

Accessing new markets – Demands, products and entry strategies

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About IFAU

- Private research company, started in 1982
- Cooperation with companies, authorities, research institutions, and organizations in Denmark and other countries
- Participate in Danish and international projects. Conferences. Newsletters. International activities.
- Core competences: applied research within business development, market entry strategies and innovation in the global food value chains
- More information: www.ifau.dk

Agenda

- Key trends and the global value chain
- Superfruit status – antioxidants
- Seniors as target group for healthy berry products
- Omega-3 and omega-6
- Routes for product development
- The future value chain
- Entry strategies



Key factors influencing the global berry market

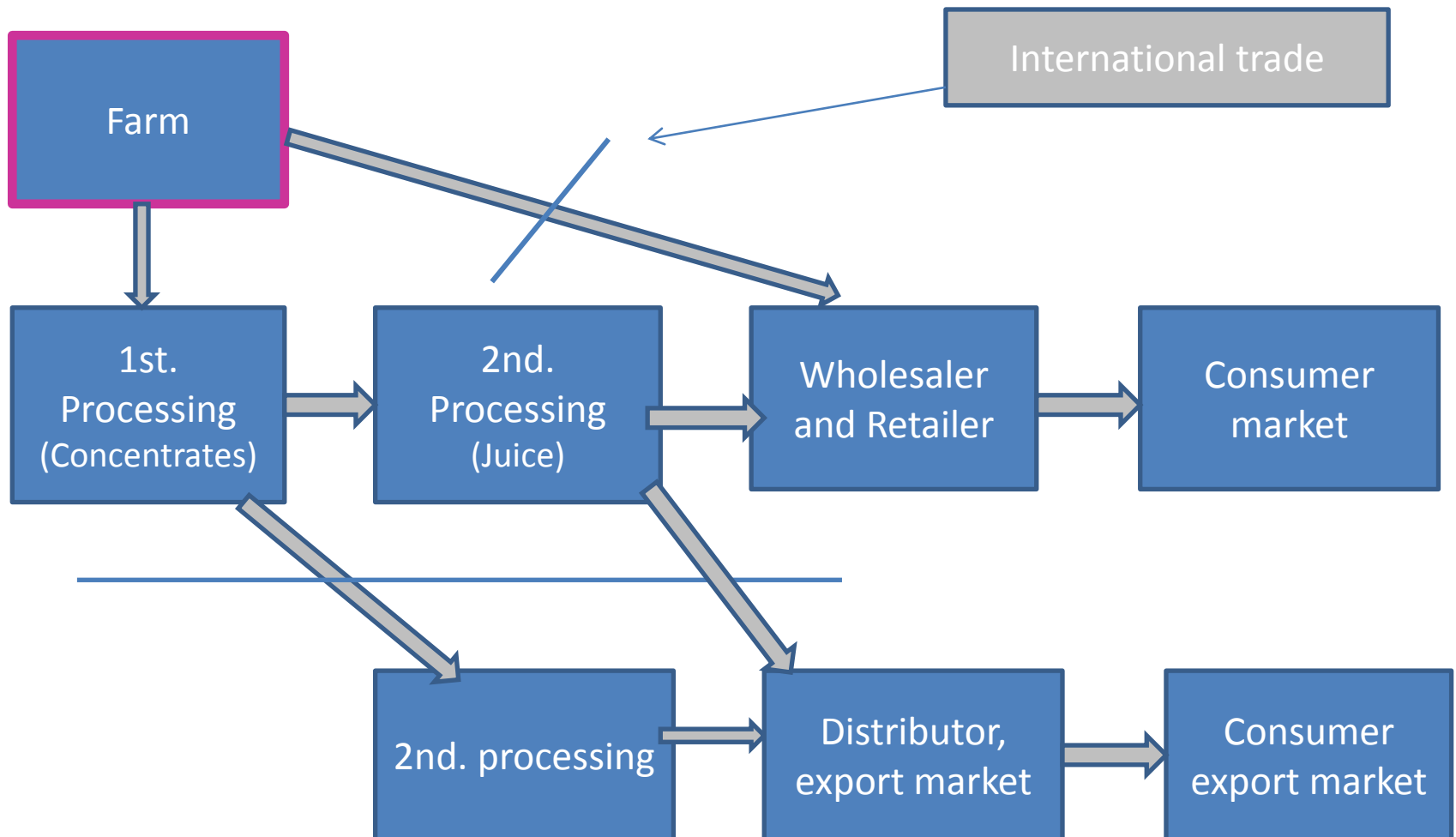
- The berry market is global – fresh and processed berries
- Exotic characteristics, interest for health benefits, search for new taste, and new applications drive the berry market – particularly for less-known berries

=> black currants must benefit from these trends

Black currants is global business

- Production in many countries and several continents
- Trade with fresh and processed black currants local and global trade routes
- Production and processing is not necessarily located in the same country
- So, black currants and processed black currants have become part of global value chains

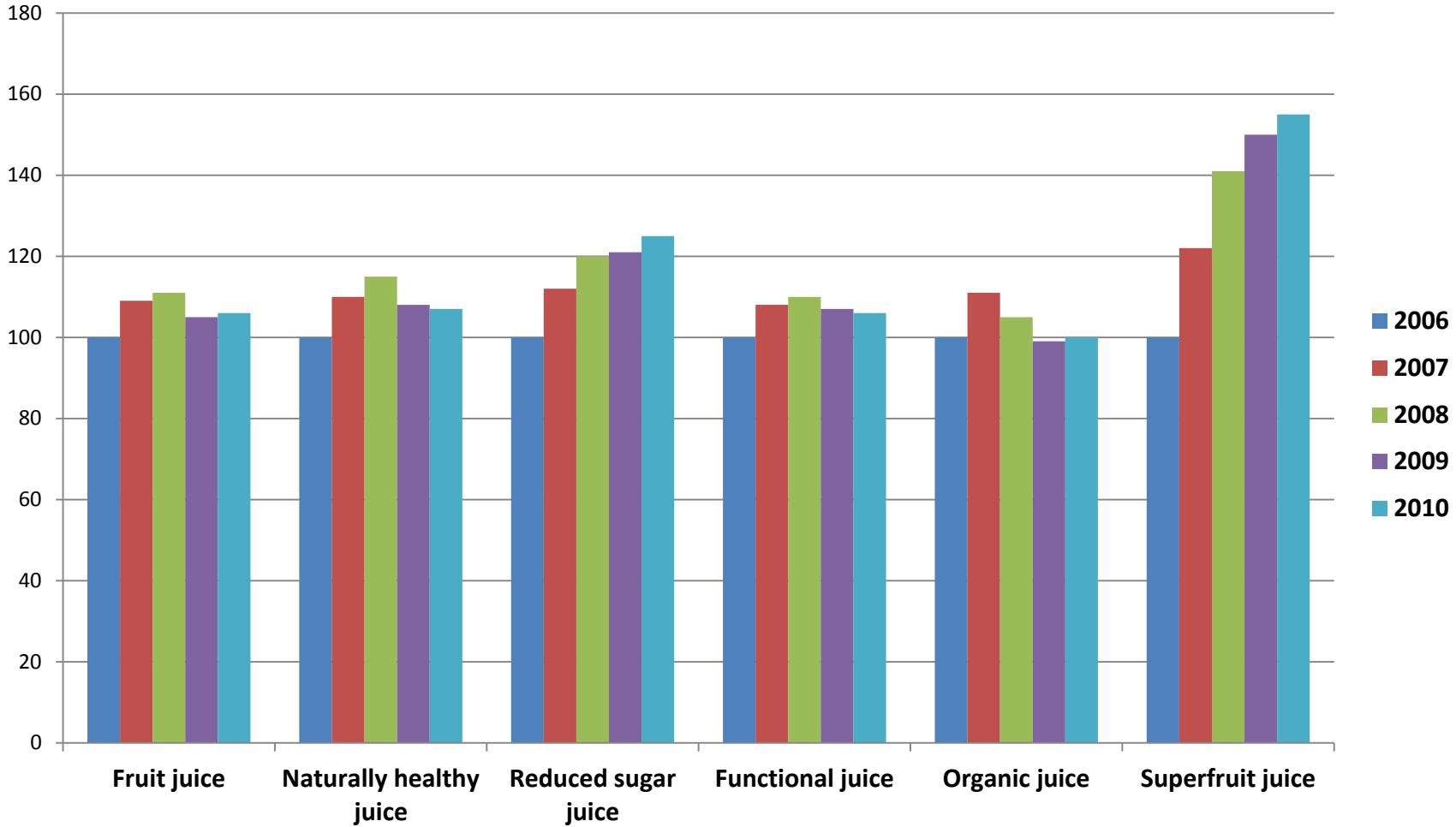
Value chain for traditional black currant products



Global market value growth, healthy juice alternatives

2006=100. Only mature markets.

USA = 90% of superfruit juice

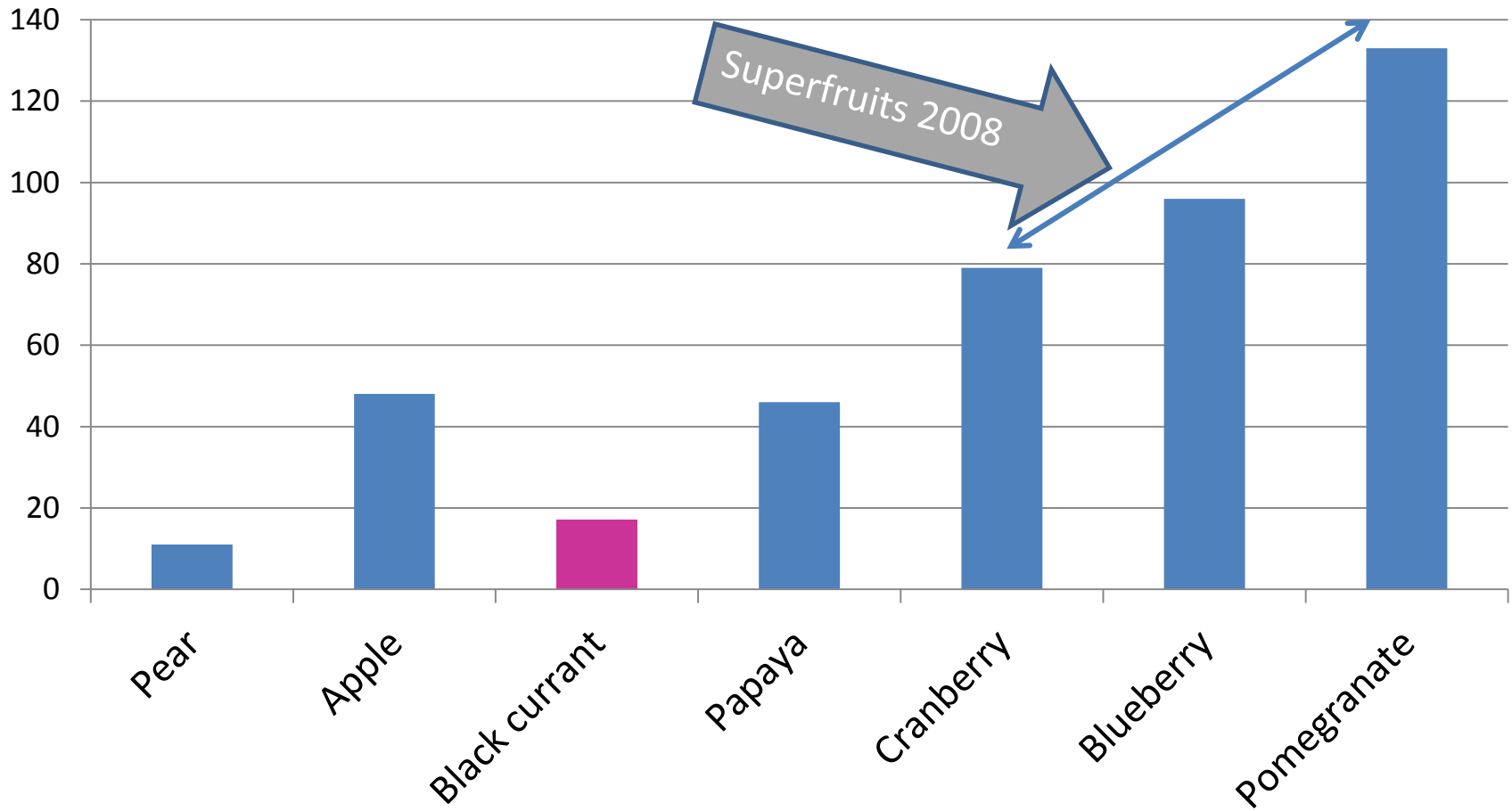


Success factors for establishing Superfruit status in the consumer market

Element	Explanation
Sensory	Appearance, taste, texture, aroma. Appealing fresh or processed
Novelty	New fruit, new colours, new taste; a point of difference
Convenience	Key to success. Consumers willing to pay for convenience
Control of supply	Control of supply to avoid a "me-to" product. Plant variety rights; owning the berry production; fruit with high cost-of-entry
Health benefit	Science generates health benefit substantiation to support a convincing health claim. More published work => the higher superfruit status
Marketing of benefit	Marketing strategy to communicate the health benefit in a credible way to an appropriate target group of consumers

Comparison of total number of studies

(Invitro, animal and human, 2006-2008)



Antioxidants a key to growth?

- Global market value for products with antioxidants 2009: +12 billion USD, and growing; +10% per year
- Very broad market; chocolate, green tea, berries and more. Food, drinks and supplements.
- 2009: 400 new products launched with antioxidants; 2010 more than 450 new products
- Superfruit juice, green tea (Asia), fortified water are the biggest categories globally.

American-South African collaboration: Cape Kingdom, HQ in Florida, USA

- Science-based company
 - Focus on Buchu (*agathosma*), native herb in S.A.
 - Water fortified with bioflavonoids, antioxidants and essential vitamins
 - Black currant as flavour
- => New nutraceuticals can increase knowledge of black currant flavour

www.capekingdomusa.com



Futureceuticals: Supplier of antioxidants in the USA

- Vertically integrated bio-tech company; Wisconsin, Illinois, Europe. Founded 1999.
- Science-based, research on website
- Marketing: "bioavailable and bioactive ingredients"
- Antioxidants ideal for capsules, tablets, ready-to-mix beverages; for child nutrition, healthy ageing and beauty-from-within
- www.futureceuticals.com

Vita Currant product range

Extract: offers a concentrate of phytonutrients

Freeze-dried: extract with 100% of original nutrients;
whole or powder

Spray dried: black currant juice powder



	Extract	Freeze-dried	Spray dried
ORAC	6,000	300	NA
Anthocyanins	1,45%	25%	NA
Kosher	Yes	Yes	Yes
GMO-free	Yes	Yes	Yes
Colour	Purple	Red	Purple

Enzed – Canada

- Company strategy: to develop and market science based nutraceutical products
- 1st product: Black currant product rich in antioxidants and vitamin-C; Anthocin
- Use 200:1 concentrated black currant powder made from skin and meat
- Powder imported from New Zealand
- Marketed in health food stores, health clubs across Canada
- www.enednaturals.com



Better for you: Juice PLUS+

- Juice powder concentrate in capsules
- Marketing: "an inexpensive way to add more nutrition. High in antioxidants"
- Vineyard Blend: blueberries, raspberries, black currants, cranberries, grapes and elderberries
- Produced and sold in USA
- www.juiceplus.com



Lindt Chocolate, Switzerland

- Introduction of a new range of premium chocolates in 2010: Lindt Excellence
- High quality ingredients and innovative flavours: Black currant, caramel, roasted almond, coconut

⇒ Chocolate industry supports black currants' image as premium ingredient

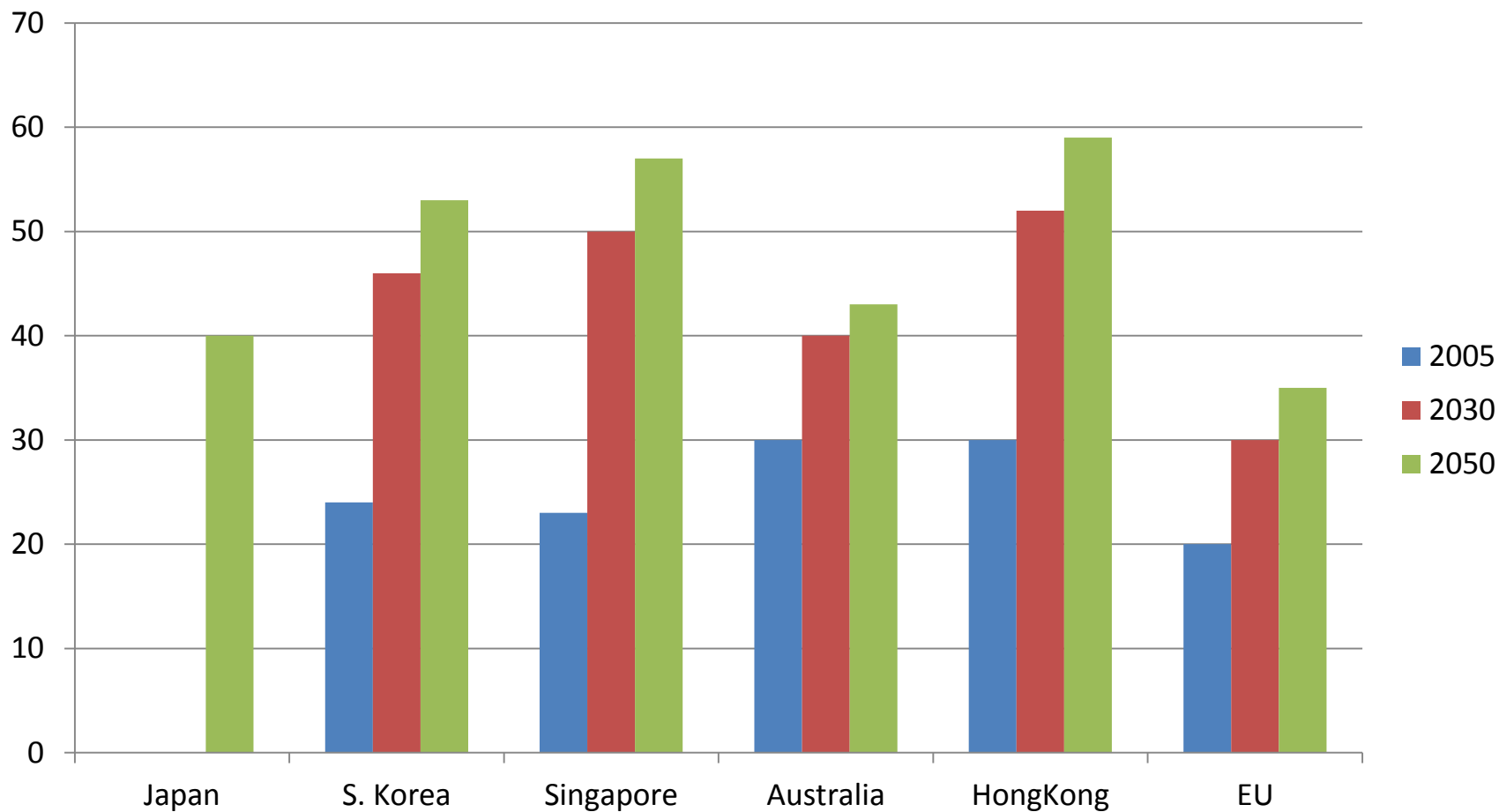


Target group for food and drink with health benefits: The Seniors

People aged 50+ the largest group buying food with health benefits; they drive the market.

<u>Senior segment</u>	<u>Age</u>	<u>Health focus</u>
Early seniors	50-60	Healthy, physically active
Young seniors	60-70	Transition to more health issues
Seniors	70-80	as above
Grand seniors	80+	Fragile, illness

Ageing populations are here now; % of population aged 50+

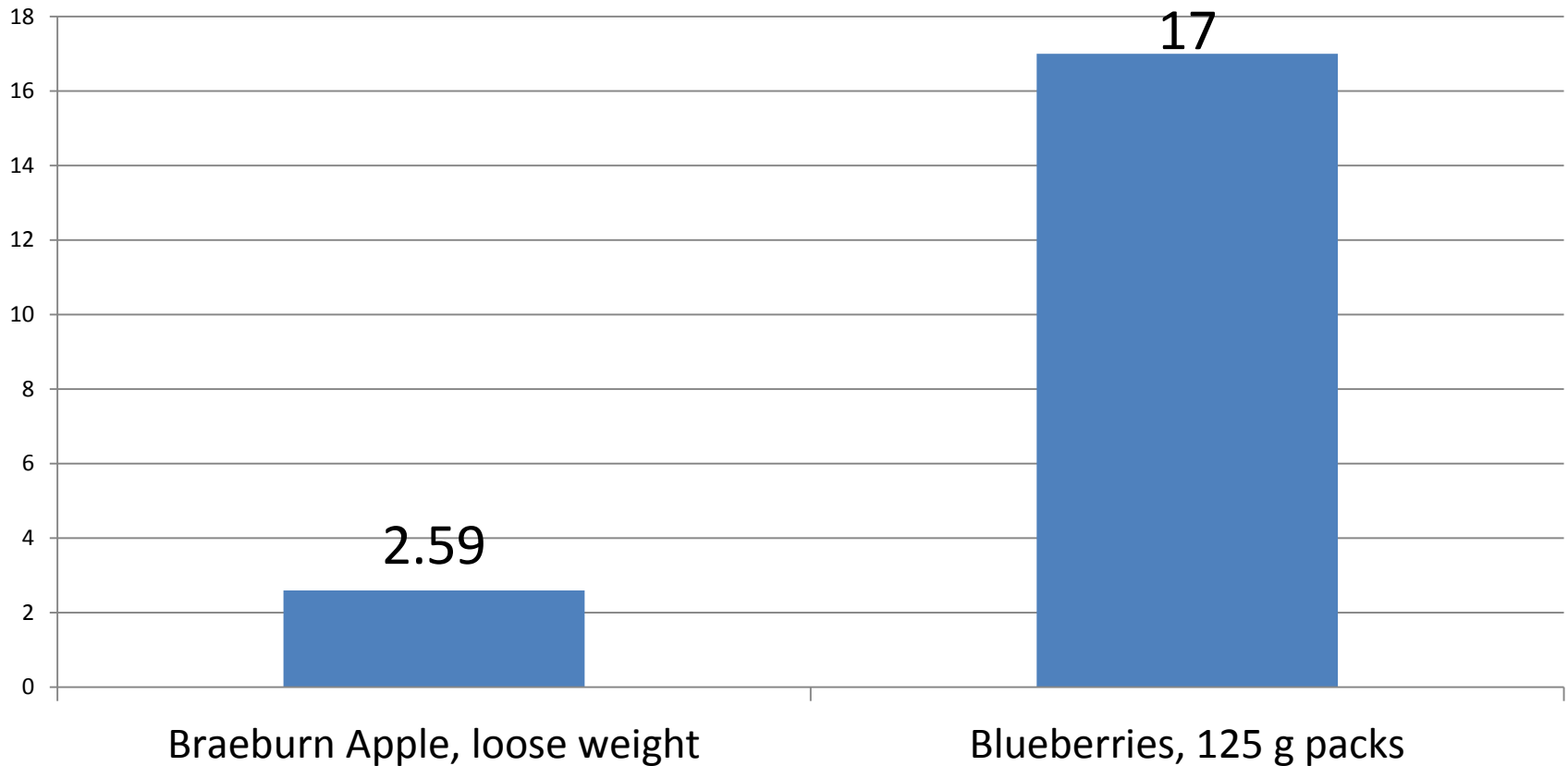


Products for the 70-80+

Nutritional drinks – collaboration between Danone and HealthSpan Solutions (USA), 2009
Drink with active nutrients (amino acids) to manage specific health issues and healthy ageing



Seniors – the largest segment of buyers of fresh blueberries – despite a significantly higher retail price (£ per kg, 2011)



Viking Imports; Australia

- Since 25 years an imported specialised in Scandinavian food, supplies to IKEA
- Sources specialty products from Sweden, Denmark and Finland;
- Imports of dried and frozen berries: black currants, blue berries, fruitmix and sour cherries
- Recently also from Bulgaria and Serbia
- Has organic certification
- www.vikingimports.com.au



Berry products from Viking Imports

2011

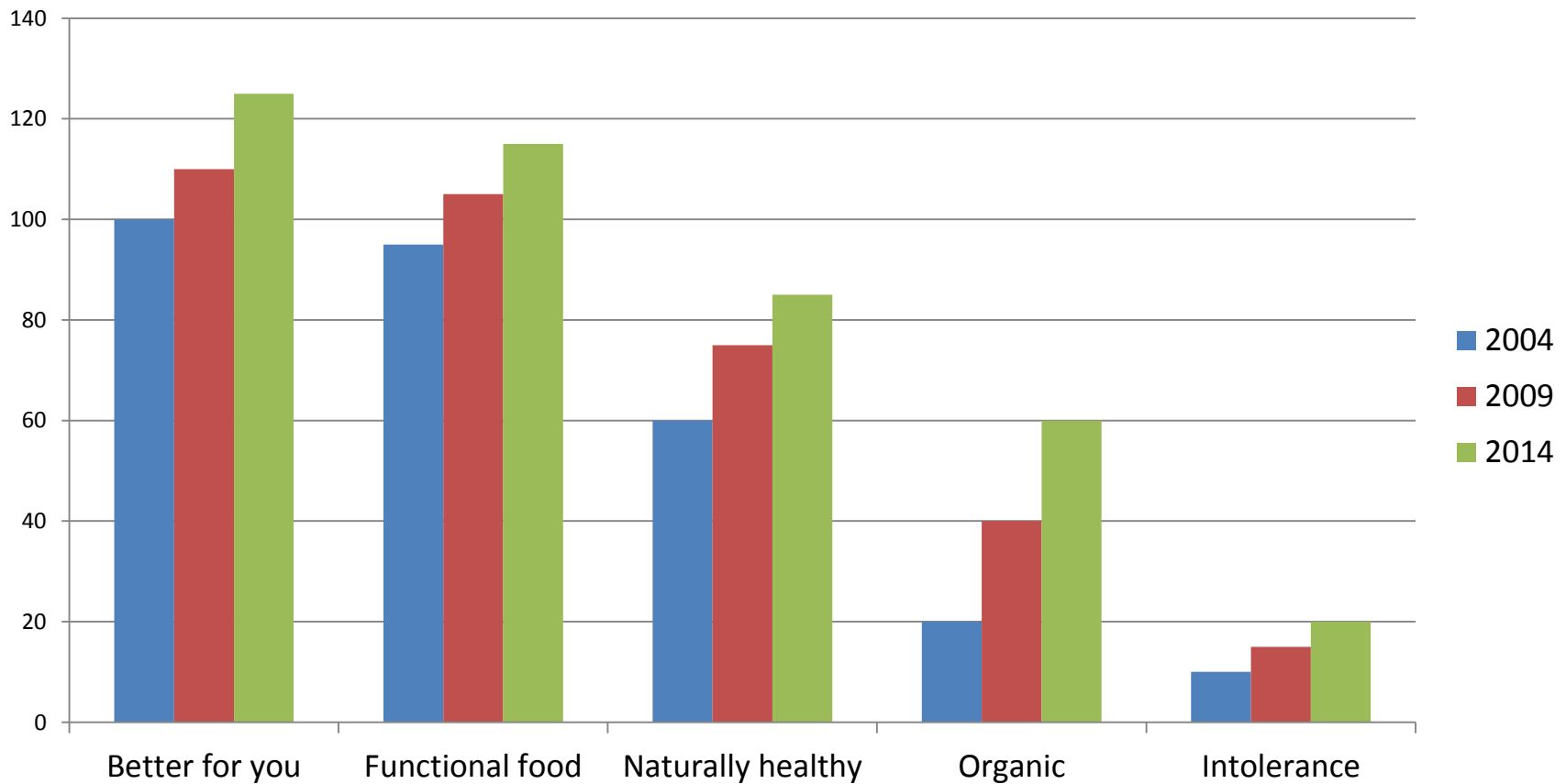


2009



Outlook for the global market for food with health benefits

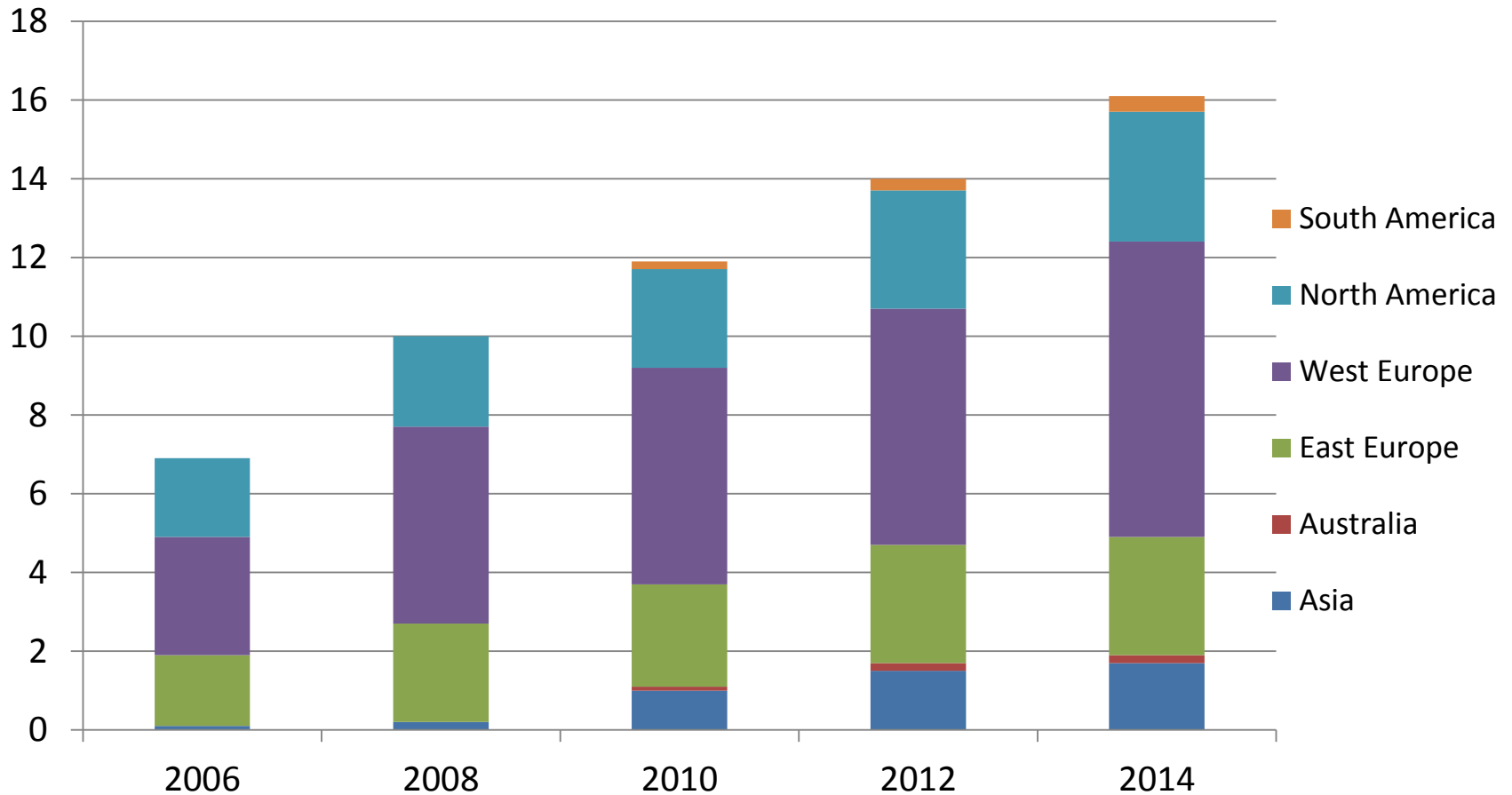
bill. USD, retail value



Trends in the global market for omega-3 fortified products

- 2010 global market value for food, beverage and supplement with omega-3: 5.6 billion EUR
- Predicted growth rates: 15-20%/year to 2015
- Drivers: Consumers' willingness to pay, consumer education, positive development in regulatory framework (claims), increased market participation by major food companies
- BRIC countries: increasing demand for fortified infant nutrition
- High quality fresh oils => opportunity for black currant seed oil?

Global market for omega-3 as ingredient; 1,000 tons



Examples of openings in the market for fortified infant nutrition; omega-3

- USA:

- 2001: FDA authorizes supplementing DHA and ARA to infant food
- 2003: GRAS–standard issued for DHA as general food ingredient

- EU:

- 2010 EFSA issues positive opinion about DHA and the visual development of infants recommending minimum intake of 100 mg/day of DHA

Black currants seed oil – a source of omega-3 and omega-6

- Omega-3 health claim for reducing blood pressure approved by EFSA
- Other health benefits include
 - Reducing cholesterol
 - Treating rheumatoid arthritis
 - Boost immune system
 - Treating fatigue-related visual impairment
 - Rich source of antioxidants
- Applications: skin care and cosmetics; nutritional supplements; ingredient in baby food, other ?

Omega-3 and omega-6 in child nutrition

- UK company Haliborange
- Health benefit: support brain functions by adding omega-3 (marine source)
- Black currant: only as flavour
- Black currant seed oil is rich in Omega-6 => supports brain function; is this the future ingredient?



New products making omega claims USA, 2009

Product	% of new products making omega claims
Cereal bars	11.5
Breakfast cereals	7.1
Functional drinks	6.9
Baby snacks	5.8
Savoury snacks	5.8
Bread and rolls	5.4
Milk	4.6
Juices	3.2
Spreadable fats	3
Cookies	3

OSE Oil Seed Extraction Co. NZ

- Since 2002; develop, produce and supply high quality essential oils to the global food industry, skin care and health product industries.
- 4,500 sq. foot factory, cold storage, quality assurance program
- Parent company: Midlands Seeds Co. NZ
- Oilseeds: Flax, borage and:
- Black currant seed oils => marketed as ingredient for for skincare products
- www.osel.co.nz



Two routes for product development

- Consumer pull
- Wellness market: scrubs, soaps, oils, tea
- Products with health benefits: fresh berries, processed berries, processed berry products

- Technology push
- Healthy ingredients for functional foods:
 - Omega 3- and omega-6 (powdered or liquid oils)
 - Antioxidants (concentrates, powders)
- Other healthy compounds
- New non-food applications: cosmetics and other

Emerging market – Cosmetics and Wellness products

Black currant seeds crushed
=> exfoliation products (DK)



Seed oil for cosmetics.

Black currant fragrance
=> Candles (USA)



Research agendas driven by:

Benefits for health	Categories	Nutrition needs	Systems
Digestive Weight management Cognitive Eye health Energy Antioxidants Mobility Diabetes	Dairy Grains Fruits, berries and vegetables	Seniors Sports nutrition	Packaging Services

Research and technologies beneficial to black currants

Challenges for new products with health benefits

- 80% of new foods and drinks with health benefits are withdrawn after 2 years
- Reasons for "technology push failures":
 - Does the product meet any real consumer need?
 - Is the consumer educated to understand the product?
- Developed in collaboration with researchers and or ingredient suppliers
- Ingredient suppliers are technology push; food companies are consumer pull.

How will the value chain develop?

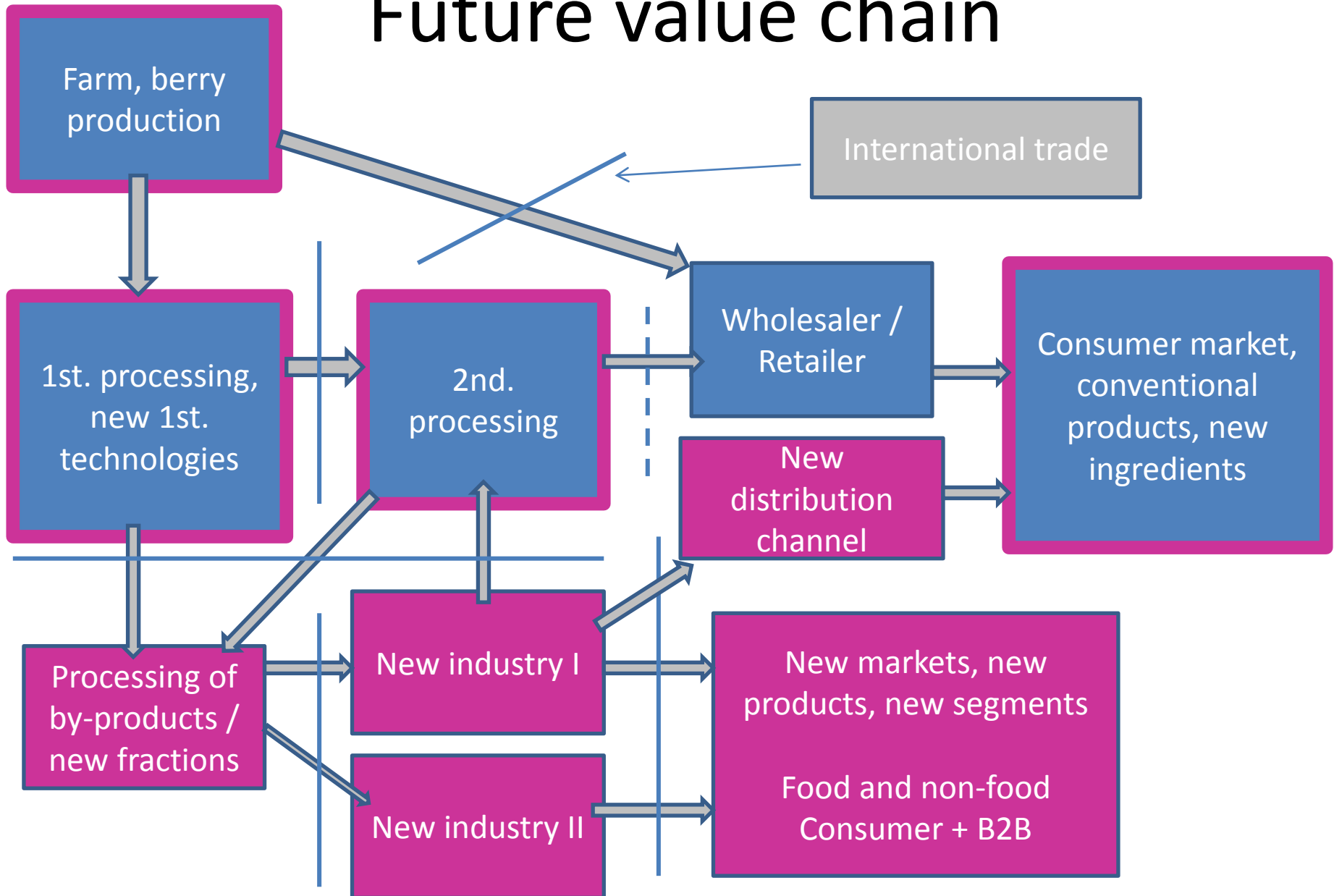
Upstream

- Demands for specific compounds in plants and berries => impact on plant breeding, growing and variety rights
- More trade (international as well as new business areas) => Need for certification system?

Downstream

- New industries: ingredients, supplements, processing of by-products (seed, leaf, skin)
- New non-food applications: skin care, cosmetics, bio-energy, technology, dyes, animal nutrition, other

Future value chain



Impact on the black currant value chain

- Internationalisation of value chain continues; all parts of the chain to increase international trade
- New business opportunities from:
 - New products, new market, new segments
- Drivers of new business opportunities: producers of ingredients, supplements, technology-based companies
- Traditional food products only volume growth
- Value added foods will be technology-driven or niche-driven (specialties, organic etc.)

Challenges of international supply chains

- Global raw material streams; berries, ingredients and processed products
- Full-year availability to processors – vs. seasonal
- Trade barriers, currency risks and import duties – always a challenge
- Ensuring food quality and safety
- Authenticity – if this parameter is relevant for the specific supply chain
- Finding collaboration partners in foreign countries

Strategies for gaining foothold in future value chains for black currants

- Building partnerships with 1st. and 2nd. processors – also in new industries; and cross-border partnerships between growers
- Building networks around technology platforms: growers, researchers, traders, companies, other
- Contracted supplies to companies: specific demands to the berries; healthy compounds, colours, other demands; Berry growers' expertise important here
- Establish international trading systems of berries with certification of specificities; include seed, leaf, skin

Thank you for your attention.
Any questions?

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