Decoding of the nutrition and health trends
2018-2020
One to one with the consumer of the future
An unique expertise focused on nutrition
PLANT-BASED WATERS

Drink from the source
What are we talking about?

Plant-based waters
= waters contain in plants’ cells

Tree waters
- Maple water
- Birch water
- Bamboo water

Fruit waters
- Coconut water
- Cactus water

Not considered as plant-based waters:
- Cold-pressed fruits and vegetables
- Chlorophyll waters
- Microalgae waters
- Detox waters
A dynamic market with an attractive double-digit growth rates

A growing market thanks to...

- **Natural products** booming
- The search for **healthy alternatives** to sweetened drinks and sodas
- **Strong imaginary** + purity and extreme naturalness **symbols**

Coconut water dominates

- **Asia Pacific and South America** = higher growth areas for coconut water
- Maple water market is expected to triple by 2020 with a CAGR of 30% between 2016 and 2020

<table>
<thead>
<tr>
<th>Year</th>
<th>Volume</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>2.1 MD$</td>
<td>US$2.7 BILLION</td>
</tr>
<tr>
<td>2016</td>
<td>2.7 MD$</td>
<td>coconut 96%</td>
</tr>
<tr>
<td>2020</td>
<td>5.4 MD$</td>
<td>coconut 86%</td>
</tr>
</tbody>
</table>

- Other plant 4% and 14%
In the pole position: coconut water

The most famous and popular of plant-based waters, coconut water still seduce consumers

Market driven by 3 multinationals who have acquired start-ups
Maple and birch: new classics
A market with several local start-ups

Maple water → Revitalization since 2013 with several launches in **North America**

- **2012** VERTICAL WATER
- **2012** OIVA
- **2013** SEVA
- **2014** HAPPYTREE
- **2016** SIBBERI
- **2016** THE MAPLE GUILD

- **2015** BUDDHA WATER
- **2015** BELGIAN
- **2015** TAPPED
- **2015** PREVITALISE
- **2014** BIRKENAU

- **2016** TAPPED
- **2016** PREVITALISE

Main positioning = **full hydration**
Differentiating positioning = **Sibberi** on the « force »

Own forests in Finland

Launches map of birch waters

Functional birch waters with other ingredients to bring health benefits (detox, vitality, fitness)
Water, olive or bamboo: discover the newborns

Searches for « cactuswater » increase worldwide since 2012 and mainly since 2015

Bamboo water: very recent launches and only 2 actors

The most recent: olive water

- **BaNu**
  - 1st beverage with bamboo water + leaf extract
  - Antioxydant and anti-inflammatory claims

- **Sibberi**
  - Sugar content **4 times lower** than coconut water

- **Evee**
  - Rich in vitamin C and source of vitamin E
  - Valorization of the whole fruit beyond oil only
A mushrooming market
5 most exploited varieties in nutraceuticals

1. Shiitaké
   (main active compound: lentinan)

2. Chaga
   (Northern regions, Canada, Russia)

3. Cordyceps
   (Still rare in nutraceutical because of high price. Harvested at altitude in the Himalayas, Nepal, Tibet)

4. Reishi
   (Rare in the wild, grown in artificial environments)

5. Maïtaké
   (Complicated and recent culture)

From a use in traditional medicines to recent applications in nutraceuticals:
All the attributes of a « superfood »?

Big market potential

- Variable from one species to another
- Overall: rich in fiber, in carbohydrates including β-glucans, in vitamins B; low in fat

Nutritional superiority

- Easy-to-understand matrix
- Natural benefits
- Warning: possible negative vision related to harmful fungi

Naturality

- Big history, travel in time and space
- Back to primitive and simple food

Storytelling

- Increasing number of publications on their health benefits
- Scientific difficulties: studies on isolated active ingredients
- 2012, EU: rejected EFSA claim (immunity)

Scientific proof

- Variable awareness from one species to another
- Strong BtoB communication in recent years
- Little BtoC communication, will develop in the coming years (general public, naturopaths…)

Awareness
A growing global market

- The supermushroom market has tripled in 15 years

![Graph showing growth in mushroom market](image)

- The global mushroom market should reach $50 billion in 2019

- Reishi seems to stand out:

  - Europe = fastest growing region

**Sales growth for products with mushrooms as a primary ingredient**

<table>
<thead>
<tr>
<th>Product</th>
<th>2015 Sales</th>
<th>2016 Sales</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chaga</td>
<td>35.08 MDs</td>
<td>59.48 MDs</td>
<td>70%</td>
</tr>
<tr>
<td>Cordycep</td>
<td>15.4 bn</td>
<td>15.4 bn</td>
<td>0%</td>
</tr>
<tr>
<td>Maitake</td>
<td>15.4 bn</td>
<td>15.4 bn</td>
<td>0%</td>
</tr>
<tr>
<td>Other</td>
<td>15.4 bn</td>
<td>15.4 bn</td>
<td>0%</td>
</tr>
<tr>
<td>Reishi</td>
<td>15.4 bn</td>
<td>15.4 bn</td>
<td>0%</td>
</tr>
<tr>
<td>Shiitake</td>
<td>15.4 bn</td>
<td>15.4 bn</td>
<td>0%</td>
</tr>
</tbody>
</table>
A growing number of ingredients suppliers

Specialists or generalists

**THOSE SPECIALIZED IN MUSHROOMS**

- mycotrition
- nammex

**THOSE SPECIALIZED IN INGREDIENTS FROM A REGION**

- Arctic and Scandinavia
- CLS Technology
- PureTaste®

**GENERALIST INGREDIENTS SUPPLIERS**

- B-glucanes from oyster mushrooms (immunity)
- Fat burner from button mushroom
- PureTaste®: shiitaké protein
Finished products tend to diversify (1/2)

Soon all categories will be concerned

- Drinks and powders = most developing forms on the market
- Coffee = adapted to reishi bitter taste
Finished products tend to diversify (2/2)

One superfood among others

- Superingredients mixes = biggest drivers of the supermushroom market
- EU: enables to use health claims

Mushrooms to grow

- USA: + 10% for domestic mushroom growing between 2013 and 2014

Shiitaké lentinan + echinacea + pollen

Tremella + acerola + schisandra

Mushrooms + probiotics

- 2016: mushrooms enriched in vitamin D to fight winter deficiencies
TRADITION AND TECHNOLOGY

When technology leverages the best of nature
The fermentation, an ancient but trendy process

Why?

What is it? **Foods processed by microorganisms** (bacteria, yeast, mould and fungi) that drive out pathogen bacteria, which **extends the expiry date for consumption** of food products.

« Gut-brain axis » and probiotics’ popularity + Growing interest for natural solutions

Some proven health benefits!
- Sauerkraut and fermented cucumber juices… to treat **gastroenteritis**
- Milk kefir… for the reduction of **lactose intolerance symptoms**
- Fermented milk… to fight against **cardiovascular diseases**

Evolution of the interest in the Google search « fermented food » in the world between 2004 and 2017

More than 3 500 types across the world
The fermented drinks, stars of fermentation
Search of naturality and healthier & less sweet alternatives

Estimated evolution of the global market of kefir between 2016 and 2023
535 M$ → 1,6 Md$
Evolution of kombucha between 2015 and 2021
1,2 Md$ → 2 Md$
Estimated evolution of the global market of kefir between 2016 and 2023

$750 bn → $1 060 bn
Estimated evolution of the global market of fermented drinks between 2015 and 2023
0,9% = part of soft fermented drinks

Kefir
Kombucha
Jun tea

Milk kefir (including vegetal) vs fruit juices
NEW: water kefir!

...and still modern packs, sometimes ethnic, often colourful
The fermented vegetables, even more traditionally rooted

Tempeh, kimchi, natto, sauerkraut, miso...

An interesting nutritional profile with real benefits on digestive health

From the vegetable in jar…

Tempeh, kimchi, natto, sauerkraut, miso…

Fundraising of $6.5 M (301 Inc. accelerator)

And the fermentation DIY!
To go further with fermentation...

Cascade fermentation

Coconut shavings, byproducts of the coconut oil production, to produce a high-protein fermented drink, creamy, refreshing and slightly tangy.

Co-products valorization

Nutrient profile optimization of fermented foods thanks to bacteria for personalized nutrition

Fundraising: 200k€ + Price

Biotechnologies

Ingredients and food supplements

Fermented chlorella  Patented glucosamine  Distribution world agreement  Range of products from trendy fermented ingredients
Seed germination

Meaning? Under water and heat influence, the seed builds up supplies to be used by the plant for its growth.

> Increase of the nutritional value of plant-based foods

$30M → $250M
Sprouted cereal products sales between 2015 and 2018

Main categories of sprouted cereal–based products

- Products made of sprouted dried pulses
Other process...

To highlight all the potential of nature and plant-based alternatives

Cold filtration

A patented process to get **optimal nutritional quality**

From fruits and vegetables juices to plant-based juices… and even coffee!

$1,6 \text{ bn} \rightarrow $2,4 \text{ bn}

Sales of premium fruits and vegetables juices between 2004 and 2015

$\text{DHA / glass} = 125 \text{ mg}$

Food supplements galenics

Preserve and drive the natural ingredients to the right place
3 shades of green

Authentic, simple and ‘free from’ naturalness
The worship of naturalness
An essential criteria for consumers in their purchase decisions

The buying criteria having taken the most importance over the years, for food and drinks

- Worship of naturalness → omnipresence in food and supplements
- Healthy and environmentally-friendly food → consumer quest
- Innovation and creativity → the industrials’ essentials

Increase in the importance given by consumers to various attributes, at the time of purchase, from 2013 to 2016

<table>
<thead>
<tr>
<th>Attribute</th>
<th>2013</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>No artificial flavours</td>
<td>13%</td>
<td>13%</td>
</tr>
<tr>
<td>Certified organic</td>
<td>16%</td>
<td>16%</td>
</tr>
<tr>
<td>Organically produced</td>
<td>16%</td>
<td>16%</td>
</tr>
<tr>
<td>No artificial colorants</td>
<td>16%</td>
<td>16%</td>
</tr>
<tr>
<td>No preservatives</td>
<td>17%</td>
<td>17%</td>
</tr>
<tr>
<td>No artificial ingredients</td>
<td>19%</td>
<td>19%</td>
</tr>
<tr>
<td>Natural</td>
<td>22%</td>
<td>22%</td>
</tr>
</tbody>
</table>
The authentic naturalness

The « BACK TO BASICS » age

FORGOTTEN VEGETABLES
Bring those vegetables up to date in innovative recipes
(kohlrabi, cardoon, sweet potato, horseradish, salsify, parsnip, rutabaga, Jerusalem artichoke, etc.)

Consumers wanting to discover new flavours and to further diversify their diet

« RAW FOOD » AND PALEOLITHIC DIET
Two very popular food modes

RAW FOOD = raw diet encouraging unprocessed food consumption

PALEO FOOD = ancestral diet based on raw food, meat and fish, excluding food appeared in the Neolithic period (cereals, legumes, dairy products, processed food, etc.)

A variety of food products: healthy snacking

Return to roots with a raw food, just like our ancestors
The natural simplicity

CLEAN LABELLING on the move

1. **MINIMALISM**: a short ingredient list
   - « Nothing else »
   - « That’s all »
   - « Just »
   - « Only the essential »

2. **ALTERNATIVE NATURAL INGREDIENTS**: superfluous and artificial ingredients hunting

3. **THE MINIMUM OF PROCESSING**
   - Stop to ultra-processed food!
   - → International classification NOVA depending on the degree of food processing

Nanoparticle hunting in food supplements (ex: titanium dioxide E171)

Nutrition & Health trends – 2018/2020
The transparency

CLEAN LABELLING on the move

The transparency of ingredient origins, traceability, etc.

Customer experience

- Fleury Michon: #VenezVérifier
- Nestlé: #CestMoiQuiFabrique

A new trendy concept: the « blockchain »!

A technology of exchange and storage of information entirely secure, transparent and without trusted third-party.

→ Adapted to the food sector to assure the traceability of a product

Offer a certification tool in real time along the supply chain

1st supplier chain of products based on chicken, verified by the « blockchain »

AUTHENTICITY  SIMPLICITY  « FREE FROM »
**Naturalness rhymes with ‘free from’** (1/3)

The ambivalent success of ‘free from’ products

→ Search of products with as many ‘free from’ claims as possible on a packaging: regarded as **healthy and better for health**

‘Free from’ classification depending on their main founding principles and their maturity on the market

<table>
<thead>
<tr>
<th>Environment</th>
<th>No pesticides</th>
<th>No GMO</th>
<th>No palm oil</th>
</tr>
</thead>
<tbody>
<tr>
<td>Animal welfare</td>
<td>No battery farming (free-range farming)</td>
<td>No meat</td>
<td></td>
</tr>
<tr>
<td>Allergen</td>
<td>No seeds (US today)</td>
<td>No FODMAPs</td>
<td>No cow’s milk proteins</td>
</tr>
<tr>
<td>Nutrition</td>
<td>No cereals (petfood)</td>
<td>No milk</td>
<td>No lactose</td>
</tr>
<tr>
<td>Endocrine disrupters</td>
<td>No soy</td>
<td>No salt (added)</td>
<td>No sugars (added)</td>
</tr>
<tr>
<td>Clean Label</td>
<td>No synthetic hormones</td>
<td>No melting salts</td>
<td>No nanoparticles</td>
</tr>
<tr>
<td></td>
<td>No nitrites</td>
<td>No artificial flavours</td>
<td>No additives</td>
</tr>
<tr>
<td></td>
<td>No preservatives</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Maturity (classification according Nutrikéo)

Not included: package contaminants
### Naturalness rhymes with ‘free from’ (2/3)

The ‘free from’ with strong reputation on the market

<table>
<thead>
<tr>
<th>Product</th>
<th>Market Estimation (world)</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>No gluten</td>
<td>€3 billions in 2020</td>
<td>Schär, Freedom</td>
</tr>
<tr>
<td>No lactose</td>
<td>$US6.1 billions in 2016, dominated by the US with $US1.1 billion</td>
<td>LaDorna, Zile, Lumo</td>
</tr>
<tr>
<td>No palm oil</td>
<td></td>
<td>Omega3, Bjorg</td>
</tr>
<tr>
<td>No GMO</td>
<td></td>
<td>Kettle, Kashi</td>
</tr>
</tbody>
</table>

Manufacturers divided into 2 parts:
- the ‘no palm oil’
- the pro ‘sustainable palm oil’ (RSPO)

- Anti-natural image:
  - Threat to the environment
  - Danger to health

Products recognizable by a specific label

**AUTHENTICITY**

**SIMPLICITY**

« FREE FROM »
Naturalness rhymes with ‘free from’ (3/3)

The ‘free from’ being on the rise

**Phytoestrogen content**

**Targets:** allergic people to soy, vegetarians and vegans looking for variety in plant proteins, pregnant women, children, etc.

**No soy**

Food with ‘no soy’ claim

Commitment Casino AGRIPLUS
Range of deep-frozen vegetables without pesticide residues

**No pesticides**

Commitment Casino AGRIPLUS
Range of deep-frozen vegetables without pesticide residues

Babyfood: Blédina
Online communication only

**No antibiotics**

Communication about *animal welfare* and *good farming practices*

Different levels of accuracy in pig industry

2013 At the end of weaning
2015 After the first age
2016 From the birth
2017 At the end of weaning

**No nanoparticles**

Calcium carbonate, iron oxide, silicon dioxide, titanium dioxide, etc. in *food products and supplements*, consumed via food wrappings, additives and pesticides.

Brands highlighting nanoparticles’ absence in recipes and formulations

AUTHENTICITY SIMPLICITY « FREE FROM »
Trend PERSISTENCE depends on:

- the NOTORIETY of the subject
- the MATURITY of its market

Which trend will continue over the coming years...?
THANK YOU for your ATTENTION