

## Jayne Bullen - The Noakes Foundation (SD 2016)

**Jayne Bullen:** Hi everyone, my name is Jayne Bullen.

I am a proudly South African and I head up the Noakes Foundation, so I work closely with professor Noakes.

And we, as the Noakes Foundation, we mentor and fund free thinking researchers that ordinarily wouldn't get funding through commercial channels. So we have about eight researchers that work under our teams.

And I'm going to tell you very briefly what we did in South Africa to change the way that our country eats. On about \$6000. That was our budget.

So we jumped from a team of pure scientists about a year and half ago quite quickly to something that looks like this. To a group of community and town job interventions and we started to work with the poorest. And I'm going to tell you about why we did that.

As most things do, it all began with the man with a purpose.

Does anyone know who this is? The amazing professor Tim Noakes.

He's the most committed immaculately disciplined person I have ever met and he still got diagnosed with type 2 diabetes in his late 50s and it changed his life on this path forever.

He was trying to retire at the time and he reversed his type 2 diabetes, found out the best ways to do that, adopted a ketogenic lifestyle. And fast track, a couple of years, he wrote his story.

And at that time he made a passionate entrepreneur and chef with an ambitious goal as well.

And this is Jonno Proudfoot, the founder of The Real Meal Revolution,

and his business... He published a book... And has online weight loss programs.

And their goal is quite a small one... To change 100 million lives by 28th of February 2025.

So the two of them wrote a book that contributed to a revolution that changed the dietary landscape in South Africa. This is a book called "The Real Meal Revolution".

And Tim gave his story to Jonno and they wrote a cookbook.

It was published in 2013 and today it's still the best-selling book. Week on week it's the top 10 in South Africa. It's published almost 300,000 copies. It's a phenomenon that reached the top tiers, the top income segments in South Africa.

All of the people, probably most of the people that are in this room would fit into that bracket in the South African landscape, very quickly adopted this lifestyle. People that could afford the nut butters and the fancy things.

Who thinks that the low-carb lifestyle is expensive?

Okay, so not too many of you ever gotten so far.

So that was one of the things that we had in South Africa was that the wealthier were adopting healthy lifestyles and the rest of the country was left behind. And what I'm going to show you is that there's a huge difference in the haves and the have-nots in our country.

So one thing that we do, which is a commercial partnership that really works with us is we work with The Real Meal Revolution and we have something called Real Research, which is very quick living research.

So we didn't want to wait four years for the results of our clinical trials, we wanted results now, we couldn't wait. Most of us know that we haven't waited for all of the overwhelmingly positive rate clinical trials to come out.

We work with about 120,000 individuals that have engaged on the program. Of that, about 6000 people enter daily their macronutrient details. And in these slides that I'm going to show you now, we tracked about 1200 of these people.

And we know some of the basic things that definitely validates them. Men lose more weight at the beginning, but women stay on for longer. And the results aren't as bad as you think.

So we do other things, we can track almost every detail about their lives, and it's fascinating.

I'm not going to take you through the details of these slides.

But this one particular slide is quite interesting, which is how when we start to look at the macronutrients of people over time, this is a segment of 1000 males, as the appetite starts to reduce, your appetite decreases, we know this, all of us that were doing this diet know it.

But if you look at the beginning there, is where they began. Both their carbohydrate and protein consumption decreased dramatically. And actually so did their fat, which is that red line. And it was directly correlated with weight loss in all cases.

So we can do some really interesting things, but working in these quick fix scientific fields made us ask some more important questions and made us realize how important it was that we act fast. We want to change and correct the dietary errors of the past 50 years.

That's something important to prof. Noakes, because he feels responsible. He was one of the founders of the carb loading concept in marathon running. So we're also trying to determine what the optimal diet will be.

And we know that there is no universal fix for that, but we are doing research to find out what it is. And particularly in South Africa we have 11 national languages in our country and a huge dichotomy of different ethnic segments.

And we know that certain things respond differently to different people.

We're doing some very interesting research into different communities in ethnographic at the moment to figure that out. Most importantly we want to help everyone live better lives.

And that's a big thing to ask in our country. And that created more questions for us locally, which was, "How are we actually going to fix South Africa?" We know that there's this huge population that lives on almost nothing.

And what are we going to do from a nutritional perspective knowing that they live on sugar and in a country where the staple foods are slowly killing most of our people?

So in South Africa, the average South African consumes about 100 kg of maize and maize-related products every year. And that's what the staple foods are in South Africa...

The maize, the white sugar, which is pretty much the same thing as maize, and the white bread.

And that's what the bulk of the population lives off.

And Gary Taubes' work inspired me a lot, because he was the first person that really pinned that and said, "Why are the mothers obese and the children malnourished?"

And we all know as parents that we would never take the good food from our children.

So the people that are the worst off in South Africa are the black rural and township females.

They are the ones getting the sick the quickest, dying the youngest and suffering from very avoidable diseases.

That's a little cutoff, but when I came along to the foundation about a year and a half ago

I had a very clear dream that turned out to be a dream shared by many in the LCHF movement in South Africa.

And it was to find ways to get this diet to the poorest and to get them eating better quickly.

And, yeah, my motivation, which is probably a typical motivation for most South Africans

because we are constantly confronted by poverty, is to think of the poorest person you know and to make sure that your next act is finding a way to help them.

And that's what we did at the Noakes Foundation. We realize that professor Noakes had a similar dream.

This is body shape rendition of the lady that raised me. Her name was Emily and she was a domestic worker. I was one of those white South Africans that was brought up by an African lady. And I loved her.

She was morbidly obese, she was bigger than this. She was tiny and she was almost as wide as she was tall. And I used to smell the edge of her apron and that made me happy. And she died at 42 of a heart attack.

We lived on a farm and there was a very gradual incline from where she lived at the bottom of the farm to our home. And it took her 20 minutes in the morning. She would have to stop and sit down every six steps, because she was so obese.

And every month with her paycheck, which was really tiny, my mother would buy her a 20 kg thing of millipop, which is a maize-based product in South Africa and a 10 kg bag of sugar.

And that was all she ate.

So the other people that we're most concerned about are the next generation of South African children. This is a typical township scene, I don't know how many of you've been to South Africa and strolled around townships, but schoolchildren dress immaculately and they are incredible.

And in South Africa the standard amount that's given per child per school meal is R2.60 a day, which is 17 US cents. So this is an example of a treat meal, which is a hot cooked meal...

It's got rice and some really, really cheap soy protein product that's rehydrated.

About once a week they'll be able to afford something like this on this budget, but what you get for R2,60 is probably three slices of very cheap white bread and half an apple or a bowl of rice and a small amount of baked beans.

And in most cases, particularly in the poorest areas, this is the only meal these children get a day. Their mothers and their parents can't afford to feed them and they are relying on what's given to them at school. So we want to know how we're going to change the next generation.

So if we take a look at what happens in South Africa with income, we have something quite amazing there, it's called the Living Standards Measure. It's not based on race or ethnicity, it's based on certain living standards that people have.

So, do they live in a fixed abode, do they have things like televisions, running water, running toilets, linguistic abilities, literacy, etc.? So it's quite comprehensive.

And I just converted a couple of things. So the poorest of the poorer live on about \$107 a month. The wealthiest live around there on sort of under \$2000 a month.

So pretty much everyone in this room would most likely fall into that category if they lived in South Africa, because we are all educated and know what's going on in the nutritional landscape. So we are interested in the segment... Kind of in the middle there.

So that little bracket there is the bulk of the population. And that's where Emily, my domestic worker when I was a child, would sit. So she was not by any means the poorest of the poorer. She earned a salary, she had food, she had a fixed abode And we are looking at that segment.

So most of the people that we've done our initial pilot studies and interventions on, have been in this kind of segment where we can tell them about good food. And they've got a basic budget were they can start tweaking things limited.

So if you can imagine trying to do an LCHF diet on that... We also realize that we wanted to benefit everyone in our country that could not afford private health care. So in South Africa it's about like being having a car or not having a car...

If you can't afford private health care in our country, you're really going to struggle if you get sick. Mostly you're undiagnosed... Your outlook is not great. You kind of go to a clinic every three months and they do a... prick your blood sugar and send you away with more metformin.

It's kind of... they don't look at your diet, there's very little help. So those are the people that we're aiming to help through the intervention that the Foundation is doing.

It's about 85% of our country.

And they are known as the KFC and Jive generation. You probably won't know what this is, but it looks familiar to me and everything I've seen in Walmart. And that's a drink called Jive,

which in South Africa is the cheapest drink you can buy. Obviously highly sugared and highly toxic.

And it's cheaper to buy two liters of that, than it is to buy a bottle of water. So a lot of mothers are putting that into their babies' bottles from time of weaning, because they don't have access to fresh running clean water that's reliable and safe and they trust that more than they do, you know, water.

They're also obviously substituting baby formula for things like that, because they can't afford it. So this is also a treat for a lot of people. So if children get about one dollar once a month or whatever it is, they tend to go and buy two liters of that and drink it.

And that's how these next generations of South Africans are being raised. And of course we're trying to change that.

So as prof. Noakes always says, "South Africa is facing an obesity and diabetes tsunami."

The poorer are by far the worst off. And these are typical scenes that we see in South Africa, you know kind of on the streets and domestic workers and average people like you and I are really, really struggling with obesity.

We're doing a study with the Navy in South Africa, that's kind of a group of Navy people doing their exercise. And they came to us and came to prof. Noakes and said, "We have a problem.

They're not fitting through the submarine passages anymore."

So they can't get the Navy workers to lose enough weight to be in the submarines at the moment... It's so severe. So I'm not going to talk you through all of these stats, but what we know is there is a massive health crisis in our country.



And we are the third fattest in the world. Americans know this story, I think you are number one or two. So the similarities are massive. The difference is that in South Africa people don't have the education and income to change their lives. They are doing it on almost nothing.

Particularly children... I mean their outlook is dire. And we have to do things differently in Africa and quickly and on a shoestring. Those are the rules.

So I mean this is a very common picture of an African baby these days. These are things that we see all the time. It's not anomalous anymore.

So one example of something that we've done that's quite fun and that we are proud of is that we went to Banting Boulevard... Some of you have taken the sample outside. If you haven't, go and try it.

And we said to them-- they used to make kind of expensive LCHF products, and we said to them, "We've got to get people off pop," which is a maze-based product. It's the biggest problem when we go into the townships as people cannot give it up.

And they came back to us two weeks later with this incredible low-carb pop that's only about R29 a bag, which is \$1.5. So for 17 US cents we can start to get schoolchildren good quality breakfast. Now if we can imagine how that would change their day and their ability to focus and to function in the world, just that alone is making a huge difference.

And we have a commercial partnership with them where we get products and we give it straight to the interventions that we work with in townships. So we also have an affiliation program where LCHF compliant brands come to us and we vet their production processes and what's in it and we independently certify and analyze their foods and we have a little stamp and then we get a kickback, which goes directly into township interventions.

And our plan is to solve this problem through these interventions that we have started.

They have a massive impact. I'm going to show you a couple of women that did one of our first interventions, which is a pilot study in Ocean View.

Katherine is the perfect example. She has a household income of about \$180 a month and she cooks for 11 people on that budget. She was overweight, she has high blood pressure, she eats about 1.5 kilograms of sugar a week.

So we go into these townships and into these areas and we get them to write a food diary and then we create a meal plan that's based on affordable substitutes for them. So she was a great example of somebody...

Another one, Katy, 1.3 kg a week. And if you look at this, I mean she was even on some USN diet fuel there. So she was trying pretty hard to eat a healthy diet. These women had been in an exercise group together for 10 years and none of them would ever lost any weight.

Katy has lost 15 kg, it's not one of her favorite things... So these are people that are earning very little and no change in their lives.

Again, 1.2 kg... She was trying to eat healthily, she had 4000 random on her grocery budget, which is about 200 pounds. And she says, "I will never go back." She lost 14 kg.

Nasreen, again, she has become one of our Banting LCHF ambassadors. She lost 10 kg.

So we track the data and we have all the typical stats that we look at.

What we saw was in all cases BPs declined, most normalized over the longer period of the interventions. 98% of people lose weight and all centimeters. I'm going to play you a quick video that shows what we do in some of these communities.

Eat Better South Africa is about changing the lives of ordinary South Africans. One community at a time. We aim to improve the health of men, women and children living in underprivileged areas by training them on a budget Banting program that only cost R50 a day.

This medically supervised intervention is run by a team of expert doctors, nurses and educators who offer weekly support to people participating in the program to get better by eating better.

The cursory study in Ocean View community of Cape Town was dramatically successful.

98% of the candidates lost weight, inches, felt healthier.

And many normalized dangers to high blood pressure within five weeks. If you believe in Banting and that has made a difference in your or a loved one's health, we urge you to take action and change the state of the country's health.

With a small donation toward Eat Better South Africa the Noakes Foundation is taking the first steps in laying the foundation for a healthier South Africa. We invite you to help us start the revolution by making a donation to support Eat Better South Africa.

Click on the link at the end of the video if you'd like to change someone's life today.

The impact of the six interventions that we did in South Africa. We spent \$6000 on six community interventions over a period of eight months. So in that time there was a 900% increase in nonwhite people banters or LCHF low-carb eaters joining social media forms and finding support systems so that they could do it for themselves with very little.

There was an impact of every living or more people per one that attended an intervention.

So the spillover was massive, primarily because people live in communities, they cook for large groups of people and they saw the results so quickly.

We learned from them, it was incredible. We started on Banting for \$2 a day.

No problem, they did it without a hassle. They found the most creative, amazing innovative ways to eat healthily.

We then went into more rural areas, we had to half the budget to \$1 a day. No problem, they did it. They changed their lives with very little help. We did very little, we just gave them these little kits. This is an example of one of the amazing engage community groups we have.

If you look at how big the active membership is... It's run by an amazing woman named Rita Fenter. And I just looked today and there's just an example of a woman who's just done it for herself. And it's ordinary people that can't afford a R300... \$10 - \$20 cookbook...

They are just doing it anyway, they are finding ways. The people in South Africa regardless of their situation and condition are waking up and empowering themselves with very little.

They don't need a lot to change their lives in their futures.

And that's the miracle of it. So just dancing in the streets, doing it their own way, finding African solutions to things. So that's why the Noakes Foundation restructured itself. We have the science and we have community and we fund them totally differently for that reason.

So the science, which is the side of the foundation that's always involved in, is very much funded by only very, very pure sources so that the research is unadulterated.

Eat Better South Africa is funded by a commercial partnership and is a bit less selective.

We would never take a fund, granted, from Coca-Cola but we work with commercial partners and we do fund things. And all of that goes straight back into poor communities.

So we created a bit of a hybrid model. So if you're interested in knowing what you can do to get involved, there's a QR code here if you feel like making a donation now...

I don't know if it will work from where you're sitting.

You can also go to our websites and examples of financial contributions are... \$1 would be a standard school meal for children for about three days, \$10 for 10 days. \$100 will be the cost of one person from a township doing a six-week intervention.

And \$6000 might just reshape the country again or even your own. So you don't need a lot of money to make a huge amount of change.

You can also ask us to run an intervention in your business or come to a community that's impoverished and matters to you somewhere and teach you how to do it and you can talk to us about joining us, there are so many amazing people here that have such incredible skills.

We would love you to come and be part of our interventions, to get involved to come and visit us, to come and see what we're doing and to help. And you can also, if you have a product that you registered and applying to be a certified or tested to failure you're welcome to come to us as well... We're outside, next the Huber pop stand.

I was thinking this morning about the impact that working with someone as amazing as professor Noakes has had on my life. And the bottom line is that you can start anywhere.

You can start somewhere and you can never underestimate how a small seed and one good action... And we see this everywhere in Africa all the time... Becomes a tree, that becomes a forest not too far into the future.

And that's what we've done with these interventions. So I'm just going to end, I'll show you two shouts out of the people so you can get a feel for who these people are.

Can you, guys, play these two in a row?

One, two, three... Eat Better South Africa!

They are the guys that did it on one dollar a day. And they're still going, the progress is being incredible. And this one.

Eat Better South Africa!

Thank you.

Thank you.