Conference on
Healthy, Safe and Sustainable Foods of the Future
From foods to diets

– how do we enable the transition to healthy and sustainable diets

Ellen Trolle, Senior Researcher
Research Group for Nutrition, Sustainability and Health Promotion
Healthy, safe and sustainable foods in the future

1. How to combine food consumption – intake of foods into healthy, sustainable, nutritional adequate diets and guidelines - adapted to Danish food culture

2. How to implement the guidelines in the Danish population and professional kitchens

3. Evaluate the feasibility and the nutritional and health effects of implementing the guidelines

- We facilitate advice from the Danish Veterinary and Food Administration
- To citizens/consumers population of Denmark
- To professional kitchen staff in day care, schools, education institutions and worksite canteens
Necessary background knowledge and data
DANSDA, FOOD DATA and NNR revision

New survey 2021-2022

New products
e.g. meat replacers, cheese replacers, pulses, plant drinks, etc.

Fast changes in the market

NNR 2022 revision - Nordic Nutrition recommendations - update scientific basis and integrating sustainability - nutrient recommendations and the Food Based Dietary Guidelines

Food data
https://frida.fooddata.dk/
1180 foods
up to 113 nutrients
The scientific basis for The Official Dietary Guidelines

Example: legumes/pulses
- Climate impact: ↓
- Disease risk, probably: ↓
- Nutrient supply: ↑
- Protein
- Minerals (e.g. Fe)
- Dietary fiber

Photo: pixabay.com & wikipedea.org

Ref: Altomkost.dk
Huge dietary changes (g cooked weights)

+ Discretionary drinks and foods much lower

15-75-y mean intake per 10 MJ

(DANSDA 2011-13 Pedersen et al. 2015)

Danish adapted plant-rich diet per 10 MJ, 6-65 år
Scientific background for Guidelines for professional kitchens
Guidelines for professional kitchens

• Example: Copenhagen Municipality with the goal of a 25% climate impact reduction and ensure nutritional and culinary quality year 2025

Developing specific guidelines for diets based on actual purchase pattern and translate to a menu planning tool

Implementing by Municipality of Copenhagen

Effect assessment after 2 years: nutritional assessment and climate impact of procurement
Meeting **Challenges** of the future diets

- **Acceptability**
  Targeted diets through mathematical optimization of healthy sustainable diets (PhD project – see PhD Speakers Corner – further optimization more sustainability impact than climate

- **Acceptability and accessibility** – pulses and legumes knowledge, cooking skills … - and health effect

- **Intervention studies involving families and national commitment (application, external funding)**

- **Intervention studies involving frail elderly - follow up on nursing homes in Copenhagen Municipality (application, external funding)**

- **Highly processed foods – health effect, nutrient content**

**Analytical projects**

- **Assessment of fortification needs or options**

  *A novel approach to a plant-based diet in the Danish population - background knowledge for fortification assessment*

- **The place of Organic products in the diets**

  Integrating organic, sustainable and plant-rich diet on “one plate”, with regard to improved sustainability and health – a holistic view (application, external funding)

- **Holistic approach to sustainability of foods diets and the food system**

  NNR update, development in sustainability impact data, further optimization studies

To provide suggested sustainable healthy and nutritionally adequate diets
Conference on

Healthy, Safe and Sustainable Foods of the Future

13 October