



BANANA REPUBLIC

IN FAR NORTH QUEENSLAND, A FARMER MADE A STARTLING DISCOVERY THAT IS SET TO TRANSFORM THE BANANA INDUSTRY. AIFST'S NARELLE SCHUH ASKS KRISTA WATKINS ABOUT PIONEERING GREEN BANANA FLOUR.

Rob and Krista Watkins with their daughters Kate (left) and Kira.

Rob and Krista Watkins have developed a fully automated system, NutroLock, that turns nutrient-dense green Lady Finger bananas into the world's most resistant starch. Green banana flour, marketed under their Natural Evolution brand, is a game-changer. And like many revolutionary discoveries, it happened by accident.

Where did the idea for green banana flour come from?

The idea came from Rob Watkins – at the time Australia's largest Lady Finger plantation grower who was tired of dumping 5–10 tonnes of perfectly beautiful nutritious fruit every week simply because it was too small or large (according to supermarket specifications), or due to oversupply in the market.

Each week in North Queensland 450–500 tonnes of fruit is wasted and some weeks can see up to 1000 tonnes cut onto the ground. After observing the wildlife (wallabies, wild pigs, cattle) breaking fences and stepping over ripe bananas to feast only on

the green, Rob was fascinated to say the least. The animals were in prime condition with healthy, shining coats, disease free, very calm and happy!

One afternoon while loading a truck, Rob accidentally drove over a hand of bananas that had been sitting on the cement for a few days. In the setting rays of the sun it was like a puff of powder. He very excitedly came home with a hand of crumpled bananas and urged me to try it because it tasted like flour. Not long after, we started producing a very humble six kilograms of banana flour each week.

Banana flour is traditionally consumed as porridge in many developing countries, but it was not commercially available. We were the first company to commercially produce banana flour in the world, and are still the only internationally food safe certified producers.

Observing nature and a little universe intervention is definitely what led us to this point today. We had been severely affected by two cyclones and were constantly battling the giant wholesalers.

Now we have taken some risk out of cropping bananas. If a cyclone comes through, the facility has been designed to run like a sugar mill – just a healthier version of processing all of the fruit that can't be sold!

What is so special about Lady Finger bananas?

Lady Fingers are harder to grow than regular Cavendish bananas. They require twice the amount of work to grow and also are grown more sparsely due to their risk of disease. Fortunately our foundation at Natural Evolution begins with care for the soil – to grow healthy food it really does start with healthy plants and soil that supports that goal.

We have had them clinically tested and the variety of Lady Finger bananas grown in North Queensland produce the highest tested resistant starch in the world. This is huge for gut health and not found in many foods. We have had them tested as high as 44 per cent. Through our world leading research we have also

Branding has played a huge role in our product. We worked firstly with our own family branding, however we were limited in our expansion. Natural Evolution was founded by myself and Rob in August 2015 and is the best move we have made for the company as we saw sales double within the first week and continue to grow. It is certainly that connection to earth and our story that our consumers love.

So, we've gone from complete desperation in business, to observing animals, to finding a sustainable solution. It is a very humble experience that in the little town of Walkamin in rural Far North Queensland one of the most exciting food preservation technology systems was designed, built, scientifically tested, and is now being prepared for worldwide roll out!

What difficulties did you face along the way?

Peeling a green banana is near impossible! Trying to separate the skin from the flesh is extremely difficult and very hard on

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found that they contain 5HTP in the available form – even more rare than resistant starch occurrence. We have also found that in the powder form, Lady Finger bananas kill bacteria and have powerful anti-inflammatory and rejuvenation properties.

How long did it take you from concept to actual market reality?

To begin with it all happened very quickly. From accidentally making flour to selling six kilograms a week happened within about two months. Very soon we were behind on orders, so in 2012 we built the first pilot plant that had a maximum output of 50kg per day. We worked this way – popularising the idea of banana flour for a couple of years – and designing the NutroLock facility.

In 2014 we broke ground on building the facility and finished commissioning the facility early in 2015. The new facility will see output increase to around eight tonnes of banana flour each week. While it has been a long time getting where we are, on our timeline of the journey still to come we are just at the beginning!

your hands. To make the business viable we needed to design machinery that would separate the skin and flesh.

Other producers boil the green bananas to make the skin separation easier...inevitably this changes the product as they are “cooking” a starch, which starts the sugar conversion leaving you with a product that contains sugar rather than a product that contains no sugar, is raw and contains the highest natural resistant starch.

What are the most unique aspects of your manufacturing process?

NutroLock technology is a fully inline food processing system which has the capability to take any fruit or vegetable with a few days to weeks' shelf life and preserve it naturally in a powder form in less than 25 minutes! While bananas are our main business, we have processed potatoes, berries, nightshades, apples, cassava...all with tremendous results. ➤