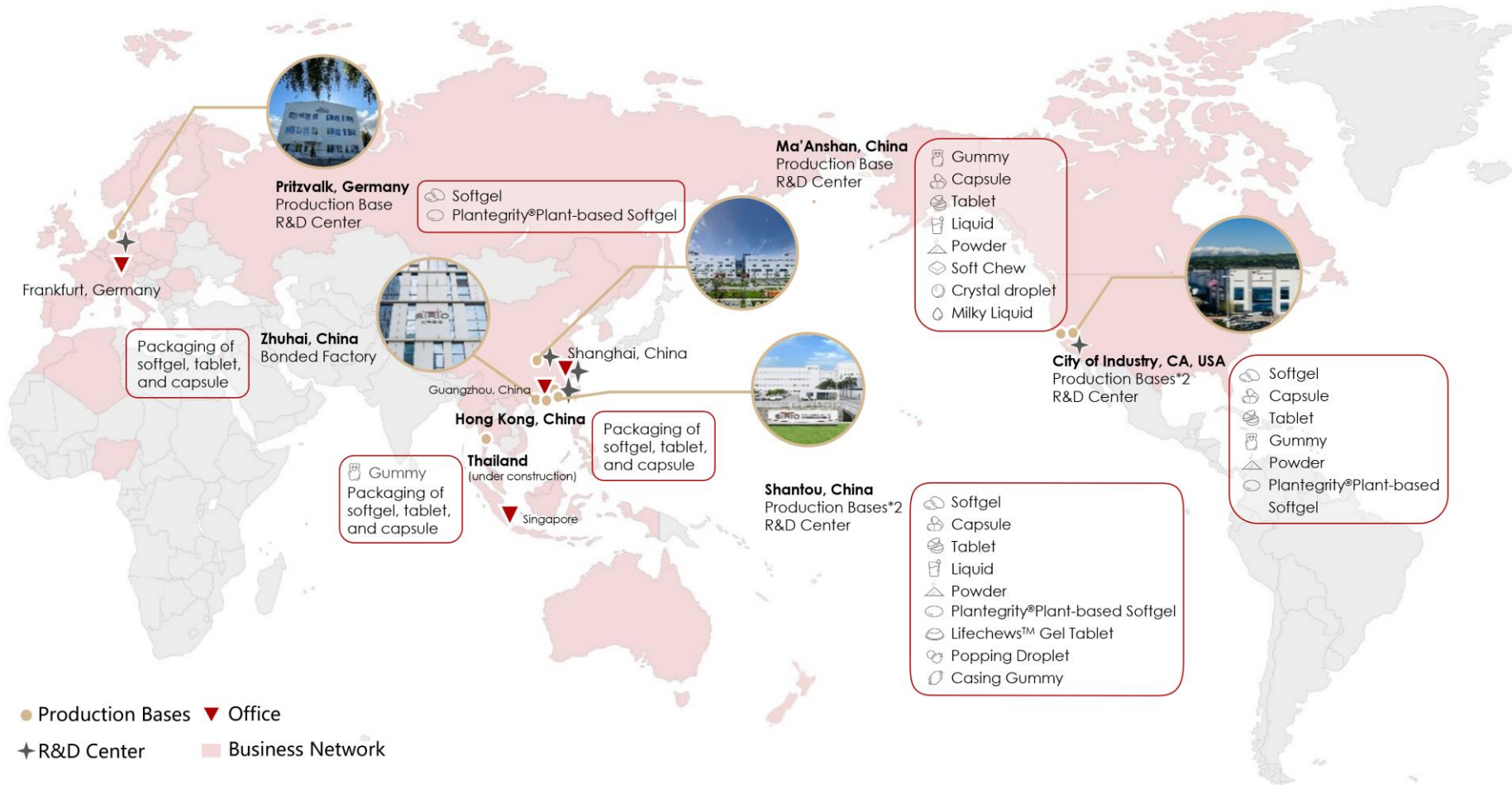




Designing for longevity: supplement formats that build habits, trust, and long-term wellness

Janine Barlow, Head of R&D Sirio Europe

SIRIO is a Global Nutraceutical CDMO



What does longevity mean to you?

Go to

www.menti.com

Enter the code

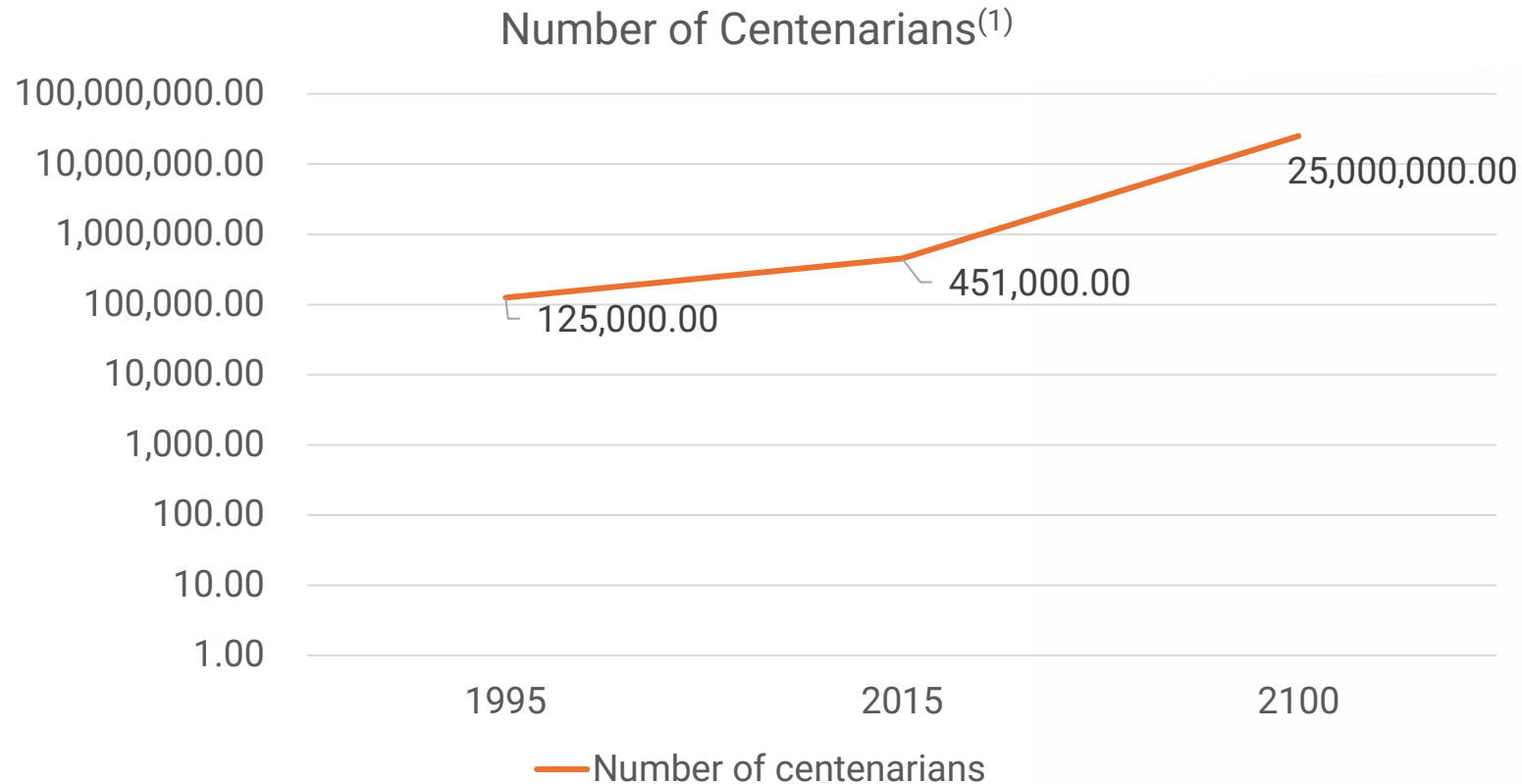
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OR



Use QR Code

We are living longer. How can we live healthier?



The United Nations monitoring of global centenarians predicts that the population of this age group will increase >50 fold in just over 100 years.

It is clear that we live longer. How can we live healthier?

The concept of healthy aging has evolved, from "anti-aging" to aspirational health and disease management

Anti-aging



Prevention over cure



Disease management



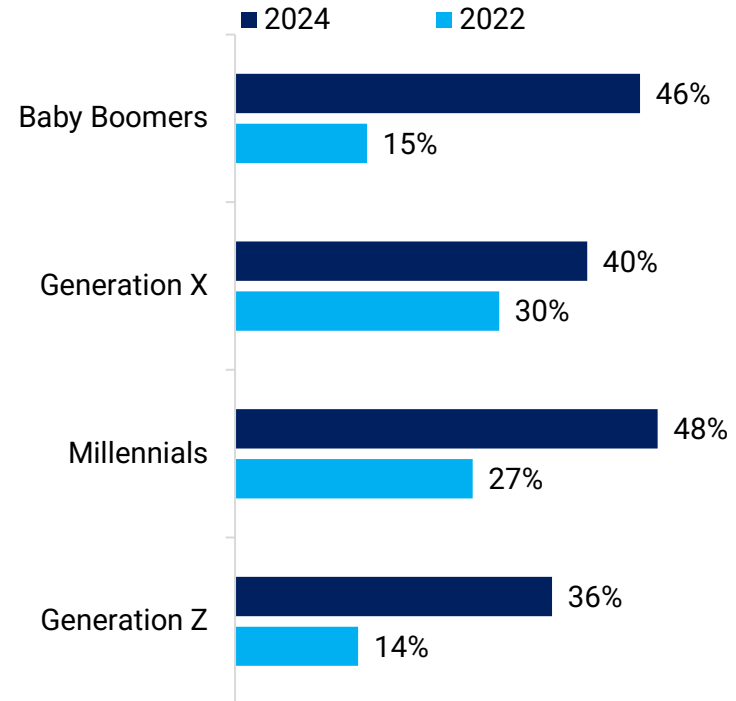
Healthy aging is focused around minimizing the risk of disease and illness in the long-term.

There has been a noticeable increase in the usage of nutritional supplements in the past two years



The proportion of consumers who say they have used nutritional supplements in the last two years to boost their health.

Global

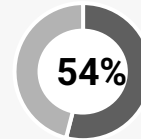


Consumers want to feel that supplements are helping to maintain health while fitting into their existing lifestyles

Whilst efficacy is crucial in shaping perceptions of value, ease of use also significantly influences purchase choice

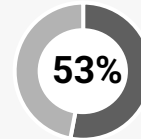


What factors are important when choosing which supplements to use?
Global – Top five answers - Consumers who have used supplements in the last two years



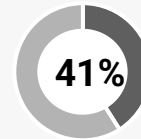
54%

Price



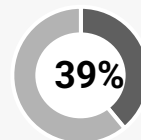
53%

Scientific evidence to support health claims



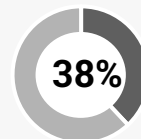
41%

Ease of use



39%

Whether ingredients are recognized/trusted



38%

Multiple health claims

Director of SIA



Prof Yu-Xuan Lyu

Research Assistant Professor at SUS Tech
Lecturer at Geneva College of Longevity Science



Scientific Advisory Board



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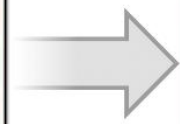
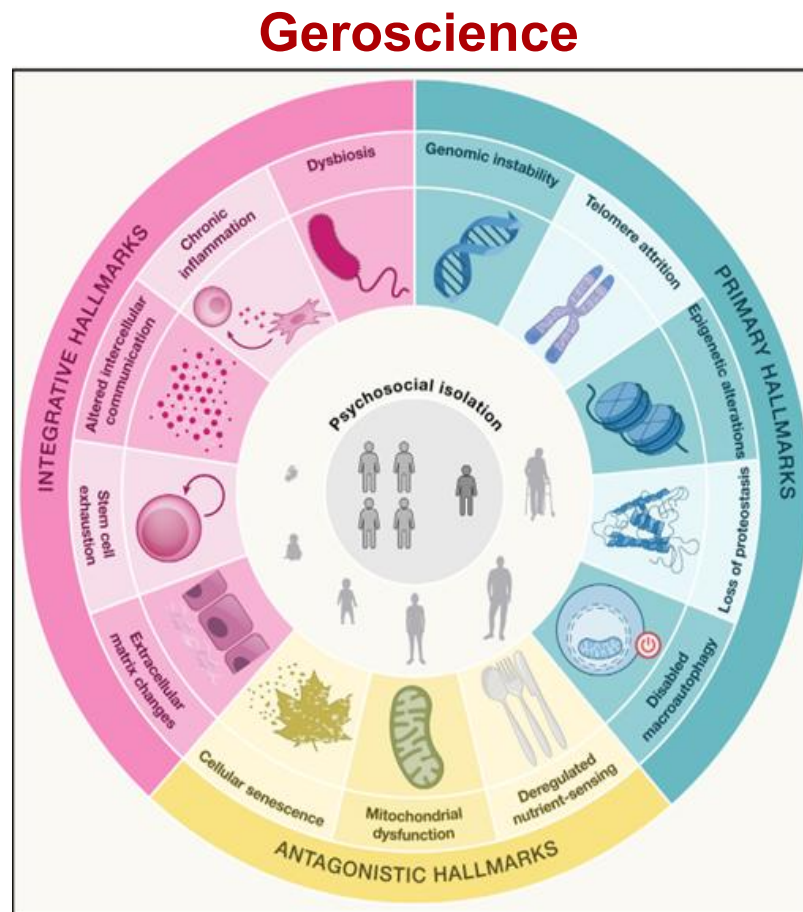
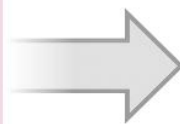


Geroscience based Anti-Aging Strategies

Anti-Aging

Interventions and challenges

- Genetics 
- Drugs 
- Nutraceuticals
- Metabolites 
- Diet 
- Exercise 



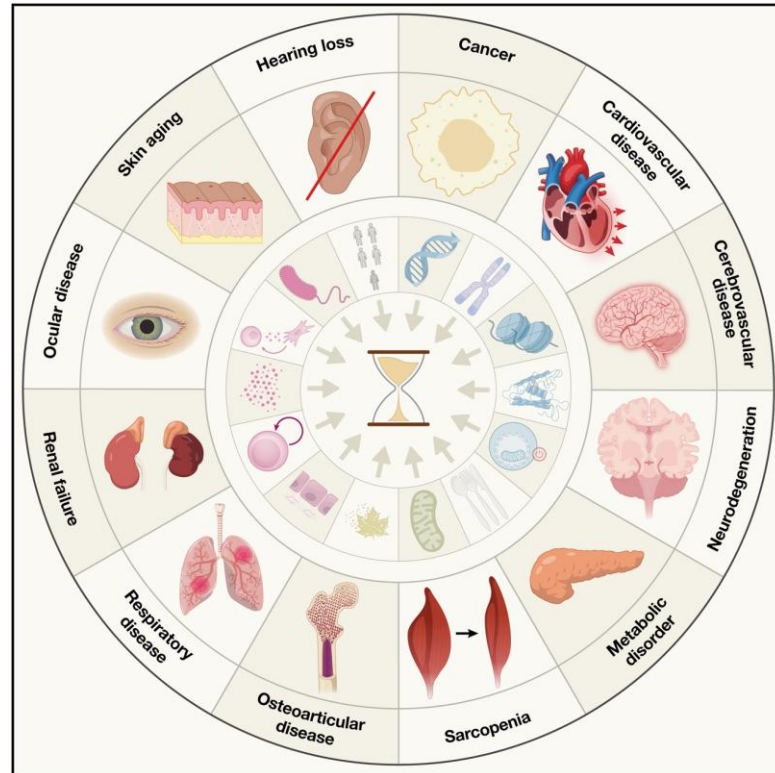
Age-related phenotypes and diseases

- Loss of bone, cartilage, muscle mass and strength
- Gain of abdominal fat
- Altered hormone levels
- Mechanical and structural changes
- Multimorbidity
- Frailty

Healthy Aging

Scientific Approaches for Healthy Aging: Identifying Market Opportunities through the Geroscience Framework

Geroscience



Geroprotection

Definition:

Refers to measures or mechanisms that delay or prevent the aging process, focusing on **cellular senescence**, **mitochondrial function**, and **immune capacity**.

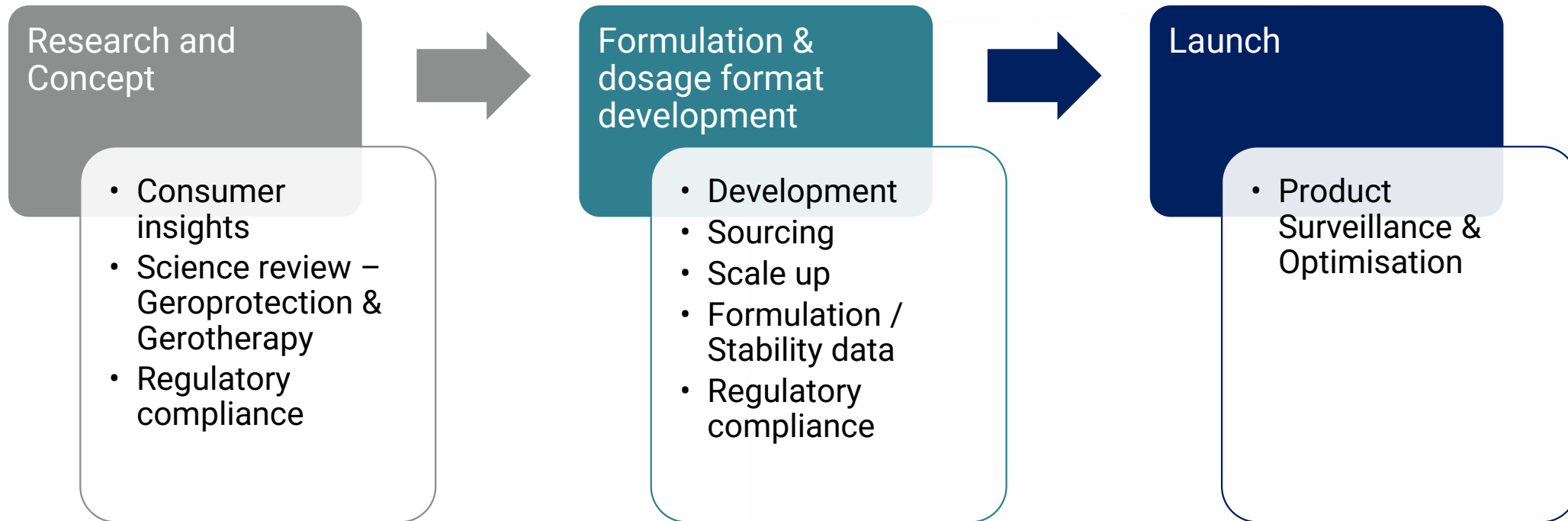
Gerotherapy

Definition:

Refers to interventions such as therapies, drugs, or supplements that help the body renew and repair over time. Targeting age-related functional decline or conditions, such as **Cardiovascular health**, **gut health** etc.

Geroscience explores the intersection of basic aging biology, chronic disease medicine, and health science⁽²⁾.

Designing Supplements for Longevity



Oxidative Resilience

ET (L-Ergothioneine)

Sulphur-containing amino acid with cytoprotective & antioxidant properties:

- Absorbs UV light & reduces cell damage – widely used in skincare
- Promising studies show neuroprotective effects, supporting brain function & preventing neurotoxicity⁽²⁾
- Early studies show promising results for increased telomere length (dose & sex dependent)⁽³⁾
- Promising findings in aged animal models: enhanced exercise endurance & muscle mass, linked to higher NAD⁺ levels in muscle⁽⁶⁾



NADH (Nicotinamide Adenine Dinucleotide)

Coenzyme found in all living cells, crucial for energy metabolism & mitochondrial support:

- Early clinical studies show promising beneficial effects in Parkinson's patients⁽⁴⁾
- Promising mice studies suggest NADH precursors may reduce oxidative stress & inflammation, potentially limiting age- and diet-related DNA damage⁽⁵⁾
- Same promising study showed improved glucose metabolism & prevention of diet-induced hepatosteatosis⁽⁵⁾

Studies indicate that ET stimulates the production of hydrogen sulfide, enhancing the activity of enzymes that produce NAD⁺ from NADH⁽⁶⁾

Aeion™ NAD + Energy

Instant melt powder Snowmelt™



Target Profile

Age-conscious Adults (not pregnant or breastfeeding), seeking solution on mitochondrial energy metabolism, particularly focusing on skin, brain, and an increase of general health and life quality



Supplement Information (Actives)

Nicotinamide Adenine Dinucleotide - 28 mg

L-Ergothioneine - 25 mg

Vitamin C - 100 mg, 125%RI

Recommended dose – 1 sachet per day



EFSA Claims

Vitamin C contributes to the protection of cells from oxidative stress; the reduction of tiredness and fatigue; and normal energy-yielding metabolism

Metabolic Support



BPL1® Postbiotic *Bifidobacterium infantis ssp lactis* CECT 8145

Postbiotic – Probiotic derived strain with cells inactivated, providing formulation flexibility surviving manufacturing and shelf-life conditions.

- Significant reduction in abdominal visceral fat compared to baseline⁽⁹⁾
- Decrease in waist circumference compared to placebo⁽⁹⁾
- *C.elegans* study showed BPL1™ postbiotic supplemented infant formula significantly reduced fat deposition⁽⁸⁾
- Shown to lower blood pressure and exert cardioprotective effects in an experimental mice model of hypertension⁽¹⁰⁾

Aeion™ BodyBalance

Weight Management. Powered by BPL1®



Target Profile

Ideal for busy, health-conscious adults seeking a convenient, sugar-free, vegan-friendly solution to support weight management and metabolic health, enhanced by clinically backed postbiotic benefits and essential vitamins.



Supplement Information (Actives)

BPL1® Postbiotic *Bifidobacterium animalis ssp. Lactis* - 10 billion cells

Chromium - 8 ug 20%RI

Vitamin B6 - 0.3 mg 21%RI

Vitamin B12 - 0.975 ug 39%RI

Vitamin C - 70 mg 88%RI

Recommended dose – 2 tablets per day



EFSA Claims

Chromium contributes to normal macronutrient metabolism, to the maintenance of normal blood glucose levels.

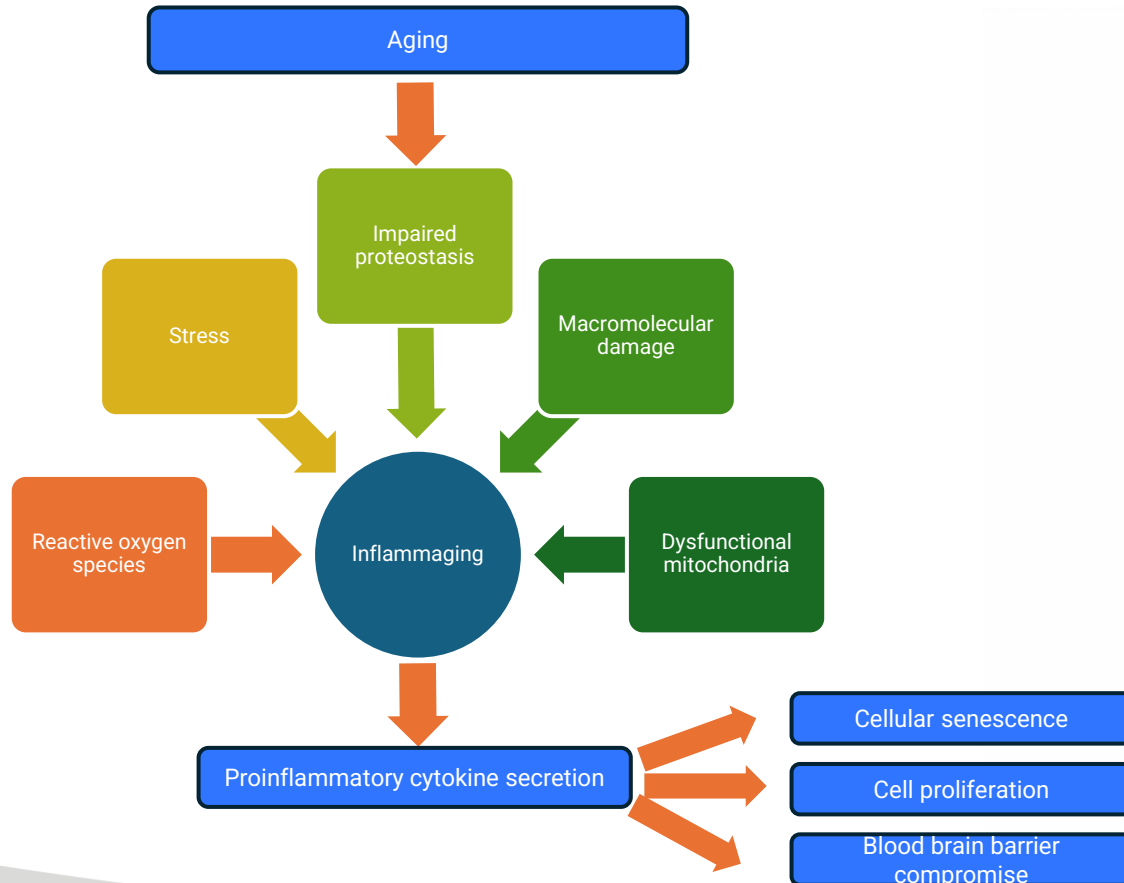
Vitamin C contributes to normal energy-yielding metabolism.

Vitamin B6 contributes to normal homocysteine metabolism, to normal protein and glycogen metabolism, to the reduction of tiredness and fatigue and to normal energy-yielding metabolism.

Vitamin B12 contributes to normal energy-yielding metabolism, to normal homocysteine metabolism and to the reduction of tiredness and fatigue.

Antioxidant Power

Inflammaging⁽¹⁴⁾



Inflammaging

High prevalence in older individuals characterised by elevated levels of blood inflammatory markers. Potentially caused by central obesity, gut permeability, cellular senescence⁽¹³⁾.

Quercetin

Polyphenol derived from plants with strong antioxidant activity

- Demonstrated strong anti-inflammatory effects⁽¹¹⁾
- Known mast cell stabiliser & gastrointestinal cytoprotective activity, protecting against cell injury⁽¹¹⁾
- Promising data as a senolytic agent

Aeion™ Quercetin Gummy



Target Profile

Health-conscious adults, sugar-free antioxidant gummies with high quercetin + VC for immunity support and cell protection from oxidative stress.



Supplement Information (Actives)

Quercetin - 250 mg

VC - 125 mg, 156%RI

Recommended dose – 1 gummy per day



EFSA Claims

Vitamin C contributes to the protection of cells from oxidative stress and normal energy-yielding metabolism

Healthy Cellular Aging



Telomere length

Chitosan structures at the end of chromosomes to protect DNA.
Reduce with age.

Vitamin D₃

- An immune vitamin that aids balance the immune system by controlling inflammation responses⁽¹⁵⁾
- As Vitamin D associated with many pathologies (autoimmune, infections, menopause, obesity, etc) it plays an important role in affecting the aging process at a cellular level⁽¹⁶⁾
- 2000 IU daily supplementation significantly reduced LTL attrition over a 4-year period⁽¹⁷⁾

Aeion™ CellAge

Where longevity begins



Target Profile

Designed for health-conscious adults aged 35–65+ who are seeking science-backed support for cellular health, healthy aging, and cognitive function through a convenient, once-daily, high-bioavailability chew



Supplement Information (Actives)

DHA (docosahexaenoic acid) - 250 mg
Vitamin D – 20mcg, 400%RI
Recommended dose – 1 tablet per day



EFSA Claims

DHA contributes to maintenance of normal brain function
Vitamin D contributes to the maintenance of normal bones and muscle function as well as the normal function of the immune system. Helps to reduce the risk of falling associated with postural instability and muscle weakness. Falling is a risk factor for bone fractures among men and women 60 years of age and older.

Vote for your favourite concept and visit our booth to claim your samples.



Use QR Code

A graphic for the Sirio booth. On the left, a white vertical panel contains the Sirio logo (a red arc above the word 'SIRIO'), the text 'VISIT US AT OUR BOOTH', and 'BOOTH NR.3G40'. To the right, a 2x2 grid of textures is shown: a green leaf (labeled 'LAYERS'), a brown paper with ripples, a blue-green leaf (labeled 'LIKE HABITS'), and a brown wood grain (labeled 'STACK UP'). A white line winds through the textures.

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