

A GLUTEN FREE, NUTRITIONALLY RICH CREATIVE JOURNEY

Lucinda Bruce-Gardyne, Founder



TASTE, GLUTEN FREE, MILK FREE...

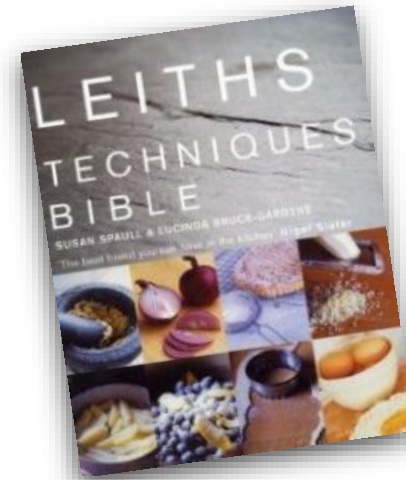
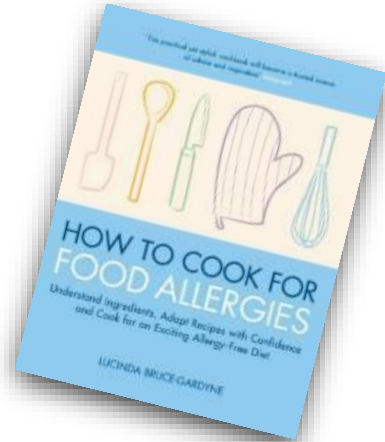
... GENIUS' BREAD AND BUTTER!

I will be sharing:

- How Genius started 10 years ago
- How we continue to champion good gut health, through cutting edge innovation



A BIT ABOUT ME..



Founder of Genius Foods, the UK's leading gluten free bakery brand

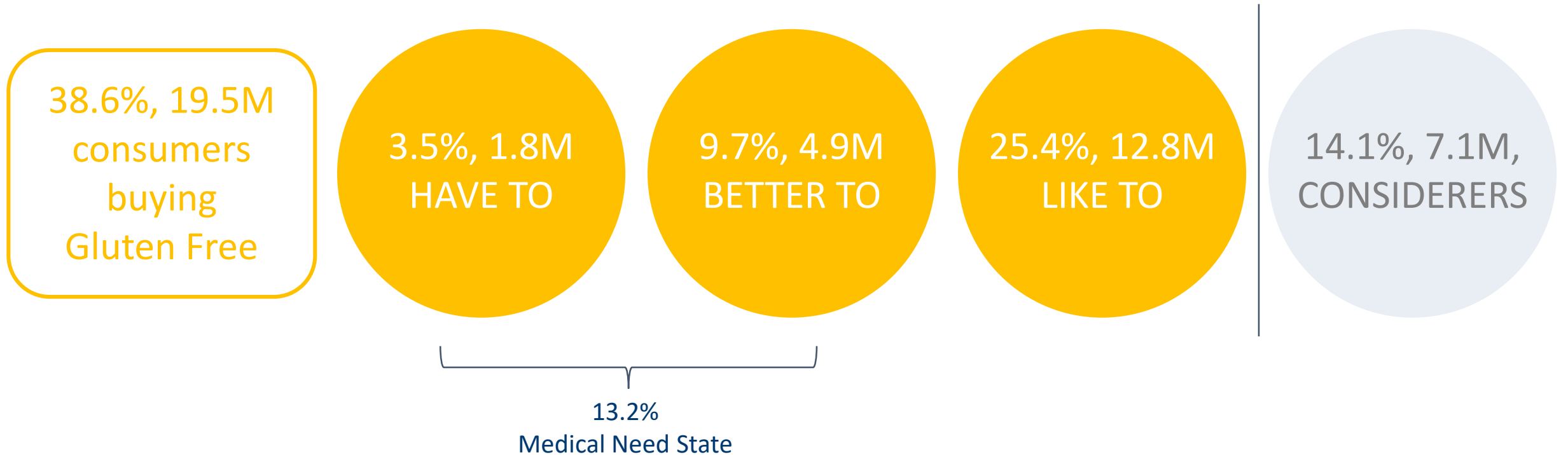


IN 2005 I LEARNT...

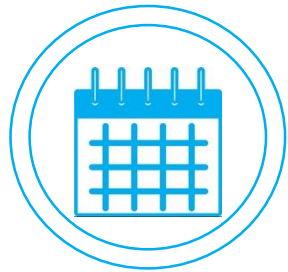


- The elastic protein gluten, contained in wheat, barley and rye flour, was effecting my son's health
- Gluten free bread was poor
- New thinking was desperately required to solve this family problem!

..AND FOR OTHERS MISSING BREAD



LIFE BEFORE GENIUS



LONG LIFE



MICROWAVE!



In 2005

- 15% of people regularly avoided gluten and wheat in the UK
- Of this, only 2.4% ever bought gluten-free bread
- And only ate 1/20th normal bread consumption

Why?

- Because gluten free bread was not bread!
- It had an average shelf life of 60-90 days
- It had to be microwaved or toasted to make it edible

The Impact?

- Inconvenience and isolation for consumers, particularly away from home

WHAT WAS THE ROUTE OF THE QUALITY PROBLEM?

GLUTEN PLAYS AN IMPORTANT ROLE IN BAKING



Gluten:

- Binds pastry and biscuit dough
- Creates layers in croissants and puff pastry
- Makes bread bubbly, soft and chewy
- Makes cakes spongy and light

PEOPLE ON RESTRICTED DIETS DESERVE UNRESTRICTED LIVES



- Fresh bread is a staple and the ultimate convenience food
- It's inconvenient to bake at home and gluten free bread presents the greatest culinary challenge
- I wanted my son, and others like him, to eat normally

MY VISION

To create gluten free bread that rivalled mainstream bread in:

- Fresh, soft and tasty
- Functionality without codex wheat starch
- Nutrition
- Natural ingredients
- Availability
- Cost



... SO I SET TO IT!

FIRST I HAD TO ANALYSE WHAT WHEAT DOES IN BREAD

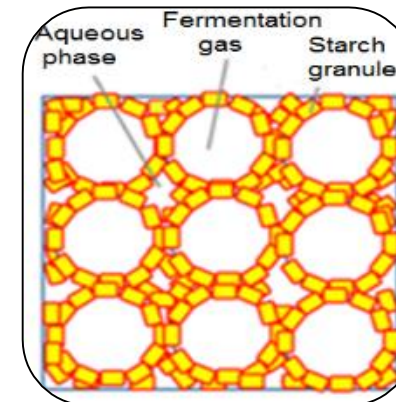
- Bread is made with 50% wheat flour and 50% water
- Wheat flour and water forms an elastic dough that doubles in size as it fills and stretches around bubbles created by yeast
- Risen wheat dough bakes to create fluffy, chewy and springy bread.
- In contrast, gluten free flours like tapioca, potato or corn starch and water makes soup that bakes to hard, heavy, crumbly bricks
- I realised a blend of gluten free ingredients, imitating the properties of wheat dough, was necessary to make great gluten free bread



Wheat flour
and water
= dough



Gluten free
flour and water
= a mess

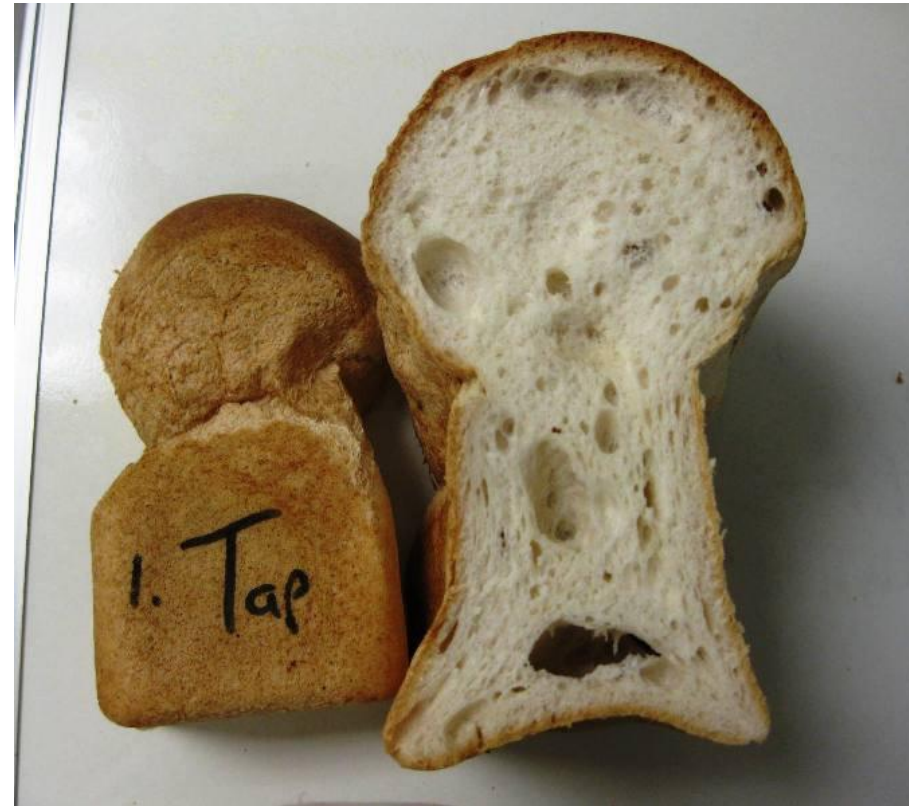
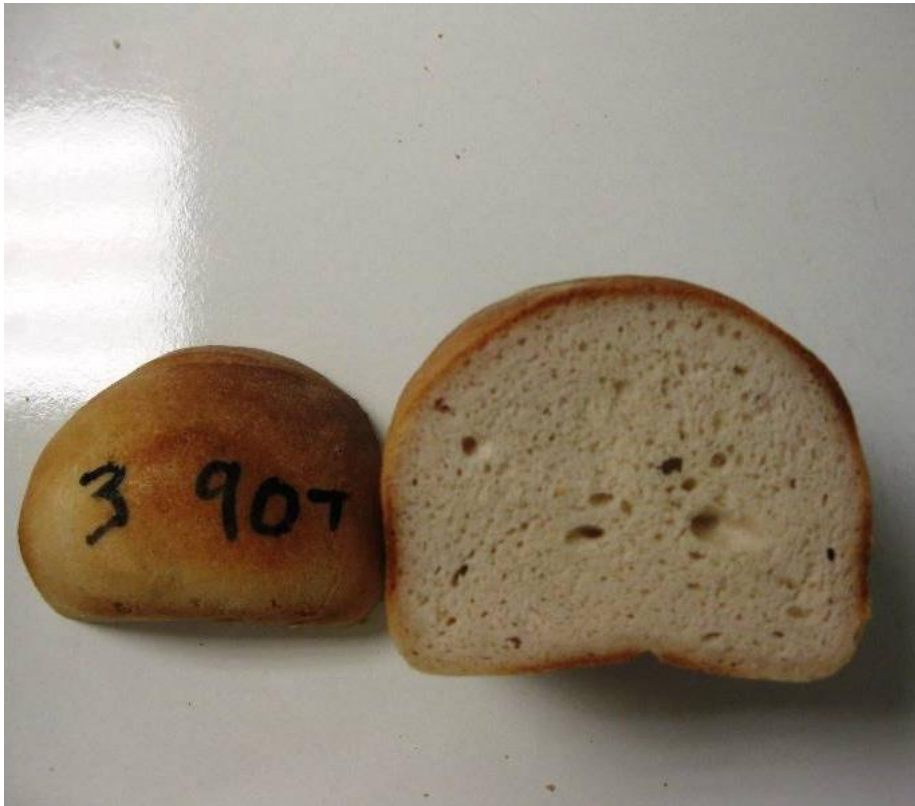


IT WAS AN ALL CONSUMING, PAINSTAKING PROCESS



- I scanned my local health food store for gluten free ingredients
- Blended the ingredients, one change at a time
- Noted every outcome and planned my next move
- Baked 1000s of loaves over 18 months with 12 breakthroughs along the way
- Slept with a note pad by my bed, in case an idea came to me in the night
- Stopped tweaking the recipe when family and friends said “WOW! That tastes like normal bread!”

THE BLEND OF INGREDIENTS IS ESSENTIAL TO GET RIGHT



To create elasticity, rise and setting power

IT TOOK TIME & TENACITY

3 years of passionate hard work

2 years of development in my kitchen

2 broken ovens

1 broken Magimix

1 year working closely with the largest gluten free bakery in the UK



INNOVATION BEGINS FOR REAL, WHEN YOU START TO SCALE

- It took 1 year to scale my 2kg Magimix recipe to a 200kg batch
- At scale, a small change to recipe or process created wild changes in the product
- The bread dried out in 24 hours. It had to remain soft for 8 days if retailers would consider stocking it
- The ingredients, from all over the world functioned differently from batch to batch and we didn't know why
- There was no one to ask or papers to refer to



NEW THINKING AT SCALE REQUIRES...

REMOVE?



- Team work
- A continuous stream of new ideas
- An open mind
- Commitment to the cause, no matter how painful
- A clear and common vision of what you are working to create
- Determination to achieve 'WOW Factor', no matter how big the challenge

ORIGINAL GENIUS BREAD LAUNCHED IN 2009

14
Ingredients

Unsliced

330g
kCal / 100g

Protein
7.4g White
6.5g Brown

Fibre
4g White
6g Brown



Milk, Soy, Gluten
Free

Fat
15% White
14% Brown

Egg only allergen

Labour Intensive
Process

Limited
Production
Capacity



LUCK IS WHEN PREPARATION MEETS OPPORTUNITY



Sir Bill Gammell

Once the bread was successfully scaled in 2008, I raised investment to recruit a team to create a brand and commercialise it



2009 UK LAUNCH

OVERWHELMING CONSUMER RESPONSE

Success due to:

- Strong consumer need
- Ground breaking product solving a genuine problem
- Social media
- Retail and investor interest
- Expert team work



GENIUS CREATED...

- A new Fresh Free From Category
- A new standard for competitors to match
- A return to sandwiches, packed lunches and picnics
- The desperately needed possibility of other tasty products
- An overwhelming demand for fresh and tasty gluten free bread
- We brought normality and relief to peoples lives
- We raised the bar



INNOVATING TO KEEP UP WITH DEMAND

IN 6 MONTHS WE WERE UK BRAND LEADERS WITH A 50% MARKET SHARE OF GLUTEN FREE BREAD

Within weeks of launch consumer demand was overwhelming

- Production on our basic kit moved to 24/7
- The process was manual, slow and variable
- We became capacity constrained
- Not helped by batches of ingredients behaving differently



Within months, we were designing an automated line:

- To increase capacity, increase efficiency
- We also designed a new recipe in 2010, in line with consumer needs



WE IMPROVED THE NUTRITIONAL PROFILE

High in Fibre

Reduced Fat by 40%

Vitamins & Minerals



No artificial preservatives

Reduced kCal by 20%

ODMAP friendly



AS DEMAND GREW FOR ADDITIONAL PRODUCTS, WE KNEW WE NEEDED TO OWN MANUFACTURING



IN FEBRUARY 2013, WE BOUGHT THE BAKERY I FIRST APPROACHED



EACH PRODUCT WE DEVELOP PROVIDES ITS OWN CHALLENGES DEPENDING ON ITS SHAPE, SIZE, SHELF LIFE & USAGE



- It takes time and care to get each product right
- Trying to innovate too quickly can lead to poor product quality and disappointed consumers



AND DIFFERENT MARKETS HAVE DIFFERENT REQUIREMENTS



Innovation is required to tailor our offering for different markets and channels

- **Each market likes a different product range**
- **Products sometimes have to taste different**
- **Shelf life and supply chain requirements vary**
- **Portion sizes and packaging solutions are different for retail and foodservice**
- **Global consumers have varying nutritional expectations**

Multiple formats create complexity both logistically and in production.



EXPERTISE IS KEY

TO STAY AHEAD IN THIS COMPETITIVE SECTOR THE GENIUS R&D TEAM ARE MADE UP OF A COMBINATION OF WORLD CLASS FOOD SCIENTISTS AND ARTISAN BAKERS

Together scientists and artists inject their know how to continue refine our products:

- **To make informed recipe and processing choices**
- **To shorten development time**
- **to increase production efficiency**
- **To develop mainstream, tasty, products with strong food values**
- **To continue optimising the nutritional value of our products**
- **To provide consumers with the best and most reliable gluten free products on the market**



UNDERSTANDING OUR CONSUMERS KEEPS OUR BUSINESS ALIVE



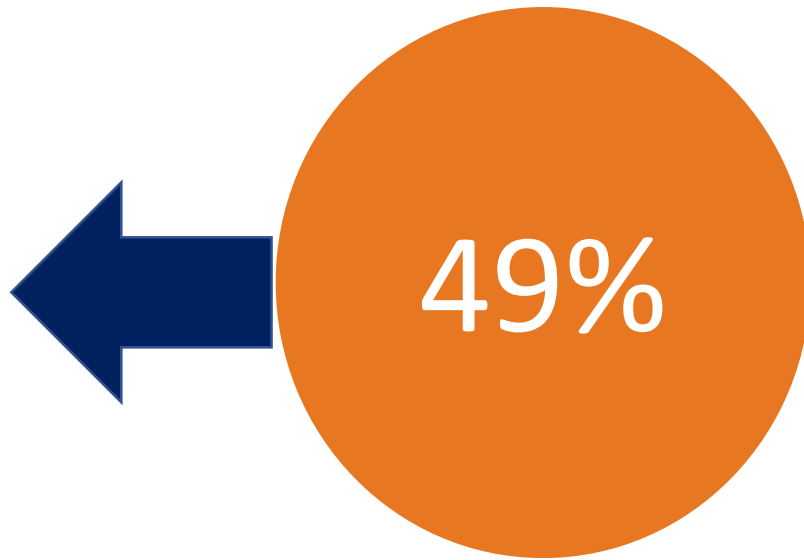
WE STAY CLOSE TO CONSUMER TRENDS AND CAN SEE CLEARLY THAT THE LANDSCAPE IS CHANGING



THE SHIFT IN BEHAVIOUR IS SIGNIFICANT

Healthy eating is moving from being **medical** (functional) motivated to **wellness motivated** (functional & emotional)

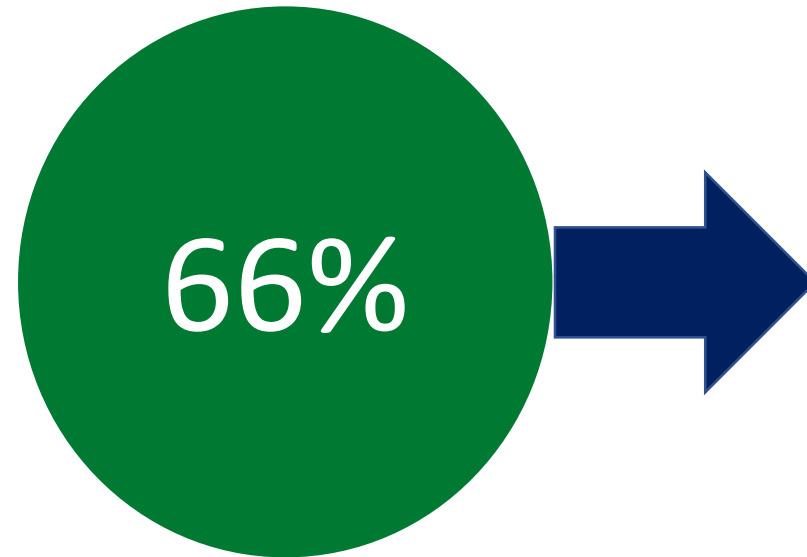
The Past



ACCEPTED WELLNESS

Avoiding foods to prevent ill health
(salt, sugar, fat)

The Future



DIGESTIVE WELLNESS

Actively choosing to buy into food types to aid
digestive wellness / maintain health



CUSTOMERS ARE WANTING THEIR WELLNESS NEEDS MET AND IT'S MANY AND VARIED....



AND CENTRED AROUND DIGESTIVE WELLNESS



GLUTEN FREE CAN HERO HIGH FIBRE & LOW SUGAR WHILST MEETING WIDER DIGESTIVE WELLNESS NEEDS

| Key Attributes | | Rationale |
|----------------|------------------------|---|
| 1. | High Fiber (> 6g/100g) | <ul style="list-style-type: none"> The first benefit consumers look to <i>ADD</i> Wide acceptance that in the UK consumers have too little “Helpful little swaps” on Bakery staples deliver High Fibre solutions daily |
| 2. | Gluten Free | <ul style="list-style-type: none"> The first ingredient consumers <i>AVOID</i> Increased awareness of Gluten Sensitivity “Lightening the load on the gut” is a beneficial step |
| 3. | Low Sugar (<5g/100g) | <ul style="list-style-type: none"> Wide consumer acceptance of the need to reduce |

Wider Digestive Wellness

Plant Based

Vegan

Pre-biotic



AND GENIUS CONSUMER RESEARCH CONFIRMS THIS...

Wellness is complex & personal, spanning all ages & situations

66%, 33.2M CONSUMERS, BUYING INTO THE FOLLOWING FOOD TYPES TO AID DIGESTIVE WELLNESS

| | | | |
|---|--|-----------------------------------|--------------------------------------|
| UP FRUIT & VEG 43%, 21.7M | AVOID HIGHLY PROCESSED FOOD 31%, 15.5M | HIGHER FIBRE 23%, 11.6M | GLUTEN FREE 15%, 7.6M |
| PROBIOTICS 14%, 7.1M | DAIRY FREE 9%, 4.5M | PLANT BASED 9%, 4.5M | ANTI-INFLAMMATORY 5%, 2.5M |
| PREBIOTICS 5%, 2.5M | VEGAN 4%, 2M | FLEXITARIAN 3%, 1.5M | FERMENTED FOODS 3%, 1.5M |
| FODMAP 2%, 1M | PALEO 1%, 0.5M | | |

5%, 2.7M CONSIDERERS



FIBRE IS THE SUPERFOOD ON EVERYONE'S LIPS

WORLD HEALTH ORGANISATION REPORT FINDS 90% OF THE UK ARE NOT GETTING ENOUGH FIBRE



The lifesaving food 90% aren't eating enough of



Blow to low carb diet as landmark study finds high fibre cuts heart disease risk

A review commissioned by WHO says fibre in 'good' carbohydrates such as wholegrain bread and oats has positive effect



How to get your daily 30g of Fibre

A WHO report finds few people in the UK eat enough fibre. Here's how to do it, and enjoy it



5 high fibre foods to help you get your 30g per day, from porridge to nuts

90% of us aren't getting enough of it



The superfood scientists say can make you live longer

Experts say a diet high in fibre – found in high-carb foods could cut the risk of heart disease, stroke and diabetes



Blow for low carb diet as BREAD found to cut risk from killer diseases

Millions are at risk of an early death because they do not eat ENOUGH fibre, warns major study.



Brits urged to eat more fibre after study shows lifesaving benefits

- Getting plenty of fibre cuts the risk of an early death by a third
- Also reduces the risk of heart attack, stroke or bowel cancer by a quarter
- But most adults in Britain – 91% - eat less than the daily recommended amount



The best ways to get more fibre in your diet

A high fibre diet has been linked to reduced risk of heart disease and cancer

THE ADVICE IS TO EAT MORE WHOLEGRAIN BREAD – BUT GENIUS BREAD DEMONSTRATES THAT GLUTEN FREE IS EVEN BETTER!

Wholegrain bread or cereal for a fibre fuelled breakfast?

2 x Toast
Warburtons Seeded Batch



3.6g
of fibre

Cereal
2 x Weetabix



3.8g
of fibre

2 x Toast
Genius Triple Seeded



8g
of fibre







Genius Triple Seeded bread has 2x the fibre of the top 5 branded gluten containing breads








GLUTEN FREE HAS BEEN THE SLEEPING GIANT

Most GF products deliver much higher Fibre, but don't compromise on other traffic light nutritional






White Bread

| Nutrition Values per 100g |  |  |  |  |
|---------------------------|---|---|---|---|
| Fibre: | 2.1g | 2.3g | 3.9g | 9.3g |
| Sat Fat: | 0.4g | 0.5g | 0.4g | 0.4g |
| Salt: | 0.95g | 0.98g | 0.86g | 0.9g |
| Sugar: | 2.5g | 3.0g | 4.0g | 3.9g |







Wraps

| Nutrition Values per 100g |  |  |  |  |  |
|---------------------------|---|---|---|---|---|
| Fibre: | 2.7g | 2.7g | 3.6g | 8.8g | 16g |
| Sat Fat: | 3.1g | 2.1g | 2.9g | 3.7g | 0.5g |
| Salt: | 1.53g | 0.75g | 1.45g | 1.38g | 0.58g |
| Sugar: | 3.1g | 2.4g | 3.4g | 3.7g | 2.6g |

Brown Bread

| Nutrition Values per 100g |  |  |  |  |  |
|---------------------------|---|---|---|---|--|
| Fibre: | 6.3g | 6.4g | 6.8g | 6.8g | 10g |
| Sat Fat: | 0.6g | 0.5g | 0.4g | 0.4g | 0.5g |
| Salt: | 1.0g | 0.95g | 0.98g | 0.9g | 0.9g |
| Sugar: | 4.3g | 2.4g | 2.4g | 4.1g | 2.4g |

Key:

| | | | |
|--|---|--|---|
|  Fibre High (6g+) |  Sugar Low (<5g) |  Salt Low (<0.3g) |  Sat Fat Low (<1.5g) |
|  Source (3g - 5.9g) |  Med (0.4g - 1.4g) | | |



THE FUTURE? WHAT'S YOUR GUT FEELING?

In addition to high fibre levels we continue to optimise the nutritional value of our products

- Lowering sugar, salt and sat fat
- Providing vegan alternatives
- Incorporating prebiotics, probiotics and plant based protein



ENCOURAGING CONSUMERS TO LISTEN TO THEIR GUTS!

WHAT'S YOUR GUT FEELING?



GENIUS TRIPLE SEEDED BREAD HAS 2X THE FIBRE OF THE TOP 5 BRANDED GLUTEN CONTAINING BREADS. BASED ON IRI UNIT SALES 52 W/E TO 6TH MARCH 2019.



LAUNCHED A GOOD FOR THE GUT RANGE



- Beetroot & Kale Wraps
- Good for the Gut – with prebiotic fibre
- 3x Fibre compared to regular wraps (with gluten)
- <100 kcals per wrap
- 1/3 less Carbs*
- Milk Free, Egg Free
- Vegan

- Protein Punch & Carb Cutter Bread Crisps
- Good for the Gut – with prebiotic fibre
- High Fibre
- 1/3 less Carbs and 50% more protein compared to regular crisp breads (with gluten)
- Milk Free, Egg Free
- Vegan



COMING SOON! GOOD FOR THE GUT COBS & ROLLS

LAUNCHING MAY 2019



- Fibre Fest & Protein Punch Cobs & Rolls
- Good for the Gut – with prebiotic fibre
- 2x Fibre / 50% more protein compared to regular bread (with gluten)
- Milk Free



THE DEVELOPMENT OF FRESH AND TASTY GLUTEN FREE BAKERY PRODUCTS IS A NEW ART AND SCIENCE AND NOT FOR THE FAINT-HEARTED

Factors required to progress product development in this category:

- Vision
- Consumer focus
- Determination
- Grit
- Free thinking
- Significant investment
- Risk-taking
- Team work





THANK YOU