SALES BROCHURE

Lysoveta® – Precision nutrition for the brain.

The **first and only** ingredient designed to transport essential nutrients directly into the brain via the **MFSD2A pathway**.

LYSOVETA®

AKER BIOMARINE

Brain aging starts decades before intervention.

Brain aging is not an event that begins in later life; it is a measurable, **progressive process that starts in early adulthood**. Cortical volume and structure begin to decline in the 20s and 30s, accompanied by a decline in DHA and rising oxidative stress from reactive oxygen species (ROS), both of which **damage neuronal function**.

These changes **accumulate silently for decades** before symptoms appear, meaning cognitive decline, once noticeable, reflects damage that is already advanced.

The window for effective neuroprotection opens **decades earlier than commonly assumed**, making early, sustained intervention essential for long-term brain health.[1,2]

Global brain health market.

The global brain health category is entering a period of **sustained, double-digit growth**, driven by structural shifts in demographics, consumer behaviours, and preventive health awareness. Market value is climbing steadily worldwide, with growth rates that **outpace most other health and wellness categories**, and momentum is expected to continue over the coming decade.

This trajectory is underpinned by several converging forces: an **aging global population**, rising **mental health awareness**, growing **cognitive performance demands**, and the mainstream shift toward **preventive health and longevity**. Together, these drivers are turning brain health from a niche wellness category into a durable, high-growth pillar of the global health and wellness market.

$12.5B

MARKET 2025

Global brain health supplements[3]

$35B

BY 2035

~11% CAGR growth forecast[3]

>40%

NORTH AMERICA

Largest regional share[3]

16%

ASIA-PACIFIC

Fastest-growing region (CAGR)[3]

~30%

EUROPE

EU aged 65+ by 2050[4]

A purposefully built molecule.

OVER 50 YEARS IN THE MAKING

1960s-2013

The Mystery

Scientists are trying to understand the complex mechanisms of transport across the blood-brain barrier.

2014

The Discovery

Nature publishes discovery of MFSD2A, transporter for LPC-bound fats across the blood-brain barrier.

2014-2021

Krill Connection

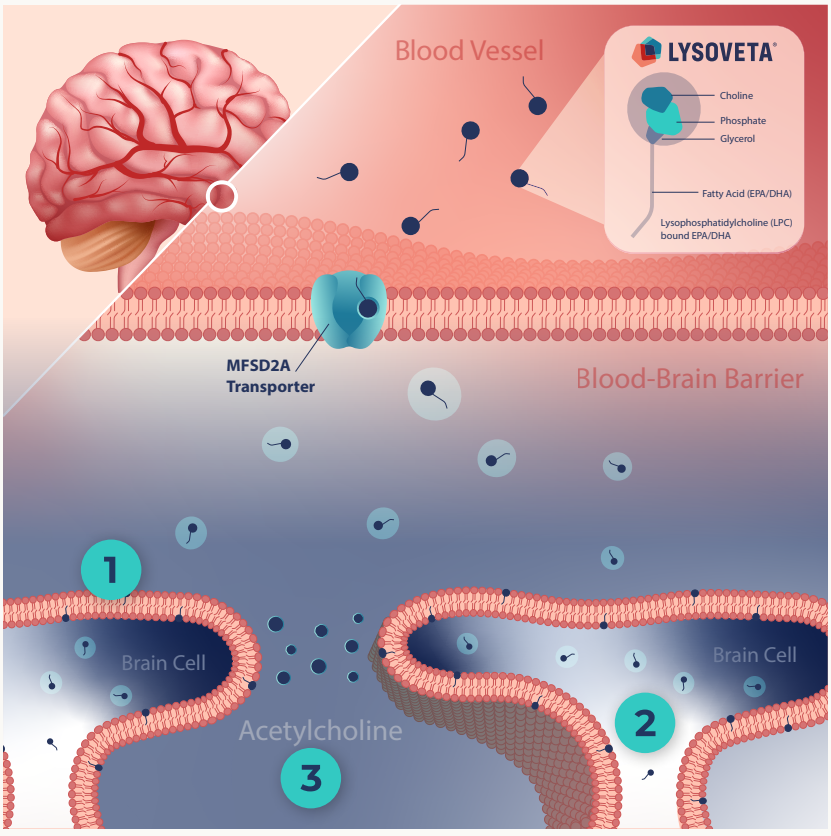
Aker BioMarine scientists started working on the development of LPC from naturally occurring PC in krill.

2022

The Launch

Lysoveta® becomes the first commercial ingredient built on the MFSD2A pathway.

THE INGREDIENT & MECHANISM OF ACTION



A first-in-class ingredient delivering EPA, DHA and choline in the lysophosphatidylcholine (LPC) form, the molecular format recognized by the MFSD2A transporter for targeted blood-brain barrier delivery.

1 **Structural Integrity | DHA**

DHA contributes to brain cell membrane structure and neuronal integrity.

2 **Modulation of Inflammation | EPA**

EPA supports balanced neuroinflammatory response in the brain.

3 **Neurotransmission | Choline**

Choline serves as a precursor to acetylcholine, central to cognitive signalling.

MULTI-ACTIVE BRAIN BENEFITS (PRE-CLINICAL EVIDENCE)

Crosses the blood-brain barrier

Confirmed transport via MFSD2A and brain nutrient delivery[5-9]

Reduces oxidative stress damage & neuroinflammation

Measurable decrease in ROS burden in neurons[10]
Significant inhibition of neuroinflammation pathways[13]

Promotes neurogenesis & Neuroprotection

Increases BDNF in multiple brain regions, supporting neuronal protection, nervous system and myelin sheath[5-8,12-14]

Improves memory & cognition

Improved performance in short-term & long-term memory and spatial recognition[5,6,12-14]

A decade of proof, protection, and recognition.

10+
YEARS RESEARCH
Sustained investment in LPC-mediated transport

15+
PRECLINICAL STUDIES
Robust evidence across multiple models

3
ONGOING CLINICAL
Active clinical investigation underway, evaluating brain health endpoints

50+
PATENTS & IP
Broad global protection, competitive exclusivity

2025
INNOVATION AWARD
Recognized for breakthrough in nutritional science

Precision nutrition for the brain.

Lysoveta® is built on a distinct scientific foundation that reflects precision at every step, from mechanism to delivery to biological relevance.

- **UNIQUENESS:** The **first and only** commercially available ingredient to leverage the **MFSD2A transport pathway**, the transporter responsible for carrying EPA, DHA and choline, in the LPC form, into the brain.
- **PRECISION DELIVERY:** Targeted delivery of **EPA, DHA, and choline across the blood-brain barrier**, already in their bioactive form.
- **MULTI-PATHWAY BENEFITS:** Supports **cell membrane structure, neuro-inflammation balance, and healthy neurotransmission**. DHA is a core structural component of neuronal membranes, EPA contributes to balanced inflammatory signaling, and choline serves as the metabolic precursor to acetylcholine, a neurotransmitter central to memory and cognitive function.
- **SCIENCE-LED INNOVATION:** Built on well-characterized biology of lipid transport, brain uptake, and choline's mechanism of action. Lysoveta® translates **decades of published research** on how the brain selectively imports and uses lipid-based nutrients into a single, purpose-built ingredient.

Together, these four pillars make Lysoveta® a differentiated, evidence-based ingredient for supporting brain health.

Source: **1.** Frangou S, et al. Hum Brain Mapp. 2022. **2.** Iwao T, Takata F, Matsumoto J, et al. PLoS ONE. 2023;18(2):e0281946. **3.** Brain Health Supplements Market Size, USD 35.02 Bn forecast by 2035; USD 12.56 Bn in 2025. **4.** The Lancet Regional Health – Europe, "Securing the future of Europe's ageing population by 2050.". **5.** Sugasini et al. Scientific Reports (2017) 7, 1: 11263. **6.** Yalagala et al. Journal of Lipid Research (2019) 60, 3:566–78. **7.** Sugasini et al. The Journal of Nutritional Biochemistry (2019) 74:108231. **8.** Yalagala et al. Molecular Nutrition & Food Research (2020) 64, 12: 2000059. **9.** Andriambelo et al. The Journal of Nutritional Biochemistry (2026): 110376. **10.** Hermans et al. Nutrients. (2024) 16(14):2252. **11.** Valenzuela et al. Grasas y Aceites (2010) 61(1):16-23. **12.** Park et al. Behavioural Brain Research, (2014) 461:114836. **13.** Tian et al. Food Bioscience (2026) 78:108544. **14.** Scheinman et al. 2021 Front Neurosci. 15:690410.