

# Fighting Malnutrition with a Multi-modal Strategic Approach: The Danish Experience 2007-9

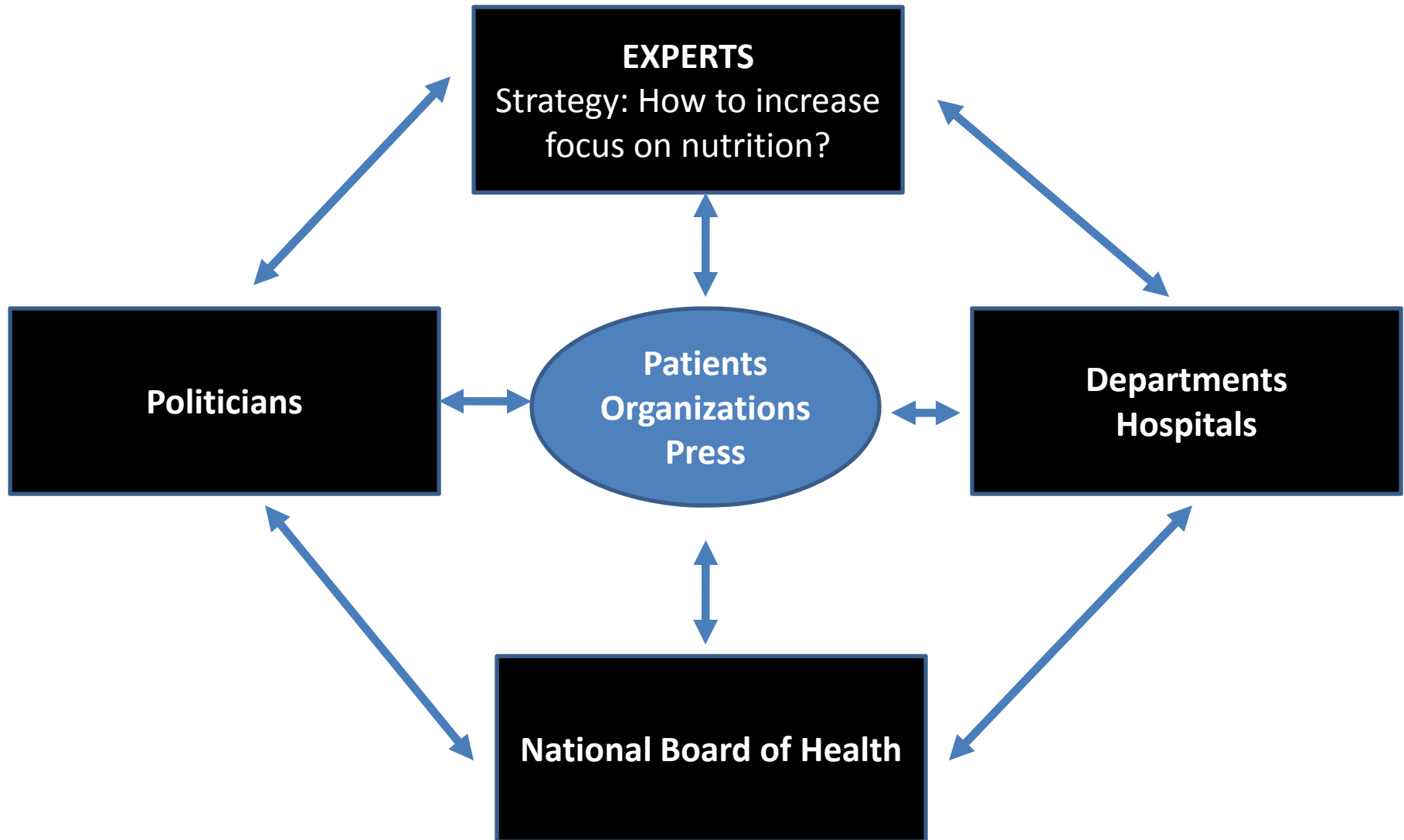
*Rasmussen HH, Holst M, Beck AM, Andersen JR, Hejgaard T, Kondrup J  
on behalf of  
DAPEN and the Danish National Board of Health*

From the mid-nineties a joint venture between the the **Danish Veterinary and Food Administration**, the **Danish National Board of Health (NBH)**, politicians and an advisory board under the auspice of **DAPEN (Danish Society for Clinical Nutrition and Metabolism)** developed a strategic multi-modal approach to fight malnutrition including:

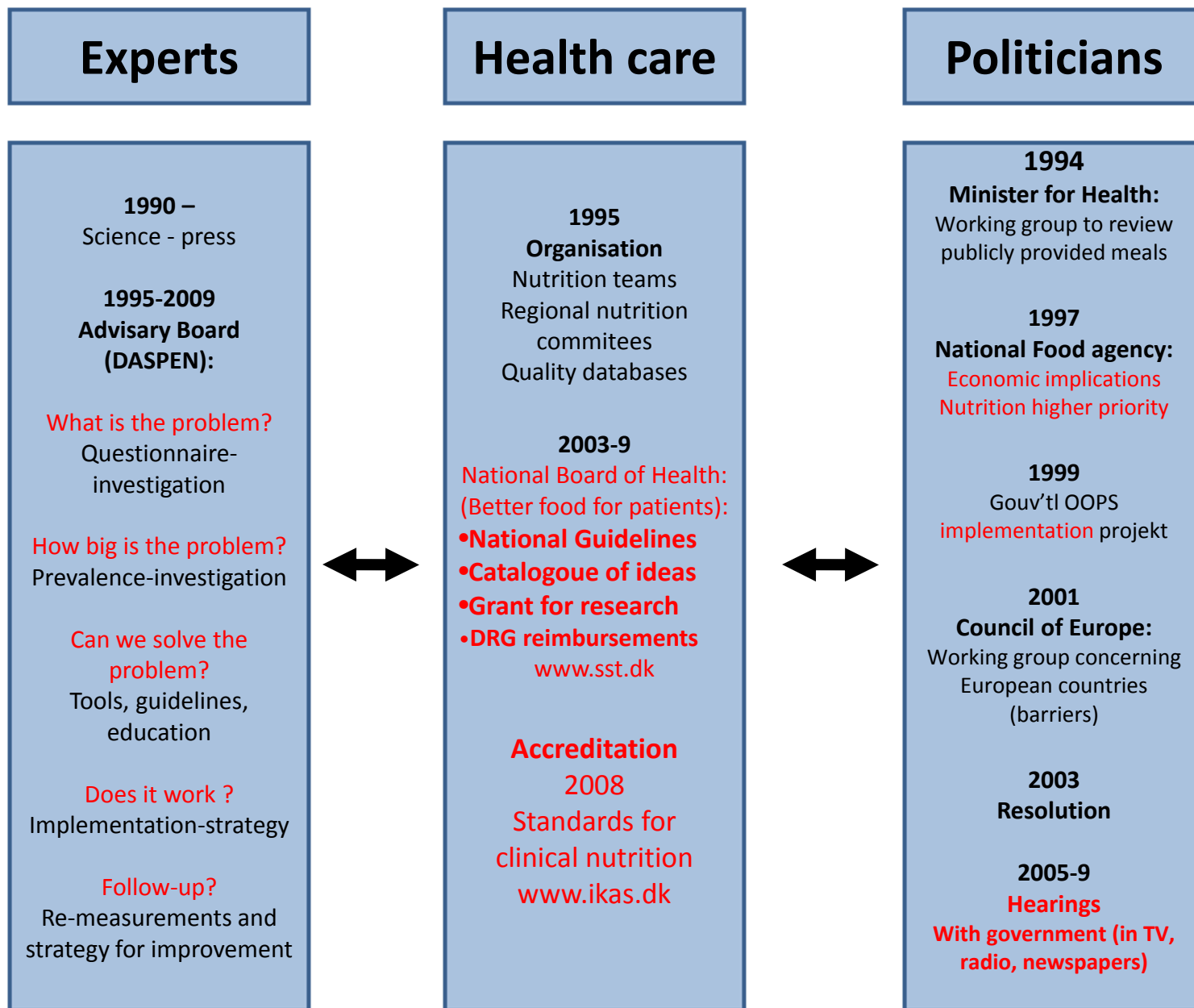
- ✓ *The initiative “Better food for patients”*
- ✓ *National guidelines*
- ✓ *Accreditation of all Danish hospitals* regarding undernutrition.

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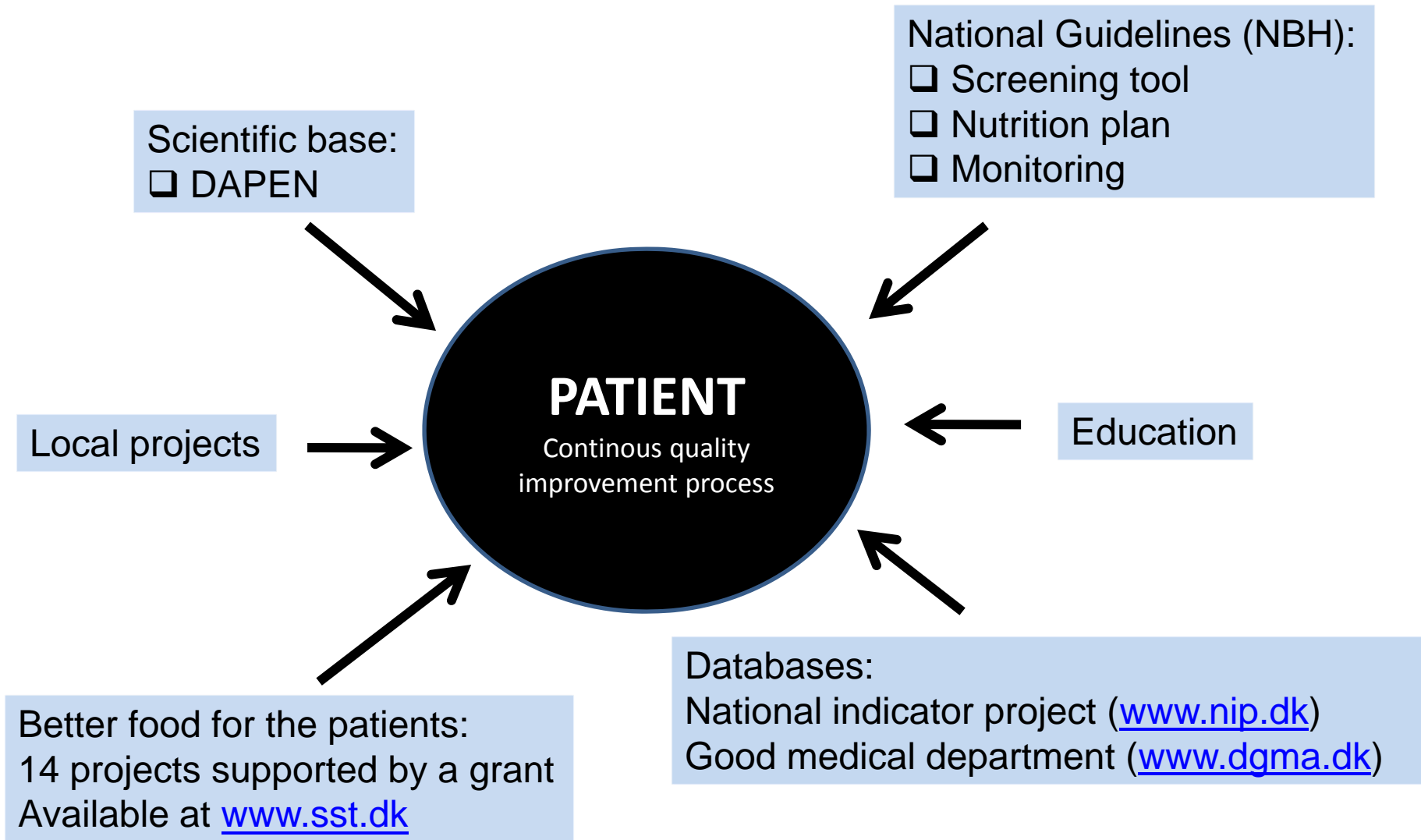
# Initiatives and activities



# Strategy and interaction between actors



# Implementation





## BETTER FOOD FOR PATIENTS – JOINT REPORT

Experience from 14 projects and  
ideas for future work on nutrition

2007

Quality evaluation  
of the nutritional  
care

Patient  
involvement

Cooperation  
between hospitals  
and primary health  
care

# Results

Documentation of variables	Pre-measurement* %	Re-measurement* %
Weight?	74	81
Height?	40	74
BMI?	0	56
Patients with weight loss < 3 months?	25	53
Patients with weight loss during hospitalization?	18	52
Energy intake < 1 week?	31	64
Energy intake in patients with decreased food intake?	43	69
Screening?	15	61
Nutrition plan?	34	86

*\*Significant differences in all variables  $p < 0.05$*

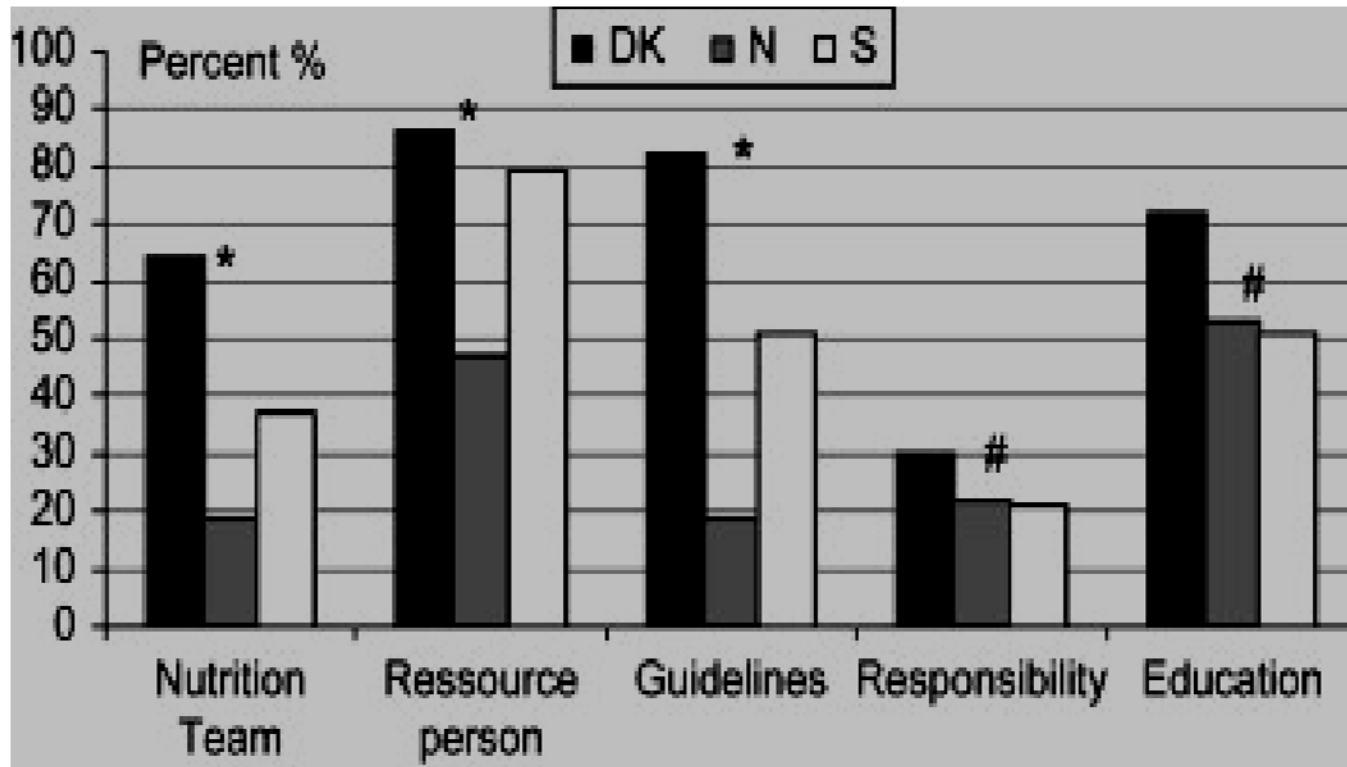
# Results

## NIP 2007 National Indicator Project *(cohort follow up study)*

Disease	Number of patients N	Screening < 2 days	Screening during hospital
Apoplexia	8683	66 %	92 %
Femur fracture	6548	49 %	79 %
Heart	2231	84 %	--
Total	17462		

[www.NIP.dk](http://www.NIP.dk)

# Results



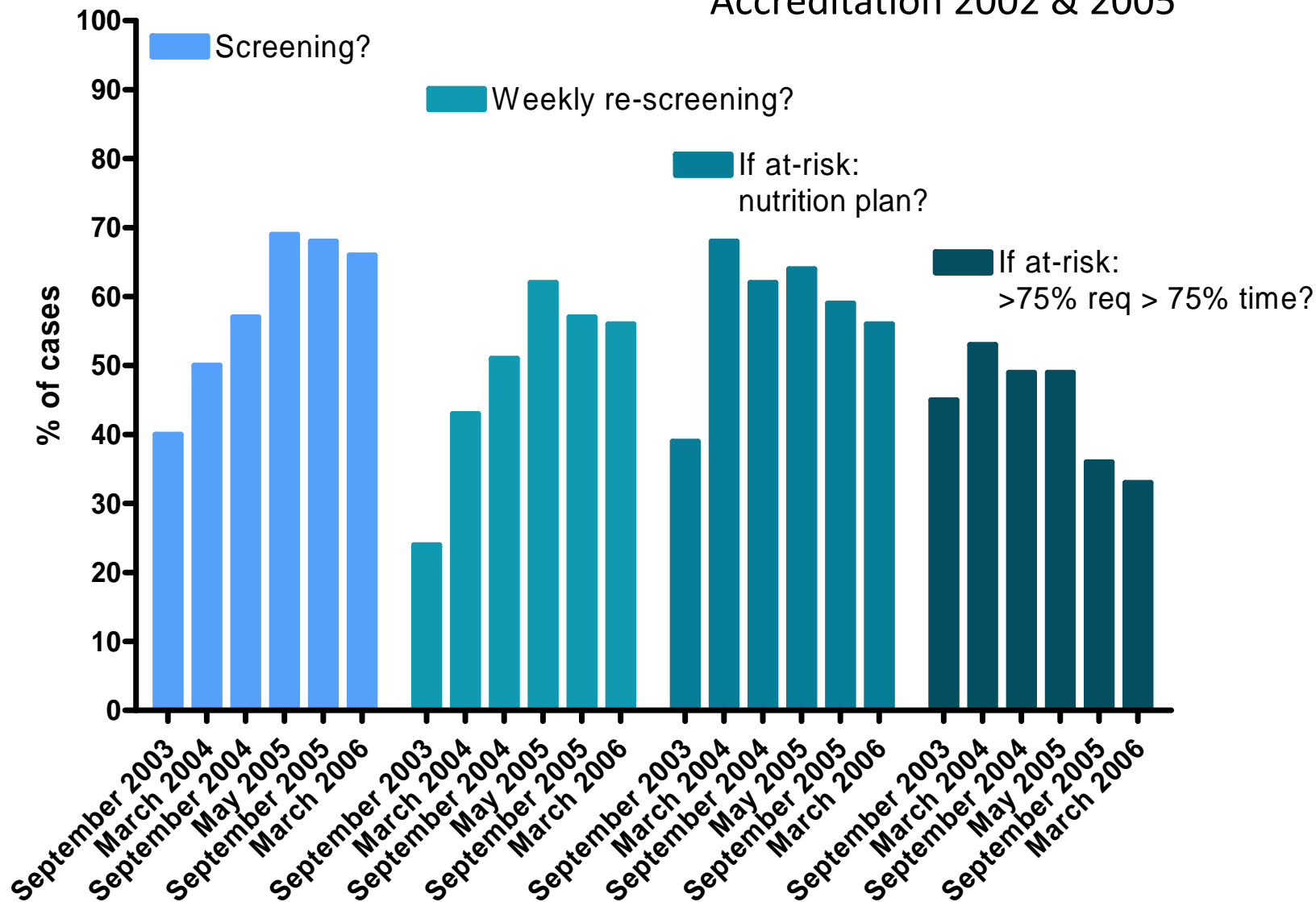
Nutritional structure in Danish hospitals



# Audit of approx. 1500 records among 4.500 beds in Copenhagen

Copenhagen audit March 2006

Accreditation 2002 & 2005



# Results

## A positive change among Danish doctors and nurses

Variable	1997 (%)	2004 (%)	P - value
Person in dept. responsible for nutrition?	20	68	P < 0.0005
A nutrition plan should always be recorded?	82	92	P < 0.005
In my department some patients gets insufficient nutrition with clinical complications?	48	22	P < 0.0005
In my dept. clinical nutrition has low priority?	40	22	P < 0.0005
I find it difficult to make a nutrition plan?	40	40	Ns

# Results

## Nutrition Standards and Indicators in the Danish Quality Programme (I)

- **STANDARD I:** Patients in hospitals are assessed for nutritional risk.
- **INDIKATOR 1:** Guidelines for screening patients to identify patients at nutritional risk. They should as a minimum include:
  - A clear division of responsibility for screening and nutritional therapy.
  - Description of screening method and patients to be screened.
  - When patients should be screened, and reasons why patients have not been screened.
  - A nutrition plan for patients at nutritional risk
- **INDIKATOR 2:** Leaders and staff knows and uses the guidelines.
- **INDIKATOR 3:** Nutrition screening should be documented in the records.
- **INDIKATOR 4:** On the basis of quality assessment leading staff will make steps for quality improvements.

# Results

## Nutrition Standards and Indicators in the Danish Quality Programme (II)

- **STANDARD II:** Patients in hospitals at nutritional risk will get an individual nutritional therapy.
- **INDIKATOR 1:** Guidelines for a nutrition plan and monitoring. These should include:
  - Assessment of energy- and protein needs according to recommendation from National Board of Health
  - Prescribing a diet
  - Registration of food intake and calculation of energy- and protein intake. Furthermore weight should be monitored.
  - Indication for modifying the nutrition plan.
- **INDICATOR 2:** Leaders and staff knows and uses the guidelines.
- **INDICATOR 3:** Documentation in records for nutritional needs (energy- and protein).
- **INDICATOR 4:** Documentation in records for the diet prescribed.
- **INDICATOR 5:** On the basis of quality assessment leading staff will make steps for quality improvements.

# Future aspects

- Stakeholder function for clinical nutrition in Denmark
- Action Network on Hospital Nutrition within the European Region of the WHO.
- Systematic screening and registering of five life style risk factors (undernutrition, overweight, physical activity, smoking and alcohol) for all patients with a first contact to the hospital including DRG-coding for re-imburement.
- Implementation of a Scandinavian database in clinical nutrition.
- Improving food intake
- Education in clinical nutrition for doctors.
- National guidelines in primary health-care

# **This was only possible by team-work including a lot of actors on the scene:**

## **Dedicated persons:**

Mette Holst, Centre for Nutrition and Bowel Disease, Aalborg University Hospital  
Anne Marie Beck, Danish Veterinary and Food Administration  
Karin Ladefoged, Dept Internal Medicine, Greenland  
Michael Staun, Medical Gastroenterology, Rigshospitalet  
Jens Kondrup, Nutrition Unit, Rigshospitalet  
Jens Rickardt Andersen, Nutrition Unit, Rigshospitalet  
Tatjana Hejgaard, National Board of Health  
and many others .....

## **Organisations:**

Danish Society for Clinical Nutrition and Metabolism (DAPEN)  
Danish National Board of Health (NBH)  
Danish Veterinary and Food Administration  
ESPEN  
Different medical specialities

## **Medical companies and others:**

Health Care Consulting

## **Politicians:**

Local and national

## **Medias:**

TV, radio, newspapers

# European championship in football 1992

