Dietary Shifts: The Protein Transformation
<table>
<thead>
<tr>
<th>Time</th>
<th>Agenda Item</th>
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<tbody>
<tr>
<td>11:00-11:15</td>
<td>Welcome and round of introductions, Diane Holdorf</td>
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<td>11:15-11:45</td>
<td>Presentation &amp; Q&amp;A, D. Holdorf, Alain Vidal &amp; Emeline Fellus</td>
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<td>11:45-12:30</td>
<td>Roundtables</td>
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<td>12:30-12:50</td>
<td>Feedback from each roundtable</td>
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<td>12:50-13:00</td>
<td>Conclusions &amp; next steps, Diane Holdorf</td>
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Dietary Shifts within the Food & Nature Program

Ensuring Healthy People & a Healthy Planet
The challenge is well understood

• **Current food and land system(s) are outstripping the resources of the planet.**
  • The pressure of feeding a growing global population has degraded 25% of all land on the planet and food production drives 80% of all terrestrial biodiversity loss.

• **A growing middle class and global population will exacerbate current trends.**
  • The global consuming class will swell to 2.6 billion people by 2025, over 70% of the total expansion in emerging markets.

• **We are not feeding ourselves in a healthy way.**
  • Nearly 1.9 billion adults are overweight, of whom 600 million are obese, and more than 2 billion people suffer from one or more micronutrient.

• **We don’t have the scale of organization or trust in the system to deliver change.**
  • Steep decline in trust in the food and beverage sector, 66% 2017 to 62% 2018.
Business Leadership is needed for transformational change across complex systems

Our future depends on our ability to create a food system that supports Healthy People and a Healthy Planet.
FReSH’s Dietary Shifts work: four work streams

- Positive nutrition
- Plants
- Livestock
- Consumer Behavior Change
  - Sugar in Mexico
  - F&V in Portugal
Transformation along four areas is critical

**Plant**
- Scaling up the production of healthy & sustainable plant protein

**Livestock**
- Production shift towards sustainable livestock systems

**Consumption**
- Nudging consumers towards plant-based protein sources
- Shifting demand towards healthy & sustainable red meat consumption
The environmental imperative and related pathways
The protein health imperative
How do we bend the curve?

- **Balanced animal protein consumption**, esp. red meat (beef, pork, and lamb) – translating into decrease consumption in wealthier countries and increased consumption in others

- Scale up of plant-based protein consumption

- Sustainable production of all proteins
A two-pronged approach to protein transformation

A white paper and engagement strategy to mobilize CEOs around transition pathways on proteins with targets in 2030 and 2050

A series of pilot activities around collaborative business solutions contributing to the transition pathway on plants and livestock
Action areas

Activity 1: Protein Transformation Roadmap and Metrics

Activity 1.1: Protein Transformation Roadmap
➢ Develop white paper endorsed by members, proposing a global protein sustainability improvement roadmap

Activity 1.2: Impact Measurement Framework
➢ Agree on business products’ impact measurement framework
Action areas

Activity 2: Plant Protein Production and Consumption Improvement

Desk work and workshop(s) to:

➢ Identify gaps between today’s plant protein production & consumption and aspired ones
➢ Assess hurdles and levers related to plant protein scale up
➢ Share members’ existing products or innovations,

White paper summarizing findings and proposing recommendations for business and other stakeholders (policy makers etc).
Action areas

Activity 3: Livestock Production and Consumption Improvement

Desk work and workshop(s) to:

➢ Identify gaps between current livestock production & consumption, and aspired ones
➢ Identify areas where further research may be needed
➢ Assess hurdles & levers related to sustainable livestock production & consumption scale up
➢ Identify solution areas
➢ Create alignment with, and generate support from industry & wider stakeholders

Under discussion: desk work, workshops & outcome whitepaper on sustainable dairy and chicken (TBC)
Discussion: obstacles and levers, and related key players
Split into 4 thematic tables
Enabling all to rotate among 2 tables

Table 1: Internal barriers, levers & key players for livestock
➢ Facilitator: Ralf Kelle

Table 2: External barriers, levers & key players for livestock
➢ Facilitator: Agnès Martin

Table 3: Internal barriers, levers & key players for plant proteins
➢ Facilitator: Jacobine Das Gupta

Table 4: External barriers, levers & key players for plant proteins
➢ Facilitator: Karen Cooper
We focus on three solution areas, which hold the key to address our health and environmental crisis

By 2050, the environmental effects of the food system are expected to increase by 60–90%, reaching levels beyond planetary boundaries.

To significantly reduce these effects and make our food system healthier, we need to tackle three areas:

- **Dietary changes**
- **Improvements in technologies & management**
- **Reductions in food loss and waste**
The protein environmental imperative

EAT-Lancet offers several options

➢ GHG emissions the #1 effect of ruminant meat (beef, lamb)

➢ Reducing the negative impacts and increasing the positive impact of both animal- and plant-based proteins
Excess average supply & consumption of protein and EAA

Daily consumption based on FAOSTAT 2015 and 2011 food loss estimations
Source: GlobAgri Model WRI 2016

Production and Nutritional Demand of limiting Essential Amino Acids (EAA) (Lys, Thr, Met/Cys, Trp)

Source: Evonik estimation based on FAO Production Data and USDA Nutritional Database
Challenges related to protein sources

- Protein sources like meat, fish, dairy, eggs and pulses are **valuable sources of limiting, essential amino acids**
- Protein sources have **high inefficiencies in primary production input utilization, in processing, and in consumption**
- Proteins sources have **high environmental footprint and business are faced with high externalities**
- Protein sources are associated with **positive and negative health impacts**
- Forecasts for protein consumption indicate **net growth of animal protein consumption worldwide**, contrarily to the urgent need for protein diversification
Stakeholders’ increased push towards dietary shifts: the Media
Stakeholders’ increased push towards dietary shifts: Civil Society

Meat consumption is destroying our planet: a report by WWF

LESS IS MORE
REDUCING MEAT AND DAIRY FOR A HEALTHIER LIFE AND PLANET

The Greenpeace vision of the meat and dairy system towards 2050
Stakeholders’ increased push towards dietary shifts: Governments

Denmark Proposes Labeling Food According to its Effect on Climate Change

Denmark officials have proposed food labeling to grade a product's impact on the environment. This new policy will likely be included in a package devoted to climate and climate change, slated to be presented by the Danish government this week.
Stakeholders’ increased push towards dietary shifts: Consumers

While fruits, vegetables, and herbs have always been an important part of cooking, more and more people around the world are opting to eat only plants at some or all of their meals.

As a food service expert, it’s important for you to stay on top of these rising trends. Of course, you don’t have to abandon your existing menu, but by catering to both people who eat foods and beverages from animal sources and people who avoid them, you can expand your offerings to serve a wider range of consumers.

In this issue, we’ll examine the main types of plant-based diets and the reasons people choose them. We’ll also cover some of the unique challenges and opportunities of cooking without animal-based ingredients, along with helpful tips you can use in your establishment.

From an occasional meatless meal to a strict vegan diet, you’ll know just what it takes to keep every guest satisfied.
Stakeholders’ increased push towards dietary shifts: Shareholders

“The possibility that future regulations prompted by increasing concern about climate change may reduce the value of current assets is becoming mainstream in the energy sector. How this type of regulatory risk might affect the food industry, and in particular the relative returns from investing in meat vs. alternatives, is to be assessed” (WEF, 2019)

‘Out have gone the pesticide manufacturers and the red meat suppliers,’ says Cedric Lecamp, manager of the fund.