

More Than a Milkshake

The real value of oral nutritional supplements



Martha Jackson

Medical Nutrition and Policy Manager,
British Specialist Nutrition Association
(BSNA)



Effective use of oral nutritional supplements (ONS) can have a profound impact, particularly when malnutrition remains one of the most under-recognised and costly health challenges facing modern healthcare systems.^{1, 2, 3, 4} Despite advances in medicine, large numbers of patients in hospitals, care homes and community settings continue to experience poor nutritional intake, weight loss and declining muscle mass during illness.⁶ ONS have become an essential component of nutritional care in the UK, recommended within the National Institute for Health and Care Excellence (NICE) Guidance, and widely used across healthcare settings to prevent and manage disease-related malnutrition when dietary intake alone is insufficient.^{6, 7} When used appropriately, ONS improve clinical outcomes, enhance quality of life and reduce healthcare costs,^{8, 9, 10} while supporting the aims of the 10 Year Health Plan by shifting care from hospital to community settings and from disease management to prevention.¹¹ Yet misconceptions about their role, including overreliance on ‘food first’ strategies alone, can delay effective treatment and worsen patient outcomes.

What are oral nutritional supplements?

Oral nutritional supplements (ONS) are specially formulated products designed to provide additional nutrition to individuals who have difficulty meeting their nutritional needs through regular food intake alone, providing energy, protein, vitamins, minerals and other nutrients in a concentrated form. They are usually provided as ready-to-drink liquids, powders which can be mixed with water or other liquids, or come in other formats such as pudding style.¹² ONS are intended to supplement normal dietary intake rather than replace food completely.

According to the NICE Clinical Guideline 32 (CG32),⁶ oral nutrition support includes fortified foods, snacks and ONS for individuals who are malnourished or at risk of malnutrition.

ONS are available in a variety of formulations to meet different clinical needs, including:

- High-energy supplements
- High-protein supplements
- Fibre-containing products
- Low volume products
- Nutrient adapted formulations intended for specific disease areas
- Texture-modified supplements for patients with swallowing difficulties.

These products can be either nutritionally complete or nutritionally incomplete and contain balanced amounts of macronutrients and micronutrients based on scientific standards and regulatory requirements for a disease, disorder or medical condition.

Conditions where ONS are used

ONS are used across a broad spectrum of healthcare settings and clinical conditions. Malnutrition is not limited to famine or poverty; it frequently occurs alongside disease and ageing.¹³ NICE Guidance recommends nutrition support for people who are malnourished or at risk due to inadequate intake, weight loss or increased metabolic demands.⁶

Common patient groups requiring ONS include:

Older adults: Older adults are particularly vulnerable to malnutrition because of reduced appetite, frailty, swallowing problems, dementia and chronic illness. In care homes and hospitals, poor nutritional status is associated with falls, pressure ulcers, infections and longer hospital stays.¹⁴

Cancer patients: Cancer and cancer treatments frequently reduce appetite and increase metabolic demands. ONS can help maintain weight and muscle mass during chemotherapy, radiotherapy or surgery.¹⁵

Surgical patients: Patients undergoing surgery can benefit from peri-operative nutritional support.⁶ Evidence suggests ONS can reduce complications after surgery.^{16, 17}

Gastrointestinal disease: Patients with inflammatory bowel disease, pancreatitis, malabsorption syndromes or short bowel syndrome may struggle to meet nutritional requirements through food alone.¹⁸

Respiratory disease: Chronic obstructive pulmonary disease (COPD) increases energy expenditure and muscle wasting. ONS have been found to increase body weight and exercise performance.¹⁹

Neurological conditions: Stroke and dementia can impair swallowing, appetite and self-feeding ability.^{20, 21, 22}

The benefits of early & appropriate use

The earlier malnutrition is identified and treated, the better the outcomes for patients and healthcare systems.²³ Delayed intervention often allows nutritional decline to progress to a point where recovery becomes slower, more complex and more expensive.

Research consistently shows that appropriate use of ONS can provide significant clinical benefits,^{24, 25, 26} including improved nutritional intake, weight stabilisation or gain, preservation of muscle mass, improved wound healing, reduced infection rates, shorter hospital stays, improved physical function and better quality of life. Studies in care home residents have also demonstrated that ONS improve quality-adjusted life years (QALYs) and can be cost effective when compared with dietary advice alone.²⁷

One of the most important aspects of nutritional care is timing. Patients who receive nutritional support early in the course of disease often avoid severe weight loss and muscle wasting. Once significant sarcopenia and frailty develop, recovery becomes substantially more difficult.²⁸ Early intervention also supports independence. Maintaining muscle strength and energy can help patients continue daily activities, avoid falls and remain living at home longer. This approach aligns with the UK Government's 10 Year Health Plan for England,¹¹ which emphasises a shift from hospital-based care towards prevention and community-based support.

The problem with 'food first' alone

A 'food first' approach, often known as 'food based', typically involves encouraging patients to increase oral intake through fortified meals, snacks and dietary advice before initiating ONS. This approach is widely recommended within UK practice, however NICE guidance emphasises that oral nutrition support should include a combination of dietary advice, food fortification and supplements tailored to individual patient need, rather than a rigid stepwise pathway.^{6, 29}

While food fortification has an important role, problems arise when 'food first' is applied as a strict barrier to timely nutritional intervention. Many patients, particularly those with poor appetite, fatigue or illness-related catabolism, are unable to meet their nutritional requirements through food alone. Individuals at risk of malnutrition often cannot consume sufficient food to meet energy and protein needs, particularly during illness or in older age.

The unintended consequences of prolonged reliance on 'food-first' strategies can be devastating, leading to continued weight loss, muscle wasting, delayed recovery, increased frailty, reduced treatment tolerance, poor wound healing and, in some cases, can lead to mortality.³⁰

For example, a frail older patient with a small appetite may need several hundred additional calories and substantial protein intake. Trying to achieve this through normal meals alone may not be practical. Nutritionally dense supplements can deliver these nutrients efficiently in small volumes.

Nutrition as a last resort is costly

NICE guidance does not position ONS as a last resort.⁶ Oral nutritional support includes fortified food, dietary advice and supplements used together according to patient need. Studies have shown that ONS is an effective way to improve nutritional intakes above dietary advice alone without impacting normal food intake.³¹

An overly restrictive approach to prescribing ONS may appear cost-saving in the short term but can create far greater costs through avoidable deterioration and hospitalisation in the long term. Considering individual patient need, situation and quality of life is important.

Some Integrated Care Boards (ICBs) have introduced policies whereby ONS prescribing is restricted until a patient is extremely malnourished. While a 'food first' approach should always be considered where patients are able to meet their nutritional requirements through diet alone, this is not achievable for many patients. A blanket policy of 'food first unless severely malnourished' risks creating unintended consequences for both patients and the wider healthcare system.

Many patients experience poor appetite, early satiety, nausea, fatigue, or difficulty eating, making it extremely challenging to consume sufficient calories and nutrients through food alone, particularly energy dense foods often recommended to support weight gain. In addition, the importance of adequate protein intake must not be overlooked, as malnutrition is closely associated with sarcopenia, reduced muscle strength, frailty and loss of functional independence.³²

The importance of flavour, format & patient choice

To maximise both clinical and cost-effectiveness, compliance is one of the most critical factors in successful nutritional support,³³ and compliance can be affected by many factors, including taste, variety and palatability.³⁴

Taste fatigue is common, particularly when patients are expected to consume supplements for weeks or months. This is why manufacturers invest heavily in developing a wide range of flavours, textures and formats.

Flavour variety supports long-term adherence. Individual preferences differ significantly, especially among older adults and those undergoing treatments such as chemotherapy that alter taste perception.

Providing choice improves compliance, nutritional intake, clinical benefits and overall patient satisfaction.³³

The central role of dietitians

Dietitians play a vital role in nutritional assessment, diagnosis and treatment planning.²⁹ Nutritional care should involve an individualised assessment with ongoing monitoring. Taking into consideration a person's weight history, nutritional needs, physical capabilities, disease state, and preferences is key to determining whether patients require food fortification, ONS, enteral feeding or broader multidisciplinary intervention.

Dietitians are also essential in ensuring appropriate prescribing and preventing unnecessary or prolonged use of nutrition support. They should review effectiveness, monitor outcomes and adapt treatment plans over time.

Importantly, dietitians support patient education and behaviour change. Encouraging adherence, explaining the rationale for treatment and tailoring plans to individual lifestyles all improve outcomes.

The economic burden of malnutrition

Disease-related malnutrition represents a major economic burden on healthcare and social care systems. The estimated cost of malnutrition in England is approximately £19.6 billion annually, accounting for around 15% of total health and social care expenditure.^{1, 2}

The vast majority of these costs are not from nutritional products themselves, but from the consequences of untreated malnutrition, including longer hospital stays, increased complications, higher readmission rates and increased GP visits.¹

The expenditure associated with malnourished patients is substantially higher than for well-nourished individuals, estimating to cost three times more for a malnourished patient.²

Despite public concern over prescribing costs, ONS represent only a small fraction of overall healthcare spending. The costs of nutritional supplements are often outweighed by savings from reduced complications and shorter admissions, along with better treatment tolerance.²

Implementation of NICE nutritional guidance could generate net cost savings due largely to appropriate use of ONS, with estimated savings ranging from £172 million to £229 million annually in England.³⁵

Importantly, these savings extend beyond hospitals. Improved nutrition reduces pressure on community services, carers and residential care facilities.

In January 2027 the International Classification of Diseases, 11th revision (ICD-11) will be updated by the World Health Organization (WHO) to include '5B72 Undernutrition in adults', so that undernutrition can be coded for the first time. This code will include 3 subgroups:

- 5B72.0 – Undernutrition in adults related to disease with moderate to severe inflammation
- 5B72.1 – Undernutrition in adults related to disease with non-discernible inflammation
- 5B72.2 – Undernutrition in adults related to starvation.

This is a huge advancement for the recognition of undernutrition and highlights the importance of nutritional status and nutritional care. The UK has announced they will be transitioning from ICD-10 and implementing ICD-11 in the coming years.

Regulation & safety of the industry

ONS are highly regulated products manufactured to strict food safety and nutritional standards. In the UK and Europe, ONS are classified as Foods for Special Medical Purposes (FSMPs), designed specifically for the dietary management of a disease, disorder or medical condition, to be used under medical supervision, and fall under the broader framework of Foods for Specific Groups (FSG).

- **Foods for Specific Groups (FSG) Regulation (EU No 609/2013):**³⁶ This is the overarching framework regulation covering composition and labelling for FSMP, infant formula, and total diet replacements.
- **Food for Special Medical Purposes (FSMP) Regulation (EU 2016/128):**³⁷ This delegated regulation sets specific requirements for FSMP, including compositional criteria (vitamins/minerals), mandatory labelling, and the requirement to notify the Department of Health and Social Care (DHSC) when products are placed on the market.

For reimbursement purposes, in the UK, ONS are classified as 'borderline substances' and are assessed and approved by the Advisory Committee on Borderline Substances (ACBS).³⁸ In addition, healthcare professionals carefully assess suitability before prescribing.

The industry also invests significantly in clinical research, product innovation and sustainability initiatives. Advances in formulation continue to improve palatability, nutritional density and patient experience.

The overall value of oral nutritional supplements

ONS are far more than 'milkshakes' or convenience products. They are clinically validated interventions that address a major and costly healthcare problem. When integrated appropriately into nutritional care pathways, they improve patient outcomes, preserve independence and reduce avoidable healthcare expenditure.

Nutrition should always be thought of as a first-line intervention. Delayed or inadequate nutritional intervention often places a far greater financial burden on healthcare systems than providing timely, preventative support. Despite this, nutrition is too often overlooked, with more costly treatments frequently prioritised when they may not be necessary. Nutritional care should be embedded within every disease pathway, and every patient should have access to timely, appropriate, and effective nutritional support.

A balanced and evidence-based approach is therefore essential. Food-based strategies remain important, but they should not prevent timely access to clinically appropriate nutritional supplements when patients cannot meet their dietary requirements through food alone.

As healthcare systems continue to face pressures from ageing populations, chronic disease and rising care costs, ONS will remain an increasingly important part of effective, preventative and person-centred care.

Patient case study

An 80-year-old woman saw her GP with pain in her side after pulling a muscle in her back and was prescribed painkillers. After some time, due to the persistent pain, she was prescribed morphine patches for symptom management. Her appetite became severely suppressed and she began losing weight rapidly.

Concerned about the unexplained weight loss, along with the continued persistent pain, her doctor arranged cancer investigations in January 2024, followed by a DEXA scan, both of which returned negative results. Despite this, she continued to deteriorate over the following months, becoming increasingly frail, losing significant muscle mass and was admitted to hospital on more than one occasion.

She experienced breathlessness and her anxiety increased; she was prescribed anti-anxiety medication. Nutrition support was not considered during the early stages of investigations despite other multiple explorative interventions taking place at NHS expense. Concerned about her weight loss and frailty, her family advocated for nutritional support, but she was told to increase her calories with food, including 'eat more cream' despite feeling nauseous and having a poor appetite.

During this period, she lost physical function, the ability to do daily activities such as getting dressed and eventually walking, considerably impacting not only her quality of life, but also the family around her.

She was eventually prescribed ONS a year later in January 2025. However, by this stage, the prolonged period of poor intake had already led to substantial physical decline, and she was unable to benefit from additional nutritional support, and her condition sadly worsened.*

*Case study provided by family member perspective.

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About the British Specialist Nutrition Association

BSNA is the trade association representing manufacturers of products designed to meet the particular nutritional needs of individuals; including specialist products for infants and young children (including infant formula, follow-on formula, young child formula and complementary foods), medical nutrition products for diseases, disorders and medical conditions, including oral nutritional supplements, enteral tube feeding and parenteral nutrition, as well as companies who aseptically compound chemotherapy, parenteral nutrition and CIVAS.

