentences but not sing

- **Do strength training** exercises at least 2 days per week.
- Limit amount of time spent being sedentary, particularly recreational screen time, by engaging in PA of any type.
- (Green segment, BMI < 37.5) Encourage self-directed activities.
- (Red segment, BMI ≥ 37.5) Consider referral to tertiary weight management programmes.

Mental Well-Being

Manage stress by making time for relaxation and seeking help from supportive people.





and guided imagery



- Aim for 7 hours of sleep each day.
- **Slow down** and be in the present moment.

Aim: Control blood pressure to prevent complications

Recommendations for 'High-Normal BP' apply.

Nutrition & Healthy Eating

Incorporate components of the Dietary Approach to Stop Hypertension **(DASH) diet:**

☐ **Limit sodium intake** to 2000mg per day (about 1 tsp of salt).



☐ Choose fresh produce including fruit and vegs.



□ Limit saturated fat intake.



Aim to substitute ≥20% of refined carbs with wholegrains.

Physical Activity & Weight Management

- Perform exercise
 pre-participation assessment
 before starting any exercise more
 vigorous than walking.
- Aim for 150-300 minutes of moderate-intensity aerobic exercise spread out over 5-7 days per week (able to speak in short sentences but not sing).
- Do strength training exercises at least 2 days per week. Exercise caution when lifting very heavy weights.
- ☐ Limit amount of time spent being sedentary, by engaging in PA of any type.
- ☐ **Gradually increase** PA levels, focusing on both duration and intensity.
- ☐ (Orange segment, BMI 18.5 to <32.5)
 Consider referral to structured community programmes, or (Red segment, BMI ≥32.5) to tertiary weight management programmes.
- ☐ (Poorly-controlled) Refer to PCN for support on controlling chronic condition.

Mental Well-Being

Manage stress by making time for relaxation and seeking help from supportive people.



- ☐ Aim for **7 hours of sleep each day**.
- □ **Slow down** and be in the present moment.
- Recognise psychosocial triggers that may cause temporary spikes in BP by monitoring their mood and taking care of themselves.



□ Seek **professional help** if needed.







Aim: Achieve lipid targets to prevent coronary artery disease

Recommendations for 'No Chronic Conditions' apply.

Nutrition & Healthy Eating

Use My Healthy Plate as a guide to eat a variety of foods in the right amounts.



- Limit intake of:
 - ☐ Saturated fat from fatty meat and full-fat dairy products. Replace oils high in saturated fat with mono and polyunsaturated fat (e.g. canola, olive, sunflower oil).
 - ☐ **Cholesterol** to less than 300mg per day.
 - ☐ **Trans fat** by choosing 'Trans Fat Free' products.





- Increase fibre intake with vegs, fruit, wholegrains and soluble fibre (e.g. oats, barley, legumes).
- ☐ Consider consuming 2g of plant sterols/stanol esters# (e.g. one plant sterol or stanol fortified mini yoghurt drink) per day to reduce LDL cholesterol.

Physical Activity & Weight Management

- Aim for 150-300 minutes of moderate-intensity aerobic exercise spread out over 5-7 days per week (able to speak in short sentences but not sing).
- ☐ **Do strength training** exercises at least 2 days per week.
- □ Limit amount of time spent being sedentary, particularly recreational screentime, by engaging in PA of any type.
- ☐ **Gradually increase** PA levels, focusing on both duration and intensity.



Intensity

- ☐ (Green segment, BMI < 37.5) Encourage self-directed activities.
- \square (Red segment, BMI \geq 37.5) Consider referral to tertiary weight management programmes.

Mental Well-Being

Manage stress by making time for relaxation and seeking help from supportive people.



- ☐ Aim for **7 hours of sleep each day**.
- ☐ **Slow down** and be in the present moment.



Refrain from **negative stress coping mechanisms** such as excessive
unhealthy snacking, drinking alcohol and smoking.



^{*}Based on Cardiovascular Disease Risk Calculator

High to Very High Risk* of 10-Year Coronary Artery Disease



Aim: Achieve lipid targets to prevent coronary artery disease

Recommendations for 'Intermediate Risk' apply.

Nutrition & Healthy Eating

Consult healthcare team for dietary requirements specific to their medical condition(s), such as chronic kidney disease.



Physical Activity & Weight Management

 Perform exercise pre-participation assessment before starting any exercise more vigorous than walking.



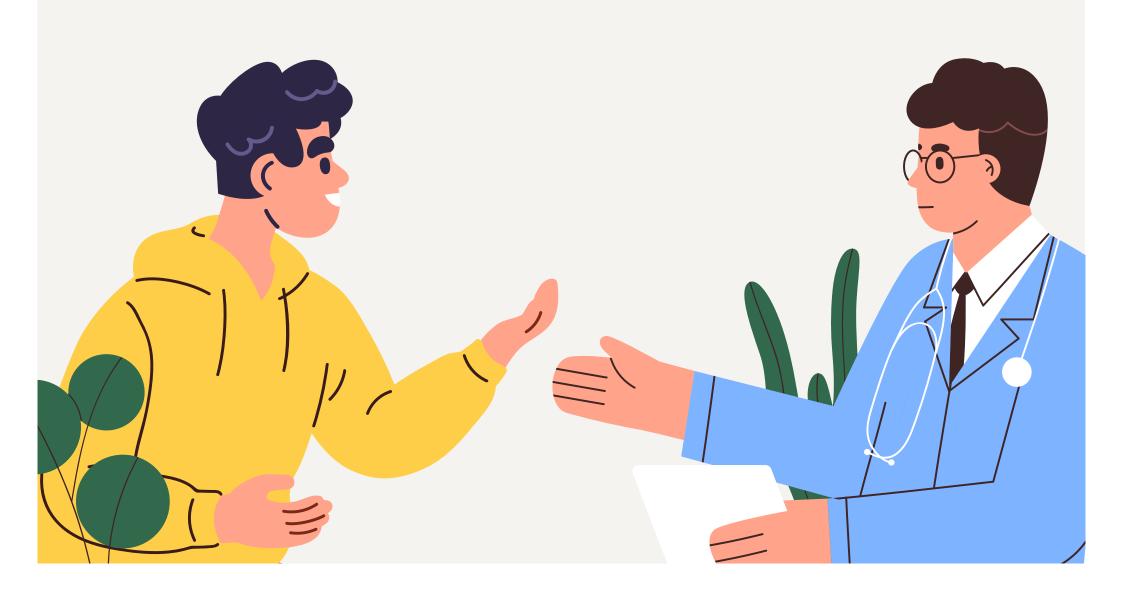
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 Consider referral to structured community programmes, or (Red segment, BMI ≥32.5) to tertiary weight management programmes.
- ☐ (Poorly-controlled) Refer to PCN for support on controlling chronic condition.

Mental Well-Being

Consult healthcare team if they feel overwhelmed by the burden of serious illnesses.



4As Model



4As Model

Adapted from the 5As model by the US Department of Health and Human Services, the 4As Model offers a patient-centered approach to how healthcare professionals might engage patients.

Healthcare professionals can adapt the model to suit the situation.

For example, if you are already familiar with your patient's needs, you could skip 'Ask' and go straight to 'Assess' to understand their progress before proceeding with 'Advise' and 'Assist'.



4As Model: A Patient-Centered Approach to Prescribing Lifestyle Advice



Assist

Understand the patient's needs and preferences. Ask:

- What is important for you?
- What have you tried to change?
- How would you like to move forward from here?

Identify and recommend three lifestyle actions for the patient to consider.

Assess the patient's readiness to carry out lifestyle actions and address barriers if needed.

Work with the patient to create an action plan:

- Agree on a 'To-Do List'.
- Cap at three lifestyle prescriptions.
- Refer the patient to a NC/PCC if needed.
- Review and adjust the action plan during the patient's next visit.

Example: Applying 4As to Diabetes

Ask	Care Team* Patient Care Team Patient	What is important to you right now? I want to stay healthy for my family and my blood sugar results are really bothering me. What have you tried to change? I tried drinking low-fat milk instead of sweetened malted drink for breakfast, but it does not taste the same. I have also tried not to have another cup of sweetened malted drink in the mid-morning.
	Care Team Patient	Is it okay if I share three options with you? (Patient nods). First, you don't have to give up your malted drink. Really?!
Advise	Care Team Patient Care Team	Consider swapping your sweetened malted with low or no sugar malted drink instead (Quality). Second, try drinking ¾ instead of a full cup of malted drink (Quantity). Finally, avoid having your malted drink within 2 hours after breakfast to spread out sugar intake evenly throughout the day (Timing). Mm, they don't sound too hard. How would you like to move forward from here?
	Patient	I could have ¾ cup of low sugar malted drink for breakfast, and have a malted drink with no sugar during my afternoon tea-break instead.
Assess	Care Team Patient	On a scale of 0 to 10, how ready are you to carry out these actions? Oh, easily a 7 or 8. As long as you don't ask me to give up my malted drink.
	Care Team	Great! Let me enter those down in your action plan. And how often would you like to carry out those actions?
	Patient	For both actions, let's put it down at 3 times a week, for a start, to slowly get used to the new habits. Is that ok?
Assist	Care Team	Good idea. It is always better to set small goals and slowly work towards our HbA1c targets. Would you like to learn more about how to improve your health?
	Patient	You mean, I can have additional help?
	Care Team Patient	I can write you a referral to see a Nurse Counsellor. Would that help? Thank you.