

A TRULY SOUTH AFRICAN LCHF COOKBOOK

Low Carb is
LEKKER®



INÈ REYNIERSE

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Photography by Sean Calitz
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Author's acknowledgements

To my husband Louis, who allowed me to feed him thin. Your passion for this lifestyle is contagious. Thanks for challenging me and being my biggest, handsomest fan, protector and provider.

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To the ONE who fearfully and wonderfully made us ... I give a grateful heart.



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Introduction

We have this saying in South Africa: 'local is lekker'. It simply means that local culture is something to be desired and enjoyed. We use this phrase to encourage South Africans to support their local artists, businesses, foods, feasts, produce ... you name it. It's the glue that makes us proudly South African.

After a year on a low-carb diet, I realised that my family had reached the point of no return. We felt better than ever, dropped some kilos and could think coherently ... most of the time anyway. We wanted to share the joy of our *real, good* nutritional values and lifestyle with others, but many people were so overwhelmed by the thought of it and figuring out recipes that I decided it was necessary to take on our proudly South African recipes and 'decarb' them!

So I started experimenting and concocting. My kitchen became a test kitchen and my camera and I became a newfound food blogger combo. A survival guide to an everyday South African LCHF (low-carb, high-fat) lifestyle had to see the light of day and mindsets had to change under less overwhelming circumstances. And I wanted to pioneer the process.

I began to envision a guide with practical know-how on low-carbing. A recipe book, a short-cut book ... a book for dummies who, like me, do not want to study nutrition but want to consume healthy, smart food and ditch disease. I read through the theories, studies and medical journals so that I could understand LCHF. I was saddened by what I discovered: so many food lies! The nutritional arena started to look like a political campaign. Who will be president: sugar or grain? It is truly worrying that people are dying from heart disease, obesity and diabetes like never before in the history of humankind!

My goal became clear. I needed to help clarify and simplify LCHF. I needed to take all those big words and turn them into layman's terms and, even better, recipes! Plain and simple. And all of this needed to happen on a budget, because low-carbing cannot be only for the rich and famous.

At this point I need to emphasise that the legacy I am hoping to leave behind with this project

is that it must *never* be seen as a diet book. I don't want you to feel like this may be yet another set-up for failure. I want you to know that this is my truest effort to help you understand and feel excited about an authentic lifestyle that corresponds with our human wiring and confirms the method behind the madness through results that bring your health back into balance. It is a 100 per cent sustainable way of nutrient-dense, carb-smart 'fuelling' that could eliminate obesity and disease for good!

THE WHY, IN A NUTSHELL

So why would any person in their right mind voluntarily choose to cut back on carbohydrates, starches, grains, sugar, fructose and processed foods? I mean, everything in moderation is okay, isn't it? Is this not leaning towards the fanatical?

Many of us are allergic to wheat and gluten. Most of us will never know this because it is sold as 'healthy' food and we won't ever look in that file for the cause of illness. The wheat we eat today does not remotely have the same genetic make-up as the wheat our great-grandparents ate. Wheat and grains causes inflammation in the brain, intestines and cells. Grains and sugar cause more obesity and heart-related disasters than cream, butter and animal fat put together. Yet fats get the blame and we end up having to use more medication!

As a family we have experienced that good fats are our friends and low-fat foods actually hijack the nourishment our brains need and exchange it with harmful ingredients in the form of added sugars. You do, however, get good and bad fats, which I explain in my swap-out system (p. 20).

These are my six profound, personal reasons why you should change your eating habits:

1 My husband used to eat a 'healthy' breakfast of muesli, yoghurt and fruit. Around 10h00 he would be ravenous and eat a candy bar. Around 13h00 he would eat his 'healthy' packed lunch of

crackers or a sandwich. Around 16h00 he would feel light-headed and would struggle to focus on his work. He would come home and attack a packet of chips or a couple of bananas, cookies ... whatever he could find. He would then eat two helpings of dinner and fall asleep in front of the television, only to feel tired the next morning. What we did not realise at the time was that he was highly insulin resistant and a breath away from Type 2 diabetes. He was very overweight, and *always* tired. After changing to a low-carb lifestyle he shed 37 kg in 14 months, he has more energy than ever and no longer has cravings and sugar spikes and dips. He is now the *boertjie* (farmer's boy) who tells other *boertjies* that they will survive without their meat-AND-POTATOES regime, and the 'eat as much as you can buffet' has lost all of its carb-filled appeal. Food is not his boss anymore!

2 My son was diagnosed with autism spectrum disorder when he was only three years old. A few weeks after we had started our low-carb journey, I noticed that most of his tantrums had disappeared and more skills and integrated coping skills had emerged. Upon further research I discovered that a grain-free, low-carb, high-fat diet is the best for kids on the autism spectrum or with ADD or ADHD. It eliminates the excess inflammation of gluten in the brain and literally soothes and heals its sensitivities that can manifest in the form of awkward behaviours and emotional meltdowns.

3 My daughter is a dreamer. Some would call it ADD. We took most processed carbs, wheat and sugar out of her diet and now she is focused, slender and the pre-teen emotional roller coaster is almost half what it once was!

4 I'm a writer, voice artist, concept developer and performer and need to come up with great ideas on demand. I used to live a mostly vegetarian lifestyle – because meat and fat just did not quite do it for me – and I often found myself writing until the early hours. I became more and more forgetful and depressed. I felt old, tired and overwhelmed by life. I constantly had cravings and chocolate was my best friend. Two weeks after unhealthy carbs left

my kitchen, and I had eaten more bacon and eggs than ever, my brain came back to life, I dropped a size or two and felt like life had colour again.

5 & 6 I am expecting twins. Yes, twins! More than ever, I think cutting out inflammation-driven and insulin-spiking foods are the best gift I can give our babies. I have come to understand that prevention is better than cure and have been keeping potential food allergens out of my system from the get-go. I currently eat more than 30 g of carbs to sustain them, and also eat a slightly bigger selection of lower carb fruit. I am not striving to intentionally be in ketosis, as pregnancy is NO time for weight loss! As I am writing this book, it is still early days for me, but by the time you read this, two tiny ones might be keeping me very busy. I trust the process to be in GOOD, loving hands.

LOW CARB IS LEKKER

You can eat like a king! Many people have told me how they never felt like they were on a diet after changing to the LCHF way of eating, to which I always say: 'You weren't on a diet! (Diet is a four-letter word to me.) You simply embraced an anti-starving, anti-craving, stable blood sugar, eat-right regime. You connected with real-food goodness again.'

You just need to get past the initial anxiety of 'What is left to eat?', 'How will we be full?', 'This is going to break the bank!', 'What will I feed my kids?' and 'Will our livers explode?' (I get the latter a lot!)

My aim is to help you and your family find normality when you first venture into the low-carb world, from the birthday cake you bake to the dinner you enjoy with your friends. This book will teach you about swap-out foods and before you know it the mind shifts will integrate with your lifestyle as the fat melts away and your mind becomes sharper.

I am by no means a health professional. *Always* consult your doctor before changing your eating plan, especially if you have an existing medical condition or take any medication. So let's figure it out together. Sounds like a plan right?

Yours in low carb, Inè.

Low-carb Living – The Why

South Africa has the third-highest obesity rate in the world, with the United States of America (USA) firmly in first place and Britain second.

Almost half of South Africans are overweight to obese according to a 2014 study conducted by the Medical Research Council. Seven out of 10 women and four out of 10 men are overweight or obese, with a predominance among black women and white men over 35 years of age. Our children rank the fifth highest on the world obesity scale, with almost 17 per cent of children under nine being obese. What a cruel wake-up call!

Preventable 'lifestyle' diseases such as type 2 diabetes, certain cancers, heart disease and strokes are directly related to obesity and are among the top 10 causes of death in South Africa.

Experts are only now starting to see the true identity of the deadly culprit, and among those brave enough to expose this identity, the term *refined carbs* has surfaced time and again.

Statistics have shown that we have become really, really fat in the last 40 years. And no amount of global intervention within the last 20–40 years has made ANY difference! Not a single tub of low-fat anything, no revolutionary diet, no piece of gym equipment and certainly no pill. WHY?

To understand the roots and earliest signs of this problem, we need to take a look at England in the early 1800s and then hop over to the USA in the 1950s.

THE HISTORY OF SUGAR

Sugar has been around for thousands of years and, like most spices centuries ago, it used to be a very expensive commodity. Roman emperors would stir a teaspoon of sugar into water and use it as a remedy for tummy ailments.

In tropical areas where sugar cane grew naturally, people would mostly chew on the fibrous plant. The Chinese, however, processed the sweet syrup from the sugar cane into crystals the size of fine gravel.

As the oceans' trade routes opened up to new world destinations, sugar was introduced to Europe and America, where this sweet wonder did not occur naturally. As tropical islands in the Caribbean were colonised, it started what was called the 'sugar rush', with Britain building an enormous new empire with their 'white gold' or sugar trade. Sugar became the sweetener of choice for elite society in Britain in the 1700s, when it cost the equivalent of \$100 per pound in today's money!

After improved production methods and large-scale cultivation of sugar cane in the colonies, sugar flooded the market. And then it was combined with industrially processed wheat flour and it opened up new ways of cooking. By the 1800s tea was sweetened with sugar, and recipes for jam, sweet pies, cakes, sweet breads, biscuits and chocolate were born. Although expensive, people had to have it. They had tasted life with sugar, and they loved it!

The British liked it so much that they colonised a few more islands in the West Indies and imported slaves to work in their sugar plantations. Within a few years the production of sugar was subsidised to the point where it was no longer only available to the rich, and other classes started to experience the sweetness.

At the start of the nineteenth century, the working class ate a diet of mostly bread, potatoes, cheese, butter and the occasional bacon fat. By the end of the century they were eating mostly bread, margarine, jam and cake. The average Brit consumed about 5 kg of sugar per year in the early 1800s, but that amount literally spiked to 21 kg per year by the end of the century. (Today we average about 60 kg of sugar per person per year!)



The Low-carb Hall of Fame

WILLIAM BANTING

This well-connected funeral director with strong ties to the royal families of the day – he handled the high-profile funerals of King George III and King George V – was also an extremely obese, upper class sugar lover who ended up as a self-proclaimed yo-yo dieter.

Aware of his romance with sugar and seeing the same fattening trend building up on people around him, William Banting decided to take charge at age 67. The diet was suggested to Banting by diabetes specialist Dr William Harvey, who studied under French diabetes researcher Claude Bernard in the mid-1800s, but it was Banting who self-published the first formal, modern version of a low-carb concept.

JOHN YUDKIN

This is the guy who warned us about sugar over 40 years ago!

John Yudkin was the founder of the nutrition department at the University of London's Queen Elizabeth College in 1953 (the first degree in nutrition at any European university). He was just in time to join the heated debate and frantic scientific research efforts of nutritionists across Europe and America, after heart disease levels started to reach alarming heights. For decades butter and animal fats were used without it spurring on such levels of heart disease. Yudkin immediately knew that sugar had to play a role because the British were consuming sugar at levels far higher than at any time before 1850.

Although ridiculed by the American scientist Ancel Keys, who believed that fat was the leading cause of heart disease, Yudkin released the book *Pure, White and Deadly* in 1972.

He wrote in plain English about the direct correlation between sugar consumption and the rise in heart disease. He fed rodents, chickens, rabbits, pigs and even students sugar and carbohydrates, and found raised blood levels of triglycerides, or fat, which was then, as now, considered a risk factor for heart disease. Sugar also raised insulin levels, linking it directly to type 2 diabetes. He also noted that most animals also over-ate on a sugar- and carbohydrate-rich diet, so obesity was also connected to sugar and refined carbs!

'If only a small fraction of what we know about the effects of sugar were to be revealed in relation to any other material used as a food additive, that material would promptly be banned.' – John Yudkin

The food industry launched campaigns against Yudkin, scientists condemned his work and those who agreed with him were too scared to say so in public. Yudkin became a pariah and his views were shunned. His book didn't sell and even though he stood by his scientific finds and convictions, he was publically humiliated and his career mostly ended in shame.

In recent years, Yudkin's work has been brought back into the limelight by childhood obesity specialist, Dr Robert Lustig. But this time it is being embraced by a growing, new generation of medical professionals hungry for science to meet the truth.

GET BIG OR GET OUT! THE BIRTH OF A PANDEMIC

Let's switch on our psychedelic disco lights and time travel over to the USA in the early 1970s. In short, Nixon was president and the country was in shambles due to the war in Vietnam. Food prices were at an all-time high. Nixon, who needed to win the people's trust, appointed Earl Butz as new secretary of agriculture. Butz urged farmers to farm from fence to fence. Small-scale farming disappeared and, almost overnight, giant industrial-scale farming was born.

Bigger farms and soon bigger people followed. More produce meant more food, and that food had to be given places to go and consumers to consume it. But people didn't just want to eat a bigger plate of corn, so the Japanese came to the rescue by producing high fructose corn syrup from regular corn. Also known as glucose-fructose, this syrup undergoes enzymatic processing in order to change some of the glucose into fructose to achieve the required level of sweetness. And the syrup ends up tasting sweeter than sugar at a third of the price. With the mass production of high fructose corn syrup you could drink the corn, bake cakes and bread with corn, make medicine with corn.

What's so bad about this? Increasingly, scientists are making a connection between fructose and the way it assists in suppressing the hormone leptin. Leptin's primary function is to tell your body when you are full.

Dr Robert Lustig on fructose: 'It makes the brain think you are starving. Now what you have is a vicious cycle of consumption, disease and addiction, which explains what is happening the world over.'

The invention of the household freezer proved to be just what was missing to complete the food surplus and convenience of ready-made foods. Freezing products that were now sweetened with corn syrup gave the consumer the opportunity to store foods that were not in season. People could also buy frozen meals and sweet treats and have them anytime.

The concept of 'snacking' started in Britain and quickly found its way into other Western countries. Chocolate bars and other sweetened, processed foods were advertised as the perfect snack between meals, and soon the food business was thriving from our newly adopted snacking habits.

Then, along with the already growing fast-food chains that readily supplied bigger portions, people experienced the power of choice to supersize. Now you could drink a soda that contained up to 50 teaspoons of sugar in one sitting!

In the 1970s and 1980s, however, obesity was not a concern. Their battle was about understanding the causes of heart disease and whether fat or sugar was the culprit. Scientist Ancel Keys drove this campaign and won in favour of fat as being the main role player in heart disease. Interestingly, he did not have full support among his scientific colleagues, but he did catch the USA government's attention. And at a time when corn syrup production was booming, the government supported Ancel's very weak theory that saturated fat intake had probable links to clogging the arteries and causing heart disease.

The plot really 'sickens' from this point on, but THIS marked the point when most people were told by the food industry that they needed to eat less saturated fat and more plant fats such as margarine, and that if they loved their hearts, they should eat low-fat foods, which the food industry supplied in abundance. And when the taste was compromised by taking out the fat, they compensated with ... you guessed it ... sugar!

'You really have this huge load of sugar going to the liver and that's the impact. Not only on the fats in the blood that may lead to cardiovascular disease, but also maybe to fat accumulation in the liver which could have some impact on diabetes and some other chronic diseases.' – Dr Jean Marc Schwarz, Touro University, California

By 1993 obesity rates soared. Pharmaceutical companies made millions out of diet pills and diet books were everywhere. Almost everyone was aware of calorie intake or was on a new weight-loss programme.

After 40 years of low-fat living, why are we more obese than ever? Our arteries are still clogged, we die of more types of cancers, active young people suffer from diabetes and more people die without the dignity of recognising their loved ones due to Alzheimer's. Autism numbers are spiking along with other brain-based illnesses.

'Genetically we have not changed, but our environment and access to cheap food has changed.' – Professor Jimmy Bell, British Medical Research Council

[Special credit to the informative 2012 BBC Two documentary *The men who made us fat.*]

An LCHF lifestyle is all about eating *real* food, food that cannot keep fresh for too long, for a reason... It's what we were created to eat all along!

ANCIENT MENUS

So what exactly did some ancient civilisations eat? Why do we limit noble things such as bread and fruit on a low-carb diet? I've researched the foods of the ancient Egyptians and Israelites and in very broad and shortened terms, they ate:

Meat

They ate mostly two meals a day, one mid-morning and the other in the evening, usually in the form of meaty stews or soups. The meat was usually goat or lamb (beef was for royalty) and they also ate wild poultry, chicken and a lot of fish. The sheep's tail was a fatty cut and seen as an absolute treat.

Fruit, nuts and seeds

During the summer months they ate a variety of about six fruits at the most, usually dates, figs (also wild sycamore figs), mulberries, melons, apricots and grapes. Some regions had apples. The rest of the year they would occasionally have small quantities of dried fruit pressed into a mould called a fruit cake. Fruits such as figs and dates were boiled into a syrup and this was called honey. This date honey was precious and used as a sweetener or to flavour certain dishes. Grapes were preserved in the form

of wine and were only eaten fresh after a harvest. Only royalty could afford coconuts.

They ate various nuts and seeds on a seasonal basis, and made oil from seeds and olives. This was part of the daily diet. Honey from bees was found in the wild and seen as a delicacy. It was the food of royalty and not something to be devoured daily.





Veggies

The poor dug in the fields for wild tubers that were small and very fibrous. Otherwise they ate what they produced in their veggie patch in season, such as leeks, garlic, onions, herbs and squash. Mushroomrooms were gathered after the rain.

Grains and legumes

They ate chickpeas and lentils in stews when meat was not available or was scarce.

To bake a bread for a family of five would have taken three hours of hard labour before it even went into the clay oven. This was a daily exercise. Imagine grinding for hours and then watching your family eat a hand-size piece of flat bread in minutes!

The wheat available at that time was very hard to grind and was pressed into a flat loaf, which was broken into pieces before eating. Not at ALL like the fluffy breads we know today. Their use of primitive equipment meant that a lot of the husks remained, so the bread contained fibre galore! The gluten content of these grains was also much lower.

Dairy

Food was regularly fried or cooked in homemade butter, and they made cheese and cultured (soured) milk and yoghurt.

TODAY'S MENU

We live in a modern society where in one 5-minute trip to the store you can buy food from all continents and all four seasons at the same time. You can buy food that has grown without ever seeing the sun, food that was developed in a laboratory, food that was made to mimic the real thing ... all under the banner of convenience.

Gary Taubes, the award-winning American science writer, says we are not fat because we eat too much, but we eat too much because we are fat. The fatter we get, the more our fat cells need to be fed.

We have moved away from one of the most basic principles of sustained life: food is supposed to be eaten to fuel and maintain our bodies. Instead,

food has become a form of comfort, our happy place or a pick-me-up. We even reward our children's good behaviour with something sweet.

Don't get me wrong, I'm the first person to tell you that we need to celebrate life, and what better way is there to do it than with a feast of beautiful food? But my plea is that you be fuel smart! LCHF gives an authentic guide to times when food was used to fuel and sustain within season and availability. Summer is meant to provide you with abundance and if you are fortunate enough, you should have some fat reserves for winter.

Let's not fuel with glucose, sucrose, high fructose corn syrups, modified hydrogenated oils etc. Eat fruit by all means, but understand that a bowl of three or more kinds of fruit used to be a dessert for kings during a festival, not everyday fare!

We are, however, South Africans living in a modern society. That is why I 'decarb' the foods we know and love and use nuts and seeds to bake instead of wheat flour. It is easier to adapt to an LCHF lifestyle if the dishes you eat are familiar, even if some of the ingredients may not be!



Is all wheat bad for us?

Yes, it is! And here's why:

- 1** Wheat triggers cravings for more carbohydrates. The gliadin protein in wheat drives the appetite, causing us to want to eat more. People who allow wheat into their diet tend to overeat by 1 600 kJ per day.
- 2** Fat from wheat usually accumulates around the belly, where it causes inflammation. This triggers an emergency inflammation signal in the bloodstream, which in return raises blood sugar, blood pressure and triglycerides.
- 3** Wheat is single-handedly responsible for a much higher LDL (bad cholesterol) density in individuals and is directly linked to heart disease. Ironically, we have been told to cut the fat and do 'healthy' whole grains if we love our hearts!
- 4** Wheat triggers acne and many other skin conditions.
- 5** Wheat has a HUGE impact on the brain and nervous system, from triggering mood swings and depression to mania in people struggling with bipolar disorder.
- 6** Wheat is connected to behavioural issues in children with ADD and ADHD and can trigger outbursts, meltdowns, despondence and lethargy, as well as an intense feeling of being overwhelmed in children with autism and Asperger's.
- 7** Gluten-free products are NOT a good alternative for a wheat-free lifestyle. Gluten-free products are made from flours with an even higher GI than wheat flour, which also causes inflammation-driven blood sugar spikes.

Wheat and grains

I wanted to write extensively on bread, wheat and modern grains, because this is where low-carb followers really tend to struggle. Some people go into a state of mourning when thinking about the departure of this item from their menus and others panic at the thought of what to feed the kids. Maybe, after reading this chapter, you might feel empowered to reconsider.

Wheat became a staple for early civilisations simply because the production of wheat meant a sustainable food source that could supply the basic needs of a growing town or city, feeding both humans and animals.

The wheat of the ancient world was very different to the wheat varieties we have today. Pieces of bread were discovered in tombs in Egypt dating back 5 000 years, and traces of einkorn and emmer wheat were found in these preserved ancient breads. Basically they were wild grasses that yielded very small amounts of wheat berries, but they were easy to cultivate. Compared to modern-day wheat varieties, einkorn and emmer wheat contain much less gluten.

We seem to have survived on wheat for a few thousand years, but that's just the problem. Our bodies are not naturally adapted to be wheat-processing factories so we merely survived on wheat, we did not excel on it.

But as the world's populations grew, so did the concern of governments to feed us.

There are currently more than 2 500 varieties of wheat. Almost every country or even region within a country has its own genetically modified version of wheat, all created in a lab. Feeding the exploding world population called for intervention methods in agriculture to yield stronger and larger crops in whatever the challenges of a certain region might be. (This is the case for all grains. Even corn and soy are extensively genetically modified.)

This was the objective. A noble one. But in our food tinkering we neglected the way the core DNA of the kernel was affected and it has led to all sorts of health havoc. This is enough reason for me to pass the bread aisle and sigh in relief.

White flour

Around the time of the Industrial Revolution, more people moved to the cities and grinding flour for most of the day was either not possible or simply not the cool thing to do. It was much easier to pop into the local bakery and get your fill.

In 1879, the first steam mill was erected in London to supply the ever-growing demand for flour. Much larger amounts could be produced in a shorter time, but the problem was that the flour had a very limited shelf life due to the reaction between the fatty acids of the wheat germ and bran when exposed to oxygen. Without the germ, however, the flour would not become rancid. So the good stuff was removed in order to eat the mostly non-essential stuff for longer. (Science for Dummies...)

At the time, white flour was much more expensive than wholewheat flour and hence became a status symbol among the upper classes. The peak in production of refined sugar and refined white flour came about almost at the same time and it was a royal marriage that gave birth to a whole new culinary experience: cakes, cookies, treats and refined breads!

In addition to the process that removes most of the nutrition from the flour, modern flours are also bleached, steamed and bombarded with chemicals.





IS WHOLEWHEAT BETTER?

Not! Two slices of wholewheat bread will raise your blood sugar higher than 6 teaspoons of sugar. Wholewheat bread has an extremely high GI.

WHAT ABOUT MY FIBRE NEEDS?

The bran of a whole grain contains something called phytates, which can also be explained as a mineral blocker that prevents the absorption of calcium, magnesium, iron, copper and zinc.

Rather than to ground flaxseed, pumpkin seeds, coconut and psyllium husks in unsweetened, double-cream yogurt or smoothies or as a wheat-free, gluten-free cereal alternative. (Always drink plenty of water with fibre sources.)

Berries, broccoli, green beans, celery and cauliflower are also good sources of fibre.

WHAT EXACTLY DOES GLUTEN DO?

Gluten is a very complex protein found in the endosperm (basically the starchy part of the wheat berry they don't chuck out with the bran and the wheat germ). The word 'gluten' is Latin for glue and it's gluten's glue-like nature that gives bread its chewy and fluffy texture and makes cakes spongy. But these glue-like properties can put our digestive tracts in a very sticky situation because it is gluten's adhesive texture that interferes with the breaking down and absorption of other nutrients in the same meal. It also ends up as a sticky mass in the gut that is hard to digest.

For someone who is gluten sensitive, this can cause inflammatory symptoms such as fatigue, bloating, diarrhoea and joint pain (especially in the wrist joints). If someone is gluten-intolerant, however, this can lead to celiac disease, meaning their body triggers the immune system to attack the lining of the small intestine and, over time, cause digested food to leak into the bloodstream. This may lead to diarrhoea, abdominal pain, rashes or constipation.

DISEASES AND ILLNESSES LINKED TO GRAINS

- Cancers such as pancreatic, colon, stomach and lymphoma
- Auto-immune diseases such as Hashimoto's thyroiditis
- Infertility
- Diabetes
- Obesity
- Arthritis
- Autism
- Depression, anxiety and schizophrenia
- Allergies
- Alzheimers
- Dementia
- Chronic headaches

If you're interested in reading up more about grains and how they affect the body, I can highly recommend the following two books: *Grain Brain* by Dr David Perlmutter with Kesten Loberg (published by Little, Brown and Company, 2013), and *Wheat Belly* by cardiologist Dr William Davis (published by Rodale Books, 2011).



INFLAMMATION NEWSFLASH

I am going to try and explain the basics of inflammation in very brief and broad terms because this topic is a meaty one. If you are getting ready to start an LCHF journey, you are going to feel inflammation leave your body, and it will be something to celebrate if you know how to appreciate it.

Inflammation in layman's terms is the body's defence and action response to something potentially damaging that entered or injured the body. Acute inflammation is what you get when you sprain your ankle for instance. The swelling, throbbing, redness and warmth that occurs right away is the body's way of saying, 'I'm handling it and I'm healing'.

Chronic or long-term inflammation occurs over a longer period of anything from weeks to months. There are three main things that this kind of inflammation can be trying to tell you:

- I guess we did not solve the problem surrounding the cause of the acute inflammation.
- A slight, but serious error from the autoimmune head office. This happens when the immune system mistakenly sees healthy tissue as an invader of sorts.
- There is a chronic irritant of low intensity that is overstaying its welcome in the body.

A few common examples of diseases or conditions with chronic inflammation are asthma, rheumatoid arthritis, chronic sinusitis and IBS (Irritable Bowel Syndrome). Obesity has also been linked to chronic inflammation.

To make things worse, there isn't a test for inflammation or what specifically triggers chronic inflammation. But if I had to take a guess on this one, I would say it's sugar, wheat, gluten, hydrogenated oils, non-nutritive sweeteners, preservatives, pollutants and possibly stress. It's just a wild guess, but when most people I have spoken to took these bad boys out of their diets they experienced HUGE relief!

The experts seem to agree, but also added hormonal changes, sleep deprivation and high levels of cortisol (the fight or flight stress hormone) to the list of chronic inflammation triggers.

Dr Marcelle Pick, American OB-GYN NP, author and co-founder of Women to Women Medical Clinic, has a beautiful, clear and informative approach on inflammation. In her blog she writes the following: 'At our medical practice we are convinced that the seeds of chronic inflammation (and a lot of other health issues) start with the gut. Two-thirds of the body's defenses reside in the gastrointestinal (GI) tract – yet it is often the last place traditional practitioners look.'

Standing ovation for you, doc! She also advises patients to go on an anti-inflammatory diet such as a low-carb diet and to supplement with omega-3, probiotics and unwinding with daily exercise.

HEALTHY GUT HEALTH

Prebiotics and probiotics work hand in hand to promote better gut health. Our diet needs adequate amounts of prebiotics to promote the health of the probiotic micro flora that occur naturally in our intestinal tracts.

When we are born we have neutral intestinal tracts that have to be programmed from scratch with a healthy population of gut flora. Sadly, some of our babies start this gut cultivation on highly processed, soy-filled formula milk, sugar-laden baby food and gluten-filled cereal. A baby on soy milk formula gets the hormone equivalent of four birth control pills in one day!

Kids grow up on sugar and refined carbs from their first teething biscuits to the dessert-flavoured baby food they prefer over steamed veggies. French fries with carcinogenic oils become handy finger foods and low-fat yoghurt with teaspoonsful of sugar are the go-to snack. This is the beginning years of our gut...

We should be feeding our bodies and the ones we love with good gut food!



EXAMPLES OF PREBIOTICS

Raw garlic, raw leek, raw onion, raw asparagus, broccoli, Brussels sprouts, cauliflower, kale and radish. These are all part of our low-carb staples and that is good news.

PROBIOTICS

We live in South Africa. We did not grow up with sauerkraut or miso, but we do have a wonderful probiotic superfood that has been the underdog for way too long. Let me introduce you to amasi ...

Amasi is the common Zulu and Xhosa word for fermented milk that tastes a lot like plain yoghurt but with monstrous health benefits. It is packed with many different strains of gut-loving bacteria and at 5 g carbs per 100 g, it is a perfect new gutsy friend to welcome on board.

Ancient cultures thrived on naturally fermented foods and drinks. Foods were cultured instead of

preserved to extend their shelf life – raw milk kefir, amasi, sauerkraut and pickles are some examples. They contain good nutrient boosts and healthy strains of bacteria that support a healthy digestive tract and inflammation fighting immune system.

To introduce amasi back into your daily diet, use it in smoothies (pp. 196–198) and salad dressings (pp. 144–145) or over low-carb cereal (pp. 39–41), and make amasi Cheese Balls (pp. 48–49), popsicles (pp. 196, 197), veggie dip, tzatziki (p. 139), guacamole and masi-sips (drinking yoghurt).

Even though amasi can be substituted in recipes calling for yoghurt or buttermilk, you need it in its original uncooked state to gain the most probiotic properties.

Now that we have covered most of the whys of low carb, from here on change is really just a few tweaks and a slight mind shift away!



Low-carb Living – The How

You are about to embark on a new and exciting journey and you should feel proud of your decision to live a low-carb lifestyle. But where do you begin?

Based on how you would have viewed meals, pantry stocking and food shopping up until now, I have compiled a breakdown for you to see what you are trading for what, food wise, which will help to make the transition so much easier. You are going to be carb smart in no time!

This system should form the basis of your practical low-carb approach when shopping or planning meals. Once you learn and understand the alternatives to bread, pasta, potatoes and rice, your low-carb lifestyle will become as normal as ever.

BE CARB SMART – 8 SIMPLE SWAP-OUTS

- 1** Swap sugar or honey for xylitol, stevia or erythritol. These should be used sparingly and for cooking and occasional baking only, not for coffee, tea and so on.
- 2** Swap all wheat, rice and potato flours for nut flours, seed flours, milled flaxseed and milled desiccated coconut. This will form the base of your new baking regime.
- 3** Swap veggies that grow beneath the ground, as well as high-carb peas, corn and legumes, for other veggies that grow above the ground.
- 4** Swap rice, mashed potatoes and pastas for cauliflower 'rice', veggie mash and cabbage strips sautéed in butter.
- 5** Swap bad hydrogenated fats, seed oils and margarine for good fats such as cream, butter, olive oil, coconut oil, avocado and avocado oil, eggs, cheese, animal fats and coconut milk or cream. Use daily as your primary source of energy.
- 6** Swap cereal, processed snacks and candies for *Low Carb is Lekker* recipes, nuts and seeds (a small child's handful and NO peanuts), low-carb fruits, occasional 85% cocoa dark chocolate.
- 7** Swap processed meat and cereal-filled polony for fatty, if possible grass-fed, juicy meat (rind, fat and skin still on), quality salami, bacon, roast beef, chicken, fish, organs and marrowbones.
- 8** Swap sugary drinks for sparkling water.

OH SUGAR!

It is only carbohydrates that affect blood sugar and insulin levels to any significant degree, which is why we use a low-carb high-fat (LCHF) approach instead.

All forms of sugar, even molasses and agave, have a very high glyceamic index (GI). But what is GI? GI measures the effect that carbohydrates have on blood sugar levels. A carbohydrate-dense food that quickly releases glucose into the bloodstream as it breaks down during digestion is said to have a high GI. Fibre-rich foods that take longer to release glucose tend to have a lower GI. Fat and protein are seen as no GI.

The following comparisons are an example of the general carbohydrate spread and are listed according to global standards:

0-55 = low GI (Examples: flaxseed, nuts, berries, apples, veggies, legumes, barley, millet)

56-69 = medium GI (Examples: bananas, oats, brown rice, honey, table sugar)

70 and above = high GI (Examples: white bread, white rice, glucose, potatoes, breakfast cereals)

If you and your family functioned in the medium and high brackets, your insulin levels had a daily roller coaster ride and snacking would likely occur often as the body's way of trying to stabilise things.

I must point out that 55 GI is still very high, all things considered. Aim for foods that are less than 10 GI, which covers almost all above-ground veggies, nuts and seeds.

Xylitol and **erythritol** are sugar alcohols and are absorbed in the body in a very different way to sugar. They are not fully absorbed by the gut and mostly pass through the system without much impact, according to most studies and sources. They are natural and safe to use but their consumption should still be limited. Pigging out on them will negatively affect weight loss and I would suggest you use them **ONLY** in baking treats a few times a week and **NOT** in coffee or tea.

Of the two, I prefer organic xylitol, which is made from birch bark and has a low GI of 7. It really

is a pleasure to bake with and brings a wonderful sense of normalcy without the spike! Note, however, that overconsumption can have a laxative effect.

WARNING: Food containing xylitol should never be fed to dogs.



Erythritol is not widely available yet in South Africa, but works just as well as xylitol and has a much lower GI. Sugar alcohols (nothing to do with actual alcohol) do have some empty kilojoules, much like regular sugar, but it does not cause a rapid spike in blood glucose and has little to no effect on insulin levels.

Stevia is a natural plant sweetener that is 300 times sweeter than sugar. It is 100 per cent natural with no kilojoules and NO effect on blood sugar. It does, however, have an aftertaste that some may dislike and it's also harder to determine how much to use in recipes.

I have found stevia to be a better alternative to use in drinks as you can sweeten without the added kilojoules. I add 1–2 tsp xylitol to 8 cups liquid and then sweeten to taste with stevia to balance the taste.

PLEASE NOTE: It is never a good idea to take in your daily kilojoules through drinks. Rather eat real food and fuel your body wisely!

Here is a handy sugar GI comparison. (If you read meat labels you will be surprised to see how often the first three names on this list pop up. Sugar hides in interesting places, folks!)

Maltodextrin	Sugar	110
Maltose	Sugar	105
Dextrose	Sugar	100
Glucose	Sugar	100
Sucrose	Sugar	65
Golden syrup	Modified sugar	60
Inverted sugar	Modified sugar	60
Blackstrap molasses	Sugar extract	55
Honey	Natural sugar	55–75
Coconut palm sugar	Natural sugar	35
Maltitol	Sugar alcohol	35
Fructose	Sugar	25
Agave syrup	Modified sugar	15
Xylitol (organic)	Sugar alcohol	7
Erythritol	Sugar alcohol	1
Stevia	Natural sugar	0

A NUTTY AFFAIR

This section – where you swap out wheat, rice and potato flours for nut and seed flours – is probably the one that takes the most getting used to, but it is also the section that is not desperately needed for our existence, so you can ease into it.

Isn't it good to know that your LCHF lifestyle can still include 'decarb'd' bread, cookies, muffins and cereal? You just need to approach it from a different, very viable angle.

The bottom line is this: wheat is a seed that is ground into flour. Using this same basic concept, you can grind any seed or nut into flour.

How to make your own nut butters, nut flours and seed meals

My coffee grinder is my BEST kitchen friend for this very reason. Any nut can be ground into flour, and the best thing is that you can use virtually any nut or seed to make the flour needed for a recipe, which is very handy when the price or availability of the suggested ingredient becomes an issue. As long as you stay clear from cashews and peanuts. They are actually legumes with a higher GI and carb count than the rest. The rest of the nut kingdom is yours to explore!

My favourites are pecan nuts and almonds. Macadamias tend to have a higher oil content and might start to turn into a paste in your grinder, but upon mixing in the rest of the ingredients they will become a batter as good as any other.

Flour is usually seen as ground nuts without the skin, while **meal** is regarded as ground nuts with the skin. Both will give you good baking results.

Seed meal

Some days I add a blend of flaxseed, pumpkin seeds, desiccated coconut and sunflower seeds into my coffee grinder and make a lovely nutrient-rich base flour that I use for literally anything from muffins to buns to cookies. It simply is flour in the end and can help to stretch the budget a bit too.

Otherwise just use the seeds a specific recipe asks for and grind for 10–20 seconds. Always measure afterwards to have the exact amount and sift into the dry ingredients.

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