



# DIETARY MANAGEMENT OF PATIENTS WITH CHRONIC DISEASES

Text by Jaclyn Reutens

There has been growing evidence demonstrating that many chronic diseases are preventable through a healthy lifestyle. Complications of diseases and their effects on morbidity and mortality can be prevented or minimised with effective and timely lifestyle interventions.

Thus, for patients who suffer from chronic conditions, a carefully planned diet can make a big difference. With certain diseases, what one eats can help reduce symptoms. In other cases, the diet can improve health significantly.

In particular are two prevalent chronic diseases – diabetes and hypertension. The National Health Survey conducted in 2010 found that one in nine (11.3%) Singapore residents aged 18 to 69 years had diabetes mellitus and slightly less than one in four (23.5%) Singapore residents aged 30 to 69 years had hypertension.

## Diet and diabetes

Diabetes cannot be cured but it can be successfully treated with a combination of diet, exercise and medications. Carbohydrate directly impacts glycaemic control. Protein, fat and fibre indirectly affect how fast the blood glucose level rises. Patients need to achieve a balance of these nutrients.

The cornerstone of a diabetes diet is portion control. The glycaemic load of a meal is far more important than the glycaemic index of a food.

### Common misconceptions

These are some common misconceptions patients may have about food and diabetes.

**Misconception:** “Carbohydrates are bad for diabetes.”

**Truth:** While carbohydrates have the most immediate effect on blood glucose levels, our body needs carbohydrate foods to get other essential nutrients. Example: wholemeal bread provides a good amount of carbohydrates as well as dietary fibre, zinc and potassium. A lack of carbohydrates will trigger hypoglycaemic attacks.

**Misconception:** “I have to give up desserts and sugar completely.”

**Truth:** That is a herculean task and one that is probably 1) not necessary and 2) impossible to maintain for the rest of one’s life. Just cut down on the portion and frequency, use artificial sweeteners, or make nutritious desserts with fresh fruits.

**Misconception:** “I can’t eat fruits because they contain sugar.”

**Truth:** Fruits do contain sugar called fructose. It’s completely different from

sucrose, the white sugar that is added to tea and coffee which we continuously advise patients to cut back on. Fructose found in fruits raises blood glucose levels slowly because fruits also contain dietary fibre that slows down absorption. They are also an abundant source of essential vitamins and minerals. The bottom line is: diabetics can safely eat fruits as long as they space it out throughout the day.

**Misconception:** “Brown sugar is better than white sugar.”

**Truth:** Nutritionally, they are the same. They contain the same amount of carbohydrates per gram and raise blood glucose levels at the same rate. The only difference is that brown sugar contains molasses that gives it its brown colour.

### Tips to eating better

- Know where carbohydrates are found. Many patients avoid rice but eat noodles and/or snack on biscuits all day. Carbohydrates are found in all types of rice, noodles, pasta, breads, breakfast cereals, potatoes, sweet potatoes, pumpkins, biscuits and cereal grains, such as couscous and quinoa. Encourage patients to opt for wholemeal or wholegrain versions instead.
- Ensure that each meal contains carbohydrates. For sedentary

individuals,  $\frac{3}{4}$  bowl of cooked rice equivalent should suffice for each meal.

- Aim for three meals a day and decide if a snack is necessary. Do not skip meals.
- Avoid excess saturated fat, which wraps around insulin receptors and makes it hard for insulin to work efficiently, leading to insulin resistance. Advise patients to cut back on coconut milk (eg, in curries, desserts, laksa), palm oil disguised as “vegetable oil” on food labels, chicken skin, fatty meats (eg, Chinese sausage, luncheon meat, pork belly), pastries, cakes, butter, mayonnaise, creamy soups, etc.
- Use the carbohydrate exchange for meal planning. 15 g of carbohydrates is one exchange. Most diabetics need about ten to 15 exchanges a day. This is one of the most effective tools to manage diabetes. Consider referring your patient to a dietitian for further education.

### Diet and hypertension

To manage hypertension, patients need to control their sodium intake. Singaporeans consume more than 60% of the recommended intake mainly from salt added during cooking and sauces like soy sauce that are frequently used in Asian dishes.

#### Common misconceptions

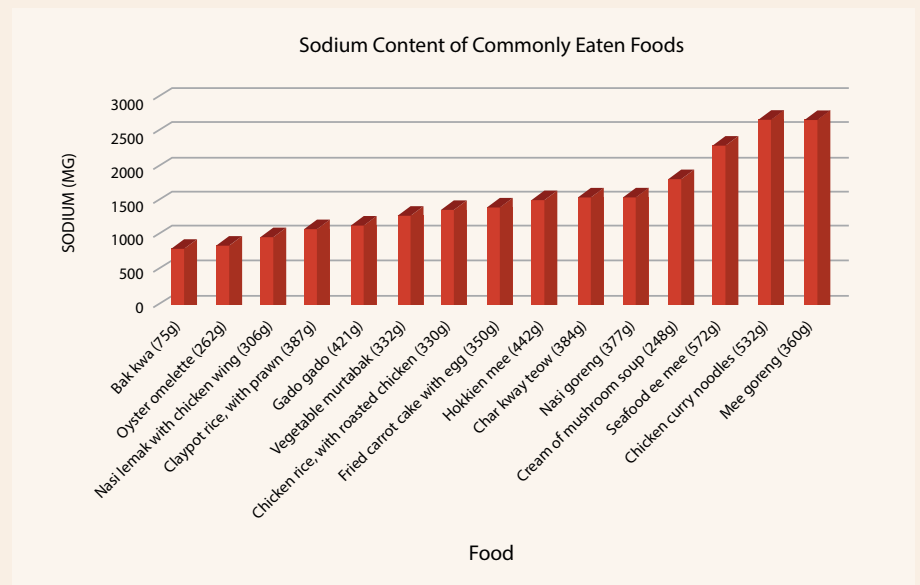
These are some common misconceptions that patients may have about food and hypertension.

**Misconception:** “A low-salt diet means my meals will become tasteless.”

**Truth:** Taste does not only come from salt. Herbs and spices add bursts of flavour to any dish. Fresh ingredients, such as mushrooms, carrots, onions and chicken bones, contain natural flavourings without the harmful effects of excess sodium found in stock cubes or monosodium glutamate. It takes about two weeks for our taste buds to adjust to a less salty taste.

**Misconception:** “As long as I take my medication, I can eat anything I want.”

**Truth:** Lifestyle changes, such as diet and regular exercise, work in synergy with medications to manage



hypertension. These adjustments need to be made for the long term.

**Misconception:** “If I swap to sea salt or use sauces with a lower sodium content, I can use as much as I want.”

**Truth:** These foods do contain lower sodium content than the regular versions. However, the quantity still matters. Our bodies require about 2000 mg sodium per day. One should aim for about 600 mg to 700 mg sodium per meal. Please see the above chart for the sodium content of commonly eaten foods in its usual serving and note how easy it is to overconsume sodium without realising it.

#### Tips to eating better

- Eat more fresh fruits and vegetables. Not only do they have almost zero sodium content, but they naturally contain high potassium levels which lower blood pressure.
- Eat out less often. By cooking their own meals, patients can control the amount of salt and sauces added.
- Cook with herbs and spices.
- Request for less salt in their dishes when dining out in restaurants.
- Drink half the soup, ask for less gravy and resist dipping foods in soya sauce as hawker foods tend to be higher in sodium.
- Look for lower sodium options. The Health Promotion Board endorses food products that are lower in sodium with the Healthier Choice Symbol.

### Additional things to note

A short note on weight loss...

Most patients diagnosed with diabetes and/or hypertension are overweight. Doctors have to stress the importance of bringing that weight down to a healthy level or at least lose 10% of initial weight for those who are obese. It makes a significant difference to their disease management. It has to be done gradually – no crash dieting please. Avoid juice cleanses and the infamous no-carbs or low-carbs, high-protein diets.

Seeking guidance from a dietitian or doctor will help patients manage their health problems far better than self-prescribed diets. We are what we eat. Nutrition education can help reduce premature mortality and improve their quality of life. ◀

Jaclyn Reutens is a dietitian and the founder of Aptima Nutrition & Sports Consultants located at Camden Medical Centre. Having 15 years of experience in nutrition, she specialises in weight management, chronic diseases and sports nutrition. She strongly believes in practical dietary strategies for maximum health benefits.

