Diabetes:

is it time to flatten the curve?

A decade ago, out of the blue, I received a type 1 diabetes diagnosis. Over the next few months, I focused on trying to reduce post-meal blood sugar spikes and episodes of hypoglycaemia. In the language of pandemics, I tried to 'flatten the curve.'

Alongside my insulin regime, I began to reduce my starch and sugar intake. I was careful about how I ate high glycaemic foods and tried to combine the higher-glycaemic sugary and starchy foods with unsaturated fats, proteins, or fibre to avoid peaks and troughs in my blood sugar. It worked. My blood sugars quickly fell to under 7 mmol/L.

LOW CALORIE DOES NOT ALWAYS EQUATE TO LOW GLYCAEMIC

I also started to notice that as a society, we do not pay much attention to blood sugar 'spikes' or post-prandial high blood sugars. Perhaps, because they are invisible or difficult to measure (unless we have a continuous blood monitoring device). Our language tends to focus on 'weight' or 'calories', both measurable variables. But 'low-calorie' foods do not always equate to a 'low-glycaemic' index. As a result, we may miss out on opportunities to adjust our diets and balance our blood sugar.[1]

There are modest changes that could be made, such as diluting children's fruit juice, adding protein to an otherwise starchy and sugary breakfast, or snacking on nuts, cheese, or yoghurts. Small alterations to meals, such as changing the ratios on our Indian takeaway or roast, by reducing the potato, naan bread, rice, and Yorkshire puddings and increasing the proteins and high-fibre legumes or vegetables could help flatten the elevated peaks.

ITS NOT JUST ABOUT BMI

I began to work with pre-diabetic patients as a group facilitator. Many patients believed that they had a reasonably healthy diet and were generally following the government

recommendations. There would often be people in each group who had an average or low BMI and wanted to maintain or gain weight, while reducing their blood sugar level. Identifying the high-glycaemic foods in their diets, and finding lower glycaemic alternatives, changing food group ratios, avoiding starch and sugary foods in isolation or just before bed, often seemed to reduce blood sugar levels.

Research from the National Diabetes Programme 2017/2018 indicated approximately half of patients with elevated blood sugars, with an HbA1c greater than 42, were not clinically obese. Approximately 15% had a BMI of less than 25, meaning the patient was average or under-weight.[2]

Many of these patients would have been unaware that they were at risk of diabetes. Risk factors often include weight, age, ethnicity, and blood pressure. High-glycaemic diets or blood sugar spikes are curiously absent from these lists, despite being linked as a cause of type 2 diabetes.[3]

PEAKS AND TROUGHS

Weight and calorie counting may be helpful to some patients. But for those who do not find it beneficial, patients with a BMI under 25, or for those who have struggled with dieting, perhaps opening up perspectives and language around blood sugar peaks and troughs and learning how to 'flatten the curve' may be useful.

IN PRACTICE

A shift of focus from 'weight loss' to 'reducing blood sugar spikes' may engage a different cohort of patients with elevated blood sugar levels. It may also have the anticipated unintended consequence of weight loss.

Some patients may feel 'helpless' as they attribute their blood sugars to factors out of their control, such as their ethnicity or certain medication they are taking. Identifying these barriers and discussing aspects they feel they can influence may help promote behavioural change.

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