



Danish Agency for Higher
Education and Science



Food & Bio Cluster
Denmark

Conference on

Healthy, Safe and Sustainable Foods of the Future


13 October

From foods to diets

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

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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

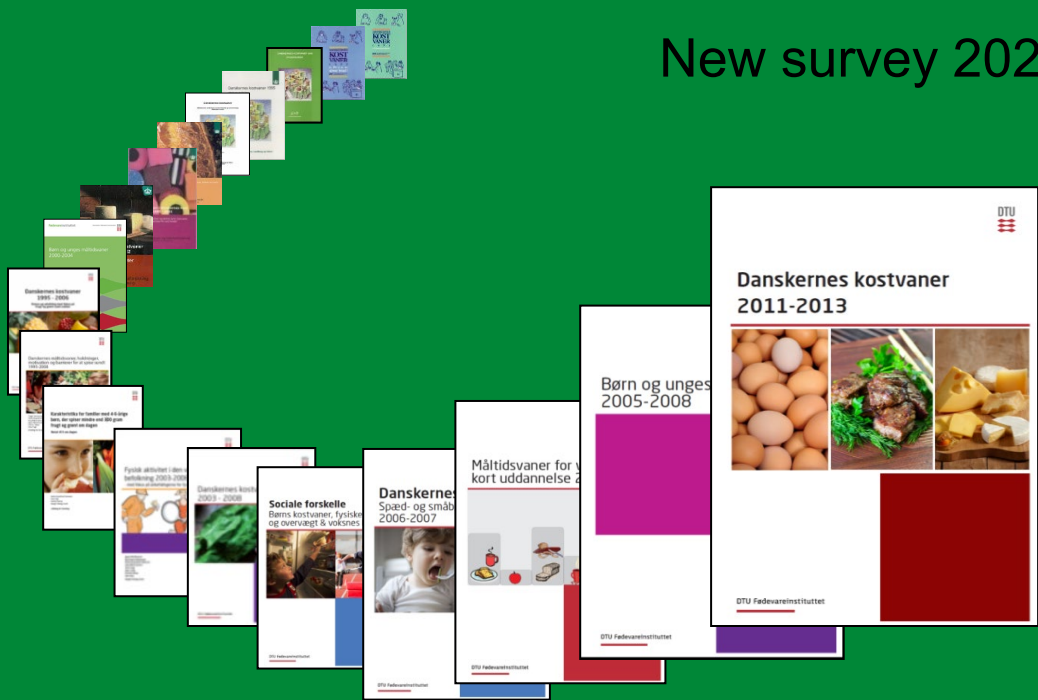
- We facilitate advice from the Danish Veterinary and Food Administration
 - To citizens/consumers population of Denmark
 - To professional kitchen staff in day care, schools, education institutions and worksite canteens



Necessary background knowledge and data

DANSDA, FOOD DATA and NNR revision

New survey 2021-2022



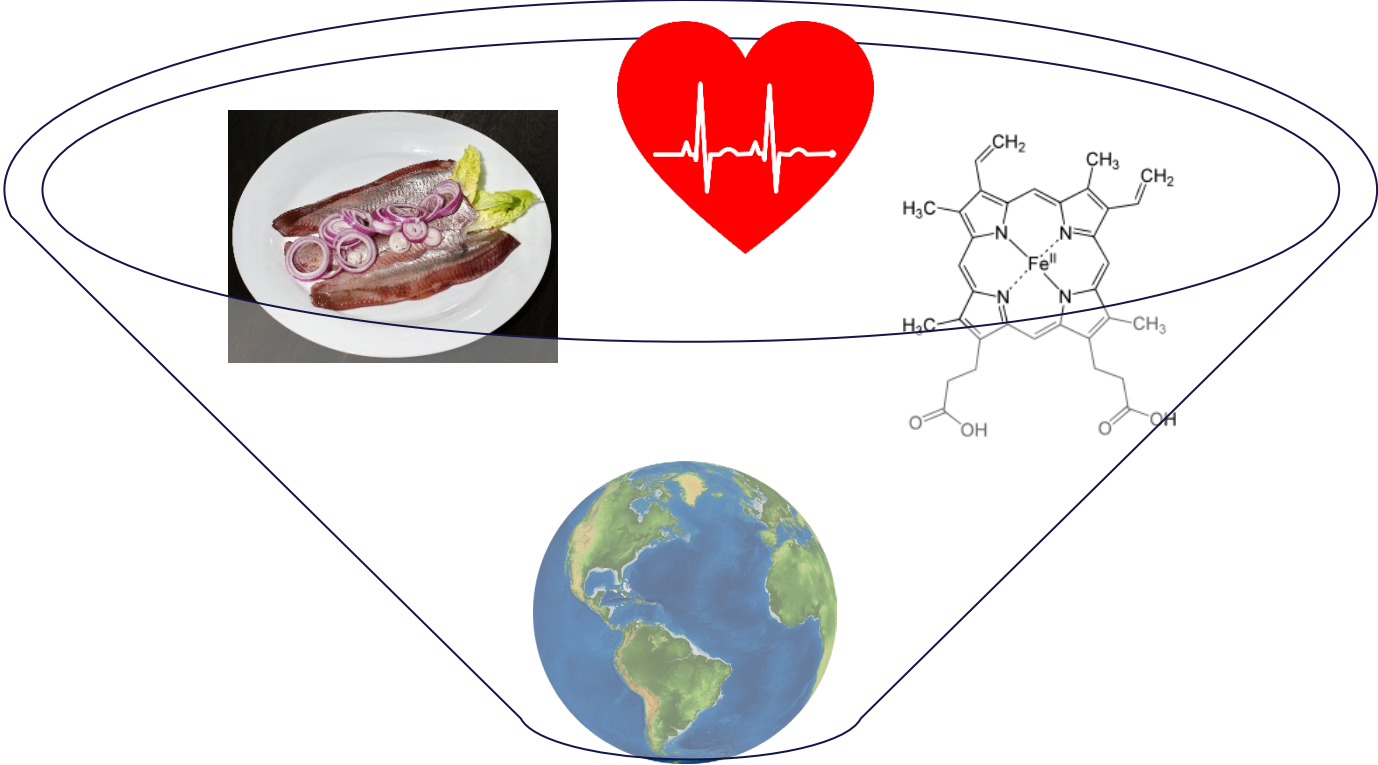
New products
 e.g. meat replacers,
 cheese replacers, pulses,
 plant drinks, etc.
 Fast changes in the market

Analytical projects by product category

Food data
<https://frida.fooddata.dk/>
 1180 foods
 up to 113 nutrients

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

The scientific basis for The Official Dietary Guidelines



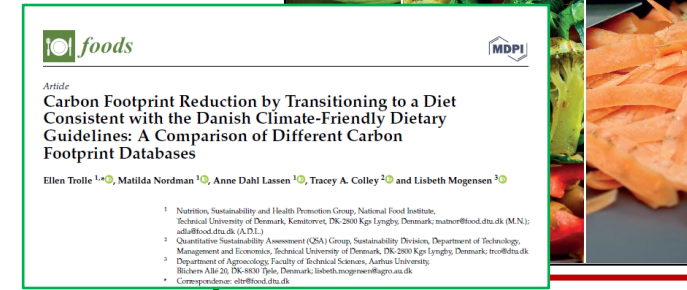
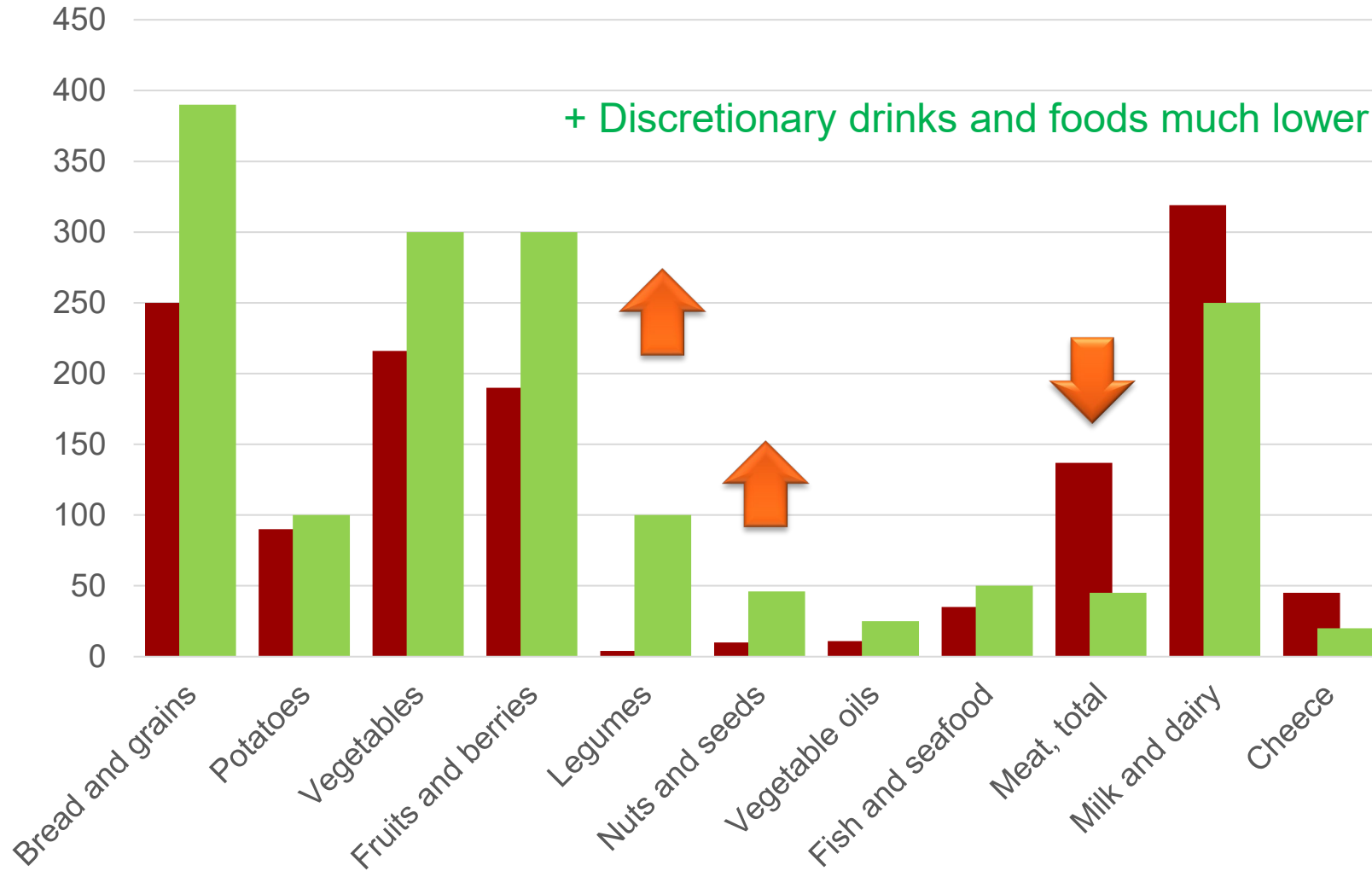
Example: legumes /pulses

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

Photo: pixabay.com & wikipedia.org

Ref: Altomkost.dk

Huge dietary changes (g cooked weights)



■ 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

For health and climate

Spis planterigt, varieret og ikke for meget

Spis flere grøntsager og frugter



Spis mad med fuldkorn



Spis mindre kød – vælg bælgfrugter og fisk



Sluk tørsten i vand



Vælg planteolier og magre mejeriprodukter



Spis mindre af det søde, salte og fede



Kostråd til Måltider

Her er de tre primære værktøjer, I kan bruge, når I vil sætte Kostrådene på menuen og servere mad, der er godt for sundhed og klima. Find alt materialet om Kostråd til Måltider på atm.dk

Principper

Viser principper for sund og klimavenlig mad, og hvordan I omsætter dem til måltider

Findes også som version til daginstitutioner

Principper i skoler og kantiner

Grøntsager og frugter	Bælgfrugter, kik, bød og ing	Kornprodukter og kæringer	Fiskevarer, kylling og fjer	Mælkeprodukter og ost	Vand
100g	100g	100g	100g	100g	100g
100g	100g	100g	100g	100g	100g
100g	100g	100g	100g	100g	100g
100g	100g	100g	100g	100g	100g

Råvareoversigt

Viser hvilke råvarer I skal vælge, når I planlægger og tilbereder sund og klimavenlig mad



Portionsstørrelser

Viser hvilke mængder der er passende i de enkelte måltider

Findes også som version til skoler og kantiner



Portionsstørrelser for vegetariske måltider i skoler og kantiner

Viser hvilke mængder der er passende i de enkelte måltider



Kostråd til vegetariske måltider i skoler og kantiner

Her er de tre primære værktøjer, I kan bruge, når I vil sætte Kostråd til vegetariske måltider på menuen og servere mad, der er godt for sundhed og klima. Find alt materialet om Kostråd til Måltider på atm.dk



Råvareoversigt

Viser hvilke råvarer I skal vælge, når I planlægger og tilbereder vegetariske måltider



Portionsstørrelser

Viser hvilke mængder der er passende i de enkelte måltider

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





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