Nestlé HealthScience

The Value of

ORAL NUTRITIONAL SUPPLEMENTS

Oral nutritional supplements (ONS) can be classified as Foods for Special Medical Purposes, providing calories and nutrients to increase nutritional intake and support weight maintenance or weight gain in patients with (risk of) malnutrition who are able to eat, but unable to meet their nutritional needs[1]

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ONS CAN ALLEVIATE THE CLINICAL BURDEN
AND IMPROVE THE FUNCTIONAL STATUS OF PATIENTS WITH (RISK OF) MALNUTRITION

IMPROVE FUNCTIONAL STATUS

- In elderly patients, appropriate ONS use can **improve mobility[2], daily activities (ADL)[3], muscle strength[4,5], and help prevent falls and fractures[6]**
- ONS use can **improve bone mineral density and bone formation/resorption** in patients with osteoporosis[7] or recent hip/femoral neck fracture[8]

EFFECTIVELY ADDRESS NUTRITIONAL NEEDS AND INCREASE NUTRIENT INTAKES

- **Increase calories** in individuals in hospital[9], long-term care[10] and community settings[4]
- **Increase protein** in adult[10] and elderly[11] individuals across healthcare settings
- **Increase vitamins and micronutrients[12]**

- ONS providing > 400 kcal/day can **reduce the high mortality rates** in elderly people[11]
- **Reduce complication rates** in older hospitalized patients[11]
- **Reduce incidence of pressure ulcer[13]** and promote wound healing[14]

ACHIEVE CLINICAL BENEFITS

ONS CONSUMPTION HAS BEEN SHOWN NOT TO REDUCE FOOD INTAKE[9,10]

ONS HELP TO IMPROVE QUALITY OF LIFE

in elderly patients with (risk of) malnutrition[15,16,17]

APPROPRIATE USE OF ONS BRINGS ECONOMIC BENEFITS FOR HEALTHCARE SYSTEMS MEDIATED BY REDUCTIONS IN:

- Hospital costs, including shorter length of stay (LOS)[18], lower readmission and complications rates[4,15,19]
- Care requirements in non-hospital settings[20,21]

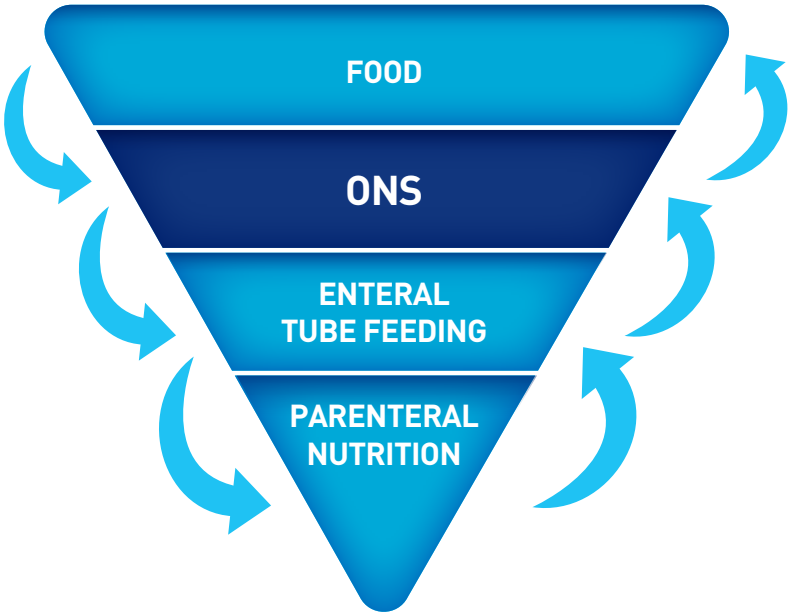
The **cost-effectiveness** of ONS has frequently been demonstrated in the **hospital setting**[20]

ONS are also likely to be **cost-effective** in the **community and care home settings**[21]

ONS **reduce hospital LOS** of approx. 2 days vs control[17], 30-day **readmissions** (16.1% vs 22.1%, p<0.0118) and **rehabilitation LOS** (26.2 vs 29.9 days, p=0.04) vs hospital diet in elderly patients after hip fracture[19]

ONS help to **reduce** the incidence of **institutionalization** of patients in a stroke rehabilitation[9,10]

GUIDELINES SUPPORT ONS AS A KEY INTERVENTION IN THE SPECTRUM OF NUTRITIONAL SUPPORT FOR THE MANAGEMENT OF MALNUTRITION[22, 23]



THE EUROPEAN SOCIETY FOR CLINICAL NUTRITION AND METABOLISM (ESPEN) GUIDELINES INDICATE KEY PATIENT GROUPS WHO SHOULD RECEIVE ONS:

(Grade A recommendations)[24]

Patients who are **undernourished or at risk of malnutrition:** to increase energy, protein and micronutrient intake, maintain or improve nutritional status, and improve survival

Geriatric patients after hip fracture and orthopaedic surgery: to reduce complications

Frail elderly: to improve or maintain nutritional status

Patients at risk of developing pressure ulcers: to prevent them, particularly with high protein ONS

MALNUTRITION IMPACTS CLINICAL AND HUMANISTIC PATIENT OUTCOMES AND ALSO AFFECTS DEVELOPPED COUNTRIES. For example, it has been estimated that **5% of the overall UK population** are at risk of malnutrition or malnourished[25]

In a large-scale multi-national study it was shown that **malnutrition remained high across all care settings[26]:**

REHABILITATION
Malnutrition 50.5%
Risk of malnutrition 41.2%

HOSPITALS
Malnutrition 38.7%
Risk of malnutrition 47.3%

NURSING HOMES
Malnutrition 13.8%
Risk of malnutrition 53.4%

COMMUNITY
Malnutrition 5.8%
Risk of malnutrition 31.9%

(Risk of) malnutrition is most common in the **elderly**, affecting as many as **69% in hospitals** and other care settings and **30%** in the **community[26,27]**

(Risk of) malnutrition leads to increased **mortality rates,** compared with well-nourished individuals[28]

Malnutrition increases **morbidity, including hospital admissions, complications, infections, and pressure ulcers[26,27,28,29]**

Malnutrition negatively impacts **functional status** parameters, **activities of daily living[30], muscle mass and strength[31], frailty[32], sarcopenia[33], and falls and fractures[34]**

(Risk of) malnutrition leads to **poor quality of life[25]**

THE ECONOMIC BURDEN OF MALNUTRITION IS HIGH[35,36,37]

cost being driven by increased resource use: hospital stays and readmissions, comorbidities (e.g. pressure ulcers), as well as long-term care[38,39,40,41]

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