

EIT Food

Annual gathering of the Spanish conf. of F&V



The perfect storm

Health

The master of the chain

Knowledge is knowing that a tomato is a fruit.

Wisdom is not putting it in a fruit salad.

- Miles Kington



THE

**Today's food systems are not fit for purpose;
a fundamental transformation is needed**

Feed a growing population

**Ensuring the conservation of our finite natural
resources**

Improve the quality of life of European society.

PERFECT STORM

Too complex challenges to be solved by individual actors in the food system alone

Societal challenges

- Rapid urbanization
- *Sky rocketing demand for varied & nutritious diet*
- Loss of valuable food producing land (climate change)
- Food waste

10 billion
people to
feed (2050)

2 billion
malnourished

3 billion
overweight

> 25% food
wasted

Challenges in the food system

- Complex fragmented structure
- Lack of consumer trust
- Limited innovation
- Slow adoption of emerging tech
- Traditional balance of power between players changes radically

How the food sector can contribute

- New technologies
- New ways of working

EU Context

THE FOOD SECTOR IN SUMMARY

- EUR90 **billion** netto export – largest manufacturing sector in EU;
- Provides **44 million** jobs in the EU
- **99.1%** of companies are SMEs with **63.3%** of sector employment and **49.6%** of turnover
- **0.27%** R&D investment as a share of output by private sector.

EU Context

- **CONSUMPTION HABITS**

- Over **50%** of European citizens are overweight;
- **14%** of EU household budgets spent on food and drink;
- **25%** of EU citizens order grocery products online and **55%** are willing to do so in future;
- **62%** of European consumers are willing to pay more for sustainable brands.

EU Context

- **SECTOR'S GLOBAL ENVIRONMENTAL IMPACT**
 - Responsible for **25%** of global CO emissions;
 - **32%** of all food goes to waste;
 - Sector consumes **70%** of global freshwater extractions.

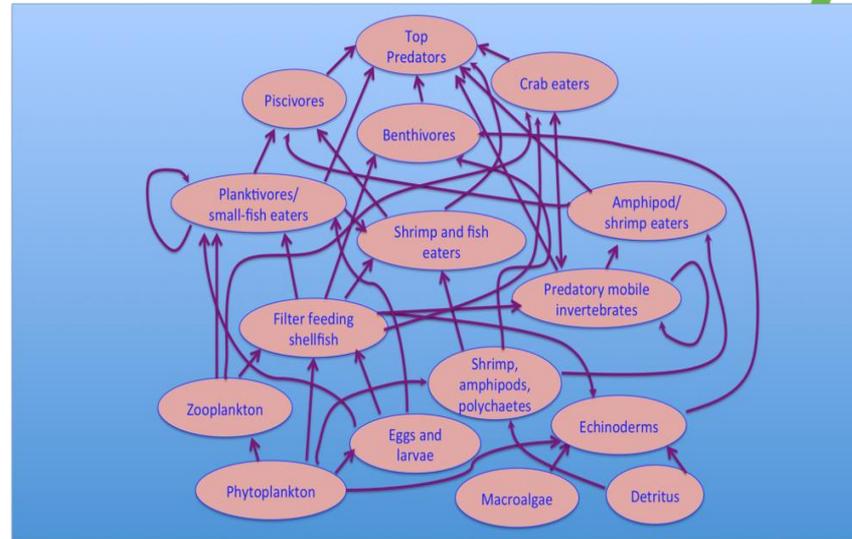
EU Context

ENTREPRENEURSHIP AND NEW BUSINESSES

- Only **50%** of European start-ups survive the first 5 years;
- **9 out of 10** start-ups fail due to lack of a market need for their products;
- Only **2.6%** of all EU start-ups are in the food sector;

EIT Food:

- We know being innovative is being a system, not a chain
Therefore we build an eco-system, not a food-chain



- We create a fertile soil for disruptive innovation where our partners can flourish



EIT Food

- We bring people together
- Creation and bring-to-market needs many skills so...

We create the Silicon Valley for food



Main problems in the food sector

- 1** **Transparency in the supply chain**
Address low consumer trust in their food
- 2** **Distorted nutritional habits**
Create consumer-valued food for healthier nutrition
- 3** **Fragmented supply chain**
Build a consumer-centric connected food system
- 4** **Sustainability**
Enhance sustainability through resource stewardship
- 5** **Skill Gaps**
Educate to engage, innovate and advance and attract new talent to food sector
- 6** **Limited entrepreneurial Culture**
Catalyse food sector entrepreneurship and innovation

1. Overcome low consumer trust; transparency

- Europeans to become change agents in the transition towards a smart, inclusive and trusted food system
- *Appreciation of food 'value' and sustainable 'cost'*
- Develop citizen participation across the food supply network:
 - involving them as responsible co-creators of innovations in nutrition and health
 - empowering people to self-manage their consumption in a healthy and resource-efficient way

2: Create consumer-valued food for healthier nutrition

- Informed and affordable personalised nutrition choices through direct engagement, new product concepts, informative packaging, and e-communication innovations
- Overcome micronutrient deficiencies in both developing and developed countries
- Tackle obesity pandemic

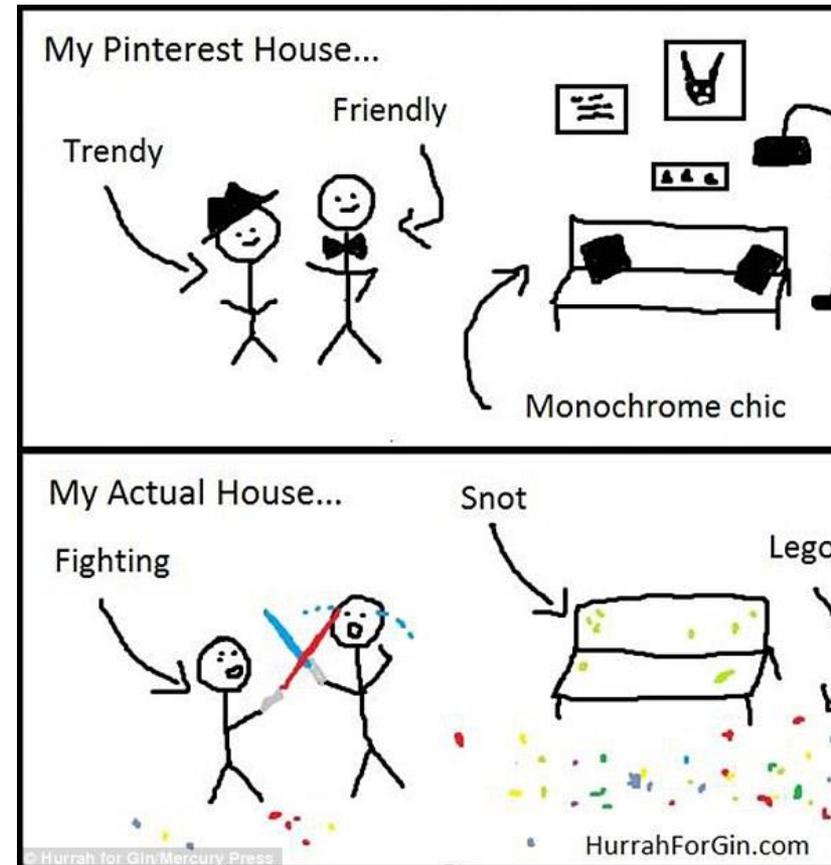
2: Create consumer-valued food for healthier nutrition (individual)

- **Personalised food solutions** for healthier living and addressing known health risks
 - **enlarge plant-based food offerings** beyond meat analogues by a novel process combination obtained also from side-stream materials to develop a range of consumer valued *tasty* and healthier food.
- Provide consumers with reliable information to make healthy food choices
- *Incentive and motivate* behaviour change.

2. Public health – Create consumer-valued food for healthier nutrition

Narrow the current gap between *intention and actual behavior* towards healthier foods:

- Empower people to improve the quality of their diets through informed food choices
- Innovative tools and technologies supporting personalised diet profiles



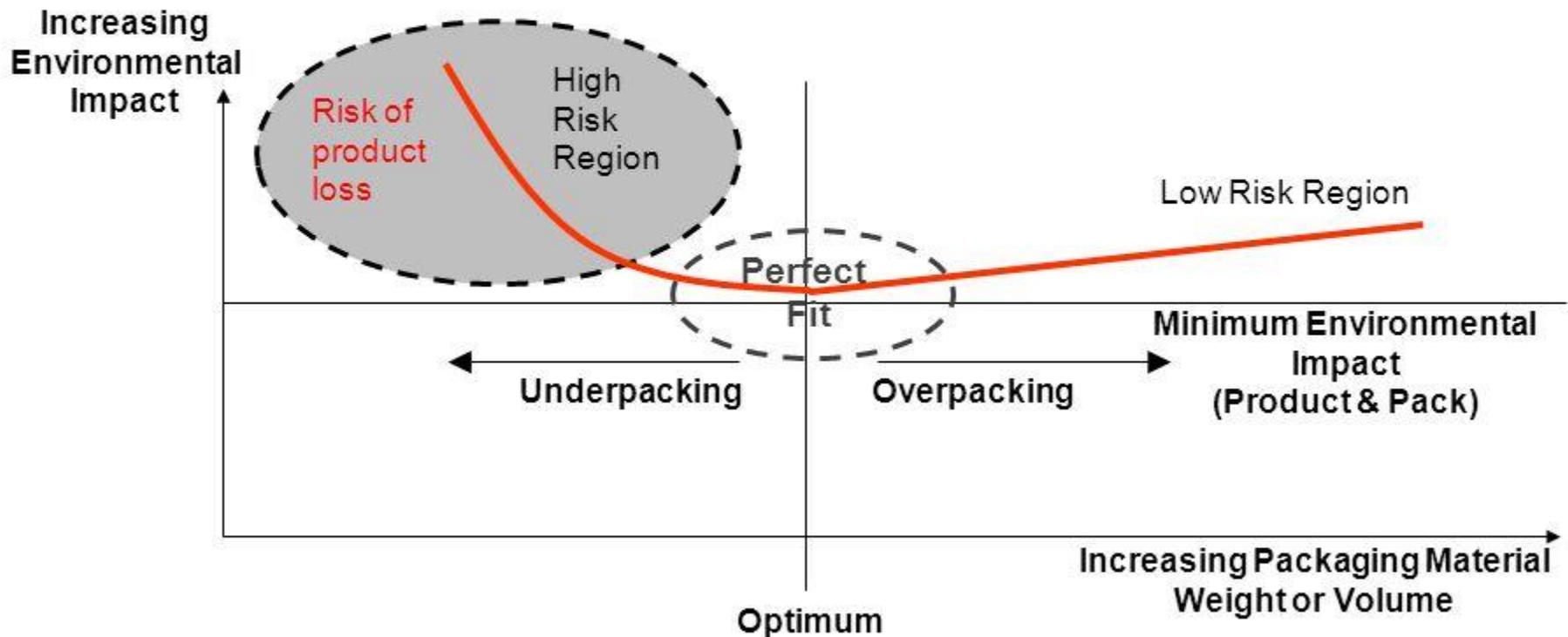
SO3: Build a consumer-centric connected food system

- Develop a digital food supply network with the consumer and industry improve safety, real-time traceability, quality and sustainability of ingredients
- Improve food system transparency and integrity

SO4: Enhance sustainability through resource stewardship

- Transform the traditional linear 'produce-use-dispose' model into a circular bio-economy
- Tackle hotspots in the environmental footprint
- Increase market penetrations of ingredients from sustainable, alternative sources and underutilised resources
- Drive circular excellence by valorising side streams

Beating the Packaging Paradox



Message: A small over-packaging (~10%) could have much less impact than “under-packaging” and causing 1% product loss!

5. Talent – Educate to engage, innovate and advance

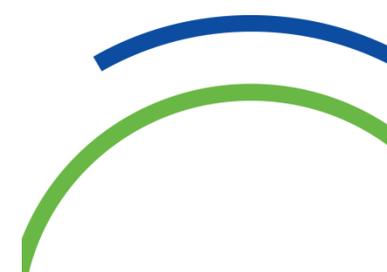
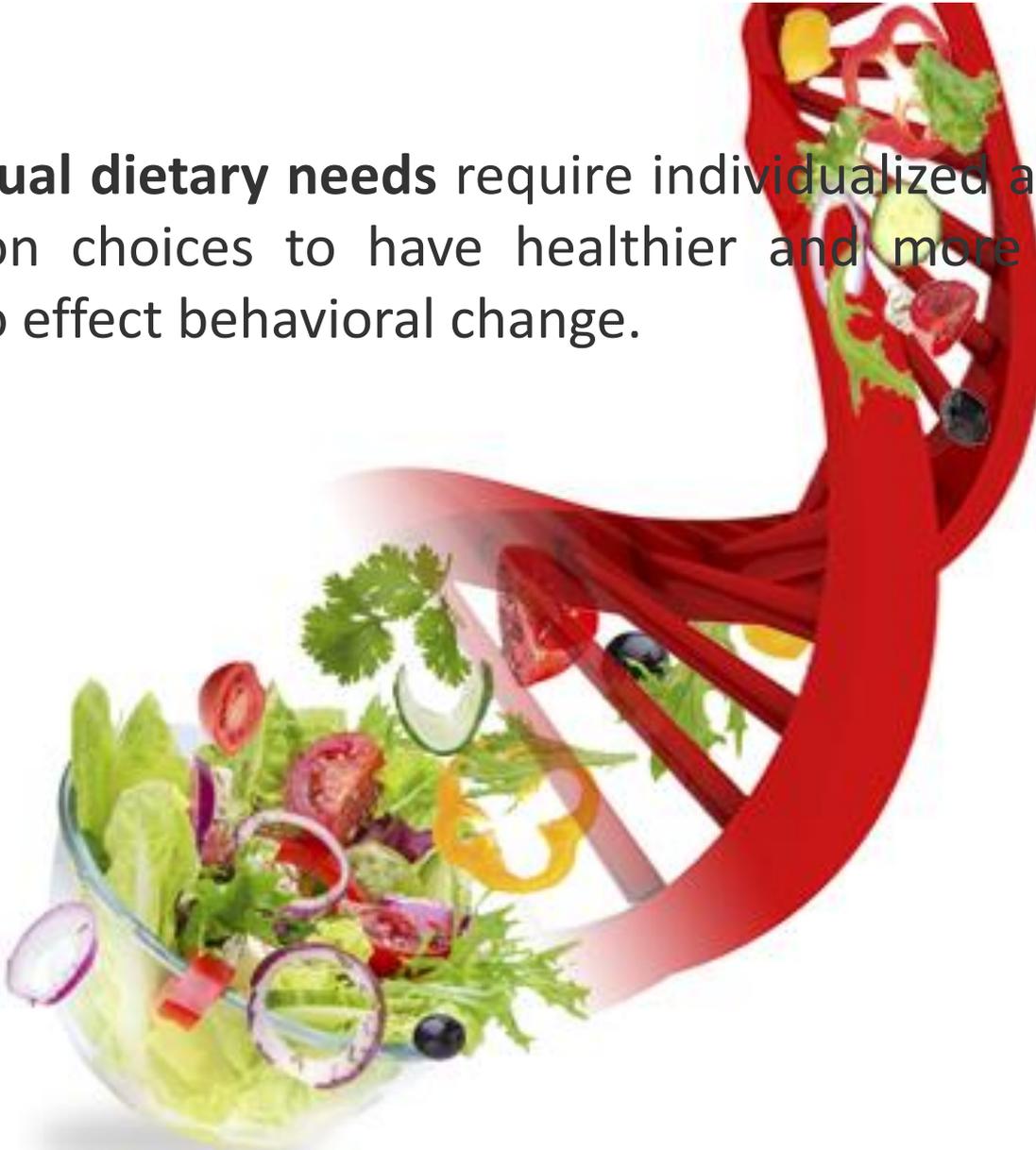
6. Enhance entrepreneurship

- Educate citizens to give them the skills to work in and appreciate the food arena
- Inspire the younger generation (incl. children) with innovative learning programs
- Creating a new generation of entrepreneurs in the agri-food sector



1. Personalized Nutrition

- **Individual dietary needs** require individualized and personal nutrition choices to have healthier and more sustainable diets to effect behavioral change.

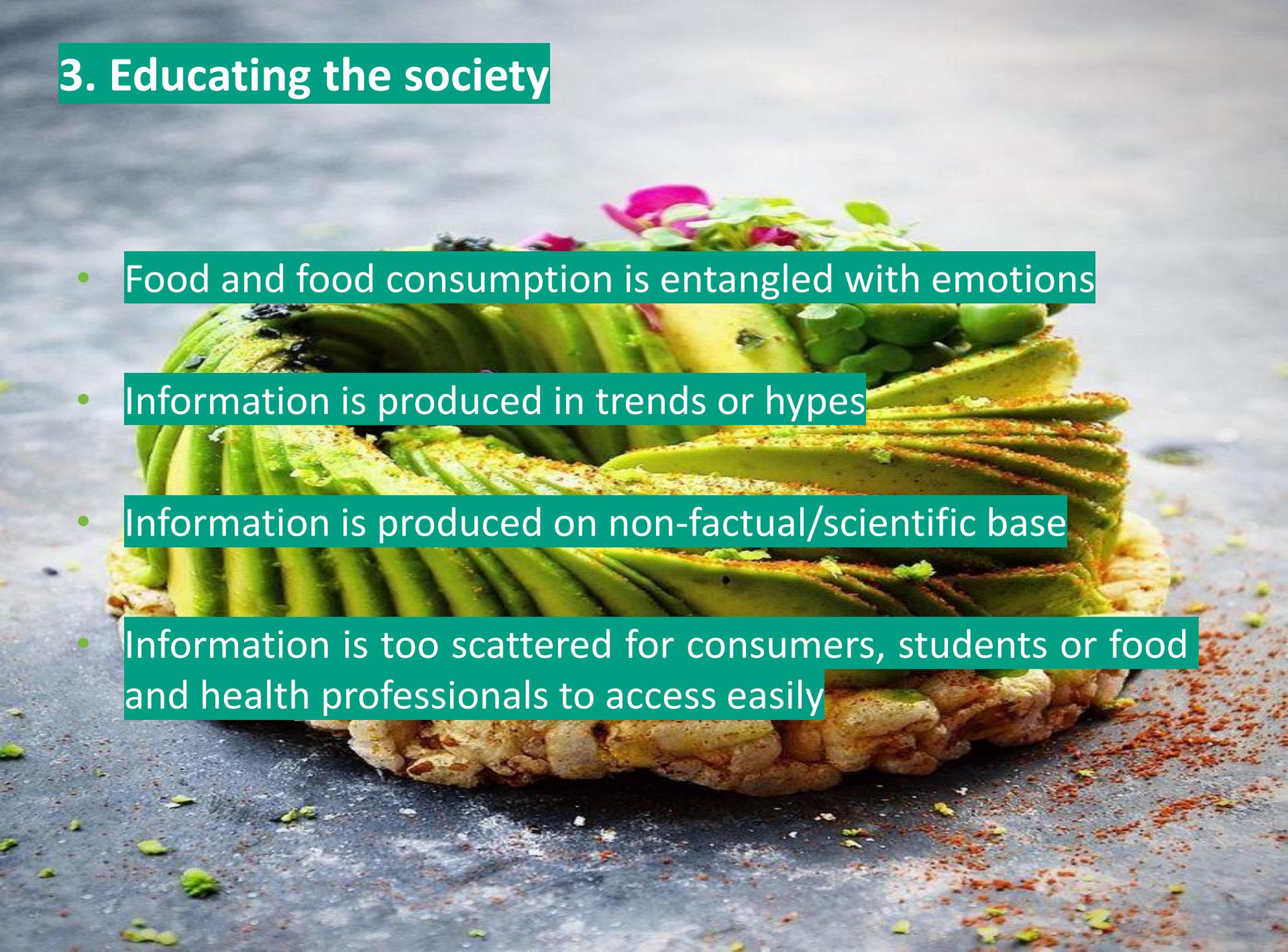


Product Reformulation

- NCDs require action:
 - salt
 - sugar
 - saturated fat



3. Educating the society

- Food and food consumption is entangled with emotions
 - Information is produced in trends or hypes
 - Information is produced on non-factual/scientific base
 - Information is too scattered for consumers, students or food and health professionals to access easily
- 
- A close-up photograph of a gourmet dish. The main component is a stack of sliced avocado, arranged in a circular pattern. The slices are layered on top of a golden-brown, textured base that appears to be a fried bread or potato. The dish is garnished with fresh green herbs and several bright pink flowers. The background is a dark, textured surface, possibly a stone or concrete countertop, with some scattered green herbs and a reddish-brown powder.

Food for Health: prevent!

Bridging the knowledge gap between the food sector and health sector are critical

**Let food be thy medicine
and medicine be thy food**

Hippocrates



SUPPLY

PARTNER

LOGISTICS

NETWORK

CONVERSION

DEVELOPMENT

SUPPLIER

VALUE

MATERIAL

RESOURCES

DISTRIBUTION

GLOBAL

MANAGEMENT

SERVICE

RAW

ORIGINAL

PROCESS

ORGANIZATION

PLANNING

PRODUCT

CHAIN

TECHNOLOGY

ACTIVITY

USER

DEMAND

COMPLEX

PROVIDER

STORAGE

DESIGN

LAYER

COORDINATION

MARKET

INVENTORY

FUNCTION

COLLABORATION

REMOTE

SYSTEM

COMPONENT

BUSINESS

PEOPLE

CUSTOMER

MODELING



Change: the master of the chain

- Seed producers want to dominate
- Clients go deeper in production and run the foodchain
- Classic retailers disappear

Clients go deeper in production and run the foodchain



Why the Future Could Mean Delivery Straight Into Your Fridge

By Sloan Eddleston
VP, Walmart eCommerce Strategy & Business
Operations
September 22, 2017



France's Leclerc approached by Amazon over logistics tie-up

French retailer's chief says US ecommerce group could 'be its partners'



The reported approach comes amid speculation that Amazon is considering acquisitions or partnerships in Europe, after its purchase of upmarket US chain Whole Foods for \$13.7bn earlier this year. Amazon's deal with Whole Foods led several US retailers to reflect on their own future and several have started to internally contemplate whether their best option would be to be acquired by the e-commerce behemoth.

A world map with glowing blue and yellow lines connecting various points across the globe, symbolizing global connectivity and change.

Worldwide changes

- ☞ Brexit
- ☞ New players
- ☞ Fytosanitary blocks
- ☞ WTA
- ☞ Importance of agriculture
- ☞ The consumer

Ukraine's fruit exports rise 40%

Published on Nov 06th, 2018



European production

- ☞ Russia changed for ever; 14% growth
- ☞ EU permanent supply of quality;
- ☞ EU looks for impossible markets:
 - Apple/pear to india
 - Vegetables Africa
 - Libanon & south Korea
 - Asparagus to Japan
 - Israel
 - Blueberries worldwidenaar cruise schepen over heel de wereld
- ☞ Tailor made is the working way

World wide

1. Search for economic security: defensief & offensief

2. Support of labor in agriculture

- **China Ministry of Agriculture, 2016:** "It is critical that we preserve jobs in agriculture and create more jobs in related services."
- **US Department of Agriculture, 2017:** "We need to protect jobs of farmers."
- **India Planning Commission, 2017:** "The stability of the nation continues to depend on agricultural employment."

3. Creation of agro-champions

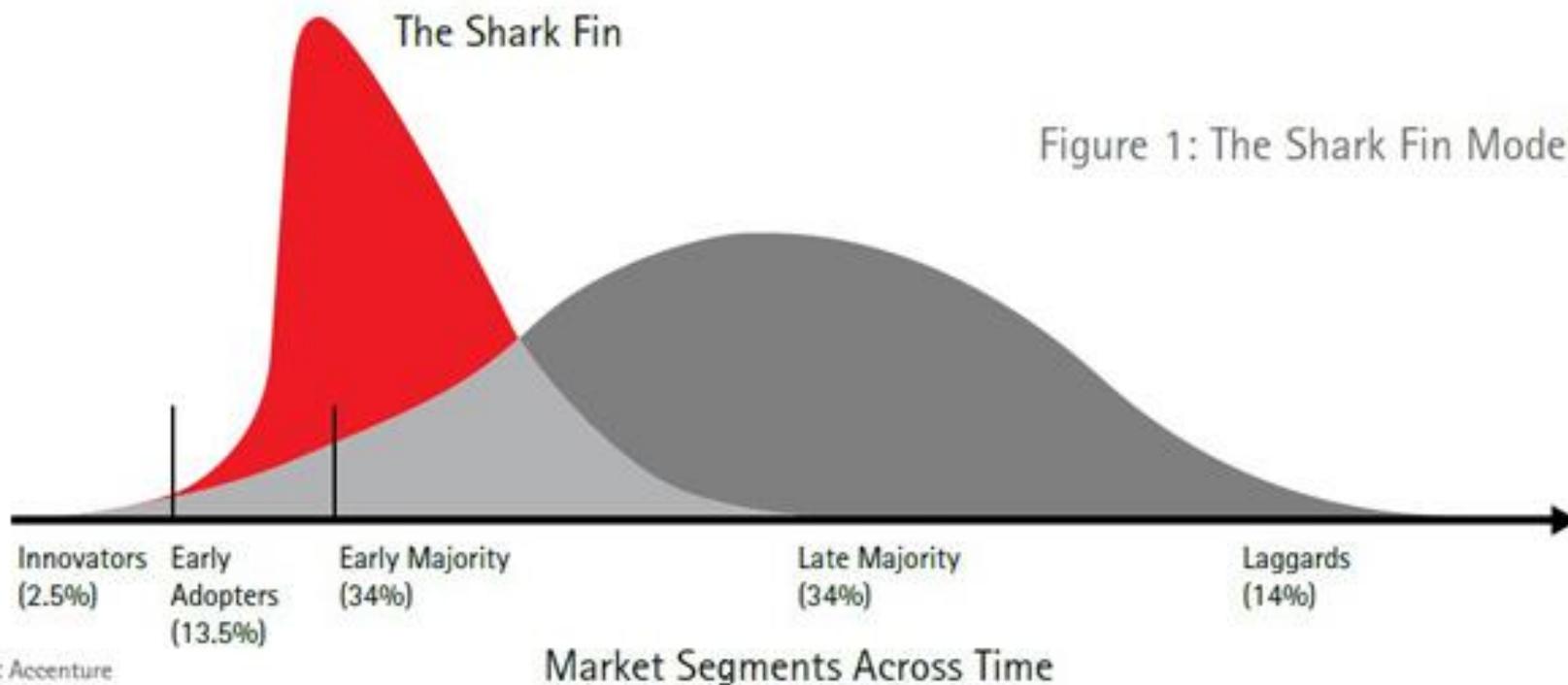
- **China State Council, 2016:** "Chinese national champions have to expand their domestic and international market share. We will support them to catch up in terms of quality and safety."

4. Possibilities of regular people

- **China State Council, 2016:** "China's growing middle class should benefit in the first place the growth of Chinese companies."

The consumer

Figure 1: The Shark Fin Model.



Source: Accenture

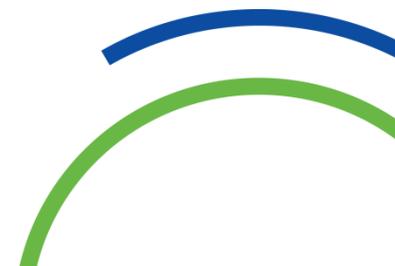
- Innovate
- Include the consumer in your plans
- Food is the new health
- Waste will kill you
- Packaging is acces
- Quality and transparency are a must

CREATE
SOMETHING
EVERY DAY.

**THE REASONABLE MAN
ADAPTS HIMSELF TO THE
WORLD; THE
UNREASONABLE ONE
PERSISTS IN TRYING TO
ADAPT THE
WORLD TO HIMSELF.
THEREFORE ALL PROGRESS
DEPENDS ON THE
UNREASONABLE MAN.**



-  @filipfontaine
-  FilipFontaine
- Filip.fontaine@ffny.be





Innovate with us!



EIT Food is supported by the EIT
a body of the European Union

eitfood.eu

