

# ProVen: Probehav Study & Product Summary







### **PROBEHAV STUDY**

#### AIMS:

To examine the effects of ProVen 50 Billion on:

- 1) General feelings of anxiety, using a questionnaire-based approach;
- 2) Cognitive function, using a comprehensive cognitive battery of tests
- 3) Stress reactivity, using a laboratory stressor task in which participants must undertake a number of actions designed to induce the stress response.

The first trial of probiotics on cognitive outcomes in humans







#### PROBEHAV STUDY

#### STUDY DESIGN:

- DBPC pilot study
- 50 healthy volunteers (19-38 years old, BMI<30)</li>
- Active: ProVen 50 Billion at 5x 10<sup>10</sup> cfu per capsule/day
- Placebo: Maltodextrin
- Duration of intervention: 6 weeks

#### **RESULTS:**

- 1. ProVen significantly decreased 'trait' anxiety levels compared to placebo group (p = 0.042)
- 2. 'Continuity of attention' increased in response to the ProVen intervention and decreased with the placebo group (p=0.035)







# ProVen and Lab4 Probiotics

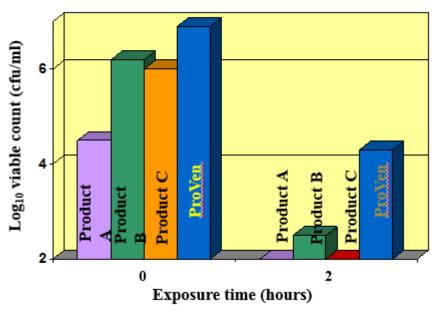








# Passage of Probiotics through the G.I. Tract



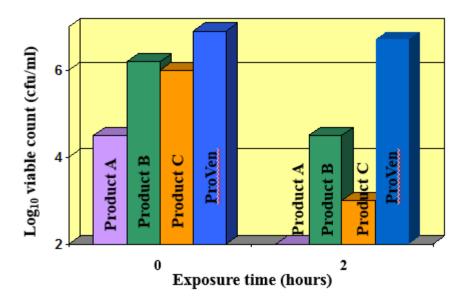
The Acid Test: At a low pH of 2.6, ProVen remains the most viable probiotic







# Passage of Probiotics through the G.I. Tract



The Acid Test: At a high pH of 4.2, ProVen remains the most viable probiotic







# Who we are... PROVENT

We produced our first human propiotic in 1994

Since then, OUR OWN team of scientists, have worked to develop OUR OWN trademarked group of probiotic strains – finalised around 15 years ago:

- ProVen used in our child and adult products to reflect the composition of the human gut once it is fully developed
- **ProVenb** used in our pregnancy, baby and toddler products to replicate the composition of the friendly bacteria in the developing human gut







# Who we are...



#### **ProVen**

Lactobacillus acidophilus – strain 1 Lactobacillus acidophilus – strain 2 Bifidobacterium bifidum Bifidobacterium animalis (var lactis)





#### **ProVenb**

Lactobacillus paracasei Lactobacillus salivarius Bifidobacterium bifidum Bifidobacterium animalis (var lactis)











#### Unlike any other probiotic brand in the UK

- We have OUR OWN team of researchers and scientists
- We do research on OUR OWN group of probiotic strains ProVen and ProVenb are both extensively researched
- Our research team works DIRECTLY with the best universities and hospitals in the UK and overseas to carry out OUR OWN clinical studies
- We develop our ProVen products based upon our clinical studies
- We manufacture all the ProVen products in OUR OWN Good Manufacturing Process (GMP) approved facilities in South Wales







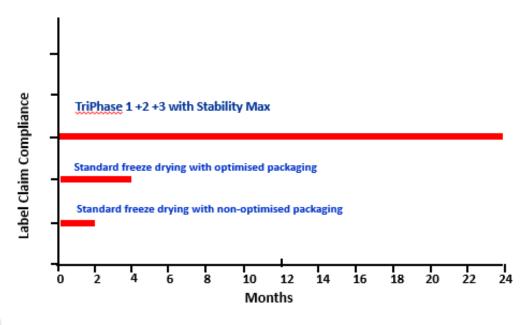






#### TriPhase and Stability Max -The Ultimate Stability of Probiotics

This chart compares typical stability profiles obtained with a high potency probiotic (over 5 billion per capsule)combined with a multivitamin component



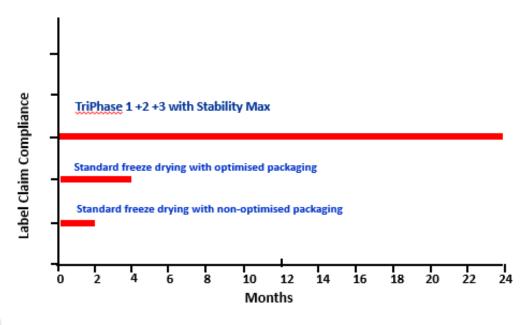






#### TriPhase and Stability Max -The Ultimate Stability of Probiotics

This chart compares typical stability profiles obtained with a high potency probiotic (over 5 billion per capsule)combined with a multivitamin component









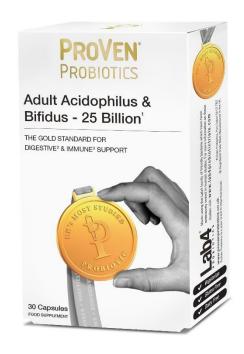
# Adult Acidophilus & Bifidus – 25 Billion

- For use alongside and following antibiotics prevents the overgrowth of undesirable bacteria following antibiotics
- ProVen probiotics significantly reduced total symptoms and improved quality of life of IBS sufferers
- Shown to reduce the incidence of C.difficile diarrhea
- Proven to colonise the human intestine

30 capsules 25 billion ProVen friendly bacteria per two capsules

25 billion = benchmark clinical study level 12.5 billion = maintenance level

NUTRITION INFORMATION Serving Size: Servings Per Container:	1 Capsule 30		2 Capsule: 15	S
Amount Per Serving		%NRV*		%NRV*
Vitamin D3 Vitamin C	25µg 80mg	500% 100%	50µg 160ma	1000% 200%
Calcium	120mg	15%	240mg	30%
Zinc	15mg	150%	30mg	300%
Selenium	55µg	100%	110µg	200%
Lab4 Consortium				
L. acidophilus (CUL60)	7	†		†
L. acidophilus (CUL21)	12.5 billion	†	25 billion	†
B. animalis subsp. lactis (CUL34)	viable cells	†	viable cells	+
B.bifidum (CUL20)		†		†
Fructooligosaccharides (FOS)	100ma	+	200ma	+



For Adults | Gluten Free | Dairy Free | Vegetarian | NOT Vegan |







# Total Intestinal & Digestive Support / Total Immune & Energy Support

- Vegetarian (NOT Vegan) 14 individual sachets
- Tropical flavour drink
- 12.5 billion ProVen per sachet
- PLUS complete intestinal support

For Adults
Gluten and Dairy Free



Serving Size: 1 Sachet Servings Per Container: 14		%NRV/RDA
Vitamin A Vitamin D3 Vitamin C Calcium	800µg RE 50µg 500mg 120mg	100% 1000% 625% 15%
Lab4 Consortium Lactobacillus acidophilus (CUL60) -		ţ
Lactobacillus acidophilus (CUL21)	12.5 billion viable cells	1
Bifidobacterium animalis subsp. lactis (CUL34) Bifidobacterium bifidum (CUL20)	12.5 billon viable cells	Ť
Dietary Fibre Provided as:	3000mg	†
Fructooligosaccharides (FOS)	1000mg	+
Inulin	1000mg	Ť
Sunfiber™	1000mg	+
L-Glutamine	1000mg	+
Aloe Vera 200:1	10mg	+

- 14 individual sachets
- Fizzy orange drink
- 12.5 billion ProVen per sachet
- PLUS further immune boost and energy support

For Adults
Gluten and Dairy Free
Vegetarian (NOT Vegan)



Serving Size: 1 Sachet Servings Per Container: 14		%NRV/RDA
Warnis D3 Warnis D3 Thiannis (Warnis B1) Ribiculore (Warnis B2) Nacis Warnis B6 Folic Add Warnis B12 Bottle Perstotheric Add Zho Sorelum	25ug 1000lmg 3.3mg 4.2mg 4.2mg 5.00ug 15ug 15ug 15ug 10ug 10ug	500% 1250% 300% 300% 300% 300% 250% 600% 150% 300% 100% 182%
Lab4 Consortium Lactobacilius achilophilus (CUL60) Lactobacilius achilophilus (CUL71) Lactobacilius achilophilus (CUL71) Billiobactorium animalis subsp. lactis (CUL34) Billiobacteans billiobac (CUL72)	12.5 billion vatile cells	t
Hideberry Extract Equilation to: Claimony Fruit Guerre Extract (Mn 22% Caffeine) Bota 1,3 & 1,6 Globans Caffeine (an Caffeine Anhydrous & Guerres Extract) Concentre (210	200mg 1400mg 200mg 100mg 100mg 10mg	† † † †







#### Fit for School

#### For boosting immunity in children:

- Shown to reduce incidence of coughs and colds by a third
- Shown to halve the number of days of illness
- Absenteeism from school and thus childcare reduce by a third
- Days with a runny nose or sore throat reduced by a third
- Visits to the doctor, and consequently antibiotic prescription, reduced by 43%







#### Fit for School

- 30 chewable tablets
- Strawberry-flavoured
- 12.5 billion ProVen per tablet
- PLUS vitamin C

For children aged 4+ Gluten and Dairy Free Vegetarian and Vegan



Serving Size: 1 Chewable Tablet Servings Per Container: 30		
Amount Per Serving		%NRV/RDA*
Vitamin C	50mg	63%
Lab4 Consortium Lactobacillus acidophilus (CUL60) Lactobacillus acidophilus (CUL21) Blfidobacterium animalis subsp. lactis (CUL34)	12.5 billion viable cells	† † †

200mg

Fructooligosaccharides (FOS)

- 28/14 individual sachets
- 12.5 billion ProVen per sachet
- PLUS vitamin C,
  vitamin D and FOS

For children aged 1+ Gluten and Dairy Free Vegetarian (NOT Vegan)



NUTRITION INFORMATION Serving Size: 1 Stick Pack Servings Per Container: 14		%NRV*
Vitamin D3 Vitamin C	5µg 50mg	100% 62.5%
Lab4 Consortium Lactobacillus acidophilus (CUL60) Lactobacillus acidophilus (CUL21) Bilfidobacterium Inificum (CUL20) Bilfidobacterium animalis subsp. lactis (CUL34)	12.5 billion viable cells	† † † †
Prebiotic Fructooligosaccharides (FOS)	1000mg	t







#### Lactobacillus & Bifidus (ProVenb) for Pregnancy

- Supported by the Swansea Baby Trial the largest clinical trial ever done with pregnant mother and infant pairs
- Mums-to-be took 10 billion ProVen Probiotics ProVenb friendly bacteria daily for their third trimester
- Babies took 10 billion ProVenb friendly bacteria daily for the first six months following birth
- Risk of allergy in the babies reduced by 50% a lifetime benefit

30 capsules
10 billion ProVenb per tablet
PLUS vitamin C and calcium to support digestive and immune health

For adults
Gluten Free
Dairy Free
Vegetarian
Vegan

 Per Serving
 %NRV\*

 80mg
 100%

 120mg
 15%

Lactobacillus salivarius (CUL-61) Bifidobacterium animalis subsp. lactis (CUL-34) Bifidobacterium bifidum (CUL-20) Lactobacillus paracasei (CUL-08)



10 billion viable cells





#### ProVenb plus complete nutritional support for Pregnancy

- Supported by the Swansea Baby Trial – the largest clinical trial ever done with pregnant mother and infant pairs
- Mums-to-be took 10 billion ProVen Probiotics ProVenb friendly bacteria daily for their third trimester
- Babies took 10 billion ProVenb friendly bacteria daily for the first six months following birth
- Risk of allergy in the babies reduced by 50% - a lifetime benefit

- 30 capsules + 30 softgels
- 10 billion ProVenb
- PLUS vitamins, minerals & DHA at levels optimised for pregnancy
- Includes folic acid and vitamin D
- 200mg of DHA essential for foetal nerve and brain development
- For conception, pregnancy and breastfeeding

For Adults
Gluten Free
Dairy Free
Contains Fish









# Lactobacillus & Bifidus (ProVenb) for Babies

- Supported by the Swansea Baby Trial and 'Safety in Newborns' study
- Proven to be completely safe
- Proven to reduce allergic sensitization to any allergen by 50%
- Proven to reduce eczema by 60%











#### Lactobacillus & Bifidus (ProVenb) for Babies

- 30 days supply
- Powder with scoop
- 10 billion ProVenb per dose

For babies from birth Gluten and Dairy Free Vegetarian and Vegan Add to expressed breast milk or give direct to baby



NUTRITION INFORMATION
Serving Size: 2 Level Scoops
Servings Per Pack: 30

Amount Per Serving
Lab4b Consortium
Lactobacillus salivarius (CUL61)
Lactobacillus paracasei (CUL08)
Bifidobacterium animalis subsp. lactis (CUL34)
Bifidobacterium bifidum (CUL20)

To billion viable cells

†

10 billion viable cells

†

†

11 billion viable cells

†

12 billion viable cells

†

13 billion viable cells

- 30 days supply
- Powder with scoop
- 10 billion ProVenb per dose
- PLUS GOS at breast-milk levels

For babies from birth Gluten Free (not Dairy Free)

Vegetarian (not Vegan)
Add to made-up and
cooled formula milk



NUTRITION INFORMATION
Serving Size: 1 Heaped Scoop
Servings Per Pack: 30

Amount Per Serving
Lab4b Consortium
Lactobacillus salivarius (CUL61)
Lactobacillus paracasel (CUL08)
Billidobacterium animalis subsp. lactis (CUL34)
Billidobacterium bilidum (CUL20)

f
Galactooligosaccharides (GOS)
Fructooligosaccharides (FOS)
100mg

†







#### ProVenb with Vitamins and Prebiotic for Toddlers

The only probiotic with multivitamins specifically developed to promote immune, digestive and general health in toddlers

- 30 days supply
- Powder with scoop
- 5 billion ProVenb per dose
- PLUS 100% NRV of all 13 essential vitamins
- PLUS 800mg GOS and FOS

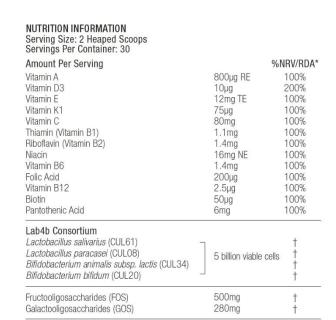
For toddlers aged 1-4

Gluten Free

**NOT Dairy Free** 

Vegetarian

**NOT Vegan** 







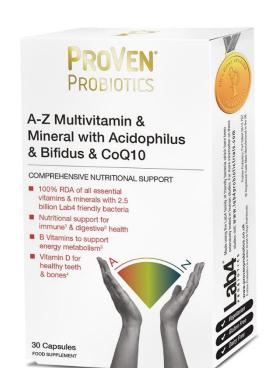




#### ProVen with multivitamins and minerals for Adults

- 2.5 billion ProVen friendly bacteria per capsule
- 100% NRV of all essential vitamins and minerals
- Additional essential nutrients to support healthy aging
- Developed specifically to support general wellbeing
- 30 capsules
- 2.5 billion ProVen per capsule
- PLUS vitamins, minerals, CoQ10, silicon and boron

For Adults | Gluten Free | Dairy Free | Vegetarian | NOT Vegan



Serving Size: 1 Capsule Servings Per Pack: 30		
Amount Per Serving		%NRV/RDA
Vitamin A (as Beta Carotene)	800ua RE	100%
Vitamin D3	25µg	500%
Vitamin E	12mg TE	100%
Vitamin K1	75µa	100%
Vitamin C	80mg	100%
Thiamin (Vitamin B1)	1.1mg	100%
Riboflavin (Vitamin B2)	1.4mg	100%
Niacin	16mg NE	100%
Vitamin B6	1.4mg	100%
Folic Acid	200ug	100%
Vitamin B12	2.5µg	100%
Biotin	50µg	100%
Pantothenic Acid	6mg	100%
Calcium	120mg	15%
Magnesium	56.25mg	15%
Iron	14mg	100%
Zinc	10mg	100%
Copper	1mg	100%
Manganese	2mg	100%
Selenium	55µд	100%
Chromium	40µg	100%
Molybdenum	50µg	100%
lodine	150µg	100%
Coenzyme Q10	20mg	t
Silicon	2mg	†
Boron	100µg	t

Lab4 Consortium
Lactobacillus acidophilus (CUL60)
Lactobacillus acidophilus (CUL21)
Billiothacterium animalis subsp. lactis (CUL34)
Billiothacterium billiolum (CUL20)

2.5 billion viable cells †



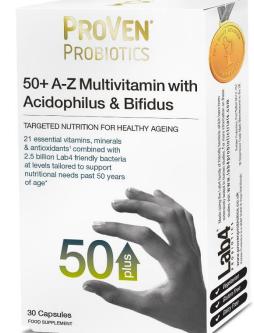




#### ProVen with multivitamins and minerals for Adults aged 50+

- 2.5 billion ProVen friendly bacteria per capsule
- 100% NRV of all essential vitamins and minerals
- Additional essential nutrients to support healthy aging
- Developed specifically to support those over 50
- 30 capsules
- 2.5 billion ProVen per capsule
- PLUS vitamins, minerals, CoQ10, silicon and boron

For Adults aged 50+ | Gluten Free | Dairy Free | Vegetarian | NOT Vegan



NUTRITION INFORMATION Serving Size: 1 Capsule Servings Per Pack: 30		
Amount Per Serving		%NRV/RDA
Vitamin A	1200µg RE	150%
Vitamin D3	25µg	500%
Vitamin E	24ma TE	200%
Vitamin K1	90µg	120%
Vitamin C	160mg	200%
Thiamin (Vitamin B1)	2.2mg	200%
Riboflavin (Vitamin B2)	2.8mg	200%
Niacin (Vitamin B3)	32mg NE	200%
Vitamin B6	2.8mg	200%
Folic Acid	400µg	200%
Vitamin B12	20µg	800%
Biotin	100µg	200%
Pantothenic Acid	12mg	200%
Iron	14mg	100%
Zinc	10mg	100%
Copper	1mg	100%
Manganese	2mg	100%
Selenium	55µg	100%
Chromium	40µg	100%
Molybdenum	50µg	100%
lodine	150µg	100%
Ginkgo Biloba Leaf Powder	25mg	t
N-Acetyl Cysteine	20mg	Ť
Coenzyme Q10	10mg	† † †
Alpha Lipoic Acid	10mg	Ť
Lutein	1mg	Ť
Zeaxanthin	0.5mg	Ť

Lactobacillus acidophilus (CUL60) Lactobacillus acidophilus (CUL21)

Bifidobacterium animalis subsp. lactis (CUL34)



2.5 billion viable cells †



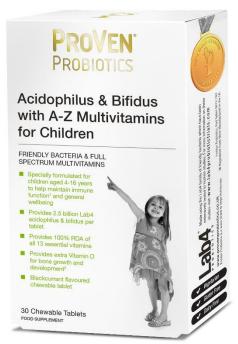


#### ProVen plus Multivitamins for Children

- 2.5 billion ProVen friendly bacteria per chewable tablet
- 100% NRV of all essential vitamins
- Additional essential nutrients for each life-stage
- Developed specifically to support general wellbeing and health in children
- 30 chewable tablets
- Blackcurrant-flavoured
- 2.5 billion ProVen friendly bacteria per tablet
- PLUS 100% NRV of all 13 essential vitamins

For children aged 4+ | Gluten Free | Dairy Free | Vegetarian | NOT Vegan









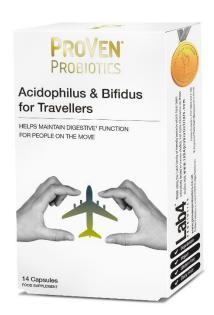


#### Acidophilus & Bifidus for Travel

Designed specifically for travel - helps protect the tummy against exposure to local food, water and a different and unfamiliar range of local 'bugs'

- 14 capsules
- 12.5 billion ProVen per capsule
- PLUS calcium, ginger, glutamine and aloe vera
- to support the gut
- Easy to pack
- Refrigeration not required
- Take before, during and after travel

NUTRITION INFORMATION Serving Size: 1 Capsule Servings Per Pack: 14		
Amount Per Serving	9	6NRV/RDA
Calcium	120mg	15%
Lab4 Consortium Lactobacillus acidophilus (CUL60) Lactobacillus acidophilus (CUL21) Bilidobacterium animalis subsp. lactis (CUL34) Bilidobacterium bilidum (CUL20)	12.5 billion viable cell	ls †
Ginger Root Powder	200mg	t
L-Glutamine	200mg	Ť
Aloe Vera 200:1	20mg	+



For adults | Gluten Free | Dairy Free | Vegetarian | Vegan







# **NEW PRODUCTS 2017**





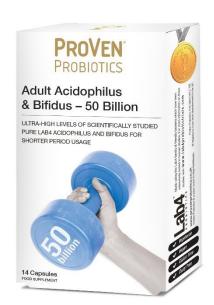




# Adult Acidophilus & Bifidus – 50 Billion

- · Ultra-high strength research-backed friendly bacteria
- Scientifically studied ProVen acidophilus & bifidus, proven to colonise the human intestine and to be effective for reducing IBS symptoms and the effects of antibiotics
- Intensive high-strength pure probiotic designed for short-term use
- For use alongside and/or following antibiotics designed specifically to support the gut during periods of powerful antibiotic use
- Higher dose for a faster and more profound effect
- For use following digestive upset
  - 14 capsules
  - 50 billion ProVen per capsule
  - Ultra-high strength

For Adults | Gluten Free | Dairy Free | Vegetarian | Vegan



NUTRITION INFORMATION

Serving Size: 1 Capsule Servings Per Pack: 14

Amount Per Serving Lab4 Consortium

Lactobacillus acidophilus (CUL60) Lactobacillus acidophilus (CUL21) Bifidobacterium bifidum (CUL20) Bifidobacterium animalis subsp. lactis (CUL34) %NRV\*

50 billion viable cells 1



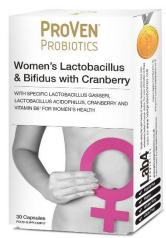




# Women's Lactobacillus & Bifidus with Cranberry

- Support both the digestive tract and the urogenital tract in women
- Designed specifically for women Lactobacillus strains are colonisers of vaginal canal (anaerobic)
- Contains 12.5 billion ProVen friendly bacteria for gut support proven to colonise the intestine
- PLUS a special strain of bacteria, *Lactobacillus gasseri* normal part of the vaginal flora thrives in acidic circumstances (p of vagina c.4)
- Oral probiotics easily move from the GI tract to the vaginal canal
- Cranberry helps to support the health of the urinary tract
- Vitamin B6 contributes to the regulation of hormonal activity
- 30 capsules
- 12.5 billion ProVen per capsule plus *Lactobacillus gasseri*
- PLUS cranberry and vitamin B6
- Take daily for ongoing support or 2 capsules per day if required

For Adults | Gluten Free | Dairy Free | Vegetarian | Vegan |



#### Women's Lactobacillus & Bifidus with Cranberry

Cranberry		
NUTRITION INFORMATION Serving Size: 1 Capsule Servings Per Pack: 30		
Amount Per Serving		%NRV*
Vitamin B6	1.4mg	100%
Cranberry Extract	100mg	†
Equivalent to Fresh Cranberries	3600mg	†
Lab4 Consortium with L.gasseri Lactobacillus acidophilus (CUL60) Lactobacillus acidophilus (CUL21) Bilidobacterium bilidum (CUL20) Bilidobacterium animalis subsp. lactis (CUL34) Lactobacillus gasseri (CUL09)	17.5 billion via	ible cells †



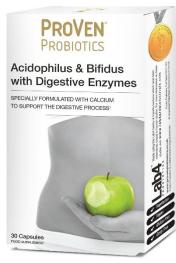




# Acidophilus & Bifidus with Digestive

- Developed to provide comprehensive support for digestion
- A logical combination providing the intestinal/digestive effects of both probiotics and digestive enzymes
- Research-backed ProVen bacteria with digestive enzymes and calcium
- Contains the major enzymes used to digest food lipase for fats, protease for protein and amylase for carbohydrates
- To help with indigestion or inefficient digestion
- 30 capsules
- 12.5 billion ProVen per capsule
- PLUS calcium to support the digestive process
- Take one capsule with each main meal

For Adults | Gluten Free | Dairy Free | Vegetarian | Vegan



#### Acidophilus & Bifidus with Digestive Enzymes

Serving Size: 2 Capsules Servings Per Pack: 30		
Amount Per Serving		%NRV*
Calcium	120mg	15%
Lipase	30mg	†
Protease	300mg	Ť
Amylase	600mg	†
Lab4b Consortium		
Lactobacillus acidophilus (CUL60)	٦	
Lactobacillus acidophilus (CUL21)	25 billion via	able cells †

Bifidobacterium animalis subsp. lactis (CUL34)







#### Cardiobiotic

- · Designed specifically to support heart health
- Contains two scientifically studied types of friendly bacteria, Lactobacillus plantarum (CUL66) and Lactobacillus reuteri (NCIMB 30242)
- CUL66 (a Cultech strain) backed by research showing it significantly reduces the amount of cholesterol being absorbed into the gut through the following mechanisms:
  - Blocks cholesterol being absorbed so it passes straight through the gut lumen and out through the body
  - Accelerates the efflux mechanism in cells which pushes some cholesterol back into the gut lumen
  - Inhibits absorption of cholesterol into the blood
- Lactobacillus reuteri supported by human trials showing significant reduction of cholesterol
- Also contains hydroxytyrosol (from olive leaf) shown to reduce oxidised LDL cholesterol
- And vitamin B1, shown to be beneficial for heart health







# Cardiobiotic

#### Cardiobiotic

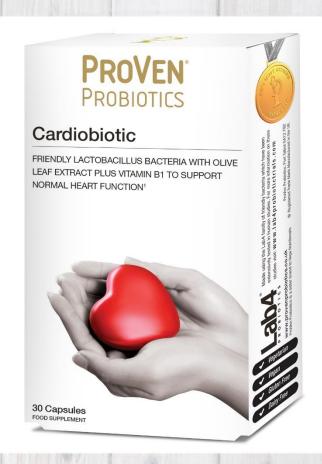
#### **NUTRITION INFORMATION**

Serving Size: 1 Capsule Servings Per Pack: 30

Amount Per Serving		%NRV*
Thiamin	1.4mg	127%
Lactobacillus plantarum (CUL66) Lactobacillus reuteri (NCIMB 30242)	10 billion viable cells	†
Olive Leaf Extract	71.5mg	†
Providing: Hydroxytyrosol	5mg	†

30 capsules 10 billion live bacteria per capsule PLUS olive leaf extract and vitamin B1

For Adults | Gluten Free | Dairy Free | Vegetarian | Vegan









#### Comparison of 'Value for Money'Across Three Leading Probiotics



Caps /Pack	CFU count/cap	Total CFU/pack	Pack Cost	Cost /BillionCFU
30	1 Billion	30 Billion	33.0 Euros	1.1 Euros!!!
10	6 billion	60 billion	6.75 Euros	0.11 Euros



30 12.5 billion 375 billion 16.0 Euros 0.043 Euros!!! Aflorex is 25 times more expensive than ProVen Afterbiotic is 2.5 times more expensive than ProVen ....... and ProVen has far more evidence of effect than either!!







### In summary

- Clinical efficacy now THE MOST IMPORTANT REQUIREMENT for any probiotic
- ProVen Probiotics 'families' of products supported by clinical research
- Products for all lifestages
- Unsurpassed stability (proprietary Tri-Phase and Stability Max processes)
- Strains chosen for their ability to survive acid and bile
- Products stable at room temperature no need for refrigeration
- Developed, manufactured and clinically studied in the UK
- Continuous research and development



