

NATURAL HEALTH PRODUCTS NZ SUPPLIER'S DAY

NOV 17, 2022

New Zealand is well placed to grow
Krill oil exports

Asia presents a great opportunity

Tools to exploit the opportunity -
Introducing some research and
applications

Did you know..

NZ is the 2nd largest Krill Oil manufacturing country globally?

(2019 20%, 2020 25%, 2021 22% - GOED/AKER/NZ Stats)

**While NZ KO production is declining
NZ is value adding more. (Capsules etc)**

**NZ is well placed to supply
increasing Asian demand for KO
products.**



OUR STORY

Aker BioMarine was created back in 2006 from a strong belief in the **positive health effects of krill**. Today 16 years later, we are the world's leading supplier of krill largely because we take care of the ecosystem from which we harvest, keeping the wellbeing of the krill biomass and the Antarctic ecosystem our top priority.

SINCE 2006 WE HAVE
INVESTED OVER **USD800M**
TO UNLOCK THE
POTENTIAL WITHIN KRILL



....and we have had a
long association with
manufacturing in NZ



We are Aker BioMarine

– a biotech innovator
and Antarctic krill-
harvesting company,
dedicated to improving
human and planetary
health



We are a **GLOBAL**
krill harvesting
company



On a **MISSION** to
improve human and
planetary health



BIOTECH INNOVATOR
and **LEADING**
SCIENCE expert



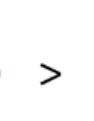
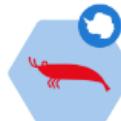
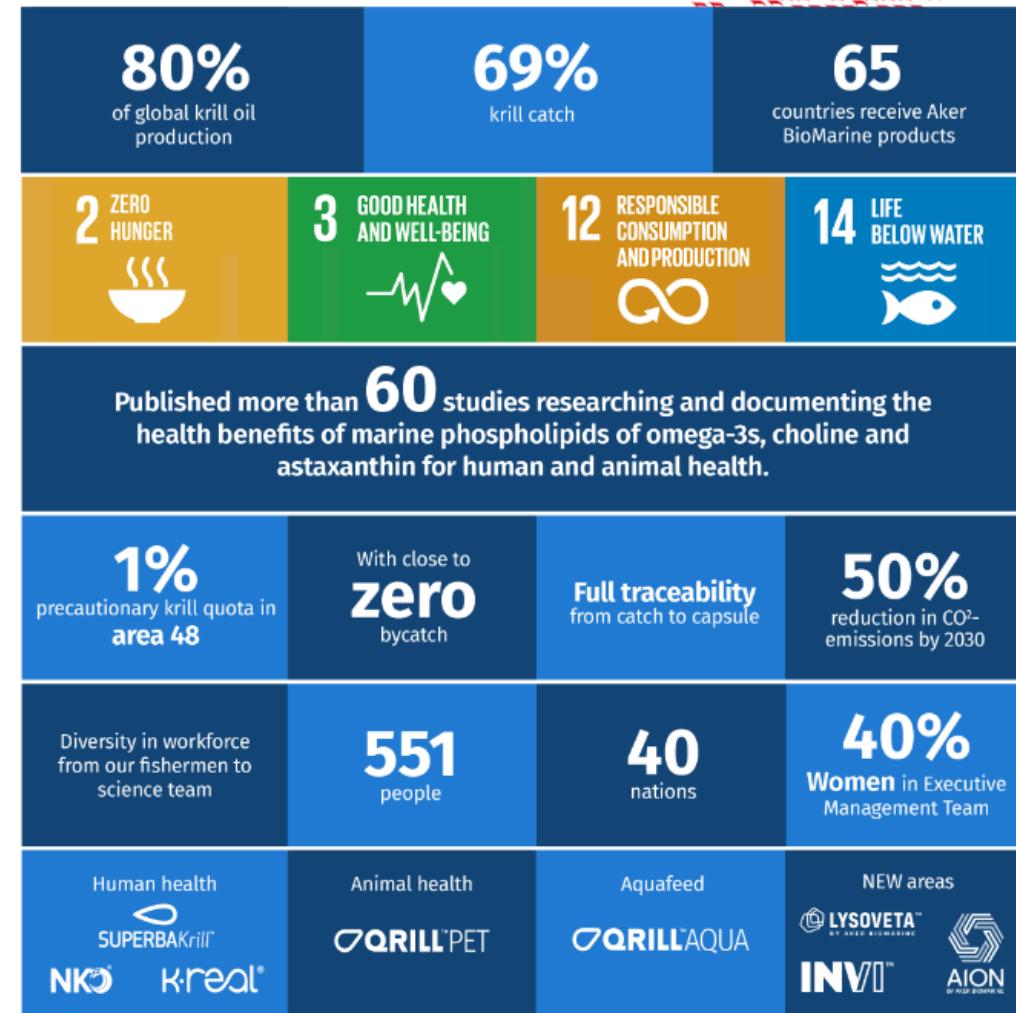
SUSTAINABLE
and **TRACEABLE**
operations



PEOPLE are the
HEART of Aker
BioMarine



Our **PRODUCTS**
and **BRANDS**



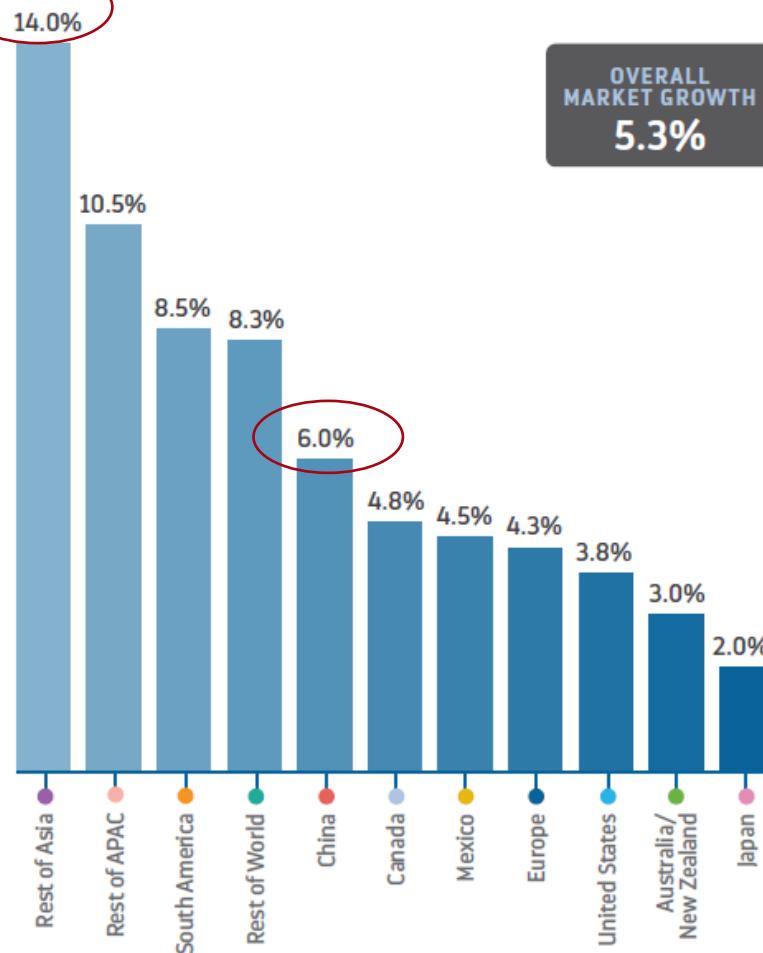
OPPORTUNITY

CAN NZ MEET THE GROWING DEMAND OF KRILL OIL IN ASIA?

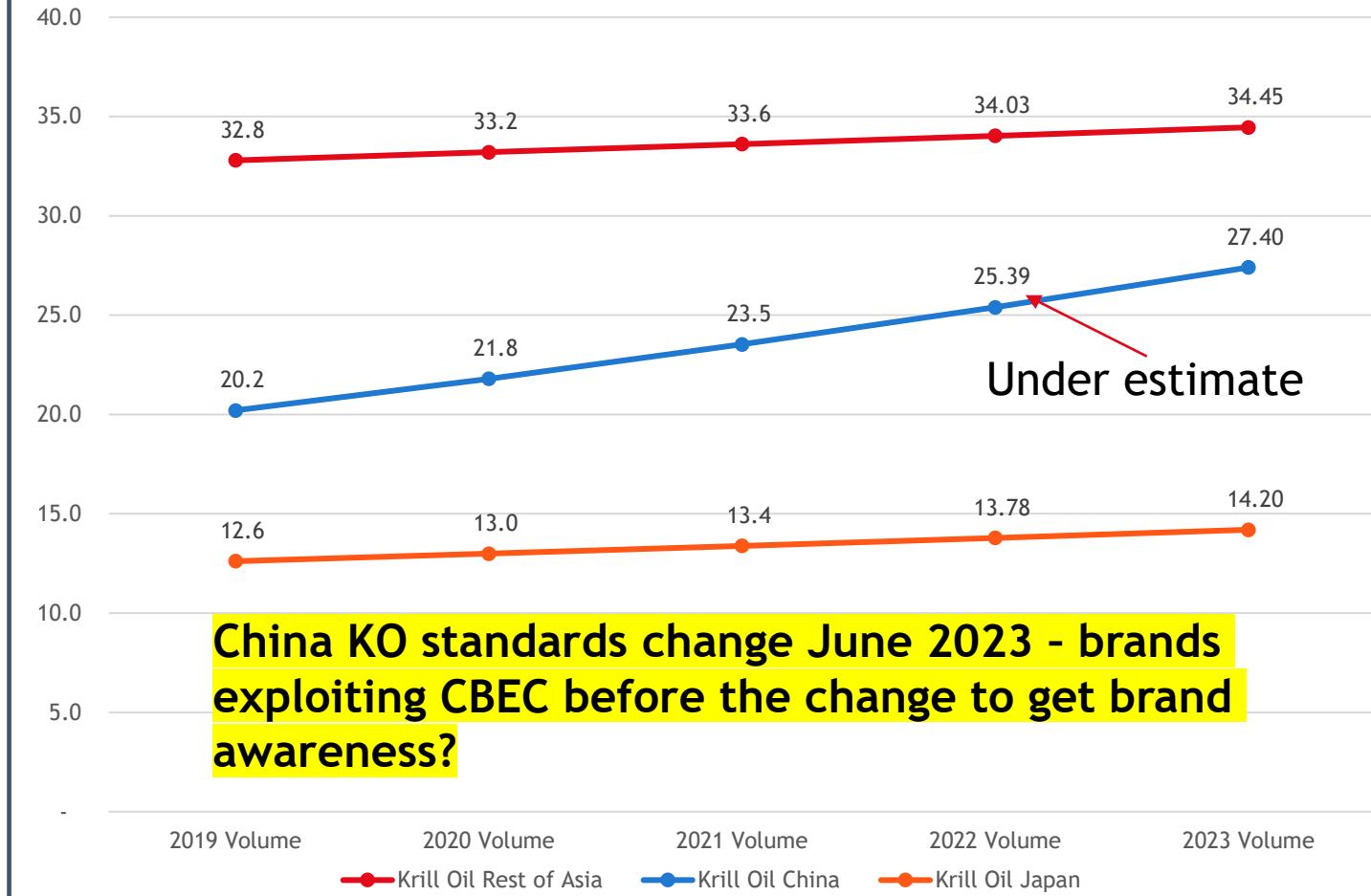
There is a growing demand of Omega-3's including Krill oil in Asia, China and Japan

(Source GOED 2022 Market report)

FIGURE 4.1. Global EPA + DHA Dietary Supplement Projected Annual Growth Through 2023 By Region



Growing demand of krill oil in Rest of Asia, China and Japan

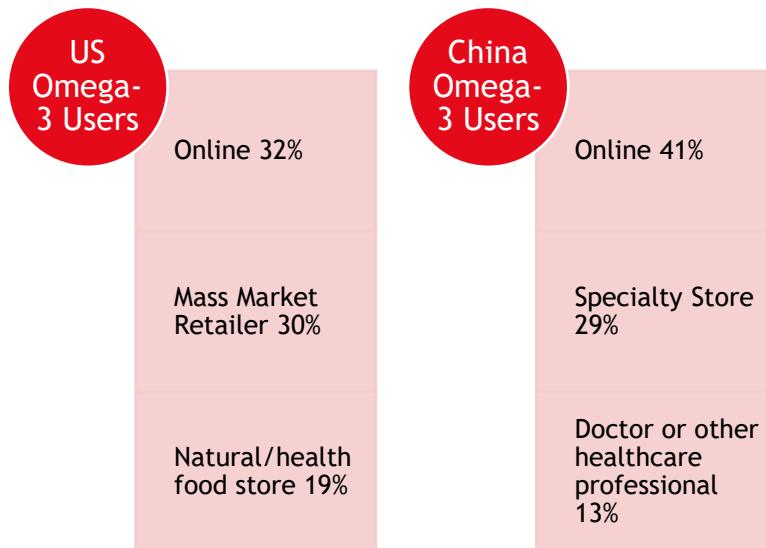


Did you know that 41% of Omega-3's are purchased online by Chinese consumers?

Where Omega-3 Users Purchase Supplements

KEY ITC INSIGHT:

- Online dominated as the channel preference in the US and China



TOOLS TO EXPLOIT THE OPPORTUNITY

1. SCIENCE TO SUPPORT CLAIMS

**SUPERBA BOOST™ JOINT
STUDY
AND OTHER SCIENCE**

A 6 year collaboration set out to investigate the effects of Krill Oil in knee osteoarthritis and joint pain



WINNER
NUTRITION RESEARCH PROJECT

Effects of Swisse High Strength Deep Sea Krill Oil (Superba BOOST™) on adults suffering from mild to moderate osteoarthritis

Aker Biomarine; CSIRO; Swisse

Breakthrough study demonstrates positive effects of Superba BOOST™ krill oil on osteoarthritis and joint health

- Randomized, Double-Blind, Placebo controlled, multi-centre trial
- Participants (n=235) with mild to moderate knee OA & regular knee pain
- 2 groups
 - Treatment group (Superba Boost)
 - EPA + DHA 880mg
 - Placebo group (Veg oil)
- Primary Endpoint: Change in knee pain at 3 and 6 months
 - Key secondary endpoints: Change in knee stiffness and physical function after 6 months.

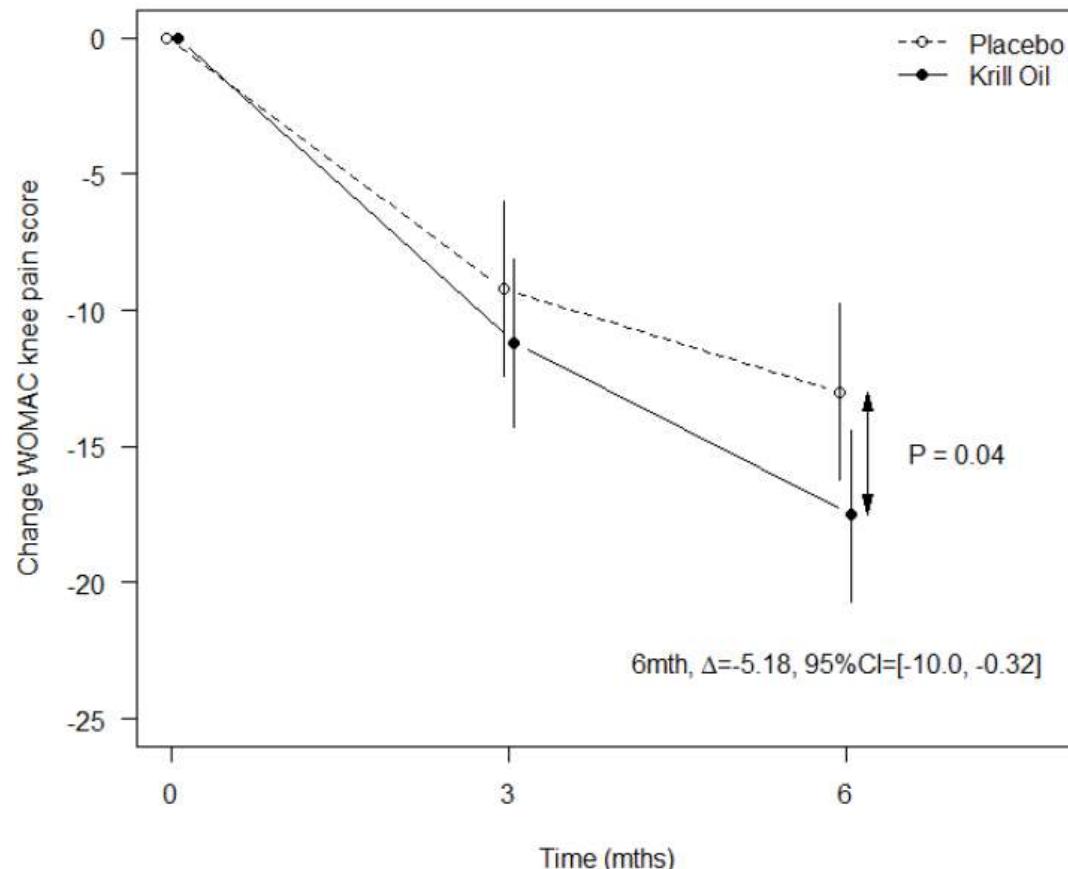
Impact Factor	Number of Journals	Ranking (Top % of Journals)
10+	239	1.9%
9+	290	2.4%
8+	356	2.9%
7+	447	3.6%
6+	610	4.9%
5+	871	7.1%
4+	1,399	11.4%
3+	2,575	21%
2+	4,840	39.4%
1+	8,757	71.2%
0+	12,298	100%

Product: Swisse High Strength Deep Sea Krill Oil (Superba BOOST™)
<https://academic.oup.com/ajcn/article/116/3/672/6650112?searchresult=1>

Krill oil significantly reduced knee pain versus placebo over a 6-month period

Key findings

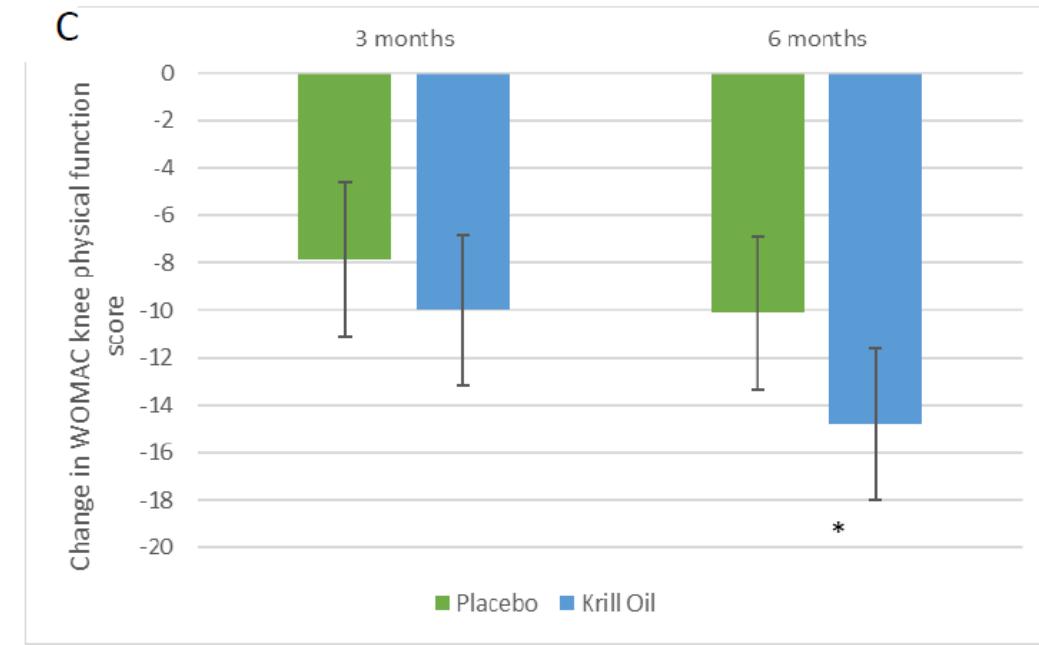
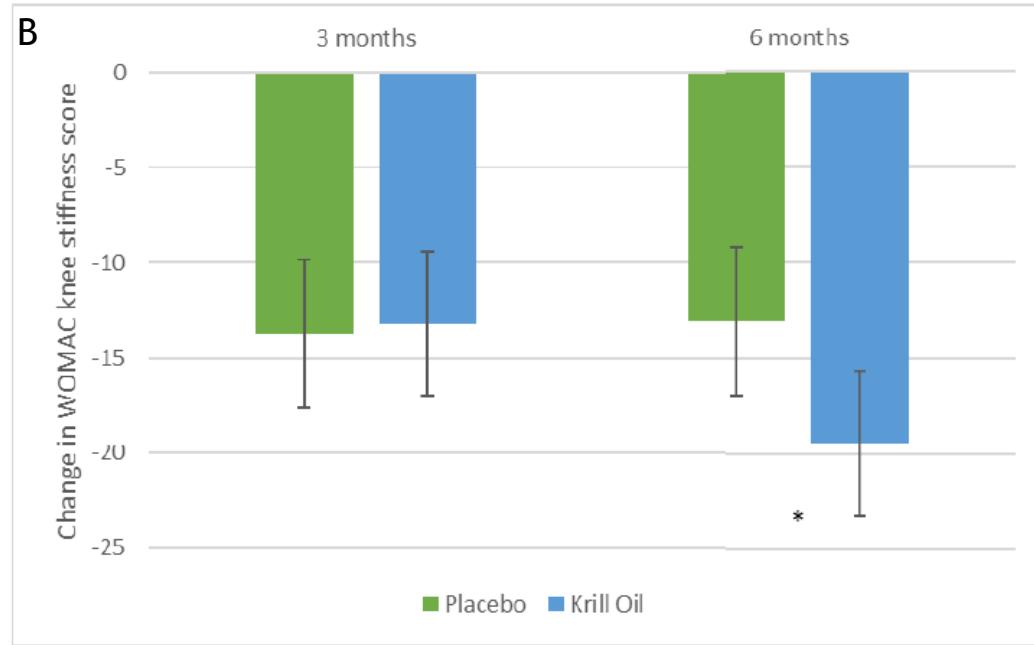
- Knee pain significantly reduced in the krill oil group versus placebo over 6 month period



Mean [95% CI] changes in WOMAC knee pain score at baseline, 3 and 6 months. *Sig. difference between krill oil group and placebo $p=0.04$.

Stonehouse et al, AJCN Jul 2022

Krill oil significantly reduced knee stiffness and improved physical function over 6 months vs placebo



Results show beneficial effects of krill oil over *all measured knee parameters*
 - very good across the board results

Adjusted mean [95% CI] changes from baseline in WOMAC knee outcome scores (B. Knee stiffness; C. Knee physical function). *sig difference vs placebo $p<0.05$.

Studies support a range of doses for joint health in specific applications

From 1 capsule a day (500mg)

4+ grams per day

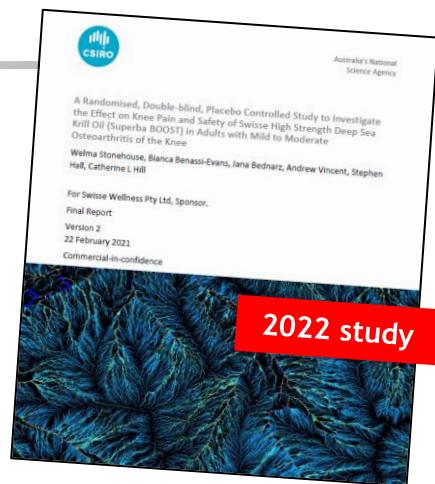
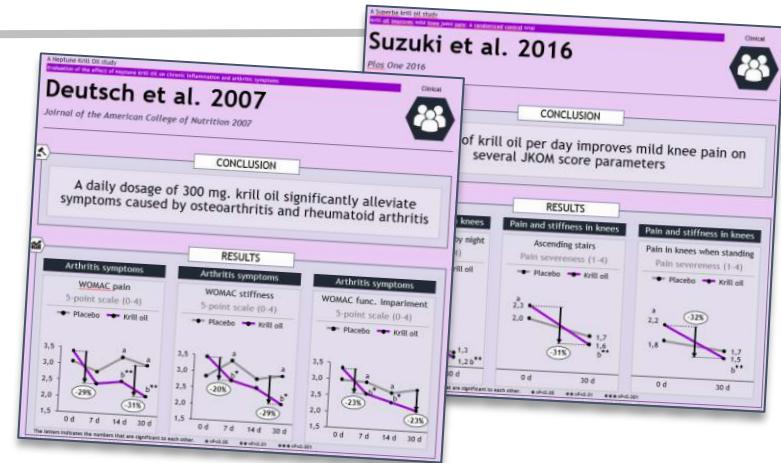
Treatment

Higher dose

Health promotion

- Lower dose
- Longer time (years)

Risk reduction

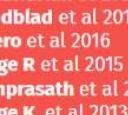
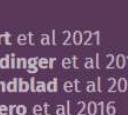
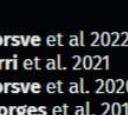


HCP

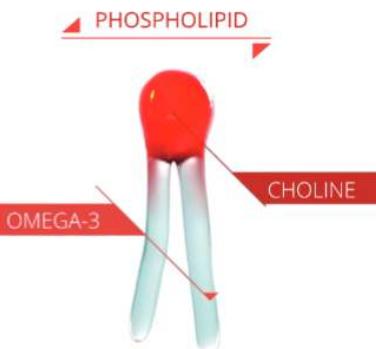
2022 study

Superba Krill benefits for human health are backed by science

Superba Krill supports overall health and wellness and is clinically proven to support various health conditions:

 <h3>GENERAL HEALTH & WELLNESS</h3> <ul style="list-style-type: none"> • Increase the Omega-3 Index • Improve the omega-6 to omega-3 ratio • Increase the cell membrane fluidity • Lower inflammatory markers • Support immune function 	 <h3>HEART HEALTH</h3> <ul style="list-style-type: none"> • Lower triglycerides levels in blood • Increase the Omega-3 Index (an increase of this Index from 4% to 8% would reduce the risk of a coronary heart disease by about 30%*) • Reduce LDL cholesterol 	 <h3>JOINT HEALTH</h3> <ul style="list-style-type: none"> • Reduce knee pain • Reduce knee stiffness • Improve physical function • Lower inflammatory status 	 <h3>LIVER HEALTH</h3> <ul style="list-style-type: none"> • Support liver function • Reduce fat accumulation • Contribute to normal fat metabolism 	 <h3>SKIN HEALTH</h3> <ul style="list-style-type: none"> • Improve hydration, elasticity and water retention in the skin 	 <h3>COGNITIVE</h3> <ul style="list-style-type: none"> • Activate cognitive function 	 <h3>SPORTS PERFORMANCE</h3> <ul style="list-style-type: none"> • Support muscle functioning and strength • Promote healthy recovery rate after workout • Prepare your body for optimal sports performance 	 <h3>DRY EYE</h3> <ul style="list-style-type: none"> • Combat symptoms of dry eyes such as inflammation, irritation and redness 	 <h3>PMS</h3> <ul style="list-style-type: none"> • Relieve the emotional and physical symptoms related to premenstrual syndrome
 <ul style="list-style-type: none"> • Berge et al 2015 • Ramprasad et al 2013 • Deutsch et al 2007 	 <ul style="list-style-type: none"> • Mozaffarian et al 2022 • Rundblad et al 2018 • Cicero et al 2016 • Berge R et al 2015 • Ramprasad et al 2013 • Berge K. et al 2013 • Banni et al 2011 • Bunea et al. 2004 • Loriao et al 2015 	 <ul style="list-style-type: none"> • Stonehouse et al 2022 • Suzuki et al 2016 • Deutch et al 2007 	 <ul style="list-style-type: none"> • Gart et al 2021 • Mödinger et al 2019 • Rundblad et al 2018 • Cicero et al 2016 • Berge R et al 2015 • Ramprasad et al 2013 • Bunea et al 2004 	 <ul style="list-style-type: none"> • 3 clinical studies (Aker BioMarine proprietary data) 	 <ul style="list-style-type: none"> • Konagai et al 2013 	 <ul style="list-style-type: none"> • Storsve et al 2022 • Burri et al. 2021 • Storsve et al. 2020 • Georges et al. 2018 • Da Boit et al. 2015 • Skarpanska et al 2010 	 <ul style="list-style-type: none"> • Deinema et al 2016 	 <ul style="list-style-type: none"> • Sampalis et al 2003

*Usage of health & nutrition and/or marketing claims should be evaluated in accordance with local regulations



50+ studies on krill oil proving significant benefits for human health

Aker BioMarine has made significant investments in R&D for nearly 20 years.

INTRODUCING

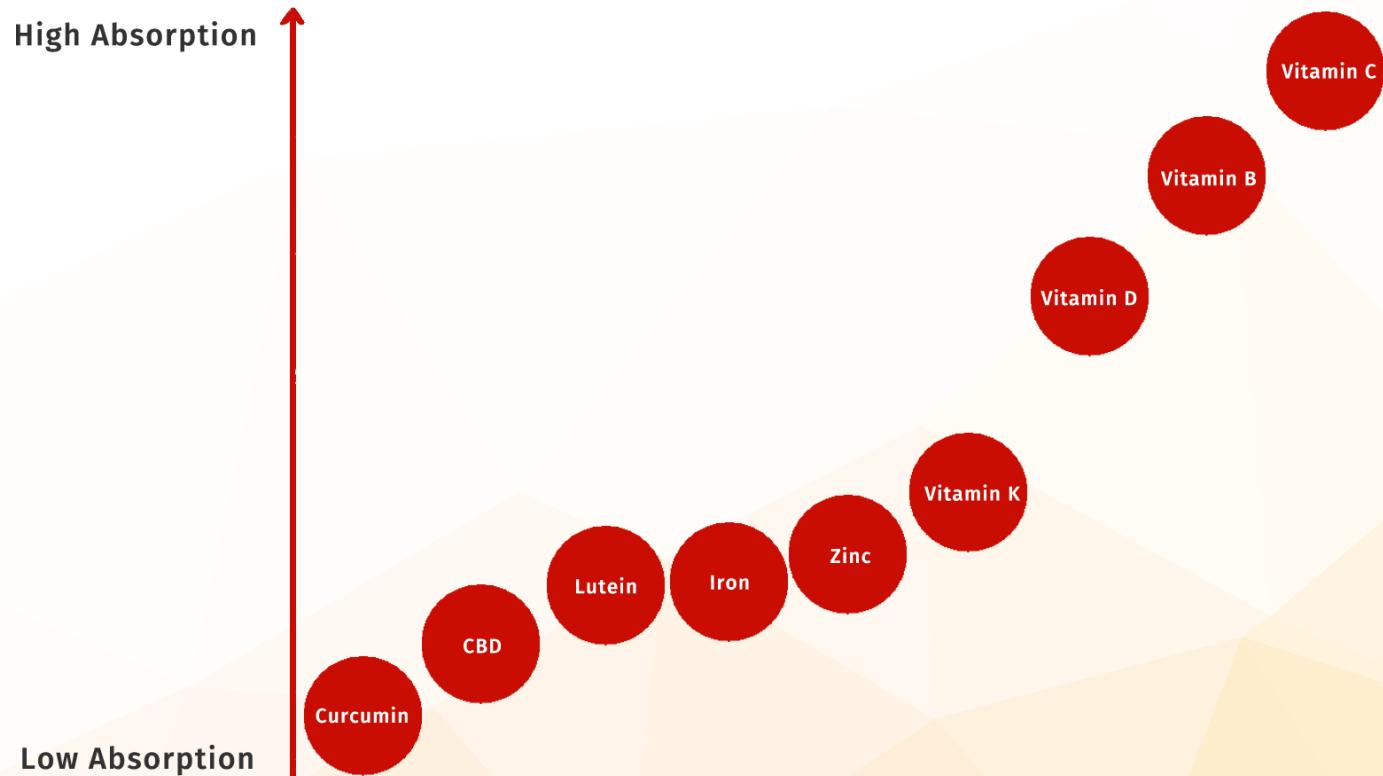
A TOOL TO EXPLOIT THE OPPORTUNITY
- Enhancing existing ingredients



*AN ENHANCED DELIVERY
PLATFORM FOR SUPPLEMENTS*

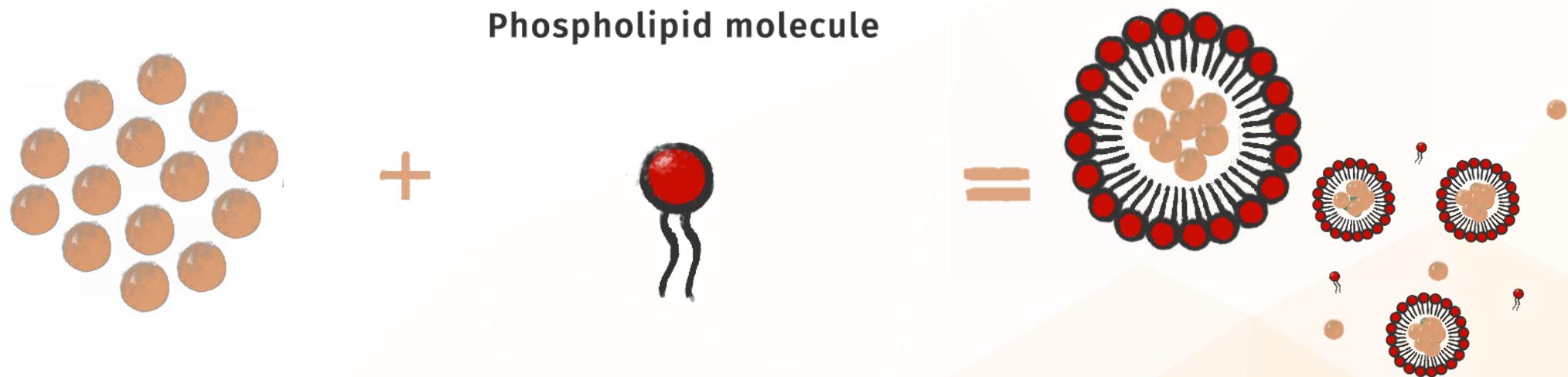
Bioavailability, absorption and supplements efficiency

- Bioavailability is the rate at which a substance is absorbed into the bloodstream and can be utilized by the body.
- Our bodies are made of 60% water, oil-based supplements resists absorption into the bloodstream.
 - Botanicals particularly struggle
- Many supplements end up being flushed from the body with limited efficacy.



Krill oil as a delivery system

- Phospholipids are an excellent delivery platform to improve absorption of lipophilic ingredients and utilization by the cells of these nutrients.



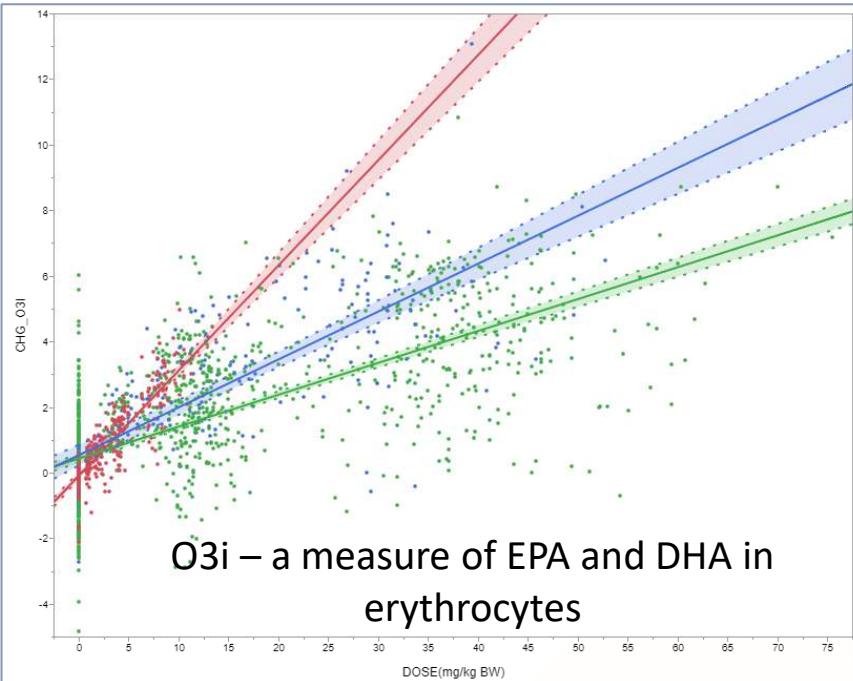
Curcumin is not water soluble
Has low absorption
Leading to limited health benefits

Thanks to PL+ technology we create
Curcumin micelles that are readily

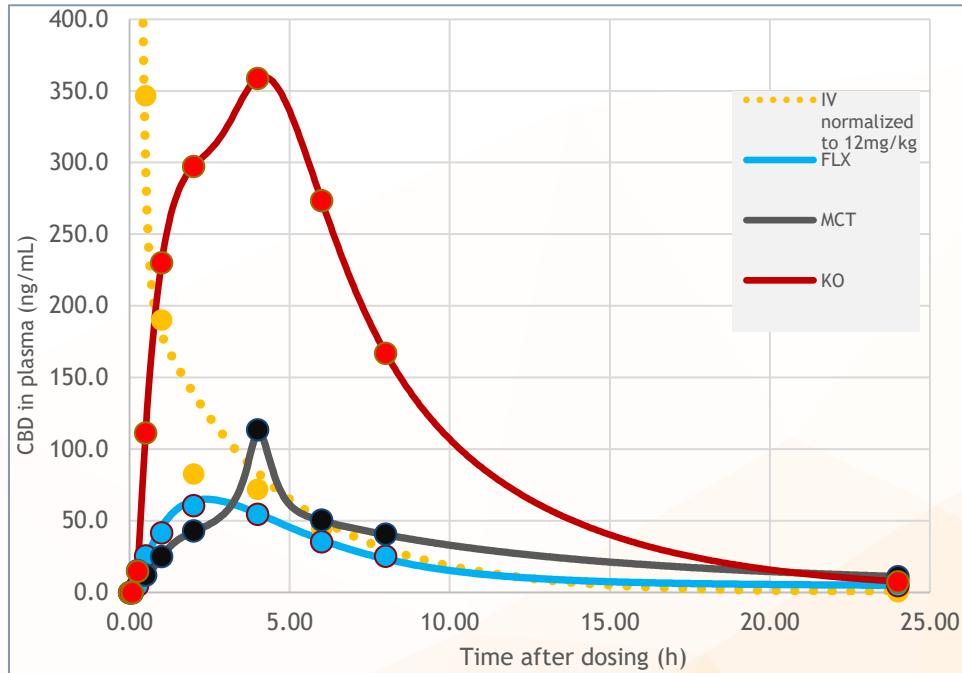
PL + TECHNOLOGY
by AKER BIOMARINE

Backed by proprietary science

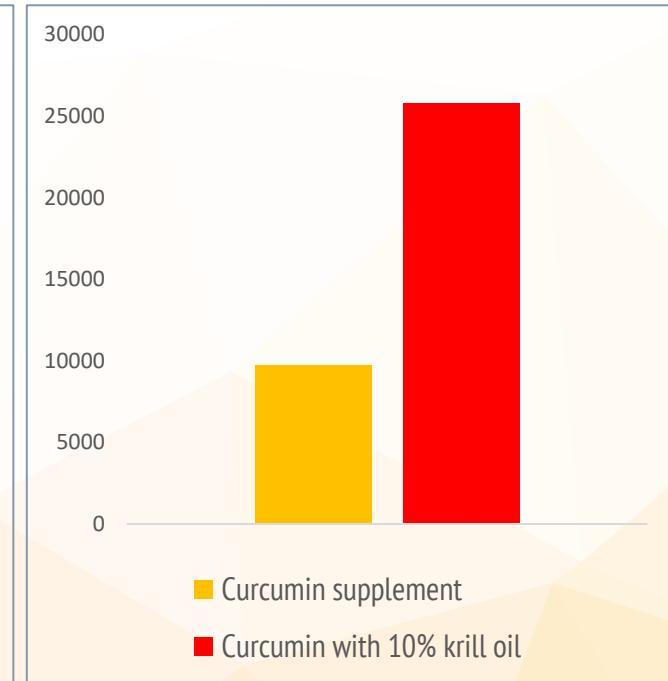
Krill oil Vs EE Vs TG



Krill oil & CBD



Krill oil & curcumin





WE'RE IN BUSINESS TO IMPROVE
HUMAN AND PLANETARY HEALTH



AKER BIOMARINE