# CHAPTER 2 DIET AND LIFESTYLE INTERACTIONS

#### **Get the Facts**

- Diet and Lifestyle have at least three components: biochemistry and hormones, our behaviour from our own mind and brain and external social behaviours and lifestyle.
- > The majority of current research focuses on the biochemistry, hormones, genetics and the microbiome we live with.
- Most researchers and reported studies fail to understand the interactions and complications between these factors. This confounding of research says that diets and lifestyle are complicated, whereas the principles are not.
- Diets / changes in lifestyles require change in each of these areas. Diets fail. Science shows us why.
- In understanding why diets fail, science and business principles give us direction about what to change, tactics on how to change, and how to succeed long term.

### **Understand the Science**

Many suggest the whole food / diet / health issue is too complicated, yet others will promote a view that being healthy is as simple as 1,2,3. They will write a book and sell you the guidelines to perfect health in a few steps along with a monthly charge on your credit card.

When I started this book, I thought health and diet were mostly about biochemistry and hormonal components and excess weight was simply "eat less, move more". That's what is in the published science and that was my background and therefore my starting point. What I learnt from researching this is that these are three quite different processes. They are interconnected. The simplest way to understand this relationship is that diet and health are like a three-legged stool. If you have any of these legs "wrong" or out of alignment, the stool falls over. If your health or your weight is out of balance you need to address it as a whole system and not just one component.

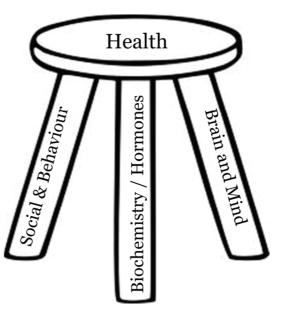


Figure 1 The Three-legged Stool of the Take-Out Diet

Science shows that all diets, and most health programs, fail in the medium to long term. Why? Eighty percent of dieters weigh more than when they started the diet two years prior. If you have dieted, and after two years still weigh less than you started, you are an anomaly! Diets are not alone in being ineffective. A recent longitudinal study in Canada followed over 5,000 patients who were aged 50 years or older. These folk had an initial diagnosis of chronic illness (heart disease, cancer, stroke, respiratory disease, and diabetes). Even after being diagnosed, and after being counselled by a health care professional on lifestyle modifications to change their condition, most people did not make major lifestyle adjustments. You would think anyone with these conditions would change, but not so.

While I was trying to understand why diets fail, I started looking for other factors. Most research is on biochemistry, endocrinology, and many of the other things that affect our appetite or metabolism seemed to be missing from this research. There are many effective short term diets. But why do people give up? Why did some diets work some of the time, but not all of the time? Experts seem to ignore this line of research, although I have seen some initiatives recently.

## Why Did My Diet Work?

How did this relate to me? My personal experience may help illustrate these principles. What were the personal challenges; why

did I actually lose the 30 lb (14 kg) in weight? I had started this health process by going "sugar free" (Sweet Poison book by David Gillespie) and I combined this with the 5:2 diet (Eat Fast Live book by Michael Moseley and Mimi Spencer). At the same time, I was researching scholarly articles for this book, and tracked my food with MyFitnessPal (calorie logging) to see what changes I was making. These three changes in my diet effectively meant I was having a low carbohydrate high fat (LCHF) diet! It was impossible to say what was actually the most important. It became clear that keeping the weight off long-term by making "lifestyle" changes would be my challenge like most others. So I had to reconcile the science evidence into a unifying theory. Hence the three-legged stool concept. In the context of the balancing act with this stool, I started to see some of the answers about the internal behaviours, and the external societal changes too. So throughout the book we will constantly refer back to this balancing act.

Going sugar free (cutting out *added* sugar and especially the fructose component) meant that my intake of carbohydrates went way down. Why? Because sugar is added to most food products, including bread and flour-based products such as cakes and breakfast cereals. I had to change to whole foods and avoid supposedly "healthy choices" with low fat, etc. because often, when fat is reduced, sugar is added to improve taste. We know from the biochemistry and hormonal leg of the stool that lower carbohydrate diets, with no change in protein levels, makes you less hungry. Carbohydrates make you hungrier. Low carbohydrate diets increase lipogenesis (fat burning); and reduce overall calorie intake.

What was simple (avoid added sugar) became a complex event, not just from the biochemistry perspective, but also affected my behaviour and my social behaviour. To make it even more complex, a change in diet affects gut bacteria, the microbiome, and that adds another layer of complexity to the biochemistry and hormone leg. These weren't the only confounding factors.

Adopting a 5:2 diet and calorie counting (food intake, daily weighing) changed my behaviour. The more protein I consumed the less hungry I was and thus I snacked less. The 5:2 diet means average consumption over a week was reduced but the 5:2 also changes your mindset about hunger and calorie restrictions and helps manage portion size. The sugar free, lower carbohydrate and the 5:2 also confounded socializing. When I went out with friends, my food choices changed. We know eating with friends increases your food consumption. If you go to a café and get presented with a

cabinet display of cookies, muffins, and bread products, it can be very difficult to snack healthier. If you go to a buffet, you will eat more. While I had plenty of willpower, I could see why the psychological components can be extremely difficult, and how these internal / external factors would cause diets to fail. It became easier for me as I was writing a book, and could look at some of these things impartially as I tried to analyze them. As I talked to others on a weight loss journey, they started to share why they failed at keeping weight off. Their stories got me looking for explanations about the other legs of the stool.

Their stories aligned with books about personal behaviour such as *Weight Loss for Food Lovers* by George Blair-West (the 2<sup>nd</sup> leg), or the book about our food producers *Salt Sugar Fat* by Michael Moss (the 3<sup>rd</sup> leg). They added to the information and gave intriguing and at the same time dismaying perspectives.

#### Conclusion

This three-legged stool has to be integrated into the whole area of change management. What is needed before you decide to change? What is needed to effect change? What is needed to ensure the change is effective long term? I started to see why there was so much confounded commentary out there on health. Why a program could work short term, but fail long term and why so few people actually made long term lifestyle changes. More importantly, I began to understand what the interactions were. I believe that as we understand these interactions, we can apply them for successful long term change.

### References

a. Katch, V. (2013) Why is behaviour change so hard? Michigan Today. http://michigantoday.umich.edu/a8589/