

# Trends in Omega 3 @

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BASF SE – Human Nutrition

## **1 | Trend 1**

**Market Segment diversification and penetration**

## **2 | Trend 2**

**Higher EPA/DHA concentrates  
Customized EPA/DHA ratios**

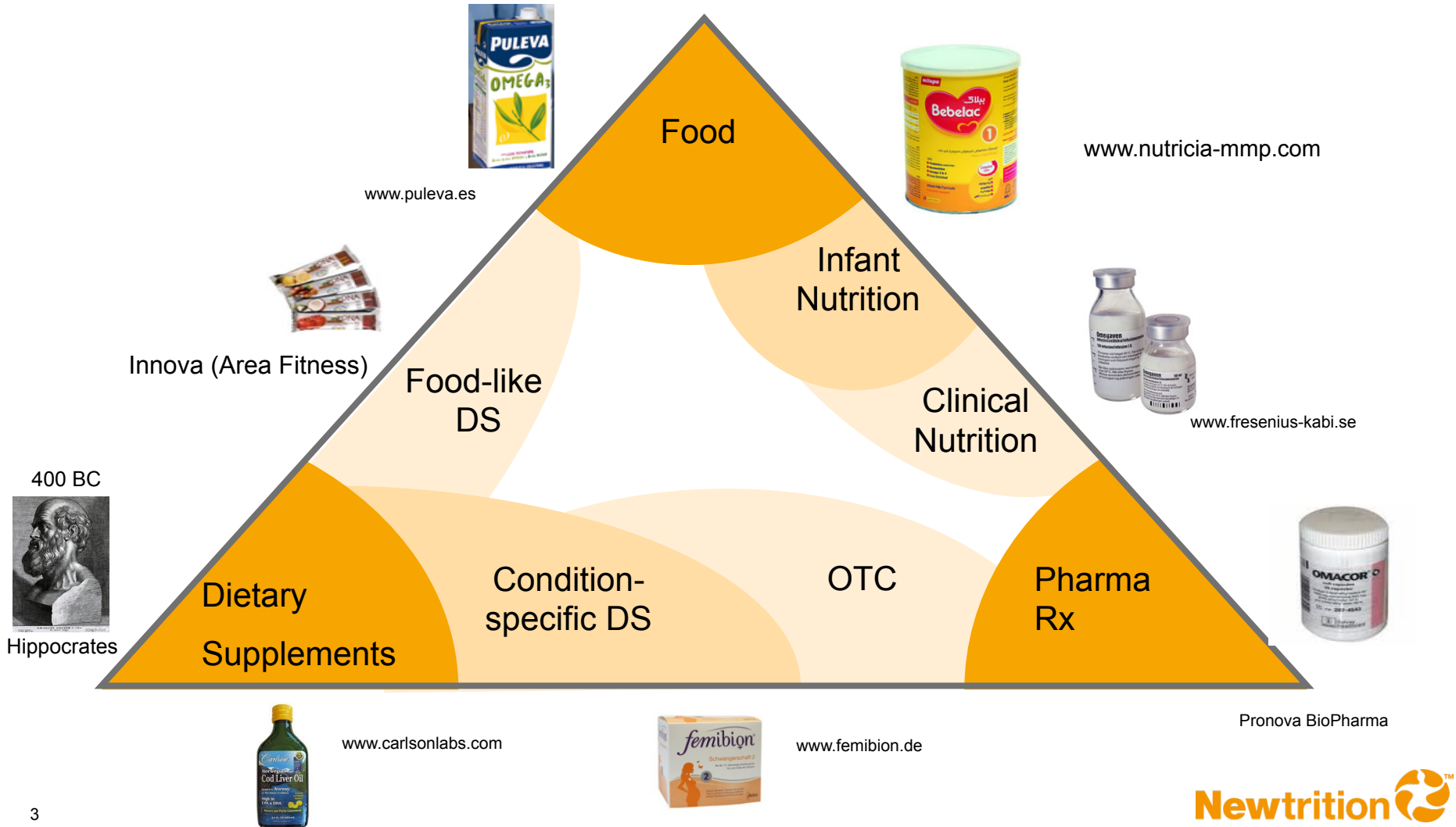
## **3 | Trend 3**

**New delivery forms**

# Trend 1

## Market Segment diversification and penetration

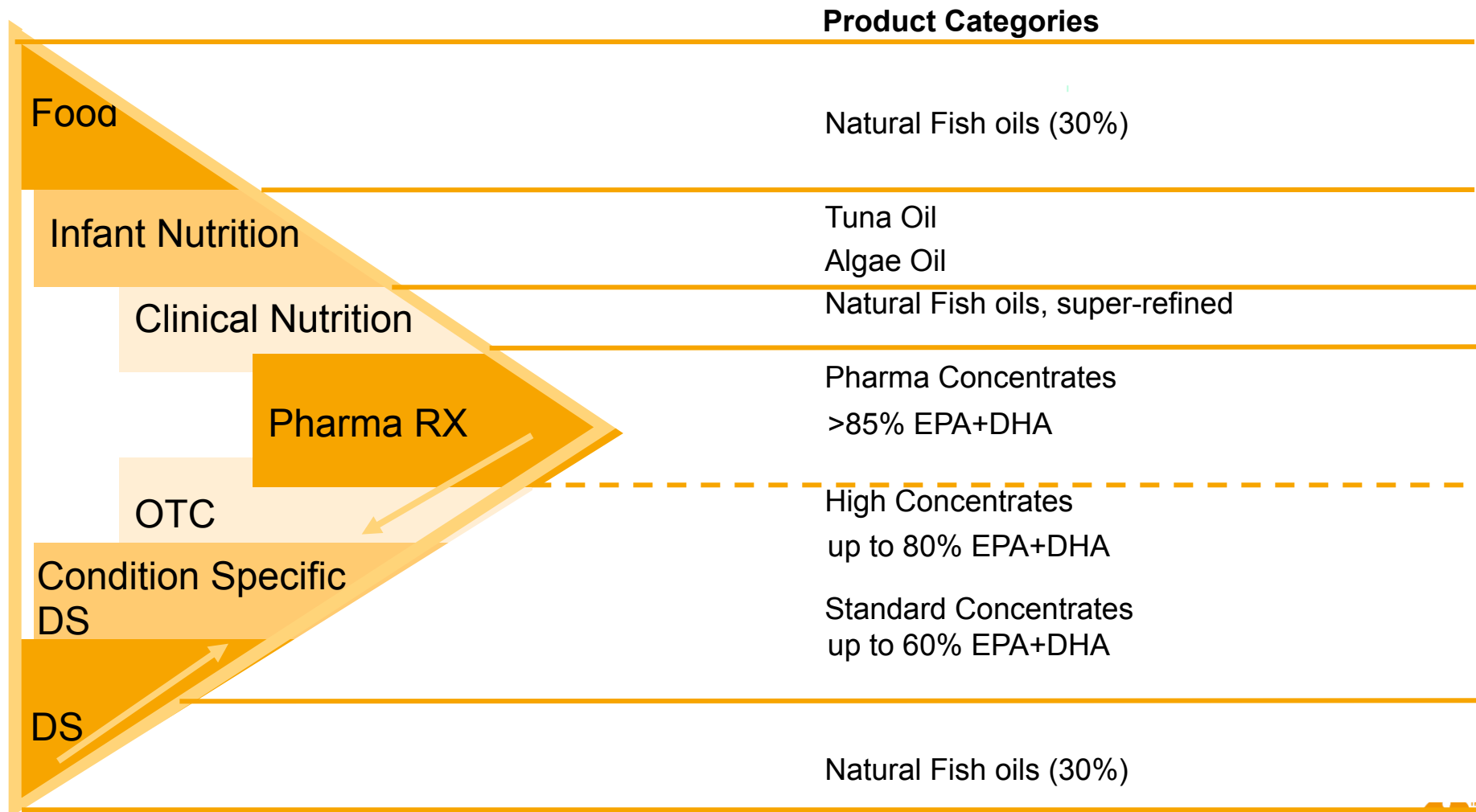
Omega-3 presence in all Nutrition & Pharma market segments



# Trend 1

## Market Segment diversification and penetration

Matching market segments and Omega-3 Product categories



## 1 | Trend 1

**Market Segment diversification and penetration**

## 2 | Trend 2

**Higher EPA/DHA concentrates  
Customized EPA/DHA ratios**

## 3 | Trend 3

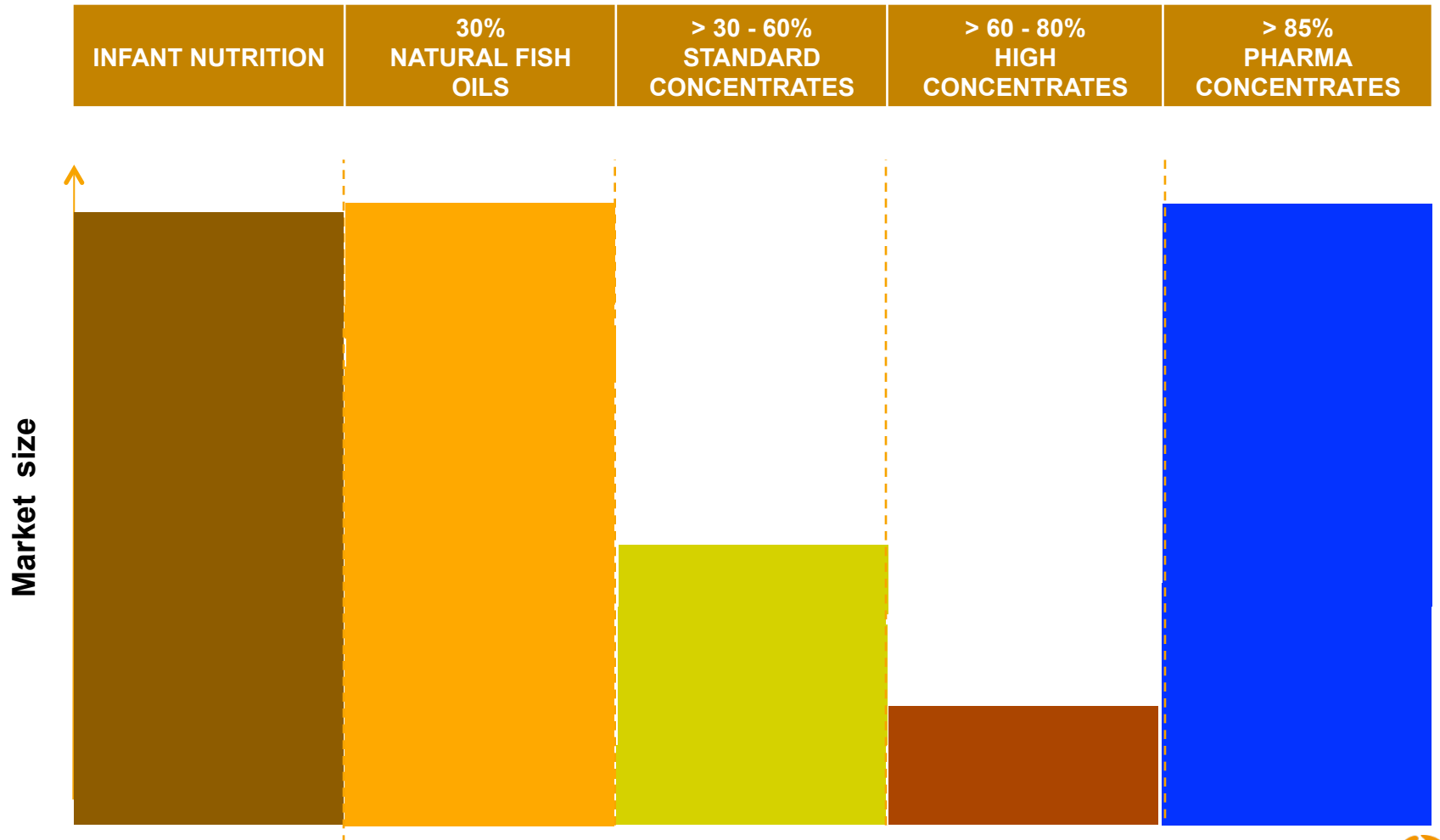
**New delivery forms**

# Trend 2

## Higher EPA/DHA concentrates

### Customized EPA/DHA ratios

Omega-3 product categories



# Trend 2

## Higher EPD/DHA concentrates

### Customized EPA/DHA ratios

#### Reasons why ?



- Reduction of supplementation with undesired fatty acids or other non essential component
- Optimized Omega-3 / Omega-6 ratio
- Increased consumer compliance (smaller capsules, one-capsule-a-day)
- Health condition-specific supplementation requires
  - higher absolute doses, and
  - higher relative concentration of EPA vs DHA
- Concentrated EPA/DHA offer the possibility to differentiate against commoditized fish oil supplements, and participating in premium markets
- Concentrated EPA/DHA offer the option for brand marketers to tailor a company-specific/proprietary EPA/DHA ratio

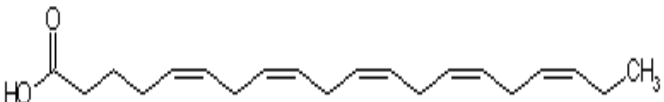
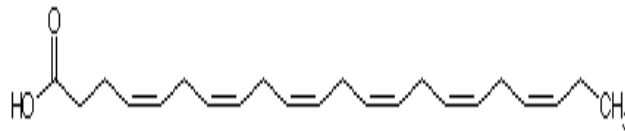


## Trend 2

# Higher Omega-3 concentrates

## Customized EPA/DHA ratios

EPA's and DHA's Distinct Health Benefits

EPA	DHA
<ul style="list-style-type: none"><li>• Reduce triglyceride levels</li><li>• Anti-thrombotic</li><li>• Anti-arrhythmic</li><li>• Mood disorders</li><li>• Anti-inflammatory</li></ul>  <chem>CCCCCCCC=CCC=CC=CC=CC=CC(=O)O</chem>	<ul style="list-style-type: none"><li>• Lower blood pressure</li><li>• Brain health</li><li>• Pre &amp; post natal formulations</li><li>• Eye health</li></ul>  <chem>CCCCCCCC=CCCC=CCC=CC=CC=CC=CC(=O)O</chem>



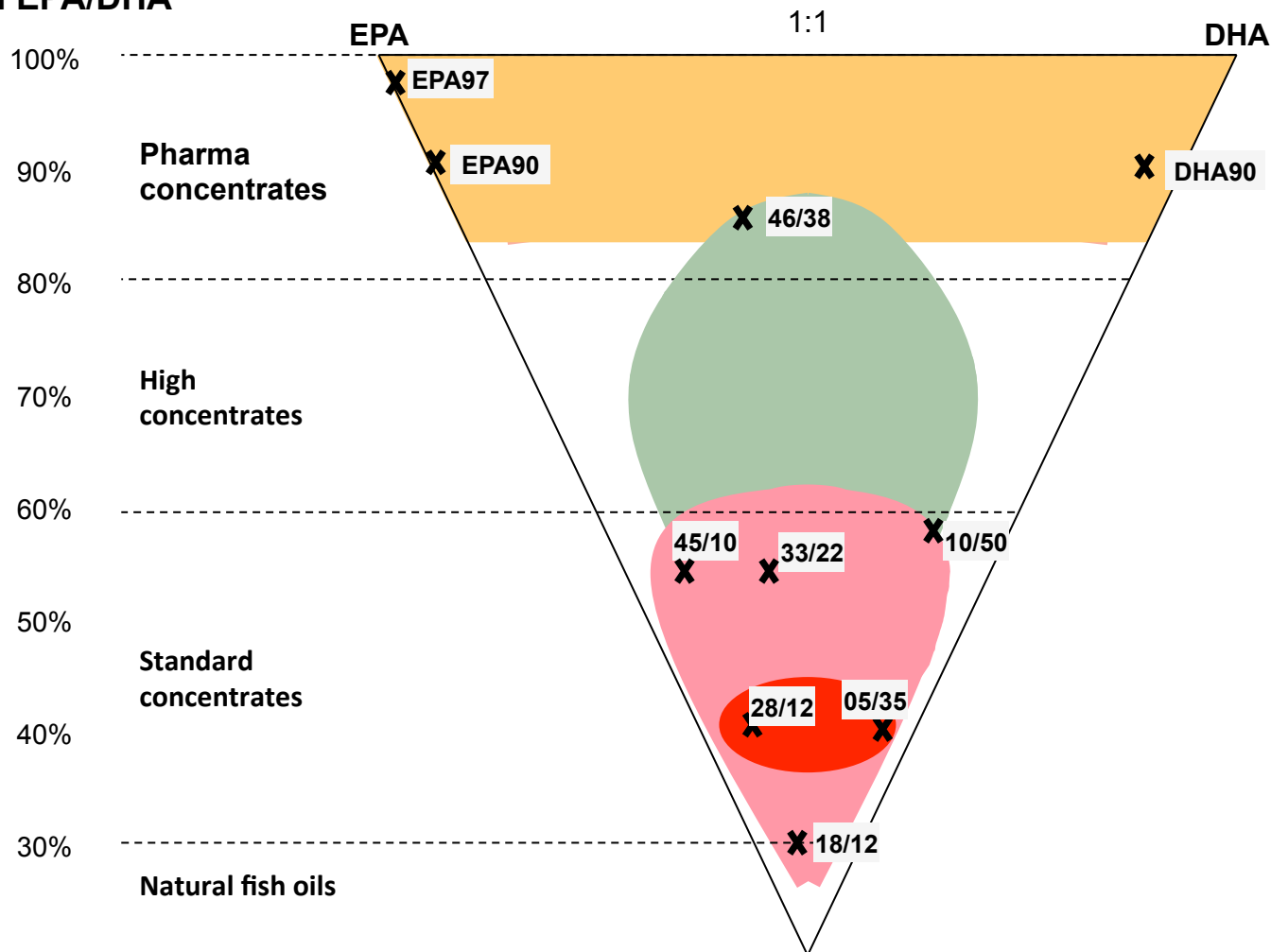
# Trend 2

## Higher Omega-3 concentrates

### Customized EPA/DHA ratios

Need for different separation and concentration technologies

Total EPA/DHA



## **1 | Trend 1**

**Market Segment diversification and penetration**

## **2 | Trend 2**

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Customized EPA/DHA ratios**

## **3 | Trend 3**

**New delivery forms**

# Trend 3

## New delivery forms

.... Standard delivery forms do not recognize the diversity of consumer preferences

### Challenges for consumer-convenient daily intake

- Swallowing problems for elderly and children



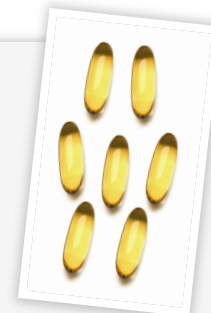
- “Pharma perception”:

*Oh my god,  
I am sick!*



- Dosage burden:

several capsules



### Customer needs

- Escape from commoditization of the softgel category
- Enable differentiation through new concepts
- Reach new and growing consumer groups (children, elderly)
- Establish higher margins through premium products

# Trend 3

## New delivery forms

Delivery solutions

- Ideal delivery form for consumer groups needs to reflect market and consumer diversity

- Options:

- Liquid supplements (bottled oils)
- Syrups
- Chewable tablets / gums
- Pre-mix powders
- On the tongue sachets
- Tablets
- One shots



# BASF is set up to serve Omega-3 market trends, based on broadest technology portfolio, after focused recent acquisitions



## Sandefjord, Norway



- First Marine Oil Factory in Norway
- Founded 1935
- EE & TG concentrates

• *Pharma, OTC, DS*

- **Omacor/Lovaza**
- **PronovaPure**

## Callanish, Scotland, UK



- Site for for lipid concentration for nearly 30 years
- EE concentrates
- Fish Oil concentrates

• *Pharma, OTC, DS, Clinical Nutrit.*

- **Maxomga**
- **Crystalpure**

## Brattvaag, Norway



- Founded 1986 as Napro Pharma
- Deodorized Fish Oils
- Bottles
- EE & TG concentrates

• *DS, OTC, Food*

- **Omevital**

## Illertissen, Germany



- Founded 1945
- Deodorized Fish Oils

• *Food, Infant Nutrition*

- **Omevital TG Gold**

## Kalundborg, Denmark



- Opened in 2009

• *Pharma*

- **Omacor/Lovaza**

## Ballerup, Denmark



- Production of encapsulated fish oils since 1988
- Fish oil powders

• *Infant Nutrition, Food*

- **Dry n-3 Powders**

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