

Improved outcomes with oral nutritional supplements: Should we spend to save?

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Economic challenges affect health and social care

- Economic constraints worldwide mean decision makers are looking to save money whilst still delivering quality care for patients



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The Telegraph

Health News

NHS delays operations 'as it waits for patients to die or go private'



5) 734668

'NHS cuts will reduce town's life expectancy'

By Adam Civoic

PEOPLE in Barnsley are likely to die younger because of cuts to health budgets, claims MP Michael Dugher.

He says the borough is in the 'top ten' of those parts of the country that will be worst affected by government changes to NHS funding policy.

Barnsley is among the most deprived boroughs in the country and health issues are worse than the national average. Life expectancy is below average and in Barnsley's most deprived areas is 8.8 years lower for men and 7.7 years lower for women than in the least deprived areas of the UK.

The gap between life expectancy here and in other parts of the country has narrowed but Mr Dugher fears that work will be undone.

The new 'Health Profile' for Barnsley shows that early death rates from cancer, heart disease and strokes have fallen over the last ten years, but that the situation is still worse than the average across England.

"It is clear that more needs to be done, but the government's policies will make inequality worse, not better," he said.

The Health Select Committee has published a report stating that Barnsley will be the ninth worst hit area because of the changes to NHS funding. Mr Dugher has called for urgent action because the policy "will see areas with unhealthy populations given less funding to tackle health inequalities."

Levels of healthy eating, smoking and obesity are worse than the national average and rates of smoking-related deaths and hospital stays for alcohol-related harm are higher than average.

More than one in five 11-year-olds are classed as obese.

Even so funding for Barnsley's PCT is being cut by 3.1 per cent.

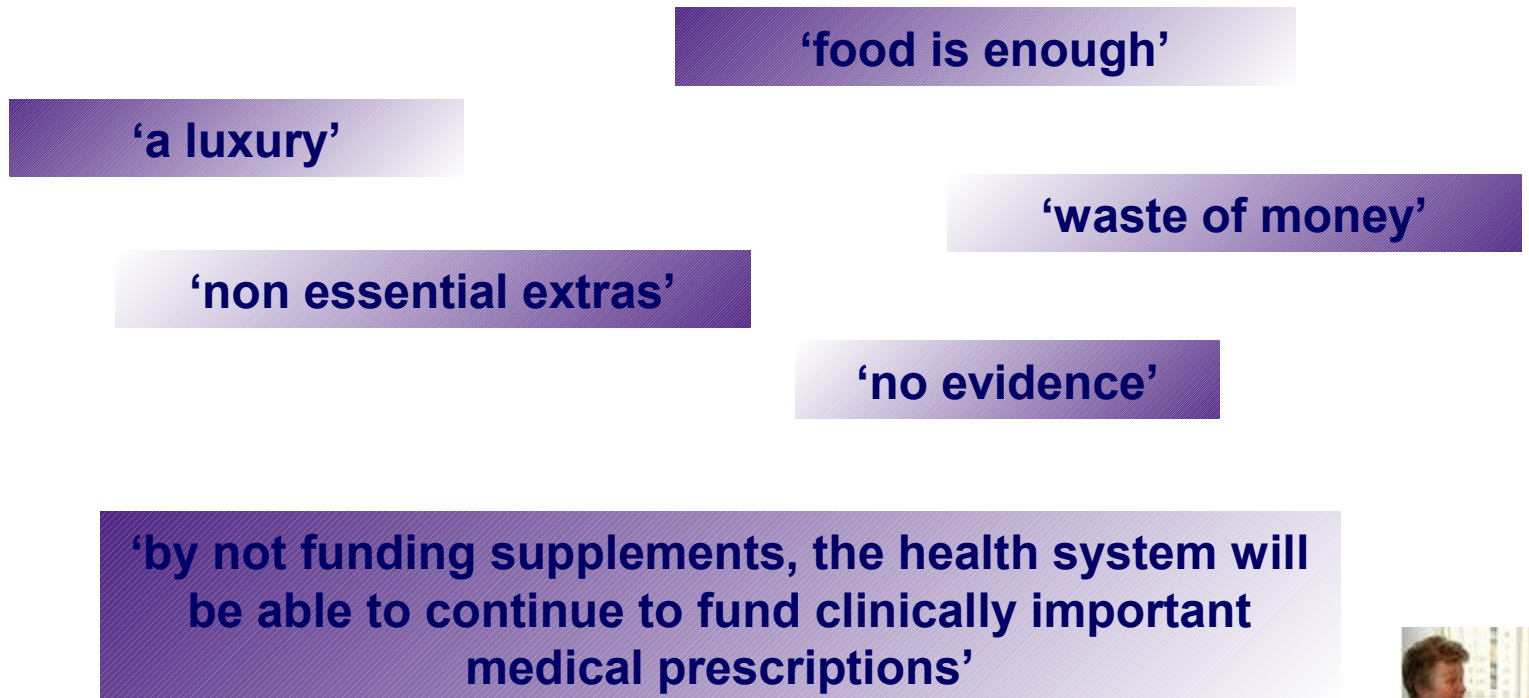
"I'm very worried that the good progress that has been made in Barnsley is at risk due to the government's double whammy of cuts to local services and Barnsley PCT."

He is angry that more well-off areas, including Conservative-controlled Surrey and Kensington and Chelsea, will get more funding for their PCTs.

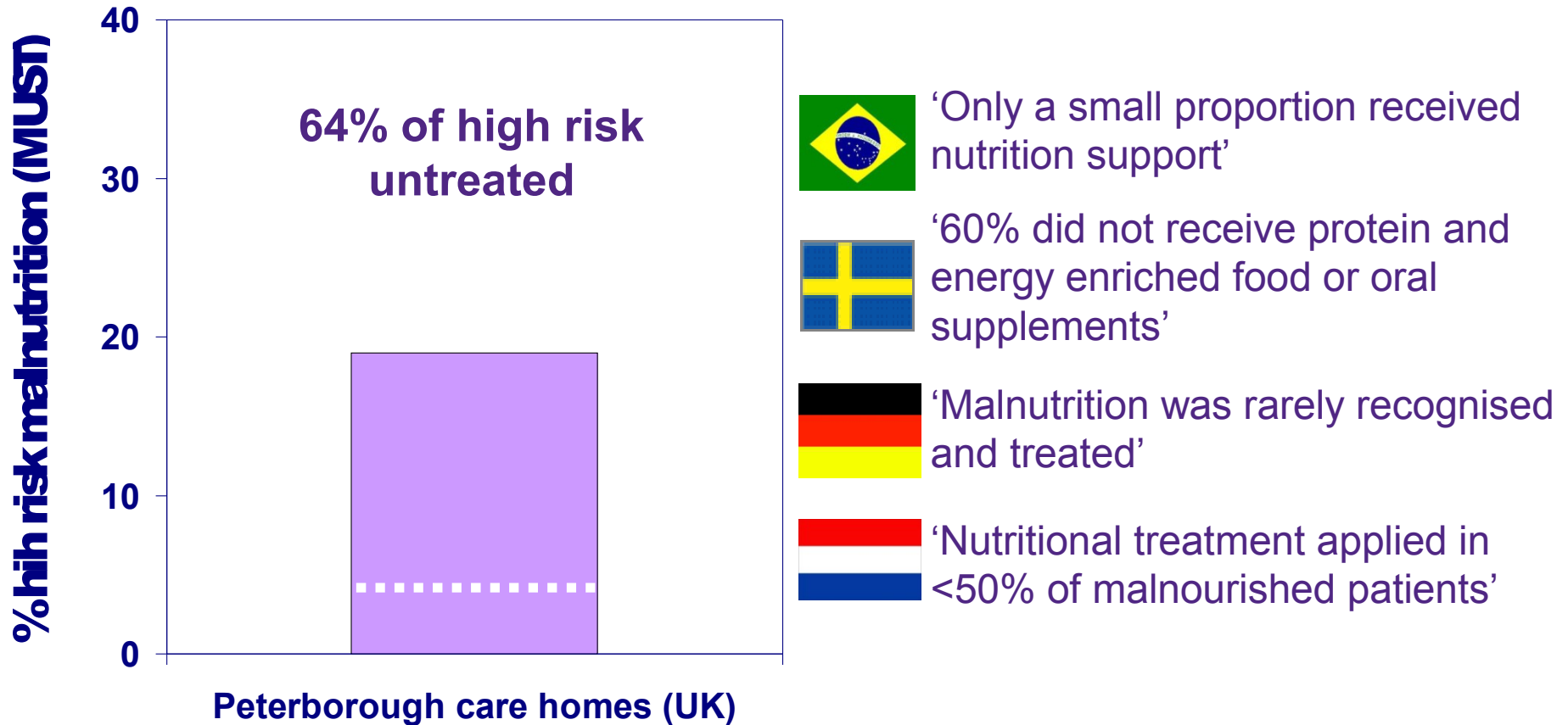
PANIC RIPS THROUGH GLOBAL MARKETS

Economic challenges risk compromising nutritional care

- Lack of understanding by decision makers often means use of medical nutrition (oral nutritional supplements, tube feeds) and other resources for treating malnutrition are questioned...



Malnutrition or nutrition support: Which is the greatest cost?



What about the untreated? What about their costs?

Biggest cost is the consequences of the untreated condition and not its management....

- Costs of treating malnutrition are a small proportion
1-3% of prescribing budgets
<2.5% of the expenditure on malnutrition
- Biggest cost is due to the consequences of malnutrition
UK ~£13 billion/y (€ 15.6 billion/y)
Europe: ~€170 billion/y (€120 billion/y EU)



Expenditure is high as malnutrition is common with adverse effects



Community

More GP visits

More hospital admissions

More outpatient visits

Poorer outcome

Greater health care need



Hospital

More complications

Slower recovery

Longer hospital stay

More readmissions



~33 million people (20 million in EU) at risk of malnutrition

Biggest cost saving is to prevent consequences of malnutrition with effective treatment

Disease-related malnutrition

Common – Detrimental - Expensive – Mostly treatable

PROBLEM

TREATMENTS

Food

- Dietary fortification, snacks
- Over the counter drinks
- Dietary advice from a Dietitian or other HCP

Oral

Supplements



Artificial

- Enteral tube feeding
- Parenteral nutrition



**Biggest cost saving is to prevent consequences
of malnutrition with effective treatment**

Disease-related malnutrition

Common – Detrimental - Expensive – Mostly treatable

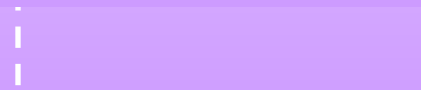


Oral supplements

Should we spend to save?

- lives
- independence and quality
- money

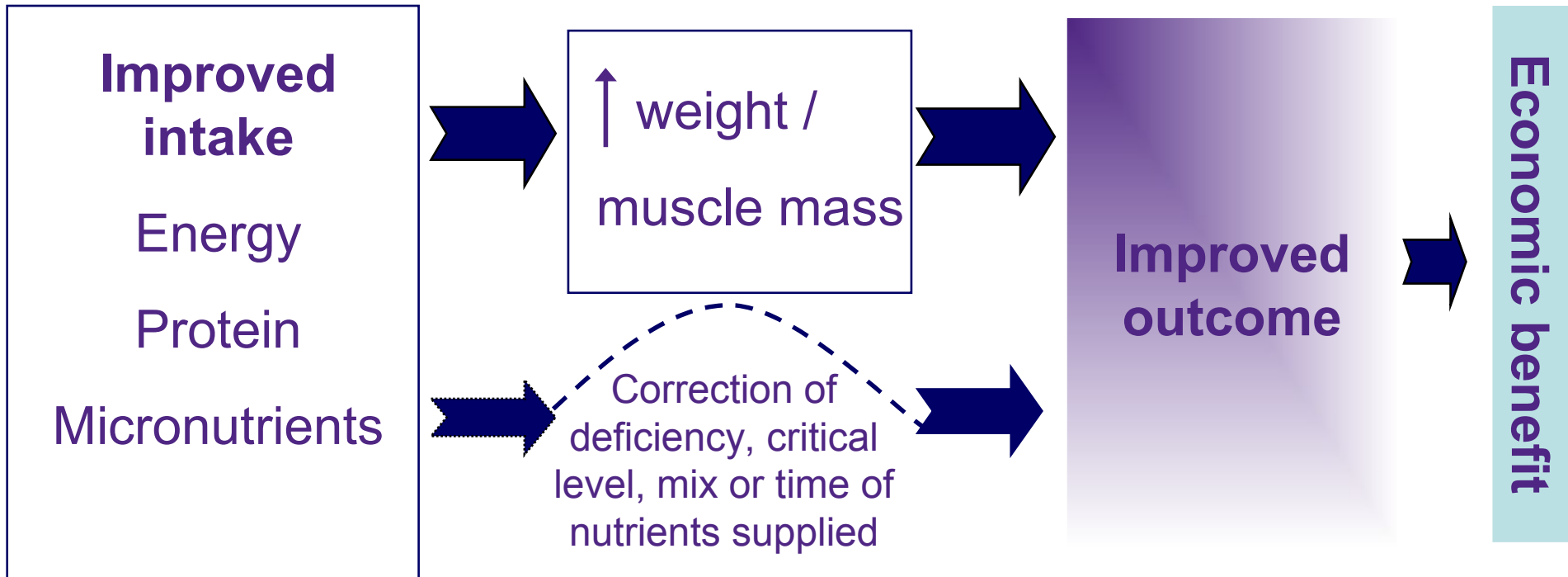
What is the evidence?



PROBLEM

TREATMENTS

Rationale for using nutrition support



Effective management of malnutrition in the top 3 for cost saving guidance

CG34 Hypertension	£446,627
CG30 Long acting reversible contraception	£214,681
CG32 Nutrition support in adults	£28,472 €34,166
TA111 Alzheimer's disease	£26,095
CG81 Breast cancer (advanced)	£15,080
TA152 Ischaemic heart disease (coronary artery stents)	£10,294



Cost savings with use of oral nutritional supplements in hospitals

- 'A small reduction in costs through intervention with oral nutritional supplements would result in large net cost savings'
- 'Oral nutritional supplements can produce a net cost saving and be cost effective in selected patient groups' *Surgery (orthopaedic, gastrointestinal), elderly*



The average net cost saving with oral nutritional supplements

~£850 (€960) / patient

(reduced length of stay costs in analysis of RCT, Elia et al 2005)

Spend on oral nutritional supplements to save money – budget impact models

- Positive budget impact of using ONS appropriately as the costs of increased use of supplements are more than offset by a reduction in health care costs



- €18 million (elderly, high risk malnutrition)

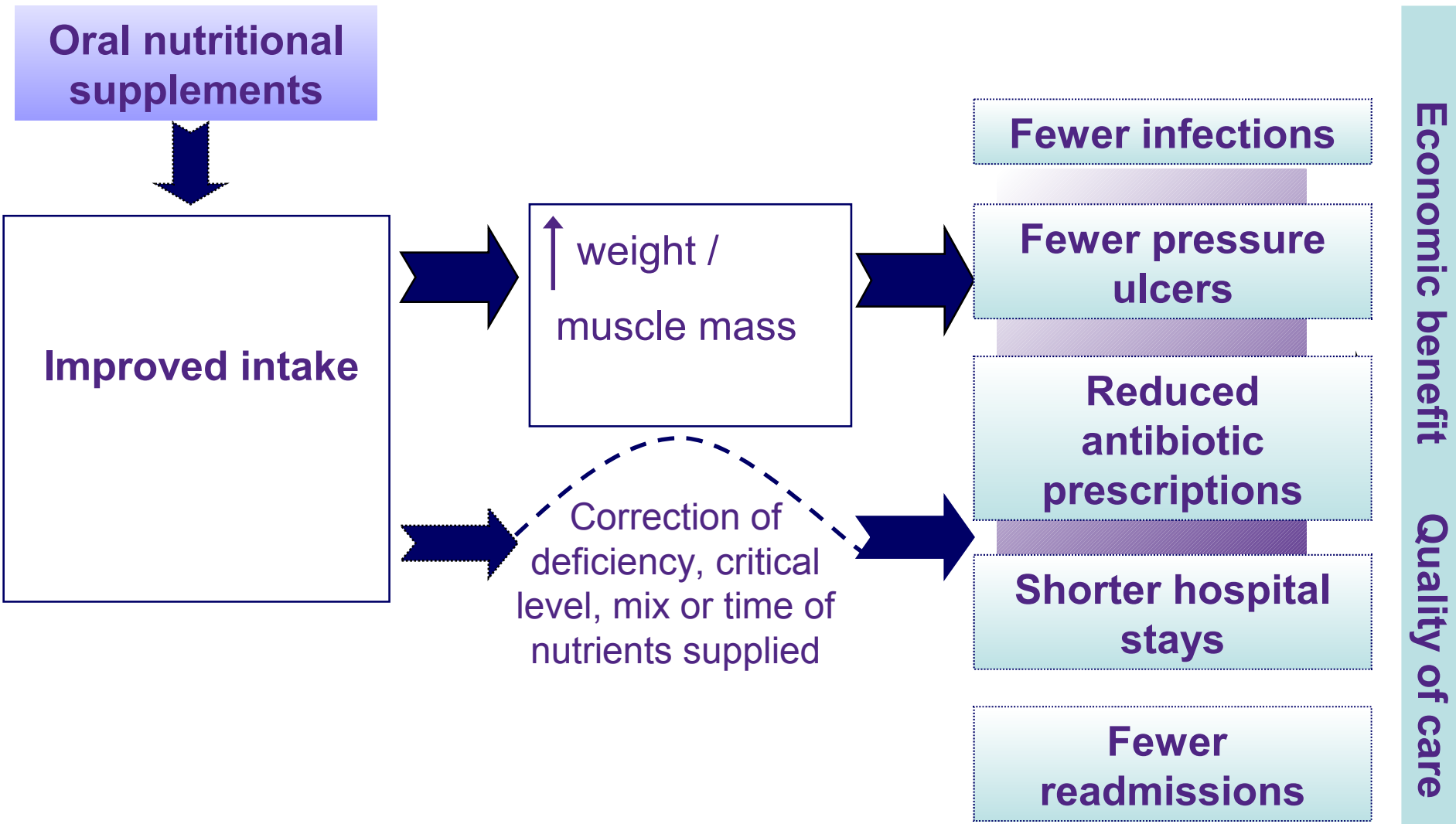


- €13.3 million (elderly, at risk of malnutrition)



- €604 million (all, at risk of malnutrition)

Reasons for cost savings with oral nutritional supplements



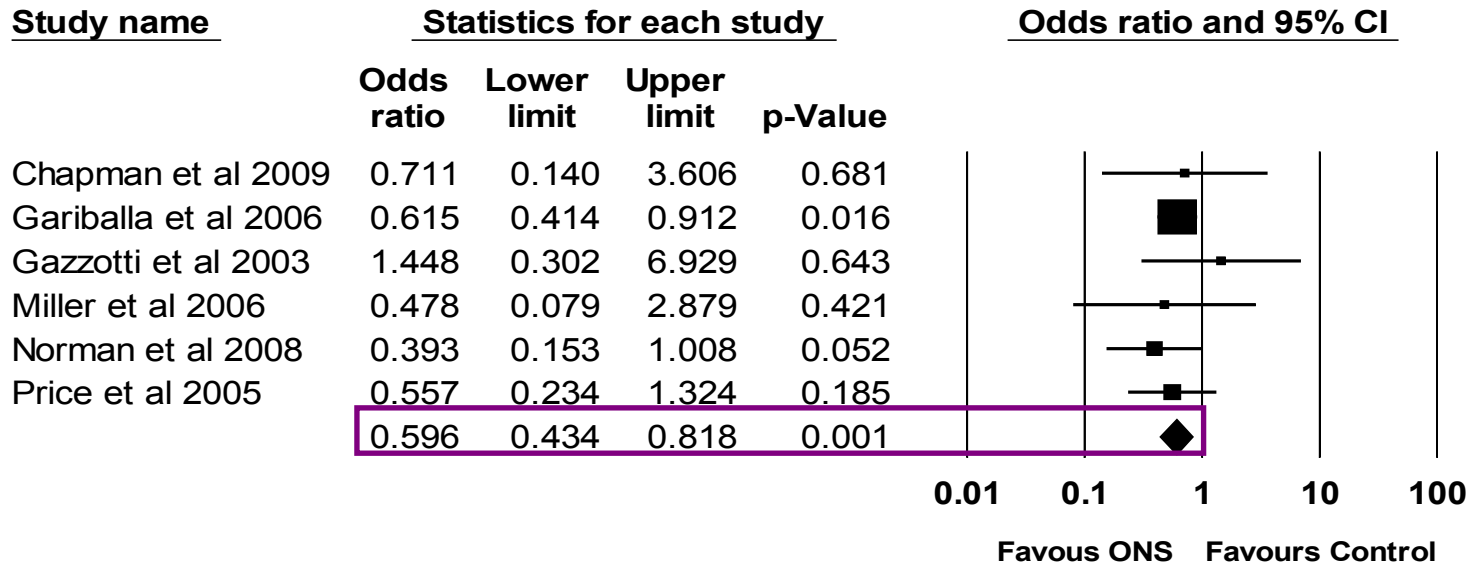
New systematic review of oral nutritional supplements on hospital readmissions

(Stratton et al OPO38)

- Systematic review of 6 RCT (from 13059 potential studies) by an international panel

Patients	Elderly (various), Hip fracture, benign GI disease Most malnourished/risk malnutrition
ONS	500-1000kcal/d, ready-made for 6 wk - 1 y Community or hospital-community
Outcome	Number of patients (re)admitted to hospital
Countries	UK, Belgium, Germany, USA, Australia
Control	Standard care, dietary advice, placebo

New meta-analysis suggests reduction in hospital readmissions with ONS (Stratton et al OPO38)



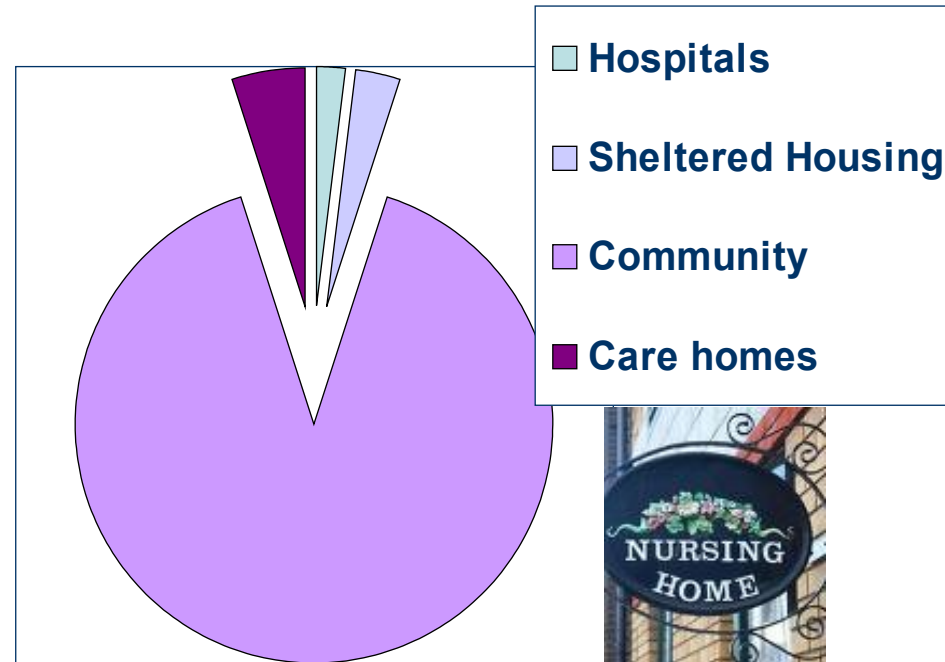
Elderly: OR 0.63 (95% CI 0.45 to 0.88), n 738

Community only: OR 0.50 (95% CI 0.28 to 0.91), n 242

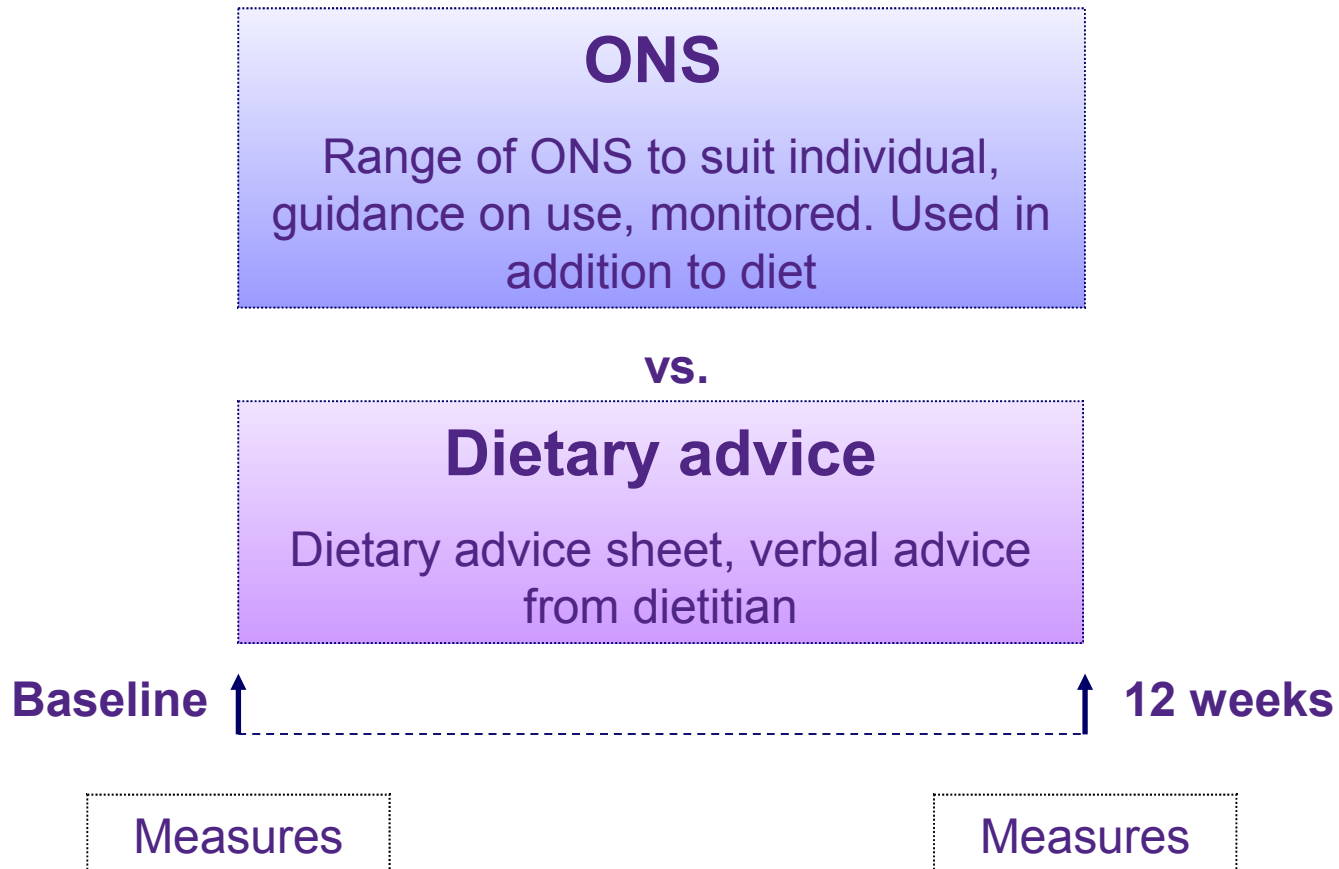


Would you spend money to improve quality of life? Need for evidence in care homes

- A substantial proportion of older people live in care homes
- At least one third of residents in care homes has malnutrition
- A recent systematic review highlighted a lack of data on the effects of any kind of nutritional support in care homes
- Effects of nutrition support on quality of life unclear

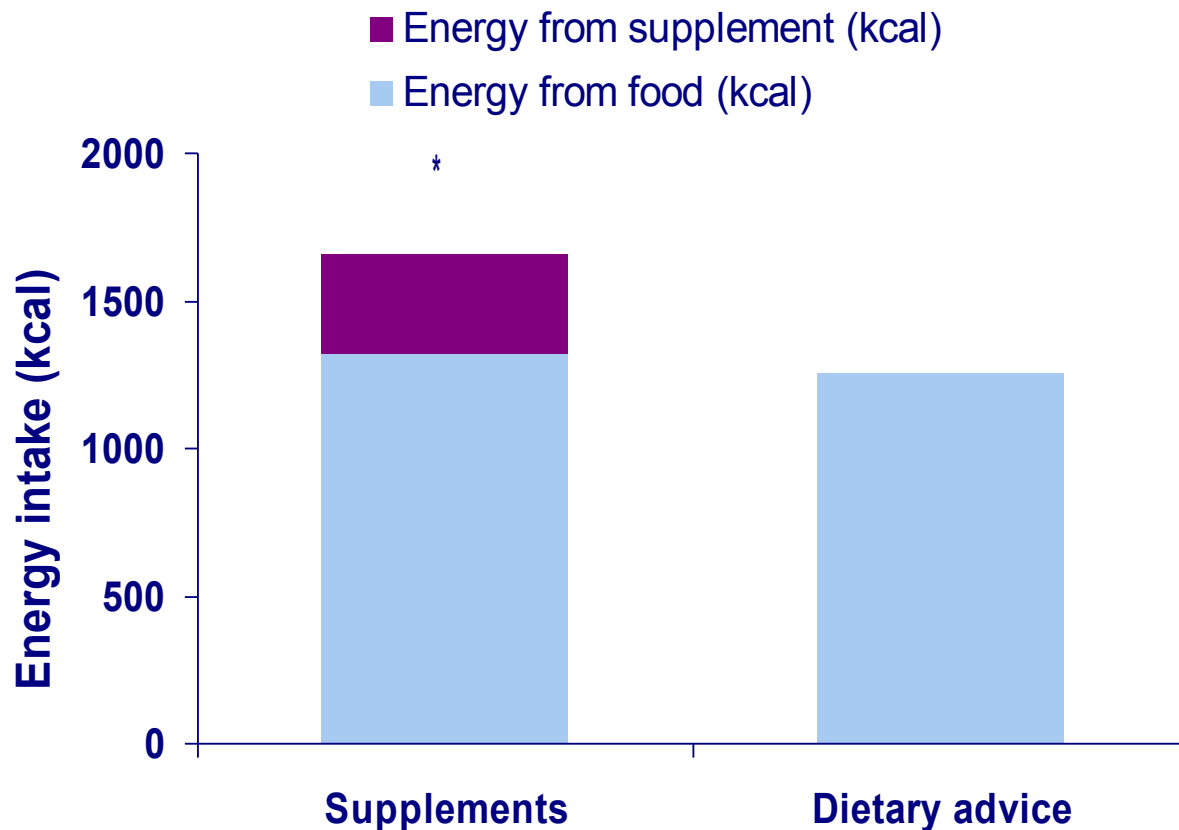


New RCT of oral nutritional supplements vs. dietary advice in care homes (Parsons et al PP021, PP022)

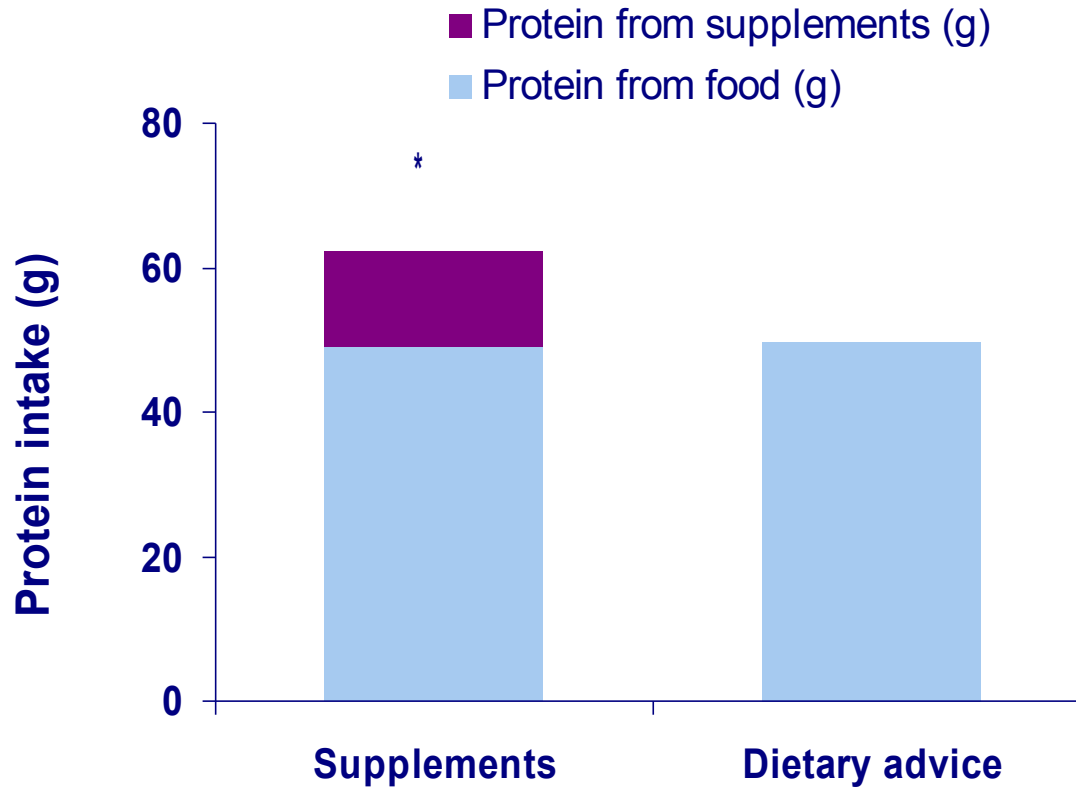


104 residents (57 residential, 47 nursing), age 88.3 ± 7.7 y, BMI 19.1 ± 2.7 kg/m²

ONS more effective at improving energy intake than dietary advice (Parsons et al PP021, PP022)



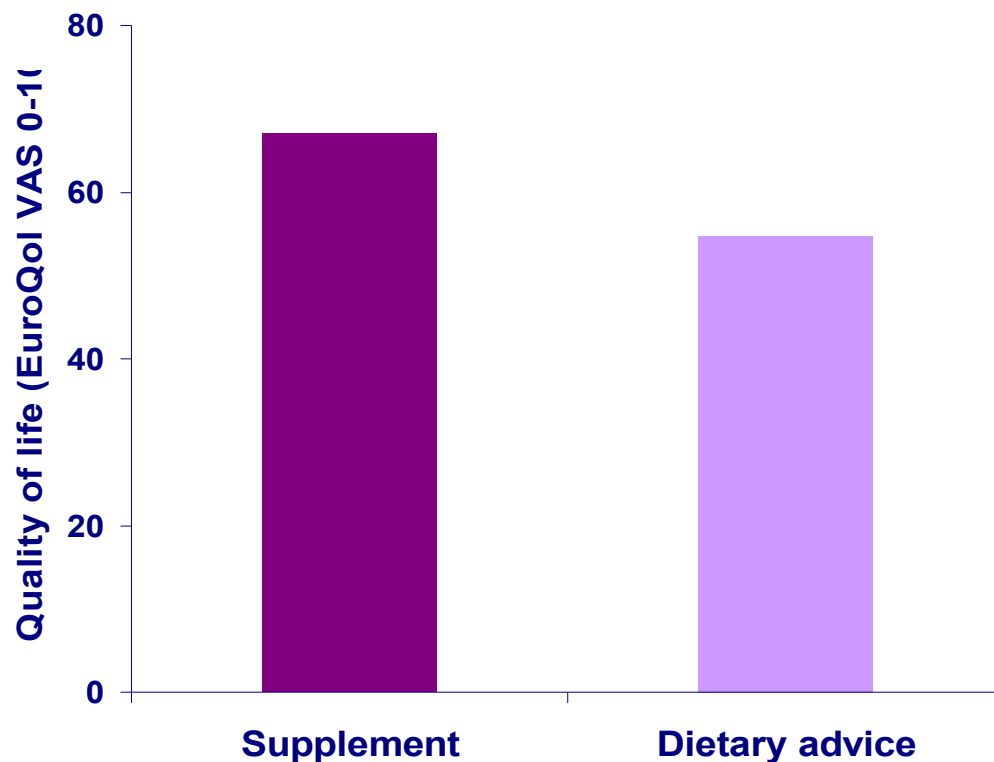
ONS more effective at improving protein than food first (Parsons et al PP021, PP022)



Similar **appetite (hunger and desire to eat)** in both groups despite the extra intake from supplements

ONS improves quality of life more effectively than dietary advice (Parsons et al PP021, PP022)

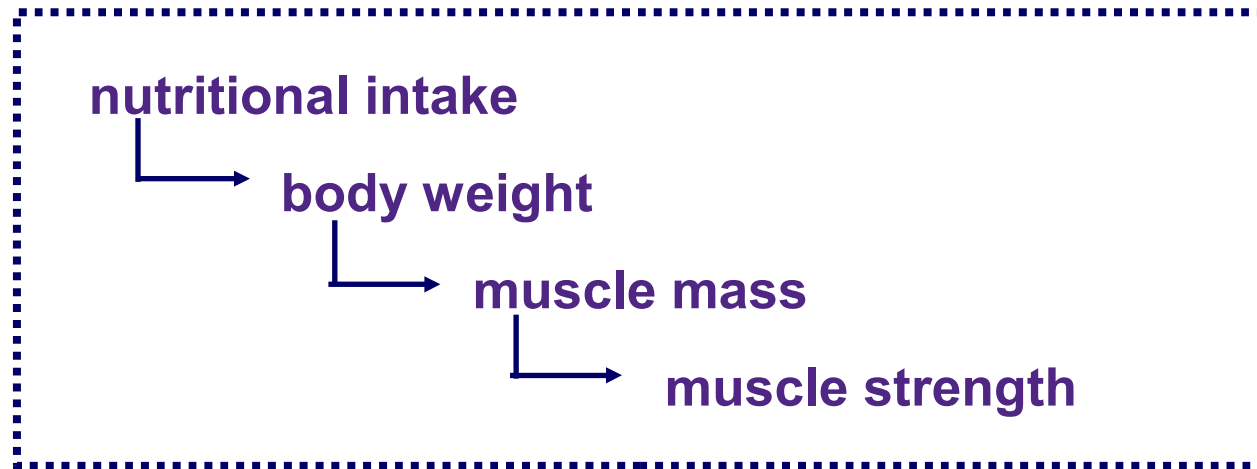
Quality of life (EuroQol 5D) significantly better in residents receiving ONS than food first



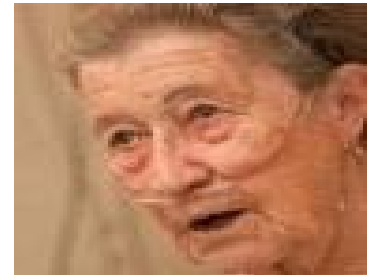
Economic analysis to follow

Evidence of benefit of nutrition support in specific patient groups?

A new systematic review (13 RCT) suggests **nutritional support in COPD significantly improves:**



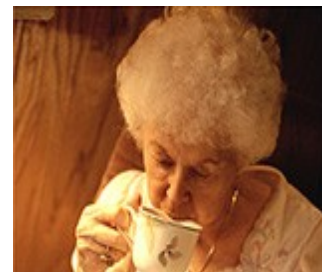
Collins et al PP102, PP103



For some conditions, strong clinical rationale exists for use of nutrition support but more evidence, including health economics, is needed (oncology, renal disease, paediatrics)

Impact of oral nutritional supplements: spend to save lives?

Meta-analysis	Mortality
Stratton et al 2003 (All)	OR 0.62 (95% CI 0.49-0.76)
NICE 2006 (Undernourished)	RR 0.81 (95% CI 0.68-0.97)
Milne et al 2006 (Elderly) undernourished aged ≥ 75 y offered ≥ 400 kcal/d	OR 0.66 (95% CI 0.49-0.90) OR 0.64 (95% CI 0.49-0.85) OR 0.85 (95% CI 0.73-0.99)
Koretz et al 2007 (Elderly)	-4% (95% CI -7% to -1%)



Mostly multi-nutrient, liquid ONS, 175-1000kcal/d, 1 wk to 2 y

Summary

- The economic climate means competition for resources and nutrition is a soft target.
- Cutting nutritional care may increase costs as individuals suffer the costly consequences of untreated disease-related malnutrition
- Evidence continues to emerge of the role oral nutritional supplements can play as part of the management of malnutrition in improving outcome
- As clinicians in the area we must educate decision makers so that patients who are malnourished are identified and get the treatment they need

**Improved outcomes with oral nutritional supplements –
we should spend to save..**

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