



Faculty of Science



The New Nordic Diet represents regional sustainable diets

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ORGANIC FOOD SYSTEM PROGRAMME





The New Nordic Diet

Rooted in the Nordic terroir

Respects nature, sustainability and local quality

Respects local culture

Respects Nordic Nutrition Recommendations

Sustainable, Regional, Healthy and Organic

New Nordic and Mediterranean diets



Both diets call for more
vegetables,
fruit,
whole grains,
fish and
non-animal proteins.

moderate consumption of
low-fat dairy,
less meat and sweets, and
avoidance of processed food.



New Nordic shares this Mediterranean thinking but utilizes the ingredients and flavors of a northern climate.

Clinical trials with a Nordic diet

	SHOPUS Poulsen et al 2014	NORDIET Adamsson et al 2011	SYSDIET Uusitupa et al 2013	SYSDIMET De Mello et al 2011
Central methods	Ad libitum free food both groups 26w, n=181	Provision of free prepared food for ND 6w, n=88	Dietary advices. Few foods provided 18/24w, n=200	Dietary advices. Few foods provided 12w, n=106
Body weight	↓	↓	-	-
Systolic blood pressure	↓	↓	-	-
Diastolic blood pressure	↓	-	- (↓)	-
Triglyceride	↓	↓	-	-
Total cholesterol	↓	↓	-	-
HDL cholesterol	-	↓	-	-
LDL cholesterol	- (↓)	↓	-	-
LDL/HDL	-	↓	↓	-
Fasting glucose	↓	-	-	-
Insulin	- (↓)	↓	-	-
IS/IR indexes	- (↓)	↓	-	-

N
F

↓ Lower compared to control group
- No difference compared to control group
No data



Ratio of the mass-based environmental impact of organic produce compared with conventional produce

Food products studied	Primary energy used (MJ)	GWP ₁₀₀ (CO ₂ -eq)	Acidification potential (SO ₂ -eq)	Ozone layer depletion (kg CFC ₁₁ -eq)	Photo-chemical ozone (vegetation) (m ² ·ppm·h)	Eutrophication potential As (PO ₄ -eq (16,27) or as (NO ₃ -eq (5, 6, 26-29)	N losses as NO ₃ /NH ₃ /N ₂ O-nitrogen	Ecotoxicity (Pesticides used (16;27) or (kg-eq TEG soil / water (5, 6)	Human toxicity - average of four types ²	Land use (ha) (16) or nature occupation (m ²) (5)	Abiotic resources used (Sb-eq)	Water use
Poultry meat (UK)	1.3 (26)	1.5 (26)	1.5 (26)			1.8 (26)	1.5-2.5 (26)	0.1 (26)		2.2 (26)	3.4 (26)	
Eggs (UK)	1.1 (26)	1.3 (26)	1.1 (26)			1.3 (26)	1.1-2.2 (26)	0.0 (26)		2.2 (26)	1.1 (26)	
Beef (UK)	0.7 (26)	1.2 (26)	1.5 (26)			2.1 (26)	1.1-2.9 (26)	0.0 (26)		1.8 (26)	0.9 (26)	
Milk (UK;NL;SE;DE)	0.4-0.8 (26;27;29-32)	1.0-1.2 (26,28-29) 0.9-1.0 (30-31)	1.1-1.6 (26,29-31) 0.9 (30)			1.1-1.6 (26,29-31) 0.4-0.6 (28,31)	1.1-1.6 (26)	0.0 (26)		1.4-2.0 (26;28-30)	0.5 (26)	
Carrots (DK) ³		1.7 (10)	2.0 (10)	1.4 (10)	1.4 (10)	4.2 (10)		1.4-1.5 (10,26)	1.4 (10)	1.4 (10)		
Tomatoes (DK;UK)	1.9 (26)	1.4-1.9 (10,26)	1.5-3.0 (10,26)		1.4 (10)	4.2 (26) 0.8 (10)		0.6 (26) 1.4/1.5 (10)	1.4 (10)	1.5-1.9 (10,26)	1.9 (26)	1.5 (26)
Oat (DK)		0.7 (10)	1.1 (10)	1.2 (10)	1.1 (10)	-0.8 (10)		1.2 (10)	1.1 (10)	1.4 (10)		
Sheep (FR;UK)	0.6-0.8 (26,27)	0.6 (26)	4.1 (26)			3.1 (26)	1.5-6.2 (26)	0.0 (26)		2.3 (26)	0.7 (26)	
Rye (DK)		0.9 (10)	1.3 (10)	1.9 (10)	1.6 (10)	0.2 (10)		1.7-1.9 (10)	1.5 (10)	1.9 (10)		
Spring barley (DK)		0.6 (10)	1.1 (10)	1.3 (10)	1.1 (10)	-0.4 (10)		1.3 (10)	1.1 (10)	1.6 (10)		
Winter barley (DK)		0.5 (10)	1.0 (10)	1.4 (10)	1.1 (10)	-0.9 (10)		1.3-1.4 (10)	1.1 (10)	1.5 (10)		
Bread wheat (UK;DK)	0.7 (26)	0.4-1.0 (10,26)	1.1 (26) 0.8 (10)	1.4 (10)	1.0 (10)	3.1 (26) -0.4 (10)	1.1-4.3 (26) 0.9 (26)	0.0 (26) 1.2-1.3 (10)	0.9 (10)	1.5-3.1 (10,26)	0.9 (26)	
Oilseed rape (UK;CH)	0.8 (26)	0.7-1.0 (11,26)	2.2 (11) 0.6 (26)	0.4 (11)	1.1 (11)	1.8 (26) -0.4 (10)	2.3 (26) 0.4-1.0 (26)	0.0 (26) 0.9-3.5 (11)	1.8 (11)	2.7 (26)	1.2-1.4 (11,26)	
Potatoes (UK)	1.0 (26)	0.9 (26)	0.4 (26)			1.1-1.4 (11,26)	1.5 (26) 0.1-0.9 (26)	0.2 (26)		2.6 (26)	1.2 (26)	0.2 (26)
Protein peas (CH)		1.1 (11)	3.1 (11)	0.7 (11)	1.1 (11)	0.8 (11)		1.0-4.2 (11)	-2.4 (11)	1.3 (11)		
Silage maize (CH)		0.7 (11)	1.7 (11)	0.7 (11)	0.9 (11)	0.6 (11)		0.8 (11)	0.9 (11)	1.3 (11)		
Pig meat (UK, FR)	1.4 (27) 0.9 (27)	1.7 (27) 0.9 (26)	0.3-0.9 (26,27)			1.0 (26) 0.6 (26)	1.1-1.5 (26) 0.5 (26)	0.0-0.2 (26,27)		1.7-1.8 (26,27)	0.9 (26)	
Soybean (CH)		0.9 (11)	0.6 (11)	0.7 (11)	0.9 (11)	0.7 (11)		0.8 (10) 5.0 (11)	0.7 (11)	1.1 (11)		

1 Red cells indicate that organic produce is inferior, and green cells indicate that organic produce is superior in terms of the environmental impact for a given product and impact category. Gray cells indicate that data are incomplete or inconclusive. References are in parentheses. Scope: calculated at farm gate in England and Wales (UK), Denmark (DK), France (FR), Germany (DE), the Netherlands (NL), Sweden (SE), or Switzerland (CH). CFC, chlorofluorocarbon; eq, equivalents; GWP, global warming potential; ha, hectare.

2 Simple average of 4 human toxicity measures given as carcinogens and noncarcinogens (kg C₂H₃Cl-eq), respiratory organics (kg-eq ethylene, person \$ ppm⁻¹·h⁻¹·m⁻³), or inorganics (kg PM_{2.5}-eq).

3 Washed and packed from fields in Denmark, and average of 2 types of organic produce.



Strong political support by The Nordic Council of Ministers

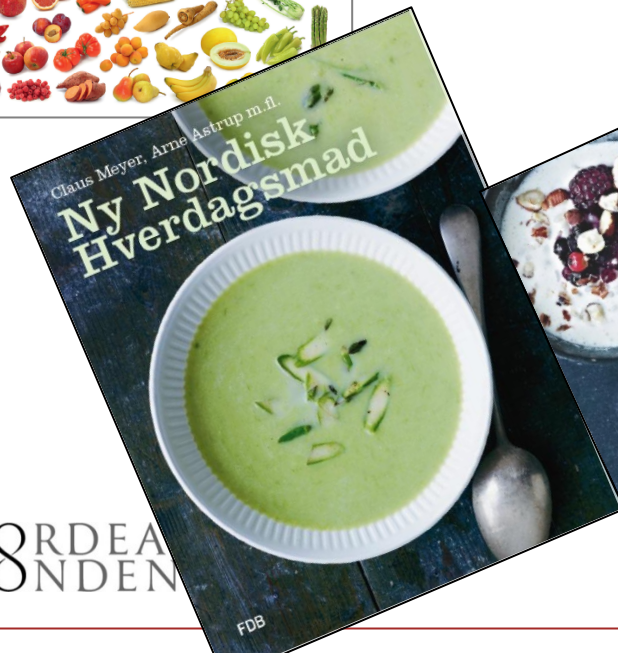
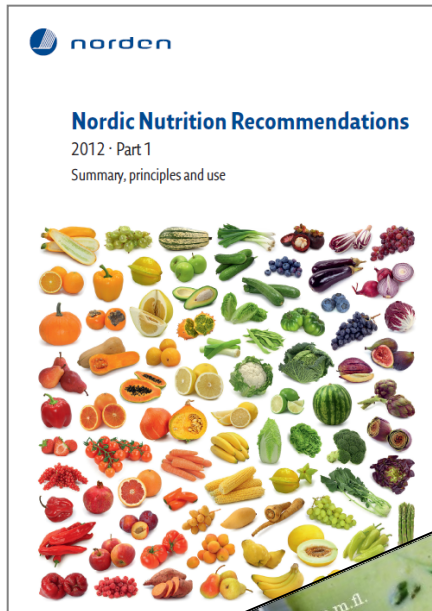
May 2016: The Municipality of Copenhagen celebrates that 88% of food in the Public Food service is now Organic



Dyrk maden = Grow/worship food

The NND is a prototype regional diet taking health, food culture, palatability and the environment into account.

The principles and guidelines could be applied in any region of the world



Thank you for your attention



QUESTIONS?

