

# FiberX KEEPING FOODS HEALTHY

Invisible fiber. Visible impact.







• FiberX™Production in Europe Page 2-3 • Fidelinka Skrob What is FiberX™ Page 4-5 • Smart Fiber. Real Benefits. • EFSA: Fiber for Everyday Health **Page 6-7** • FiberX™ & the Global Fiber Gap The Smart Move **Page 8-9** • Next-Gen Foods are Fueled by Fiber • Smarter Fiber for a Healthier Future Page 10-11 • FiberX™ brings health to the Heart of your Recipe. • Applications of FiberX™in Foods Page 12-13 • Key Application Areas About Microtec Page 14-15 • Transforming Starchinto Smart Nutrition • Labelling, Claims and Certification Page 16-17 • Nutritional & Functional Claims Health & Nutritional Benefits of FiberX™ Page 18-19 • Technology Benefits & Innovation Potential

• Keeping Foods Healthy— Simply and Effectively

• Trusted Fiber from Microtec

### **FiberX**<sup>™</sup> **Production in Europe**

FiberX<sup>™</sup> Now Made in Europe by Fidelinka Skrob doo

FiberX™ is now being produced in Europe through Microtec's first licensed European production partnership with Fidelinka Skrob, a renowned name in starch production. This milestone marks the beginning of a powerful collaboration between Australian innovation and European manufacturing excellence.

The partnership ensures reliable, large-scale production of FiberX™, making this innovative, health-promoting resistant starch more accessible to food manufacturers across Europe and global markets, especially those seeking low calorie, low-GI, and high-fiber solutions.

# Fidelinka Skrob: 100+ Years of Trust in Starch Production, Now Creating the Future of Fiber

Meet Fidelinka Skrob doo

Europe's First Plant Producing FiberX™ and FiberZ™

Located in Serbia, Fidelinka Skrob is one of Europe's oldest starch producers, with over a century of experience in turning grains into quality ingredients. For generations, Fidelinka has built its name on trust, reliability, and quality, supplying native starch and wheat gluten to food manufacturers around the world.

Now, Fidelinka is partnering with Microtec to produce FiberX<sup>™</sup> and FiberZ<sup>™</sup> — two innovative dietary fibers that support gut health, lower calories, and add fiber to foods. This partnership blends Microtec's advanced Australian technology with Fidelinka's expert manufacturing, delivering health-focused ingredients at commercial scale.

Today, Fidelinka exports to 43 countries, with all products made under strict hygiene controls and certified food-grade standards. Their production facility meets the high expectations of European and global food markets, combining tradition with technology.

This is the first licensed production site in Europe for FiberX™ and FiberZ™, bringing these fibers closer to food producers and consumers in the region. With deep experience, strong certifications, and a clear commitment to health and quality, Fidelinka is the perfect partner for this new chapter.





### What is FiberX<sup>™</sup>

Inclusion of high levels of dietary fibre in formulated foods is necessary to conform with the World Health Organisation guidelines for a healthy diet. However, the addition of adequate amounts of conventional dietary fibres often results in manufactured food products with inferior texture, flavour, colour and overall acceptability. Consequently, this results in low quality products with a short life cycle, and eventually market failure. This imposes substantial costs to the industry and is considered as a major cause of low dietary fibre intake amongst consumers.

In response to the growing consumer demand for high fibre formulated foods, made with appealing organoleptic properties from premium quality ingredients, Microtec has developed FiberX (Type 4 Resistant Starch) using advanced s tarch modification technology with approved food grade materials.

### **Smart Fiber. Real Benefits.**

FiberX™ delivers all the nutritional benefits of a dietary fiber — including improved gut health, lower glycemic response, and greater satiety — without affecting the taste, color, or structure of the food it's added to. It's thermally stable, neutral in taste, and performs seamlessly across a wide range of formulations, from baked goods to ready meals.

Importantly, FiberX $^{\text{TM}}$  contains high levels of resistant starch (RS) — a scientifically recognized dietary fiber that is not digested in the small intestine and helps regulate blood sugar levels. This makes it especially suitable for diabetic-friendly and low-calorie food formulations.

- "What makes FiberX truly different is its balance. It's scientifically complex but operationally simple. That's why it works so well for modern food manufacturing."
- Dr. Mahsa Majzoobi, Senior Research Fellow, RMIT University

### Why FiberX<sup>™</sup> Stands Out

Designed for health-forward food developers, FiberX<sup>™</sup> delivers smart functionality, invisible integration, and robust nutritional benefits — empowering manufacturers to meet modern fiber demands without sacrificing product appeal.

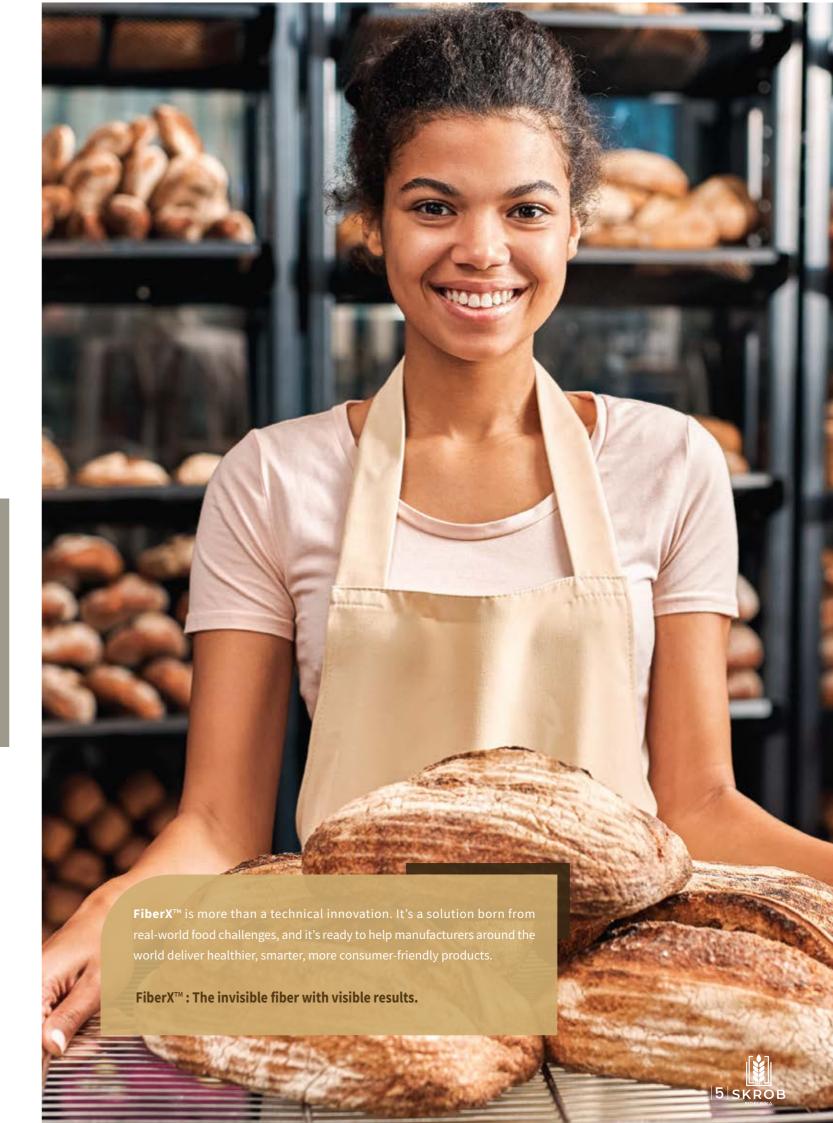
- Suitable for low-GI and diabetic-friendly products
- Co-developed by Microtec and RMIT University food scientists.
- Neutral in taste, texture, and appearance no sensory impact
- Approved by industry leaders proven in real-world applications
- **Derived from wheat, corn, and cassava** trusted plant-based sources
- Stable under heat and pH ideal for baking and industrial food processing
- Up to %92 resistant starch (RS) supports gut health and lowers glycemic response

### **Built Through Science. Proven in Practice.**

The development of FiberX™ was the product of years of R&D, led by Microtec engineers and RMIT food scientists working side-by-side — running pilot trials, testing functionality, and refining formulation performance until the product met the highest standards.

- "FiberX is the result of deep, hands-on collaboration not just between labs, but between minds. We wanted to build something that worked for industry and consumers alike."
- Prof. Asgar Farahnaki, RMIT University





# **EFSA:** Fiber for Everyday Health



### **Backed by the European Food Safety Authority**

"Increasing dietary fiber intake reduces the risk of heart disease, diabetes, obesity, and certain cancers."

European Food Safety Authority (EFSA)

The EFSA underscores the critical role of fiber not just for digestion, but for long-term disease prevention. Scientific reviews consistently show that adequate fiber intake is one of the most effective and accessible ways to protect population health.



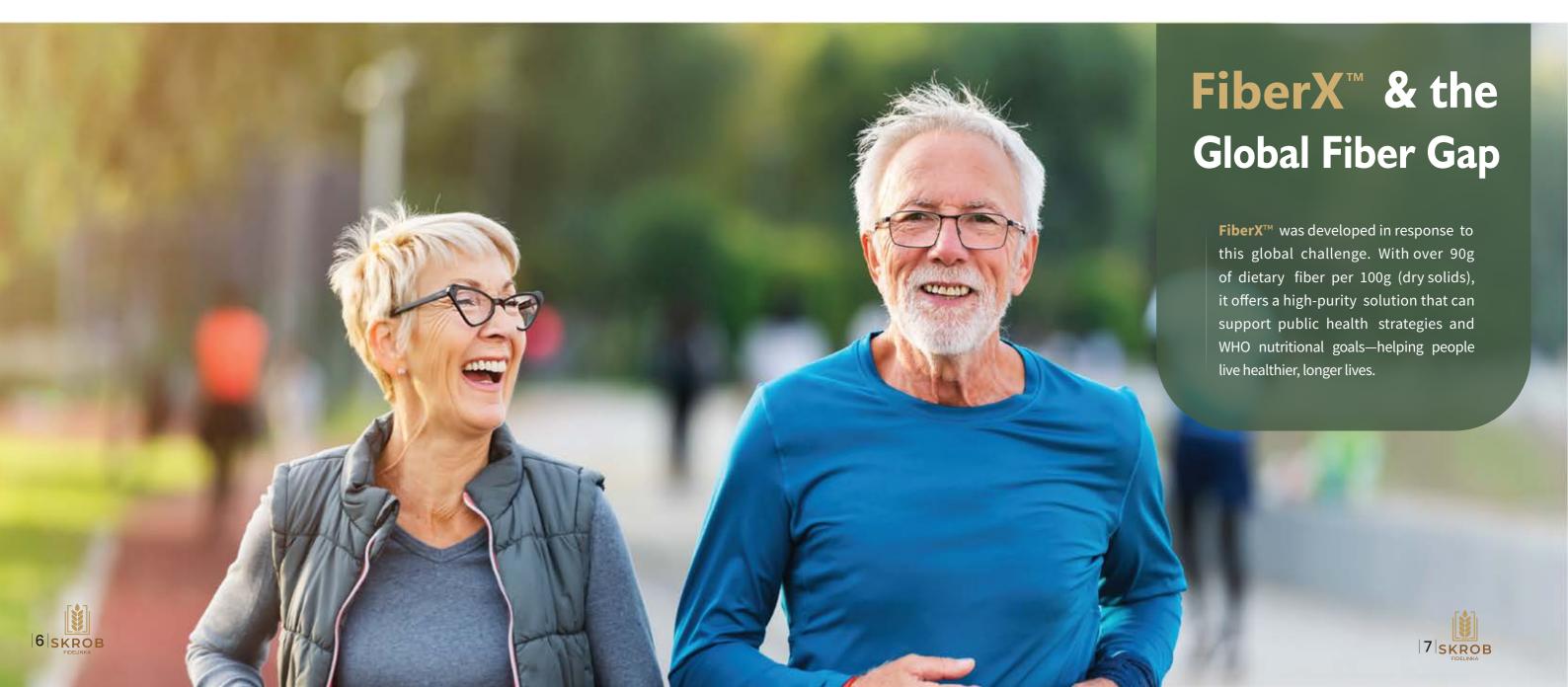
### **Answering the World Health Organization's Call for Better Nutrition**

"Most people worldwide do not meet the recommended fiber intake."

— World Health Organization (WHO)

The World Health Organization recommends a minimum of 25–30 grams of dietary fiber per day for adults to support digestive health, reduce the risk of chronic diseases, and promote overall well-being. But globally, most people consume **less than 20 grams per day**—falling short of this vital target.

This gap contributes to rising rates of obesity, diabetes, cardiovascular disease, and poor gut health.



### **The Smart Move**

**Adding Fiber to Modern Food Products.** 

As health-conscious consumers demand more from everyday foods, resistant starch as a dietary fiber has emerged as a game -changing ingredient. Recognized for its role in supporting digestive health, stabilizing blood sugar, improving satiety, and promoting overall wellness, resistant starch is quickly becoming a top priority in the global food industry.

Resistant starch is no longer a niche ingredient — it's now being widely adopted by forward-thinking brands for its clinically supported health benefits. As interest grows in low-GI diets, digestive wellness, and blood sugar management, resistant starch offers a science-backed solution that fits seamlessly into everyday foods without altering taste or texture.

**FiberX™** enables food companies to respond to this growing demand of high fiber foods with confidence—offering a highly functional resistant starch that's versatile, effective, and backed by



## Next-Gen Foods Are Fueled by Fiber

- +%12.6 Compound Annual Growth Rate in global food and beverage launches that include fiber as an ingredient.
- +%148.2 Compound Annual Growth Rate in products launched with Nutri-Score front-of-pack labeling, supporting clean-label and health-focused innovation.

(Source: Innova Market Insights, 2021–2019)





General Mills - Fiber One™



General Mills' **Fiber One**<sup>™</sup> brand includes a range of products like cereals and snack bars that are high in dietary fiber. These products are designed to help consumers increase their daily fiber intake,

"Fiber is an essential part of a healthy diet with numerous benefits to digestive and overall health."

Olé Mexican Foods – Xtreme Wellness® High Fiber Tortillas



lé Mexican Foods offers the Xtreme Wellness® line of high-fiber tortillas, designed to support healthy eating without compromising on taste.

"Fuel your day the smart (and tasty!) way. Xtreme Wellness High Fiber Tortillas make healthy eating simple and satisfying. Made with Avocado oil, each tortilla gives you 12g of fiber, 3g of net carbs, and 60 calories per serving."



# FiberX KEEPING FOODS HEALTHY

### **Smarter Fiber for a Healthier Future**

Australian Innovation | Backed by Research For All Generations | Perfected for Flour-Based Products

# FiberX<sup>™</sup> brings health to the heart of your recipe.

Boosts dietary fiber. Suitable for low-GI foods. Lowers calories.

Invisible in Application — No Change to Taste or Texture.

Integrates Into Tortillas, Pizza, Noodles, Wraps, Snacks & More.





# **Applications of FiberX™ in Foods**

### **FiberX™ for Everyday Foods**

No matter where you live or what you love to eat — FiberX™ fits right in.

In today's health-conscious world, consumers want foods that are both nutritious and enjoyable. FiberX™ was developed to blend invisibly into the foods we eat most — especially flour-based favorites like tortillas, bread, noodles, wraps, and snacks. It increases fiber without changing the taste, texture, or appearance — so your products stay delicious, just healthier.

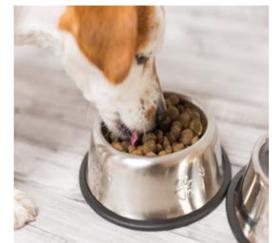
















### **Key Application Areas:**

### •Tortillas & Wraps

Add a fiber boost to flatbreads and tortillas while preserving softness and flexibility.

### • Breads & Buns

From white to wholegrain, FiberX™ enriches all types of bread without compromising quality.

#### •Pasta & Noodles

Improve the fiber profile of pasta and noodles without altering texture or cooking performance.

### Sweet & Savory Fillings

Add functional benefits to both sweet and savory fillings — from pies to dumplings.

#### • Pizza Dough

Enhance pizza bases with FiberX™ to deliver better nutrition while maintaining chewiness and crust texture.

### Bakery Sweets & Pastries

Make cakes, cookies, and pastries healthier — without affecting flavor or indulgence.

#### •Breakfast Cereals & Snacks

Perfect for high-fiber, low-GI cereals and snack bars that keep energy steady.

#### Pet Food Products

FiberX<sup>™</sup> also supports digestive wellness in pet nutrition, blending easily into animal formulations.





### **About Microtec**

### **Transforming Starch into Smart Nutrition**

At Microtec, we believe innovation only matters when it improves real lives.

Founded in Australia, Microtec Engineering Group has become a global leader in starch processing technologies and functional ingredient development — helping partners worldwide create healthier, smarter food solutions.

We specialize in the design, construction, and delivery of advanced starch production systems. But more than machinery, we bring deep collaboration — working side-by-side with our clients to combine scientific insight, engineering expertise, and practical experience to transform native starches into high-value, health-enhancing ingredients.

In response to growing global demand for healthier, clean-label food, our team invested heavily in research to develop FiberX<sup>™</sup> — a breakthrough Type 4 Resistant Starch created in collaboration with leading food scientists at RMIT University.

Recognized by the U.S. FDA as a dietary fiber, FiberX™ is made from food-grade raw materials using advanced modification techniques. It offers a powerful solution for formulating high-fiber foods that support digestive health, satiety, and blood sugar control — without compromising taste or texture.

At Microtec, we're not just building technology — we're helping build the future of nutrition.

### Science-Backed. Health-Driven. Future-Focused.

Clinical research in recent years has confirmed the digestive and metabolic benefits of resistant starch, especially for blood sugar control, satiety, and gut health. As awareness continues to grow, so does the role of functional fibers like FiberX™ in the fight against chronic diseases and lifestyle-related health issues.







### Labelling, Claims and Certification

### **Supporting Consumer Trust**

In today's health-conscious market, healthy food ingredient is not just preferred—they're expected. FiberX™ is a next-generation resistant starch with over %90 total dietary fiber, making it an excellent choice for brands seeking strong nutritional claims and transparent labelling. With functional benefits and scientific backing, FiberX™ supports label-friendly claims and simplifies formulation for low-GI, high-fiber, low calorie food products.

FiberX<sup>™</sup> is produced under certified conditions and can help meet regulatory standards for dietary fiber labelling across multiple markets. It supports a wide range of front-of-pack and nutritional positioning claims.

### **Labeling Options for FiberX**™

Depending on your product application, regional guidelines, and formulation goals, FiberX™ may be labeled as:

- Resistant Starch
- Dietary Fiber
- High-Fiber Starch
- Functional Fiber Ingredient
- Modified Starch (Dietary Fiber)

All labels are application- and region-dependent. FiberX™ complies with CODEX and local food authority definitions where dietary fiber must demonstrate resistance to human digestive enzymes and physiological benefit.

### **Nutritional & Functional Claims**

FiberX<sup>™</sup> offers wide support for front-of-pack and functional claims, especially in the bakery, snacks, noodles, and meal-replacement sectors. When used at qualifying levels, FiberX<sup>™</sup> may support the following health and nutrition claims:

- Reduced Calorie
- **Gut Health Support**
- Great Source of Fiber
- **Clean Label Compatible**
- **Blood Sugar Management**
- Supports Satiety & Fullness
- **Supports Digestive Regularity**
- Supports Low-GI Formulations
- Neutral Taste & Invisible Texture
- Gluten-Free (when made from corn or cassava)

### Certification

At Microtec, we understand how critical **quality**, **safety**, **and regulatory compliance** are in the development of functional food ingredients like FiberX™. That's why FiberX™ is produced in **certified facilities** that follow strict food manufacturing standards and undergo **routine audits** by internationally recognized bodies.

**Certifications and Standards:** 









- •ISO 9001:2015 Certified Quality Management System
- •HACCP Hazard Analysis & Critical Control Points
- •Food Safety and Risk Management Program
- •Halal Certification (where applicable)
- •Kosher Certification (on request or facility-specific)
- •Manufactured in facilities compliant with European
- hygienic engineering standards (EHEDG select sites)

Important Note: Claim eligibility must be verified based on local regulations and final product formulation. Microtec does not provide legal advice or regulatory guarantees. Please consult with qualified experts before making claims on-pack or in marketing.





### Health & Nutritional Benefits of FiberX™

FiberX is more than fiber-it's science backed nutrition

### **Supports Gut Health Naturally**

FiberX™ is a resistant starch (RS4) that feeds good gut bacteria, helping support digestive balance and overall colon health.

### **Fuels Body & Mind**

Fermentation of resistant starch produces short-chain fatty acids that serve as clean energy for the body—especially the brain and heart.

### **Consumers Need More Fiber**

Most people consume less than %5 RS in their daily diet. FiberX™ makes it easier for food producers to close this nutritional gap in everyday foods.

### **Helps Manage Weight**

By resistant to digestion and reducing glucose release, FiberX™ helps support fat metabolism and keeps you feeling fuller for longer.

### **Low Calorie**

FiberX<sup>™</sup> doesn't provide calories like regular starch. This makes it a smart choice for creating healthier, lower-calorie foods.

### Technology Benefits & Innovation Potential

### Functional Fiber that Fits Your Formula

### **Low Water Holding**

Doesn't trap water—perfect for moisture-sensitive recipes.

### Free-Flowing & Easy to Blend

Smooth, white powder with no clumping, taste, or color.

### **Low Viscosity**

Doesn't alter thickness or texture during processing.

### **Texture-Friendly**

Maintains soft, delicate textures even at high fiber levels.







### Keeping Foods Healthy— Simply and Effectively

FiberX™ makes it easier than ever to deliver healthier food—without changing what people love. With over %90 dietary fiber, neutral taste, and smooth texture, it fits seamlessly into everyday products while improving nutrition and supporting digestive wellness.

Whether you're aiming for high-fiber, low-calorie, or low-GI foods, Fiber $X^{\text{\tiny TM}}$  empowers innovation with minimal reformulation and maximum impact.

No extra steps. No compromise.
Just better food—made healthier.

#### **Trusted Fiber from Microtec**

Driven by research. Backed by quality. Designed for today's food industry.

### Disclaimer:

The information in this brochure is provided for general guidance only. The functionality and performance of FiberX™ may vary depending on formulation, application, and its type. Clients should conduct independent testing to confirm suitability for their intended use. Health-related statements are based on global research on resistant starch and are for educational purposes only; specific claims must be supported by appropriate evidence and comply with local regulations. We have made every effort to use original text and properly licensed images. If any content has been used in error, please notify us for immediate correction.







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### **Key benefits of FiberX for innovative and functional foods**

- High process tolerance.
- Suitable for Low GI Foods.
- Suitable for Low Calorie Foods
- Off-flavour or no taste (invisible fibre).
- Smooth, non-grainy texture of final foods.
- FDA compliance / Great source of dietry fiber.
- Low water absorption (little or no process adjustment is needed).
- Suitable for Fiber Fortification (good/excellent source of fibre claim).
- At a wide range of concentrations can be used for food products.