



## About WellBiome®

**WellBiome® is a functional fibre and mineral blend that supports health & wellbeing by promoting the diversity of the gut microbiome.**

Formulated by leading UK universities and key opinion leaders on the gut microbiome and functional food ingredients, WellBiome® provides a patented, scientifically formulated ingredient, suitable for a wide range of applications in the food and supplement market.

## Why OptiBiotix Health?

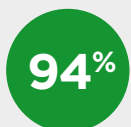
OptiBiotix is a life science business developing compounds to tackle obesity, high cholesterol and diabetes and is a recognised leader in the microbiome space<sup>2,3</sup>.

## Why WellBiome®?

- 1 The rapidly growing Health & Wellness industry was estimated to be worth \$4.2 trillion in 2019 with the digestive health segment accounting for \$60 billion<sup>1</sup>
- 2 WellBiome® provides a solution that supports products entering into or extending its value proposition to the Health & Wellness market
- 3 WellBiome® is a scientifically backed, clinically tested ingredient proven to support digestive, cardiovascular and metabolic health

**WellBiome® contains functional fibres and a trace mineral to support digestive, heart and metabolic health.**

## Technical Attributes



**FIBRE**



**PREBIOTIC**



**VEGAN**



**LACTOSE-FREE**



**HALAL**



**KOSHER**



**HEAT STABLE**



**GLUTEN FREE**



**GRAS**



**NON GMO**



**EFSA  
HEALTH  
CLAIMS**



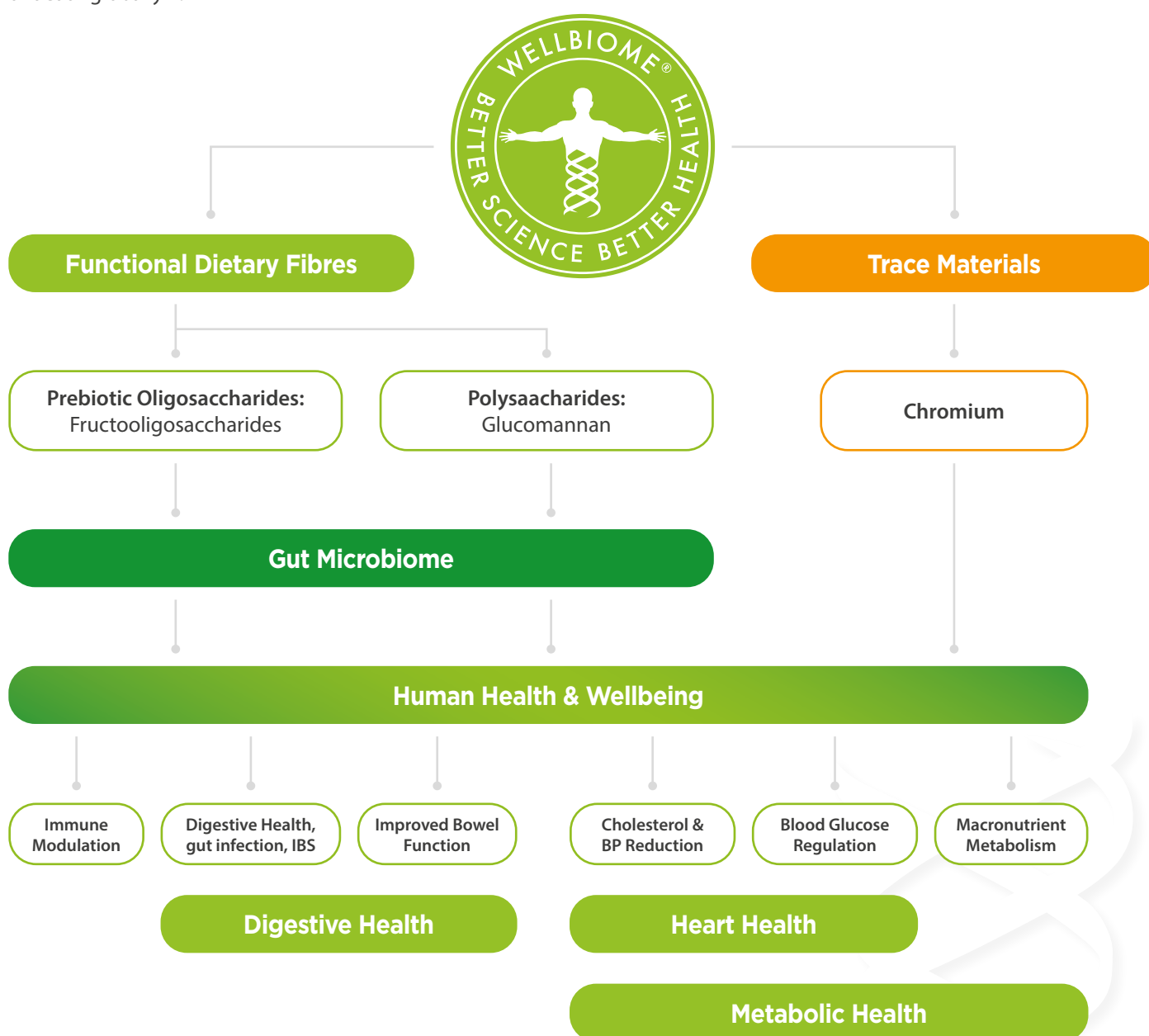
**EASILY  
ADDED DURING  
MANUFACTURING**



The human gut contains trillions of bacteria important for maintaining good health<sup>4</sup>. Supporting the health positive microbes in the gut with compounds such as functional prebiotic fibres, enhances gut microbiome diversity and can promote digestive, cardiovascular and metabolic health<sup>5</sup>.

A diet rich in dietary fibre can support normal blood pressure and cholesterol levels, both known risk factors for cardiovascular disease, one of the largest causes of death globally<sup>6,7</sup>.

Chromium is a trace mineral with a key role in macronutrient metabolism, it improves insulin resistance and helps maintain normal blood glucose levels.



# Scientifically Formulated

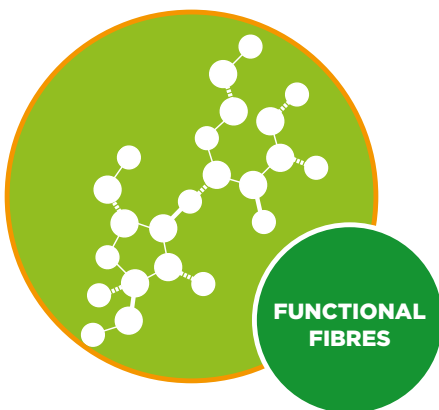
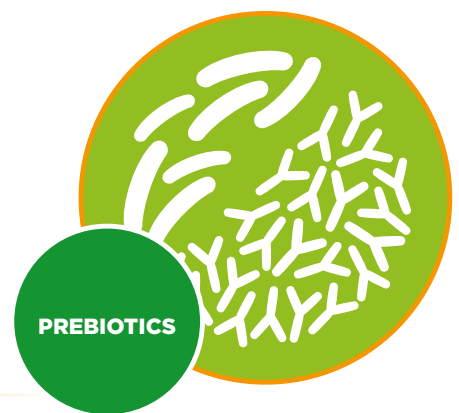
The functional fibres and trace mineral in WellBiome® work in synergy supporting digestive, heart and metabolic health to fully harness the health promoting potential of the gut microbiome



## WellBiome® composition

Functional prebiotic fibres (fructooligosaccharides), are the favourite nutrient source for the billions of health positive probiotic bacteria (*bifidobacteria* and *lactobacilli*) living in the human gut.

Prebiotics increase the diversity of the gut microbiome, a sign of good gut health, while enhancing the production of health promoting bioactive molecules such as acetate, which helps them battle potentially harmful bacteria<sup>8</sup>.



Functional dietary fibres (Glucomannan) enhance the activity of bacterial groups (*Bacteroides*, *Christensenella*) that produce bioactive molecules such as propionate and butyrate. These molecules play an essential role in gut health immunomodulation. They work together with acetate to regulate appetite, lipid and carbohydrate metabolism.

Chromium, a trace mineral essential for human health. It supports enzymes that are key in carbohydrate, lipid and protein metabolism. It also regulates insulin action and this way it can influence the breakdown of carbohydrates and fats and has the ability to amplify the action of insulin, improve insulin resistance and maintain blood glucose levels<sup>9</sup>.





## Optimised For Health & Wellbeing

Using OptiBiotix's unique microbiome modulation science developed by leading UK Universities specialising in metabolism and nutrition, WellBiome® supports digestive, cardiovascular and metabolic health



### SUPPORTS DIGESTIVE HEALTH

WellBiome® is high in soluble fibre, which helps maintain a healthy digestive system and supports regular bowel habit<sup>7</sup>. The functional fibres in WellBiome® are optimised to enhance the concentrations of health positive bacteria in the gut and the bioactive products of their metabolism.

Our studies have shown that WellBiome® maintains normal bowel habit, enhances gut microbiome diversity and significantly increases *Bifidobacterium*, *Bacteroides* and *Christensenella*, all essential bacteria for maintaining good digestive health.



### SUPPORTS HEART HEALTH

WellBiome® supports heart health by helping keep both cholesterol and blood pressure within normal levels, which significantly reduces the risk of cardiovascular disease<sup>10</sup>. High viscosity dietary fibres in WellBiome® reduce the re-absorption of bile acids in the liver resulting in consumption of cholesterol to replenish their levels. This leads to the reduction of serum cholesterol concentrations<sup>11,12</sup>.

Our studies have also shown that WellBiome® significantly reduces systolic blood pressure.



### SUPPORTS METABOLIC HEALTH

WellBiome® supports metabolic health by promoting a healthy gut microbiome, one of the most metabolically active organs in the human body<sup>4</sup>. It is also active in the stomach, where it increases the viscosity of gastric contents, slowing down the rate of emptying. This reduces the glycaemic response, which together with the insulin regulating activity in the liver helps maintain blood glucose at healthy levels.

Our studies have shown that WellBiome® can regulate glycaemic response.

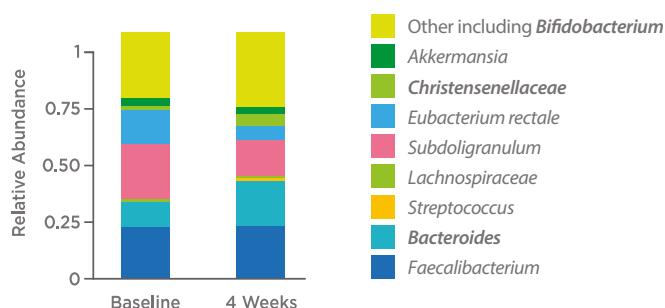
## WellBiome® Study

WellBiome has been shown in human studies to be an effective way of supporting improved health & wellbeing.

It has been shown to increase gut microbiome diversity and significantly enhances the abundance of health positive bacterial groups essential for digestive health and human wellbeing<sup>15</sup>.

WellBiome® significantly enhances the abundance of health positive bacterial groups involved in functional fibre metabolism:

 *Bifidobacterium*  *Bacteroides*  
 *Christensenella*



**Our studies have also shown WellBiome® to:**

- Maintain normal bowel habit
- Demonstrate a low glycaemic index and regulate glycaemic response
- Reduce systolic blood pressure

## Health Claims

The below table indicates the amount of WellBiome® needed to make specific health claims.

Dose (g/day)	WellBiome® Related Health Claims	General Claims
1	Chromium contributes to the maintenance of normal blood glucose levels (6)	Low glycaemic index (4)
1	Glucomannan can help reduce blood cholesterol (8)	Increase the absorption of several minerals (calcium, magnesium, in some cases phosphorus) and trace elements (mainly copper, iron, zinc)
2	Contains one gram of prebiotic (2;4)	Increased source of fibre (3)
3	Contains two grams of prebiotic (2;4)	Source of fibre (9)*
4		Good source of fibre (3)
5	Contains three grams of prebiotic (2;4)	
6	Contains four grams of prebiotic (2;4)	High Fibre (9)*
7	Cardiovascular health (1)	Excellent source of fibre (3)
7	Chromium contributes to normal macronutrient metabolism (7)	
8	Contains five grams of prebiotic (2;4)	
9	Contains six grams of prebiotic (2;4)	
11	Contains seven grams of prebiotic (2;4)	
12	Contains eight grams of prebiotic (2;4)	
12	Regular consumption of glucomannan helps maintain normal blood cholesterol concentrations (5)	

Lactose-free <sup>3</sup>, Halal, Kosher

**OptiBiotix®**  
HEALTH PLC

BETTER SCIENCE, BETTER HEALTH

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# Applications



SUPPLEMENTS



BARS



SHAKES/MEAL  
REPLACEMENTS



BAKERY  
PRODUCTS



DAIRY  
PRODUCTS



BREAKFAST  
CEREALS



HEALTHY  
SNACKS

## Health Claim References

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- (2) The International Scientific Association for Probiotics and Prebiotics consensus statement on the definition and scope of prebiotics. Available at: <https://digitalcommons.unl.edu/cgi/viewcontent.cgi?article=1235&context=foodsciefacpub>.
- (3) <https://www.legislation.gov.au/Details/F2016C00082>
- (4) Beneo; Australia and New Zealand – Use of nutrition content claim indicating presence of prebiotic related to Orafit® Inulin and Orafit® Oligofructose; May 2019
- (5) <https://efsa.onlinelibrary.wiley.com/doi/pdf/10.2903/j.efsa.2009.1258>
- (6) <https://efsa.onlinelibrary.wiley.com/doi/pdf/10.2903/j.efsa.2010.1732>
- (7) <https://efsa.onlinelibrary.wiley.com/doi/pdf/10.2903/j.efsa.2010.1732>
- (8) <https://beta.regulations.gov/document/FDA-2018-P-0877-0010>
- (9) [https://ec.europa.eu/food/safety/labelling\\_nutrition/claims/nutrition\\_claims\\_en](https://ec.europa.eu/food/safety/labelling_nutrition/claims/nutrition_claims_en)

\* Fibre per 100g (finished product)



## Supporting literature

- (1) CB Insights 2019, Wellness Trends to Watch in 2019
- (2) Open PR 2020, What's driving the human microbiome market size?
- (3) Herald Write Up 2020, Human Microbiome Market Size, Status and Global Outlook 2020-2024 [www.heraldwriteup.com/metabiomics-osel-inc-puretech-health-4d-pharma-synlogic-inc/](http://www.heraldwriteup.com/metabiomics-osel-inc-puretech-health-4d-pharma-synlogic-inc/)
- (4) Nicholson JK et al., (2012) Science 336, 1262
- (5) Le Chatelier E et al., (2013) Nature **500**: 541-546
- (6) Anderson JW et al., (2009) Nutrition Reviews **67**(4): 188-205
- (7) Cummings JH et al., (2004) Clinical Nutrition supplements **1**: 5-17
- (8) Gibson G.R. et al., (2017). Nature Reviews Gastroenterology & Hepatology **14**: 491–502
- (9) EFSA Journal 2010;8(10):1732
- (10) Egan M et al., (2013) Circulation **128**(1): 29-41
- (11) Vuksan V et al., (2000) Diabetes Care **23**(1): 9-14
- (12) EFSA Journal 2009; 7(9):1258

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