

The Missing Link

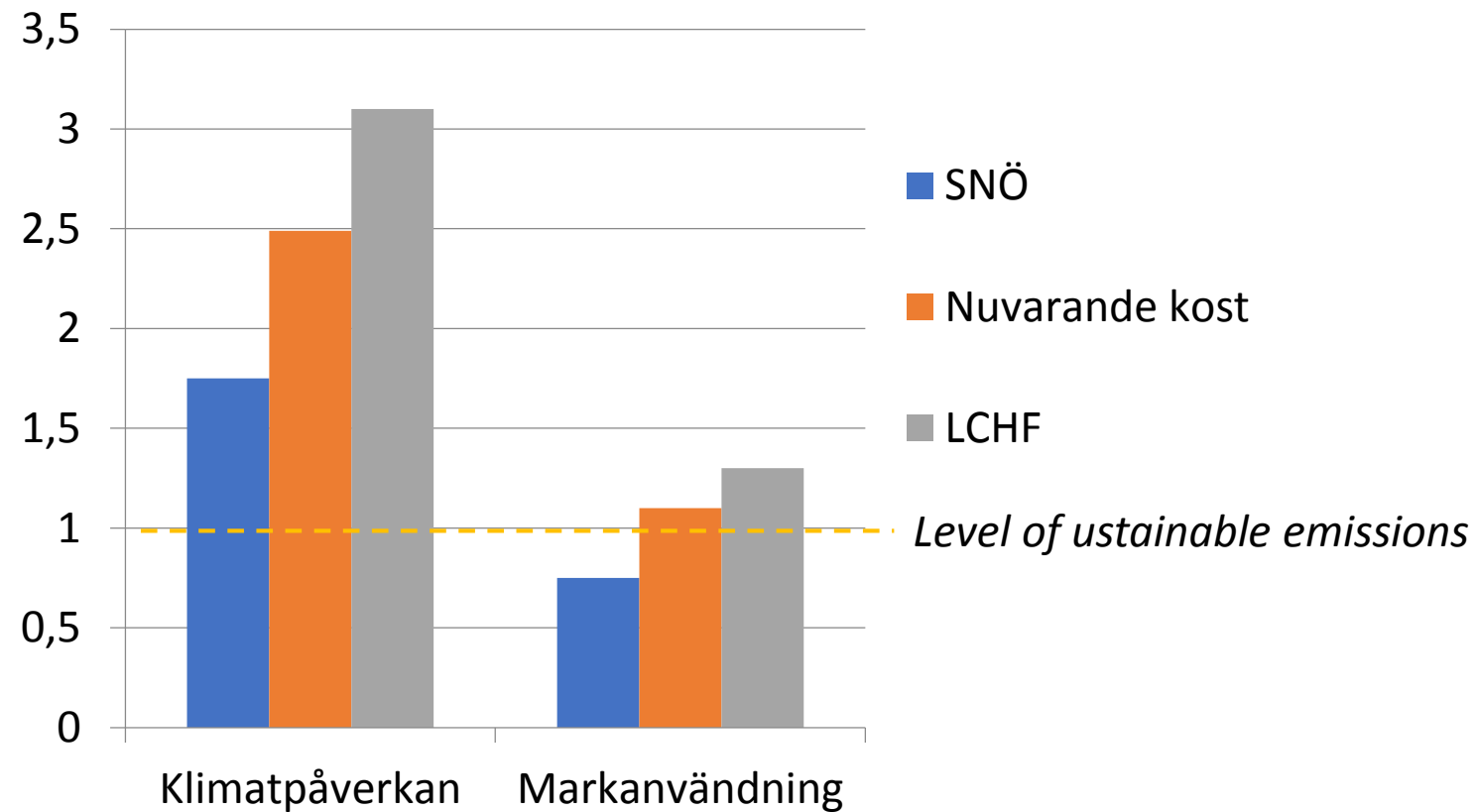
Perspectives on the link between sustainable food production and
sustainable nutrition

Three aspects

- Environmental impact of different diets
- Nutritional intake and green house gas emissions
- The NEXUS Project 2017–2021

Röös et al. 2015. Evaluating the sustainability of diets – combining environmental and nutritional aspects.

Environmental impact of different diets



Limiting livestock production to pasture and by-products in a search for sustainable diets

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<https://doi.org/10.1016/j.foodpol.2015.10.008>

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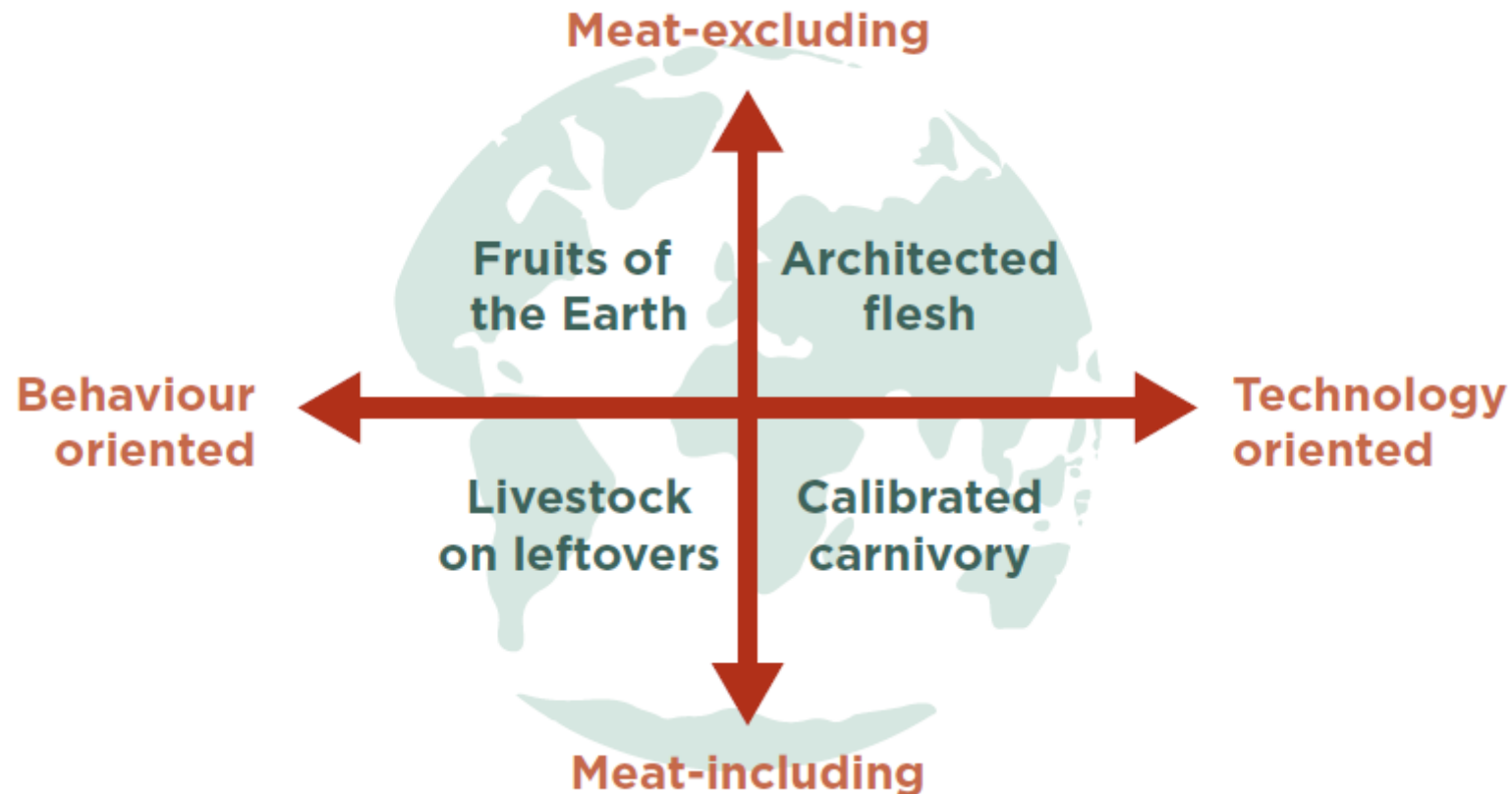
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Highlights

- A method was developed for designing nutritionally adequate and ‘fair’ diets.
- Livestock are raised on pasture and by-products not suitable or wanted by humans.
- Three diets for Sweden were developed based on different views on efficiency.

Four scenarios for future sustainable food supply

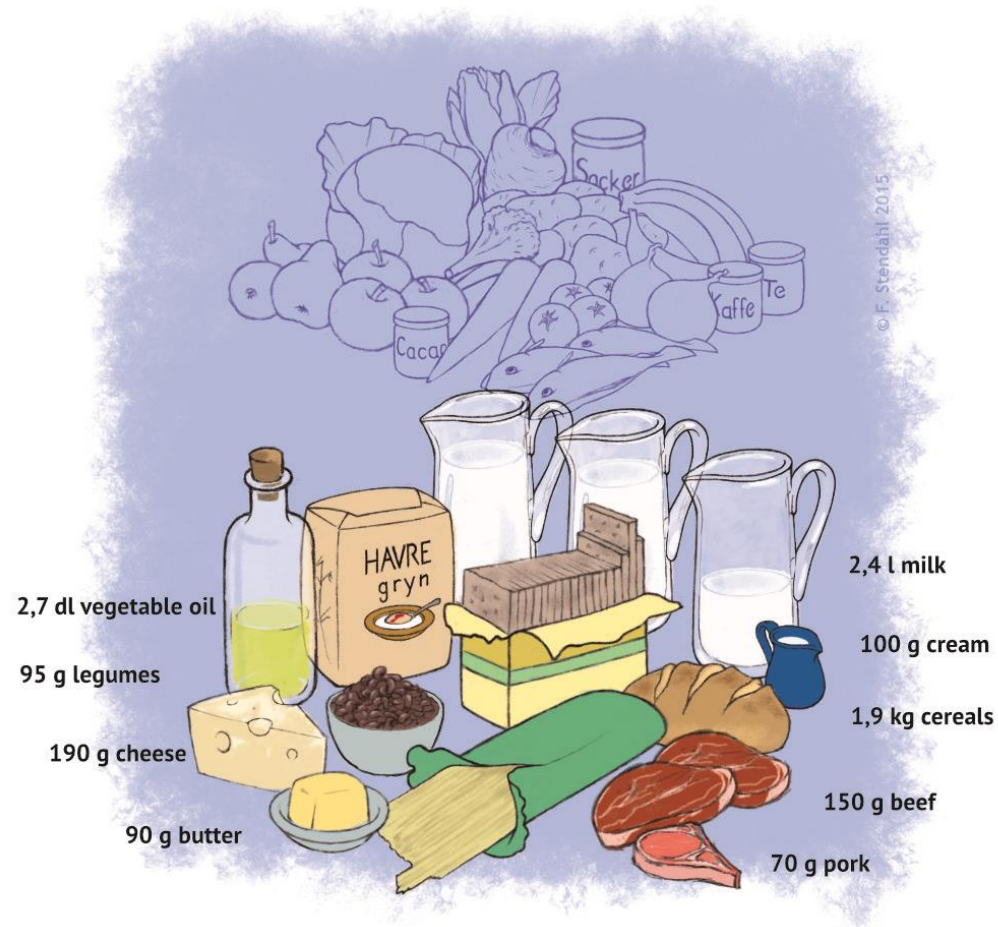


Intensive milk production

Full potential of milk production used, natural grazeland used for heifers



Weekly diet with scenario intensive milk production





Camilla Sjörö är nutritionist med mångårigt intresse för matens miljöpåverkan.

Hennes forskning handlar om skattning av växthusgasutsläpp från maten samt näringsintag och följsamhet till näringsrekommendationer för svenskar med låga respektive höga växthusgasutsläpp från maten.

Innan forskarstudierna har Camilla undervisat inom näringslära, folkhälsa och hållbara matvanor på universitetsnivå, samlat in data till flera forskningsstudier samt arbetat på Livsmedelsverket med livsmedelsdatabasen och planering av matvaneundersökningen Riksmaten vuxna 2010–11.

Näringsintag och utsläpp av växthusgaser från svenska matvanor ur ett epidemiologiskt perspektiv

Näringsintag och utsläpp av växthusgaser från svenska matvanor ur ett epidemiologiskt perspektiv



Nutritional intake and green house gas emissions from Swedish food intake and an epidemiological perspective

Camilla Sjörö

Nutritional intake

- Based on National Food Agency's food intake survey "Riksmaten" with 1 700 participants with four day food registration diary
- Energybalanced diets translated to available greenhouse gas emission data
- Mean emissions 1,8 t CO₂eq for males, 1,7 t CO₂eq for females
- Span 0,3 to 4,5 t CO₂eq
- Categorised into quartiles with 1,27 t for the lowest and 2,26 t CO₂eq for the highest

Nutritional intake (cont)

- High emission diets were signified by high intake of protein, cholesterol and saturated fats
- Low emission diets were signified by high intake of fibre, whole grain and added sugar
- Furthermore, low emission diets provided higher intake of betacarotene, vitamin A, folic acid and vitamin B12 and a little higher intake of Ca and Mg
- High emission diets provided higher intake of P, Fe, Zn and Se

NEXUS Project

- Five year project 2017–2021
- RISE Research Institutes of Sweden, Karolinska Institute and National Food Agency
- 120 000 individuals
- Investigate the correlation between four categories of noncommunicable diseases – HCD, stroke, cancer and secondary complications –, diet and environmental impact
- With the use of multivariate statistical methods identify healthy diets with lower environmental impact
- Develop a toolbox for industry and authorities to design more sustainable products and recommendations