

Science-led marine nutrition™

Company Presentation

March 2024



Vision & Mission

To improve lives through science-led marine nutrition

Sustainably produce premium bioactive ingredients with proven health benefits

Natural, fully-circular, traceable, clinically-proven

LINK TO GUIDED TOUR VIDEO





HBC Creates Value From The By-products of The Salmon Processing Industry

2 3

of each harvested salmon is used for human consumption





of the salmon remaining is historically discarded or used as feed





What Makes HBC Different

Access to fresh raw material



Strategic partnership with Norway's largest salmon processor, Hofseth International



Hofseth International has >80% market share of finished salmon product export to the US in 2023



Consistent supply of fresh, sashimi-grade salmon 365 days a year



100% antibiotic free



Non-GMO raw material

Intellectual property



Proprietary patent protected BATCH manufacturing process that unlocks 100% human grade output



Multiple patents protecting the unique "mechanism of action" of how our ingredients improve our health



Unique approved health claims for ProGo® and established US and EU regulatory frameworks



Proprietary in-house traceability QR technology

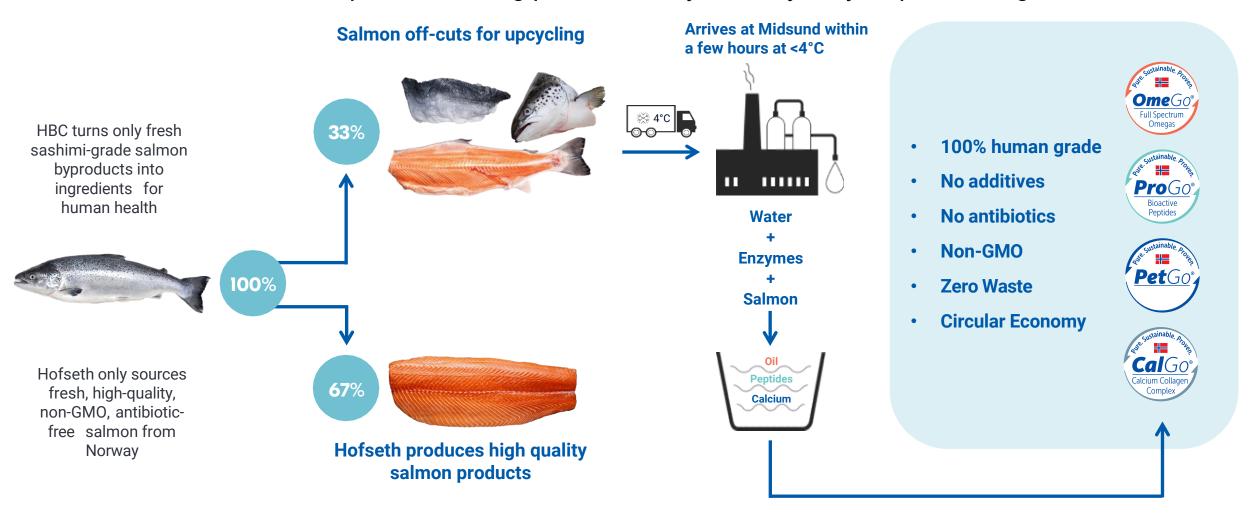


12 clinical studies



How We Do It

From fish to finished products using patented enzymatic hydrolysis processing

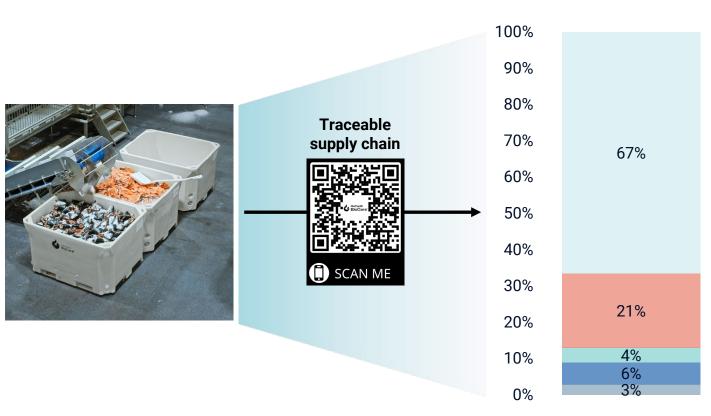




Transforming Offcuts Into Human Nutrition

FY24 planned raw material input of 17,000mt, +26% yoy

From 17,000mt HOG salmon offcuts... ... to 5,700mt of speciality ingredients for human nutrition



Output	Brand name	Yield %	Yield mt
Water vapour		67%	11,305mt
Full spectrum salmon oil	Ome Go Full Spectrum Onegas	21%	3,485 mt
Salmon protein hydrolysate (SPH)	ProGo Bioactive Peptides	4%	680 mt
Partially hydrolysed protein (PHP)	PetGo	6%	1,020 mt
Milled salmon bones	Cal Go Calcium Collagen Complex	3%	510 mt

HBC has signed a new external supply agreement, starting delivery April '24 to meet growing demand



Commercial Portfolio is more than just 4 products

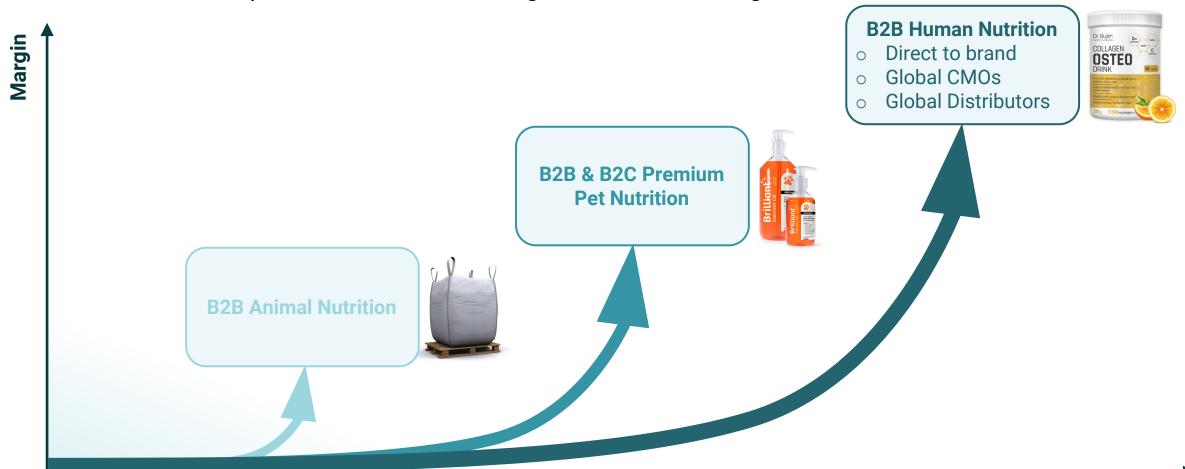
HBC targets multiple segments which offer very different margin opportunities

Output	Product	TLA	Key Characteristics		Feed / Fertiliser	Pet	Food	Nutraceutical
			Free Fatty Acids	AV / PV				
Full Spectrum	PetGo Salmon Oil		>2%	<12% / <8%	✓	✓		
Salmon Oil	Salmon Oil (Food Grade)		>1%	<10% / <5%		✓	✓	
	OmeGo® Full Spectrum Omegas	OmeGo®	>1%	<10% / <5%				✓
			Protein Level	Ash				
Salmon Protein	PetGo Peptides		>95%	<4%	✓	✓		
Hydrolysate (SPH)	Pure Salmon Protein Hydrolysate		>97%	<2%		✓	✓	
	ProGo®	ProGo®	>97%	<2%			✓	✓
Partially			Protein Level					
Hydrolysed Protein	Salmon Meal Protein Hydrolysate		>70%		✓	✓		
(PHP)	PSPH90 Protein Hydrolysate		>80%		✓	√		
Milled Salmon			In Spec					
Bones	CalGo®	CalGo®	Fine grade			√	√	√



Go-to-Market Model

Access, develop and commercialise high value market segments



Consumer Health Products Powered by HBC Ingredients































The Nutraceutical Market Opportunity



Dietary supplements market

- Dietary supplements support better human health and nutrition in a convenient format to the consumer
- Examples include: vitamins, minerals, herbal extracts, and nonherbals such as peptides, omega-3 and collagens



Market growth outlook

- Global dietary supplement market size is \$122bn in 2023
- Depending on region, growth expected at 5-15% CAGR to 2030



Market trends

- Multiple trends are constantly evolving by region
- E.g. what we see in USA tends arrive in Europe 2 years later



HBC's ingredients play into the ongoing global health megatrends:

- Natural
- ✓ Sustainably sourced
- ✓ Marine nutrition
- ✓ Proven by clinical evidence

HBC has significant agreements with leading global distributors to access the market:

- 200+ live projects
- 50 new product launches last 18mths
- New launches monthly
- Presence in US, EU and Asia incl China



B2B Human Nutrition Portfolio



OmeGo® Full Spectrum Omegas

Bringing all the benefits of Atlantic Salmon with >84% natural anti-inflammatory acids

USPs:

- ✓ Unrivalled stability with 4yr shelf life
- √ 100% natural with proven higher absorbability than omega-3
- Clinical studies supporting heart health and anti-allergy benefits



ProGo® Bioactive Peptides

Unique bioactive peptides rich in type I & type III collagen

USPs:

- ✓ Enhances iron metabolism and energy
- ✓ Supports GI health
- ✓ Increases fat burn and helps maintain a healthy weight



CalGo® Calcium Collagen Complex

The most absorbable form of natural calcium

USPs:

- ✓ Proven to be 6x more absorbable than calcium carbonate
- ✓ Supports bone formation and growth
- ✓ 24% undenatured Type II Collagen for joint health

Each ingredient offers proven and unique benefits in human health



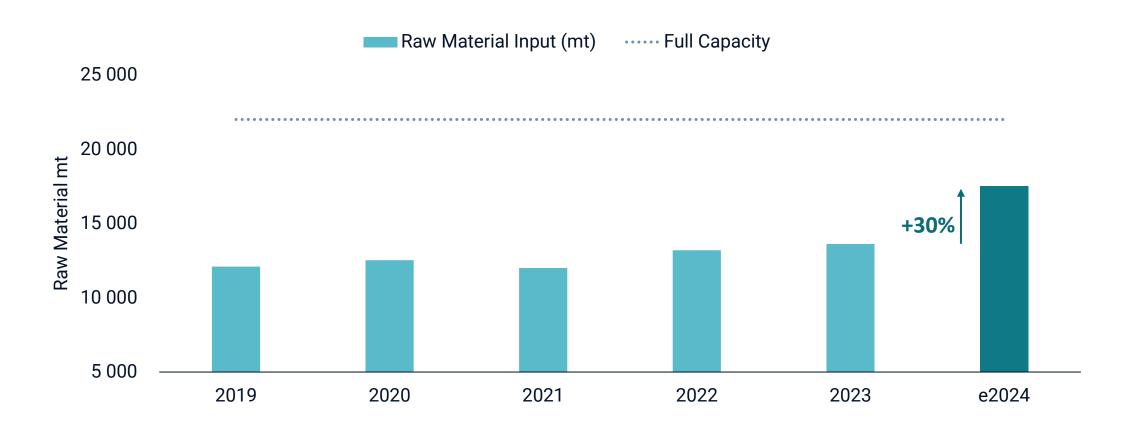
HBC R&D Overview

- \$50m already spent on R&D and manufacturing process development since inception
- HBC is a global leader in marine lipid and peptide research in the consumer health space and is now a platform for new drug leads
- 20 year history of researching the health benefits of salmon
- Long-standing 5-year research relationship with Stanford University School of Medicine
- Development of proven and differentiated health claims
- Discovery science to identify new molecules for the Pharma market
- 47 patents issued and pending to date (see Appendix)
- 12 clinical studies 6 completed and 6 underway / start 2024
- Genesis of HBCI majority owned spinout for Prostate Cancer
- In-house clinical trial unit to plan and run trials to enable speed to market and control costs
- **Team:** 2 Medical Doctors, 1 PhD, 1 trial manger, 1 PhD student





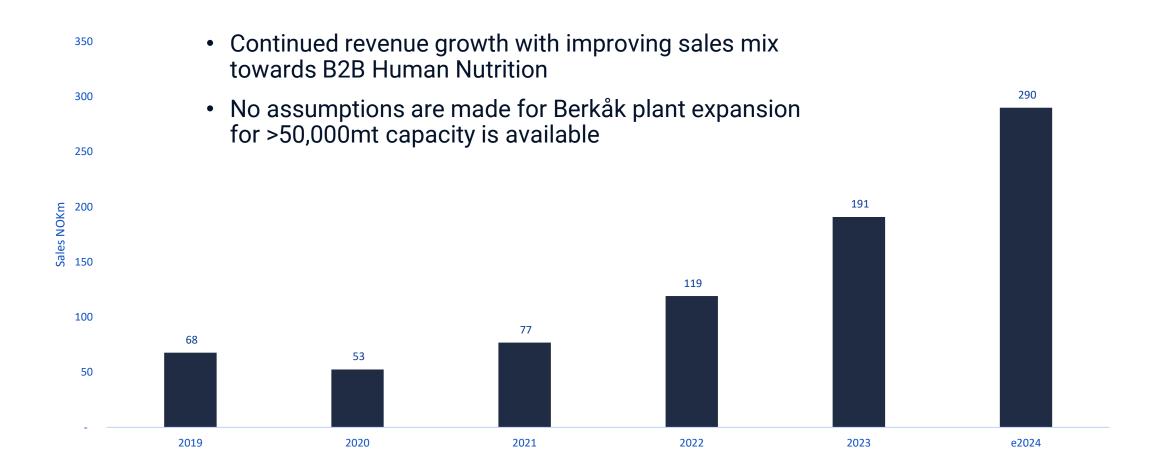
Strong demand for core business: Increased Raw Material Volumes to Increase 30% in 2024





Revenue NOKm

HBC FY24 targeting 50% Revenue Growth yoy & positive EBITDA





Berkåk Plant is a Future Growth Opportunity

Highlights

- HBC's fully owned Berkåk plant provides potential for >50,000mt
 of raw material processing capacity with over 28,000m² of land
- This would increase >3x raw material capacity to over 72,000t
- Potential human grade ingredients output:
 - 11,000t fish oil*
 - 9,500t protein*
- Multi-species, fresh and frozen capability
- Scale to support the development of a growing pet segment that is searching for new sources of sustainable, nutritious proteins

HBC plans to develop this strategic asset in due course



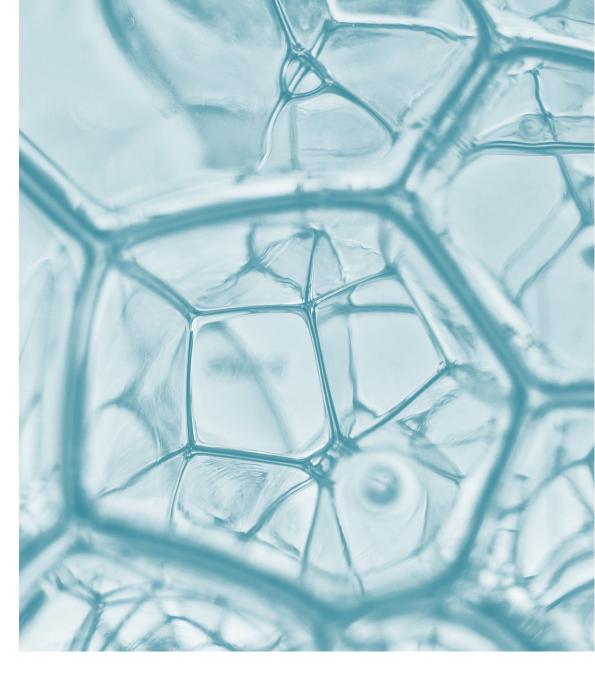
^{*} Precise volume numbers will be determined by future mix of fish if used for species beyond salmon



HBC Immunology

- HBCl is the first Biotech spinout and HBC retains c.70% of the share capital
- \$1.1m was raised at \$20m post-money valuation in August 2023
- Key asset:
 - Identified a novel peptide derived from Atlantic salmon which targets iron metabolism and starves cancer of its ability to grow and spread.
 - It is a patented novel core 5 amino acid sequence which drives FTH1 gene modulation
- Composition of Matter and Method of Use patents filed in Feb-22 (US 63/306979)

HBCI is developing a co-treatment drug for Prostate Cancer



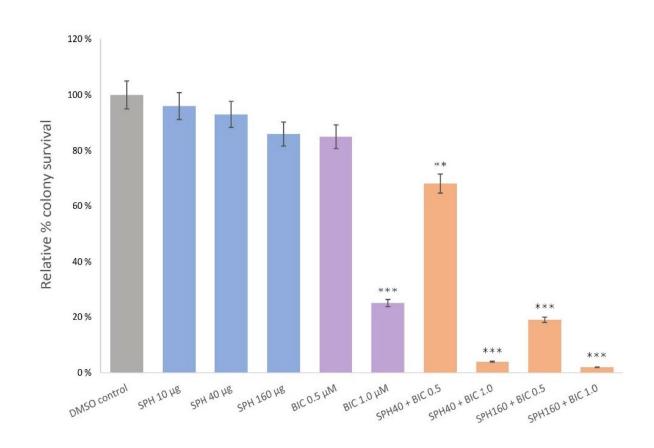


HBCI: Peptide Co-Treatment for Prostate Cancer

Very encouraging early signals

- ProGo® peptides added to Prostate Cancer (PC) hormone therapy showed up to a 98% kill rate of prostate cancer cells, 6x greater than existing hormone therapy alone (Marine Drugs, 2022)
- Two lead peptides (FT-002 & FT-005) show 2-3x greater PC cell kill vs ProGo® peptide mix – (October 2022)
- In February 2024, HBCI announced a successful first animal trial with FT-005 in combination with Pfizer's market leading anti-androgen therapy

Published In-vitro data







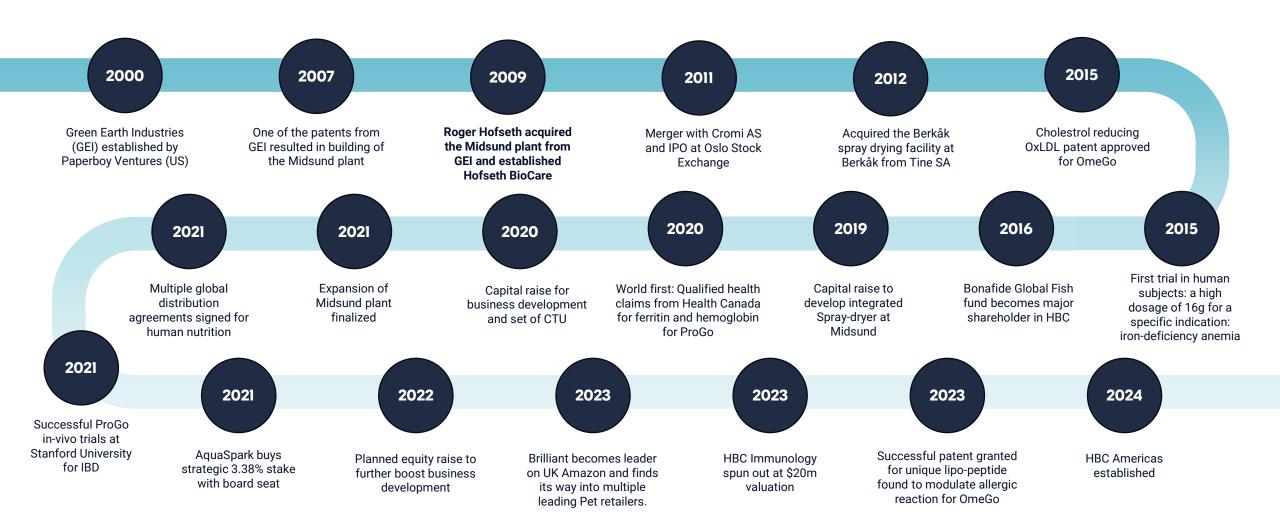
Science-led marine nutrition™

Thank you

Please let us know if you have any questions



A History of HBC





R&D: Patents Overview

Patent number	Туре	Patent	Issued/Pending	Region
342626	Manufacturing	A new method to improve enzyme hydrolysis and resultant protein flavor and bio-activity of fish off-cuts	3 issued, 3 pending	NO, EP, US, (P)CA, CL, US
5554719	ProGo®	Methods and compositions for promoting absorption of iron	4 issued	JP, KR, CA, EP
63/306,978	ProGo®	Upregulation of ferritin heavy chain 1 expression	1 pending	(P) US
2021-0252099	ProGo®	Fish protein hydrolysate powder and a composition comprising said powder for use as a medicament	11 pending	(P) US, EP, SG, CA, JP, IN, CN, HK, AU, NZ, TH
63/306,979	ProGo®	Medicinal uses of oligopeptides in combination with an antiandrogen	1 pending	(P) US
9446013	OmeGo®	Method of lowering circulating oxidized low density lipoprotein beta-2 glycoprotein 1 complex for treatment of atherosclerosis	7 issued	US, MX, CA, AU, SG, EP, IN
2021-0315941	OmeGo®	Respiratory treatments using salmonid oil compositions	16 issued, 1 pending	(P) US, PCT (2), CA, AE, AU, BR, CA, CN, EP, ID, JP, MY, SG, TH, TW (2),
		Total patents:	30 patents, 17 pending	

→ Spun out to HBC Immunology in Aug-23





OmeGo® Studies December 2023

	Study title	Targeted Benefit	# subjects	Treatment Duration	Treatment Arms	Primary Endpoint & Benefits	Secondary Outcomes	Timelines
(a)	Effect of different fish oil / omega-3 supplements on serum oxidised LDL in healthy human subjects To demonstrate that providing who processed fish oil provides enhance benefits including antioxidant elements particular read-through to healthy human subjects		28 healthy subjects age between 20-60 years	3 weeks	OmeGo [®] 1g per day, Omega-3 oil 1g per day, Algal oil 1g/d sunflower oil (control) 1g per day	Change in oxidised LDL / oxLDL: 11% significant reduction with OmeGo \$\(^{\text{o}}\); 6% non-significant decrease with algal oil; 3.5% non-significant decrease with omega-3 fish oil; 2.5% non-significant decrease with sunflower oil indicating that minimally processed whole fish oil has better antioxidant and anti-inflammatory effects as measured by impact on oxLDL	none	COMPLETED & PUBLISHED in Journal of Nutrition and Food Sciences
	Palatability study	The low oxidation and free fatty acid levels in OmeGo makes for a more appealing food topper for pets (cats and dogs)	8 dogs and 8 cats	Animals were offered two bowls, one with SO and one with 18/12 added Test duplicated for each animal and result only recorded if treatment bowl with same oil was selected	Choice test in domestic dogs and cats 5ml oil sprayed onto 200g of food pellets	8 out of 8 dogs and 8 out of 8 cats preferred the bowls containing OmeGo®	none	Internal report
	House dust mite model of induced asthma and a guinea pig model of mild eosinophilia	Investigate inflammatory -resolving properties of the oil focused on eosinophilic / allergic inflammation (interventions dosed intraperitoneally)	HDM study 20 mice; guinea pig study 24 animals	15 day study	HDM: saline, OmeGo [®] , ApoA-IV (positive control); guinea pig: OmeGo [®] , cod liver oil, linoleic acid, fevipiprant	HDM: significant reduction in eosinophil count of 42% in the lungs and 38% in the spleen vs negative control & similar effect to apoA-IV; guinea pig study 50-55% reduction in chemotaxis and chemokinesis respectively compared to linoleic acid with similar numeric effect to fevipiprant		COMPLETED & PUBLISHED in Journal Biotechnology and Applied Biochemistry
	House dust mite model of induced asthma	Investigate inflammatory -resolving properties of oral OmeGo focused on eosinophilic / allergic inflammation	50 female mice	15 day study	OmeGo® (2 doses); cod liver oil; fevipiprant; no treatment	Compared to cod liver oil, higher dose OmeGo® showed a 10% reduction in lung eosinophils, a 17% reduction in spleen eosinophil, a 10% reduction in lung eosinophils compared to cod liver oil and a 5% reduction in lung fibrosis (cod liver oil showed no benefit on any of the endpoints compared to no treatment).		COMPLETED & PUBLISHED in Biomedicines
	Rat paw swelling study	Investigate inflammatory -resolving properties of the oil focused on type 1 inflammation	20 male Wistar rats	Single dose, 24hr study	Standard carrageenan-induced paw oedema / inflammation assay, single dose of salmon oil (2 different dose levels), diclofenac (one dose level, positive control) & distilled water (negative control) given before carrageenan injection; higher dose of salmon oil showed similar resolution of paw thickness / swelling as diclofenac	Paw inflammation increased progressively over the 24hr period in the control goup and the low dose OmeGo group. In higher dose OmeGo group paw inflammation stopped increasing after 2 hrs and then declined; in diclofenac group inflammation stopped increasing after 1hr and then declined; human equivalent dose of higher dose OmeGo = 1.5g	IL-1 & IL-6 significantly reduced by dictofenac but not by OmeGo	COMPLETED & PUBLISHED in Biomedical Journal of Scientific and Technical Research
	Study to investigate the potential of OmeGo [®] , combined with best standard of care, to aid recovery from milder COVID	Supporting immune health, helping to re-balance the immune response in viral infections to speed recovery	90	4 weeks treatment	OmeG [®] o 4g vs placebo	Proportion of patients requiring ventilation until end of study and change in gene expression markers of inflammation and recovery	Includes oxygen requirements during hospital stay, clinical improvement assessed by NEWS, time to clinical recovery	Completed and first publication being written-up
	Exploratory study to assess the anti-allergic and inflammation-resolving effects of OmeGo in mild to moderate asthma	Demonstration of the health benefits of OmeGo in a model of allergy, both reduction in allergy-driven inflammation / immune health & the impact gut health in terms of the microbiome	68	20 weeks treatment	OmeGo [®] 6g per day vs placebo	Composite endpoint to assess the mean reduction in moderate and severe asthma exacerbations	Exacerbations, lung function, inflammatory markers, quality of life, changes in gut microbiome	Initiated August 2022; recruitment ends Dec 2023
	To show that a minimally processed fish oil provides broader health benefits than a processed, concentrated ethyl ester omega-3 oil-it's not just about EPA & DHA Demonstrate broader health benefits in terms of impact on markers of inflammation, oxidative stress, blood lipids, metabolism as well as sleep quality		12 weeks treatment	OmeGo [®] 2g per day vs ethyl ester 18/12 omega-3 concentrate oil	Omega-3 index	Inflammatory markers	To initiate early 2024	
	Summary of a Preclinical Study in Dogs to Assess OmeGo 's Ability to Enhance the Bioavailability of a Bioactive Peptide Mix (ProGo).	OmeGo [®] could increase the bioavailability of ProGo [®]	three groups of 6 dogs	26 days	OmeGo® + ProGo® added to the diet compared to ProGo® added to the diet Control (the diet alone)	OmeGo [®] enhanced the bioavailability of ProGo [®] , measured by increasing iron stores / ferritin		Summary of study report
	Assessing the Potential of OmeGo®, compared to Lecithin Oil or an Aqueous Solution, to enhance the Bioavailability of Vitamins A & E and Lutein / Zeaxanthin in a Modified Caco-2 Uptake Study.	Enhancing the bioavailability of Vitamins A & E and Lutein / Zeaxanthin	In-vitro study using caco- 2 intestinal absorption uptake model	2 hours	OmeGo [®] vs lecithin oil vs water	intestinal uptake of vitamin A and vitamin E (A&E) as well as lutein and zeaxanthin (L&Z)		Summary of study report





ProGo® StudiesDecember 2023

Study title	Targeted Benefit	# subjects	Treatment Duration	Treatment Arms	Primary Endpoint & Benefits	Secondary Outcomes	Timelines
A Placebo-Controlled Study of the Impact of Dietary Salmon Protein Hydrolysate (SPH / ProGo*) Supplementation in Increasing Ferritir and Haemoglobin Levels in Iron- Deficient Anaemic Subjects	Correction of iron deficiency anaemia without the need for iron supplementation	48 iron-deficient human subjects with hemoglobin levels between 8 g/dL and 11 g/dL	6 weeks (42 days)	Supplementation of the normal diet with 16 grams per day of SPH compared to 18g per day of whey protein (to provide equivalent amounts of protein); subjects maintained routine diets.	Statistically significant 14.9% increase from baseline at Day 42 with SPH. 7 out of the 24 subjects in whey group and the increase in mean haemoglobin level with whey was not statistically significant	The serum ferritin levels increased significantly with the SPH versus the whey protein isolate treated group. At the end of the 42 day study, the SPH group gained a statistically significant increase in ferritin concentration (from a low baseline of 22 ng/mL to a more normal 53 ng/mL), as compared to the whey protein isolate control group, which did not show a statistically significant shift (from 31 ng/mL to 37 ng/mL)	COMPLETED & PUBLISHED in Journal of Nutrition and Food Sciences
A Placebo-Controlled, Randomized Study on the Impact of Dietary Salmon Protein Hydrolysate Supplementation on Body Mass Index in Overweight Human Subjects	Weight loss (given on top of usual diet)	48 overweight adult subjects with BMI values 25 and 30 (37 women & 11 men)	6 weeks (42 days)	Supplementation of the normal diet with 16 grams per day of SPH compared to 18g per day of whey protein (to provide equivalent amounts of protein); subjects maintained routine diets.	SPH resulted in a statistically significant 5.9% decrease from baseline at Day 42. The whey group showed a small weight gain of 1.6% which was non-significant	Biomarker analysis assessing fat burn, metabolic efficiency and inflammation. SPH significantly increased serum bile acid by 63% vs 4.5% (non-significant) with whey; SPH significantly reduced the inflammatory cytokine IL-6 by 14.7% compared to 6.1% (non-significant) with whey; SPH significantly increased adiponectin by 11.3% and whey by 1.5% (non-significant); SPHG significantly increased preheparin lipoprotein lipase by 14.6% and whey by 2.5% (non-significant)	COMPLETED & PUBLISHED in Journal of Obesity & Weight Loss Therapy
A proof-of-concept study to evaluate Salmon Protein Hydrolysate Powder on energy increase, improvements in hair/nail/skin health and anti-inflammatory modulation in healthy males and females		Twenty participants (healthy males and females) 30-60 years of age	128 days (18 weeks) of self-supplementation	Single arm: supplementation with 4g SPH daily for 128 days	Significant change from baseline (Day 0) to end-of-study (Day 128) in energy level as assessed by a Vitality and Quality of Life Questionnaire after a 128-day supplementation with SPH Powder; Significant subjective improvement in hair/nail/skin health; anti- inflammatory modulation	14% & 15% reduction in inflammatory markers IL-8 and CRP & a 57% increase in anti-inflammatory cytokine IL-10; Relative expression of 84 stress genes as evaluated by oxidative stress-related gene RT Profiler PCR array after supplementation showed upregulation (>2.5 fold) of protective antioxidant gene systems including FTH1, HMOX1 and GPX1	Publication in preparation Q1 2024
A randomized, placebo-controlled, double-blind study to evaluate the efficacy of Salmon Protein Hydrolysate Powder on Circulatory Haemoglobin and Ferritin modulation and Hair, Nail, Skin Health in healthy males and females		14 subjects (10 females, 4 males) aged between 31 to 57 years	8 weeks	Randomized, Placebo-Controlled, Double-Blind trial of 12 g of salmon protein hydrolysate powder daily compared to whey protein isolate (WPI)	The change from baseline (Day 0) to end-of-study (Day 56) in: 1. Significant increase in Haemoglobin of 3.8% with SPH (Hb remained in normal range) vs no change with WPI 2. Non-significant 13.4% increase in serum ferritin levels (ferritin levels remained in normal range) vs no change with WPI 3. Change in Hair, Nail, Skin Health by a self-assessed Questionnaire showed significant improvement with SPH (questionnaire scores showed a statistically significant decrease from a baseline "dissatisfied" score of 4.64 to a "satisfied" score of 2.81 after 56 day supplementation) and no change with WPI	1. Significant 22.3% reduction of IL-8 with SPH (vs no change with WPI); IL-6, IL-12B, TNF α numeric changes of 14.4%, 10.5% & 16.4% respectively were non-significant & no numeric decrease seen with WPI; 10.3% numeric decline in leaky gut biomarker zonulin was non-significant (no change with WPI) 2. Percent body fat was significantly reduced by 10.8% with SPH, no change was seen with WPI; BMI decreased by 7% (significant) with SPH with no change seen with WPI	Study report
Comparison of Nitrogen Bioaccessibility from Salmon and Whey Protein Hydrolysates using a Human Gastrointestinal Model (TIM-1)	Pre-clinical / in vitro assessment of speed of upper GI absorption	N/A	2 hours in vitro analysis	Salmon protein hydrolysate (SPH), whey protein hydrolysate extensively (WPH-High) or weakly (WPH-Low) hydrolysed, non-hydrolysed whey protein isolate (WPI) and mixtures of WPI:SPH (90:10, 80:20) were digested in TIM-1using the conditions for a fast gastrointestinal transit that simulate the digestion of a liquid meal in human adults.	After a 2 h-digestion in TIM-1, SPH was the protein substrate from which the highest amount of nitrogen (67.0%) became available via absorption in this upper intestine model	N/A	COMPLETED & PUBLISHED in Journal of Functional Foods in Health & Disease
Soluble Protein Hydrolysate Ameliorates Gastrointestinal Inflammation and Injury in 2,4,6- Trinitrobenzene Sulfonic Acid-Induced Colitis in Mice	Preclinical trial demonstrating GI protective effect of HMOX1 upregulation by ProGo®	N/A			ProGo® protects gut health with better healing and faster recovery of overall health; in contrast bovine collagen peptides were no better than placebo (water)		COMPLETED & PUBLISHED in Biomolecules
Salmon Protein Hydrolysate Potentiates the Growth Inhibitory Effect of Bicalutamide on Human Prostate Cancer Cell Lines LNCaP and PC3 by Modulating Iron Homeostasis		N/A					COMPLETED & PUBLISHED in Biomolecules





CalGo® Studies December 2023

\	Study title	Targeted Benefit	# subjects	Treatment Duration	Treatment Arms	Primary Endpoint & Benefits	Secondary Outcomes	Timelines
	A randomised, blinded, cross-over study comparing serum calcium levels of CalGo® vs calcium carbonate in post- menopausal women	Natural bone calcium is more accessible and thereby provides better supplementation	21	24 hours	CalGo® 2g & calcium carbonate 1g (to provide same level of elemental calcium)	Change in serum calcium over 24 hours	Change in serum calcifediol over 24 hours	COMPLETED & PUBLISHED in Biomedical Journal of Scientific and Technical Research
	A Comparative Study of the Impact of Dietary Calcium Sources on Serum Calcium and Bone Reformation Using an Ovariectomized Sprague-Dawley Rat Model	To determine whether minimally processed salmon bone calcium-collagen (CalGo®) is superior to standard calcium supplementation on femur bone mineral density, bone strength (cortical thickness) and bone length	40 ovariectomized female Sprague- Dawley rats	60 days	Placebo, salmon bone calcium (CalGo®), G3 fed a diet containing a high dose of salmon bone calcium (SBC), calcium gluconate and calcium carbonate	Bone development parameters as measured by femur bone changes were significantly different for the different groups. The femur length was significantly increased in groups G2, G3 and G4; femur cortical thickness (bone regrowth) and femur bone mineral density (BMD) significantly increased only in groups G3 and G4 as compared to the G1 control group of animals.	Another aspect of our results shows that minimally treated salmon bone calcium contains equal amounts of phosphate and carbonate anions as well as a mix of gluconate and glycinate amino acid salts, which may play a significant role in improved incorporation into bone tissue in osteoporosis treatment.	COMPLETED & PUBLISHED in Journal of Nutrition and Food Sciences
	An In Vitro Study on the Effect of Five Commercial Calcium Supplements on Human Osteoblast Cell Proliferation and Ca2+ Mineralization	To assess the osteoinductive qualities of CalGo® compared to commonly used calcium supplements	Human fetal osteoblast cells	Incubation for 4 days	CalGo®, calcium carbonate, calcium citrate; alge calcium, eggshell calcium	CalGo® (salmon bone collagen calcium) showed consistently strong effects with the best overall profile on the proliferation and mineralization of human fetal osteoblast cells (hFOB 1.19 cells) in vitro using three assays alkaline phosphatase levels, DNA synthesis changes and Ca2+ deposition compared these results against other sources of calcium supplementation.		COMPLETED & PUBLISHED in Journal of Nutrition and Food Sciences

