

Denomega

Nutritional Oils



Hva skal til for å lykkes i markedet med marine oljer?

- “Marine food is healthy”
- The quest for active ingredients responsible for health effects is becoming more aggressive
- Fish lipids are proven to be/contain important active ingredients
- Lack of same underestimated as cause of health problems

- Individual active components must be identified
- Products with defined effect as known and desirable foodstuffs
- Or supplements with no negative sensory qualities
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- Clinical proof of effect – also final product
- Fish unavailable to or not wanted by large number of people

- Extraction Methods
 - Mechanical separation
 - Organic solvent extraction
 - Supercritical Fluid Extraction
 - Chromatographic Methods
 - Nano technology
 - Downstream Membrane separation (RO/NF/UF)
 - Derivatisation
 - Distillation

- High quality is of the essence
- Gentle methods – non destructive
- Solvents except supercritical CO2 are not wanted
- Tracability
- Well documented processes
 - Kosher & Halal
 - HACCP
 - Food / Supplements GMP

- Stabilization
- Marine lipids are unstable when isolated
- Non oxidised- or otherwise degraded rawmaterial essential
- Careful processing – as low temperature as feasible
- Antioxidants are important to retain in- and add to products
- If added to foodstuff advanced and different antioxidant systems needed

- Unknown but supposedly unstable components should be retained
- Higher value when in pristine condition and trace components retained
- Non-destructive rendering method allows also other unstable components to be utilized

- Ability to offer customer a solution
 - Not a drum of problems
- Premixes
- Microencapsulated oil
- High concentration emulsions
- Advice based on own developments on applications
- Clinical trials
- Antioxidants

- Quality and tracability
- No mistakes allowed
- Farmed raw material easier to document

Denomega 100™: Superb product - well positioned functional food ingredient



A unique possibility to new food product development

- High quality **taste and odour free** omega-3 oils to the global "functional food" market
- Secured and unique raw materials source
- New plant in Ålesund gives increased capacity
- Ongoing aggressive product- and technology development give growing application opportunities

