



For 60 days I would test out a high-sugar diet by consuming 40 teaspoons of sugar a day. 'You're a lunatic!' I hear you cry, but the scary fact is that 40 teaspoons is what many Australians are consuming every day. DAMON GAMEAU



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THAT  
**Sugar**  
BOOK



THIS BOOK WILL CHANGE THE WAY  
YOU THINK ABOUT 'HEALTHY' FOOD

THAT  
**Sugar**  
BOOK

DAMON GAMEAU



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# INTRODUCTION

Apart from climate change, or perhaps who the best 'One Direction' singer is, there is not a more fiercely debated, opinionated or instagrammed topic on the planet than nutrition. Trying to find answers, especially if you're looking online, can feel like you're wading through a mass of confusion and contradictions fuelled by inscrutable scientific data, dogmatic culinary gurus and pages of vitriolic comment. It is now unclear whether bread is a friend or an enemy; dairy is scary but butter is better; and what about feta? Some foods have even stepped into some kind of nutritional phone-booth and emerged as 'super foods'.

Be it health advocates, the media, food bloggers, friends – it seems everyone has a different opinion on what we should and should not eat.

Amid all the debate though, there is one ingredient that seems to be the current darling of the nutritional paparazzi: sugar.

Over the past few years, sugar has dominated the headlines, with plenty of speculation and bickering over its effects on our health. I felt quite ambivalent about it until two blue lines appeared on my better half's pregnancy test. The topic then seemed to rocket in importance so I decided I better bypass opinion and find out for myself.

We can read all we like about a subject but in the end all we ever have is our own experience. This book is about sharing my sugar experience.

## 60 DAYS, 40 TEASPOONS

For 60 days I would test out a high-sugar diet by consuming 40 teaspoons of sugar a day. 'You're a lunatic!' I hear you cry – but the scary fact is that 40 teaspoons of sugar is what many Australians are consuming everyday, and teenagers are having even more.

There would be a twist, however. Unlike the average teenager, I would only eat perceived 'healthy' foods – foods generally believed to be low in, or free from, sugar. This meant I had to reach my 40 teaspoons a day without soft drink, chocolate, ice-cream or confectionery. Instead, my diet would be made up of foods like low-fat yoghurt, cereals, muesli bars, juices and sports drinks: all of which are full of 'hidden sugars'.

During the experiment I was monitored by a team of doctors and scientists. I also embarked on a sugar-fuelled adventure across Australia and the USA, filming the whole thing for a feature documentary film. I met some wonderful characters, interviewed the world's leading experts on sugar, watched my mind and body change and learnt more about this little white substance than I ever thought I would.

This book is divided into four parts. For those of you who like a good story (or a bad one depending on your taste), the first section follows the ups and downs of my sugar-eating lunacy. The second part is all about the science: the facts come complete with pretty pictures to help explain what sugar did to my mind and body. The third part describes how I successfully removed sugar from my diet. It also provides some simple assistance for those who may also want to reduce their sugar intake and live a healthier life. The fourth part includes an all access pass to recipes that helped me during the post-experiment detox.

I went into this adventure without knowing what to expect. Some of what I learnt was pretty frightening – but it has changed my life and subsequently the life of my child. My hope is that in some small way it might change yours too.

**'SUGAR ISN'T EVIL, BUT LIFE IS JUST SO MUCH BETTER WHEN YOU GET RID OF IT.'**

KATHLEEN DESMAISONS,

AUTHOR OF *THE SUGAR ADDICT'S TOTAL RECOVERY PROGRAM*



The current favourite of the nutritional paparazzi: sugar.



#### THE SUGAR SQUAD:

Dr Debbie Herbst, Dr Ken Sikaris, Sharon Johnston, David Gillespie

'I EAT A LITTLE PIECE OF CHOCOLATE EVERY DAY BUT I UNDERSTAND THE ADVERSE EFFECTS IF I EAT TOO MUCH OF IT.'

PROFESSOR BARRY POPKIN, UNIVERSITY OF NORTH CAROLINA



## THE EXPERIMENT

The first step in the experiment was to assemble a cracking team that could guide me along the journey and monitor any changes to my body. This was to make sure that A: things were done correctly and B: I didn't die - although what a film that would have made. I enlisted a local GP (to monitor my overall health), a clinical pathologist (to check my blood readings), a nutritionist (to guide my food choices), a sport scientist (to accurately measure my weight, and also provide the coolness factor) and David Gillespie, author of the bestselling book *Sweet Poison* (to help me read food labels, understand the science, and perhaps acquire some sugar 'street cred').

At the start of the experiment, I hadn't touched any refined sugar for nearly three years, and I hadn't consumed alcohol or caffeine for five years. I am clearly in love with this girl, aren't I? I also just became addicted to feeling clear in my mind. (Perhaps I am a clarity junkie? I just visualised hooking up with a 'meditation dealer' on a wild night in Kings Cross and 'getting present' together.)

All the tests pre-experiment showed that I was in good health, especially in my liver, which often bears the brunt of an excessive lifestyle. My assembled team agreed I had a great body on which to conduct the sugar experiment - thanks, guys - because it was not affected by anything that would cloud or confuse the results, such as caffeine, prescription medications, drugs or alcohol (this test would have been a disaster in my early twenties).

THE SORTS OF FOODS I WILL BE EATING  
DURING THE EXPERIMENT



Everybody in the team was looking forward to seeing what would happen to my body in an excited, and slightly sadistic-masochistic way.







The sugar I eat must be 'hidden sugars' found in foods that many people would consider healthy.

## IT BEGINS: BOOSTER ROCKETS FOR BREAKFAST

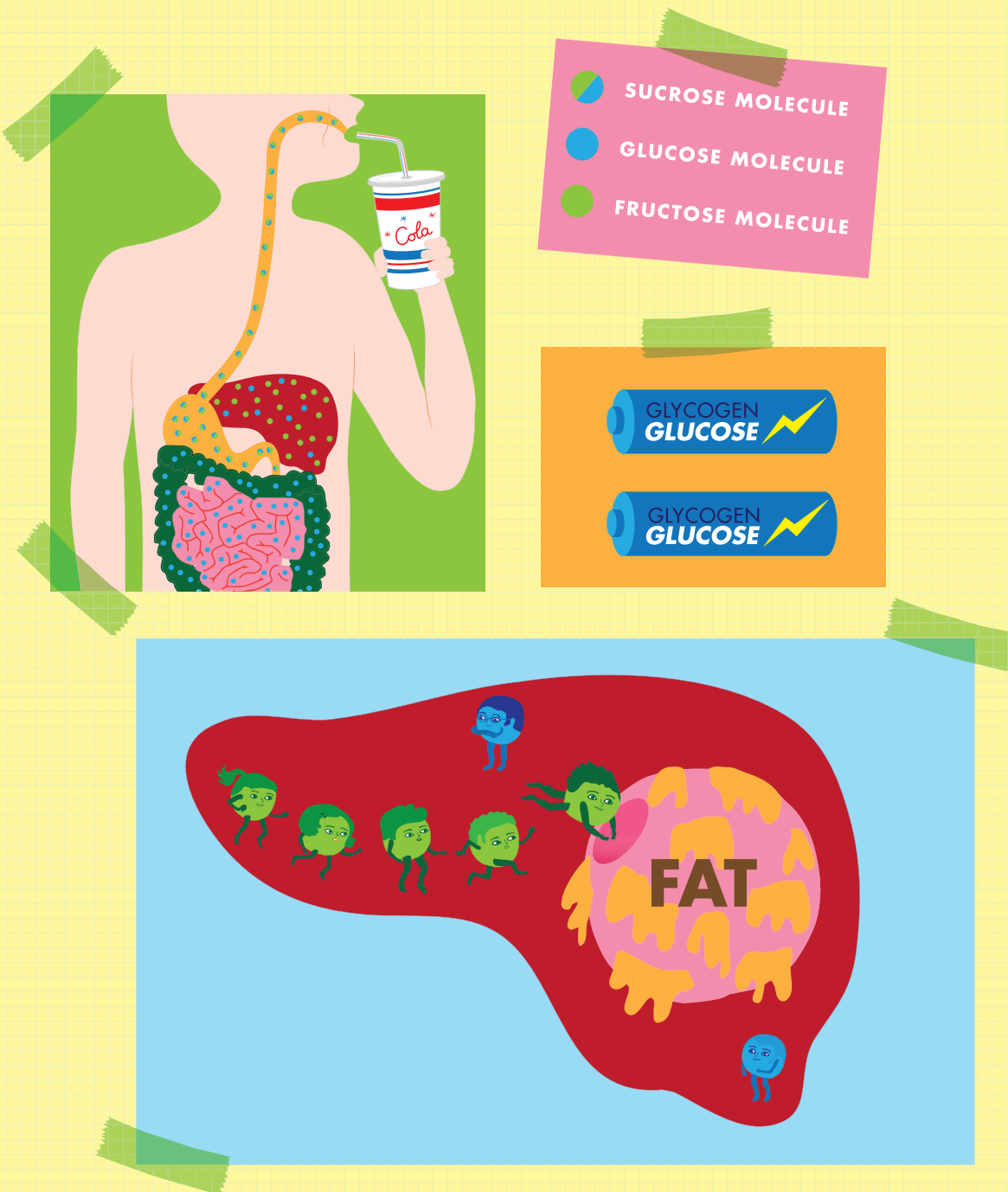
My first meal was breakfast. I chose a bowl of Just Right cereal, two scoops of low-fat yoghurt and a 400 ml glass of apple juice. This apparently healthy meal provided 20 teaspoons of sugar – all before I had even reached the gossip section of the newspaper. That's more than twice the amount the American Heart Association recommends men consume in a whole day (I would use the Australian teaspoon recommendations but we don't have any).

After not having had refined sugar for two years, the first surprise was the immediate effect on my mood. I had naïvely assumed the first few days would be quite fun. I was secretly looking forward to having a few foods and drinks I hadn't tasted in ages. Schmuck.

Straight after my Just Right breakfast-dessert combo, I noticed the sudden ramping up of my adrenals and the booster rocket-type surge to my overall energy. It was like taking a set of jumper leads to my chest. I flicked into hyper-drive and casually threw a wave to the Millennium Falcon as I sped by.

I then looked for a target. I needed to talk or more accurately offload. Poor Zoe copped a spray of vowel bullets from my mouth gun. I could see the reality of the next 60 days descend on her in one terrifying swoop. She is a smart woman and that look of fear also implied a deep knowing that what goes up must come down. Sure enough, 45 minutes later life-of-the-party, what-are-we-doing-next Damon had morphed into grumpy, edgy, who-gives-a-rat's-arse Damon.

Now I acknowledge I might have been particularly susceptible to the sugary high (and low) because I hadn't had any in a long time, but I was still shocked, and so was Zoe. In that moment we knew that for the next 60 days there would be another woman in my life. She wore a white coat made of tiny crystals and would definitely be the one wearing the pants in the relationship.



It's estimated 5.5 million Australians now have fatty liver disease. Only 6,000 of these are the result of alcohol.

## HOW SUGAR GAVE ME A FATTY LIVER

The moment of the experiment where I really knew that there would be a story to tell (and the moment that lit up the producer's face like a Coke sign in Las Vegas) was on Day 18 when I was told that my liver had turned to fat.

We know that sugar is sucrose, which is made up of 50 per cent glucose and 50 per cent fructose. When sugar enters our body, it heads straight to the small intestine. On arrival it is met by an enzyme that splits the sucrose into fructose and glucose. The fructose and glucose molecules are absorbed into the bloodstream and head towards the liver, which is an incredibly important organ for sugar metabolism and is a kind of 'sugar-sorting station'. On the way, the glucose is used for energy by any cell that needs it. The fructose, however, needs to be processed by the liver before it can be used for energy.

When it comes to glucose, the liver deals with it by either using it for energy or by storing the excess for when we are running a bit low. This form of energy storage is called glycogen and it is like our body's spare battery on a laptop. When we are connected and eating, we charge it up. When we disconnect, we first use up what's in the bloodstream, then we start depleting the glycogen stores (running on our spare battery).

### FRUCTOSE TO FAT

When it comes to fructose however, the liver responds in a different way. There is an enzyme called fructokinase that is not regulated by liver energy status - meaning that it is actually 'switched on' all the time, so the liver pulls fructose out of the blood and hoovers it up regardless of whether it needs it or not. (It could be said that the liver has a massive crush on fructose and love is blind.) Scientists believe this is because throughout evolution, fructose was very rare in nature: only found in honey or seasonal fruits (remember; no processed foods or juice bars).

The fructose is also used for glycogen if needed, especially for topping up after a big sleep or after a marathon run. But once the battery is full, the fructose immediately gets turned into fat. This is what we do when we have too much energy - we store it as fat. Because the liver is switched on to fructose all the time, it just keeps pouring in and ramps up the fat. This is where the problems really begin.

This stuff can explode in your brain if you're not careful. It's important to understand this because fructose turning to fat in the liver can set off a series of chain reactions in the rest of the body.



THE GOOD NEWS:  
AND HOW I GOT  
HEALTHY AGAIN

PART THREE



ORGANIC

# APPLE JUICE

## NUTRITION INFORMATION

Servings per container: 10

Serving Size: 200mL

Avg Quantity	per Serving	per 100mL
Energy	400kj	200kj
Protein	0.2g	0.1g
Fat, total	0g	0g
- saturated	0g	0g
- trans	0g	0g
- polyunsaturated	0g	0g
- monounsaturated	0g	0g
Carbohydrate	22.5g	11.5g
- sugars	20.4g	10.2g
Dietary Fibre	0.2mg	0.1mg
Sodium	7mg	4mg
Vitamin C	80mg	40mg

\* Recommended dietary intake (Australia)

**Ingredients:** Reconstituted Apple Juice (98%), Folic Acid, Vitamin C, Flavour MADE IN AUSTRALIA

Shake well before use. Best served chilled. Refrigerate after opening & consume within 5-7 days.



## HOW TO READ LABELS

Learning to read food labels really helped me to reduce my sugar intake. A study by Dr Rebecca Huntley revealed we get 55 per cent of our nutritional advice from a packet or label and only 24 per cent from health advocates. So with companies putting profits ahead of health, it pays to know how to read a label carefully. When it comes to understanding how much sugar we are actually consuming, it is vital.

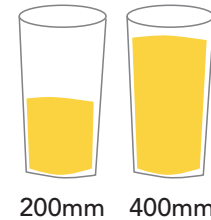
Companies fight very hard to avoid front-of-packet labelling and when you do find the nutrition table, sometimes it can feel like you need a maths degree to figure it all out. The key with sugar is to know that 1 teaspoon = 4.17 grams of sugar (4 grams makes it easier to calculate how many teaspoons of sugar you are consuming over a day).

For example, say you look at the nutrition table on a food label and it states SUGARS 20 g. You can calculate the number of teaspoons in that food by dividing this number by 4 (grams contained in a teaspoon). Therefore there are 5 teaspoons of sugar in the product.

But it gets trickier ...

Opposite is the label for a large bottle of apple juice.

This label tells us that *per serving* this drink contains over 20 grams of sugar. So there are 5 teaspoons of sugar in this serving. But here is where companies get cheeky. This *per serving* size is 200 ml. If we pour 200 ml into a glass we realise what a small serving this is - I would normally have double that at least in one serving. This means we now have 400 ml and we need to double the *per serving* size. So we now have 40 grams or 10 teaspoons of sugar in this glass of apple juice.



So don't be swayed by juice labels that boast 'No Added Sugar'. Because with 10 teaspoons per glass, there's enough sugar in it already!

In Australia, companies do not have to be specific about what type of sugar is in the food. For example, yoghurt may contain lactose plus sucrose but the label will just say 'sugars' (see label on next page).

I calculate that 200 grams (about half a large tub) of yoghurt contains about 9 grams of lactose. According to the label, the yoghurt contains 28 grams of sugar per serve. A serve is 50 grams. So if 200 grams of yoghurt contains 9 grams of lactose, a 50 gram serve will contain 2 grams.

If the total sugar content is 28 grams, and lactose accounts for just 2 grams, the remaining 26 grams of sugar is likely to be added sucrose. This is just over 6 teaspoons of sucrose per serve.

The American Heart Association recommends no more than 9 teaspoons a day for men and 6 for women (Australia's Heart Foundation currently doesn't set teaspoon guidelines about sugar intake). When you consider that a glass of apple juice contains 10 teaspoons of sugar, you can



## THE COCOBANADO SMOOTHIE

1 small avocado  
 1 fresh or frozen banana  
 About 1 cup coconut milk  
 1 tablespoon coconut oil

Great for kids as a transition away from sweeter drinks. Very filling, full of energy and contains natural sweetness. It still contains fructose from the banana but remember it's about 'bridging' off sugar early on and easing yourself or your children into a new way of eating. It's important to be kind to ourselves in the first few weeks of any transition.

Put all the ingredients in a blender (add the coconut oil just before you blend so that it doesn't go solid).

Blend until smooth. Thin with more coconut milk or coconut water until you get the consistency you like.

*Hint: Peel the banana before you freeze it.*

MAKES ABOUT 2 CUPS

## BERRY POWER SMOOTHIE

1 cup unsweetened almond milk  
 or coconut milk  
 ½ fresh or frozen banana  
 ¼ cup frozen berries  
 1 tablespoon rice or pea  
 protein powder  
 1 teaspoon raw cacao powder  
 (or cocoa powder if you don't  
 have cacao)

Put all the ingredients in a blender. Blend until smooth. Thin with more almond milk or coconut milk until you get the consistency you like.

MAKES ABOUT 2 CUPS





## A BONA FIDE WINNER THE BRIDGING SALAD

1 bunch kale  
 2 tablespoons olive oil  
 Sea salt  
 3 teaspoons apple cider vinegar  
 1 small red onion, thinly sliced  
 Black pepper  
 Handful of almonds (about 16)  
 with skin on (preferably  
 activated), chopped  
 ½ cup crumbled feta  
 1 cup blueberries  
 400 g tin lentils, rinsed  
 and drained  
 ¼ cup desiccated coconut,  
 lightly toasted

**Light and good for transitioning off sugar as it has a sweetness from the blueberries.**

Remove the stalks and tough seams from the kale. Tightly roll up the kale leaves and slice into thin ribbons. Put in a large bowl and drizzle with 1 tablespoon of the olive oil and sprinkle with some sea salt.

Massage the kale for a few minutes with your hands to soften it, then leave it to sit for 5–10 minutes.

Add the remaining olive oil, vinegar, onion and some freshly ground black pepper. Leave to marinate for 10 minutes.

Just prior to serving toss through the almonds, feta, blueberries, lentils and coconut.

**Note:** Replace blueberries with sliced orange and feta with goat's cheese.

**Hint:** Use brown or green lentils. The tinned variety is convenient but you can cook 1 cup of Puy lentils in plenty of boiling water for 15 minutes, or until soft, then drain and cool.

**SERVES 4**





## THE ONCE-A-YEAR BIRTHDAY CAKE

# RAW FIG AND COCONUT CAKE WITH AN ALMOND CHIA BASE

**BASE**

2½ cups blanched almonds,  
soaked in water and drained

1 pitted dried date

1 dried fig

½ cup chia seeds

½ cup shredded or desiccated  
coconut

½ cup coconut oil

½ cup water

**TOP LAYER**

2 cups cashews, soaked in water  
and drained

1 pitted dried date

2 dried figs

400 g tin coconut milk

½ cup desiccated coconut

**Please note that this cake still contains fructose in the form of dried fruit, but it's much healthier for a special occasion than the standard supermarket cake.**

Put all the ingredients for the base in a blender or food processor and blend until well combined. Spread the mixture evenly into a cake tin, pressing down until it's compact. Take special care to get the edge even.

Rinse the blender. Then blend all the ingredients for the top layer together until smooth. Pour over the base layer in the cake tin.

Freeze overnight. Decorate after freezing with your choice of edible flowers, fruits or nuts. We used thyme, clover and rosemary flowers. (You can also use violets or other edible flowers.) Before serving the cake place in the refrigerator to soften a little. Cut with a knife that's been run under hot water.

**Hints:** Always soak the almonds and cashews in two separate bowls overnight or a minimum of two hours before blending.

*Melt the coconut oil by running the jar under hot water before measuring to make it easier.*

**Note:** I have been known to throw a slice in the blender to make a delicious smoothie.

