Consumer Goods Perspective

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Broad Consumer Markets

• Functional foods
  – Supplements
  – Yoghourts, margarines
  – Breads etc.

• Personal Care Products
  – Anti-ageing skin care
  – Haircare & shower products

• Crossover
  – Foods for improved skin
Shape of Personal Care and Nutrition Supply Chains

“Nature”
Source of chemistry and materials

Ingredients
Supplier: information & data on applications and utility

Manufacturer: often large, information on products, packaging

Retailer sells to Consumer

Coressence
Provexis

Danisco, ADM
Croda

Unilever
Danone, P&G

Boots
Supermarkets
Barriers to success for young/small companies in sectors

• Products need several applications in different parts of the sector to justify supply chain
• SMEs often have the ideas and/or technology but aren’t ready for discussions up the supply chain
• Sector needs more cross-industry discussions to bring feasible ideas to market
• Large companies need to work harder to provide successful engagement with innovative SMEs?
Examples of (Small) Innovative Companies in Personal Care and Nutrition Sectors

• Phytoquest - isolation and analysis of plant material, mixed partnering and service model
• Phytovation - production of high quality plant extracts
• Evgen - glucosinalates for prevention and treatment of cancer
• Coressence - flavanols rich ingredients from apples
• Provexis - established 2000, AIM listed 2005, plant extracts as dietary supplements, agreement with DSM Nutritional Products, into anti-thrombotics, Crohn’s and recently cardiovascular inflammation
Coressence as an example

• Flavanols-rich ingredients from apples
• Strong science ethic to ensure success with Health Claims Legislation, e.g. clear understanding of mode of action
• Cardiovascular and cognitive health sensible choices for nutrition
• Nutrition market served by range of products for use in drinks, cereals and as colour
• Licensing or partnering with large partners e.g. Danisco
Unilever

13 > € 1 Billion global brands  2010 turnover €44.3 bn
Solazyme Adds Unilever as Strategic Investor
South San Francisco, CA – September 7, 2010 – Solazyme, Inc… announced that Unilever has joined its Series D financing round as a strategic investor… leverages the development potential of both companies in the personal care and nutritionals markets, incorporating Solazyme's renewable oil technology platform within Unilever's broad product portfolio… Unilever… has successfully tested these oils in current product formulations. Our technology complements Unilever's aggressive drive and commitment to deliver sustainable high performance products to consumers globally," said Jonathan Wolfson, CEO and co-founder of Solazyme."

About Solazyme:
Solazyme, Inc. is a renewable oil and bioproducts company… Founded in 2003… headquartered in South San Francisco… oil and biomaterials in standard fermentation facilities quickly, efficiently and at large scale. These oils and biomaterials are tailored not only for biofuel production, but also as replacements for fossil petroleum and plant oils in a diverse range of products.

http://www.solazyme.com

“To Wash Hands of Palm Oil Unilever Embraces Algae”
(Wall Street Journal Business online 7 September 2010)
Unilever interests

• Drop-in replacement materials
• Improved specifications for existing materials/lines
• New functional effects and benefits
• Sustainable sourcing, reduced environmental impact
• New product categories
• Combinations of the above
examples

• Skin & hair (e.g. ageing, growth, colour)
• Antimicrobials
• Food – nutrients
• Food preparation e.g. drying
• Edible oils

• Capabilities
“consumer-centric health care”

• Novel manufacturing methods for actives, ingredients, fragrances, etc
• Mechanistic understanding of system biology creating knowledge of new targets
• Delivery technology that can enhance efficacy of new actives or create in-vivo delivery systems
• New molecules that may have activity in nutrition, skin and hair applications
• New diagnostic technology that provides information on unique needs of each individual consumer