Malnutrition matters. Too little, too much or an incorrect energy, protein, and micronutrient balance not only affects anthropometry, but impacts on function, disease risk, and clinical outcomes.1 ‘Malnourishment’ may apply to normal or overweight individuals but usually refers to those who are underweight and affects an estimated 3 million people in the UK, with older people being at higher risk.2 Surveys suggest the majority at risk or affected by malnutrition live in the community (93%), largely in their own homes, 2–3% in sheltered housing, plus around 5% in care homes. Only 2% are in hospitals.3 Thus malnutrition is not a ‘third world’ or even secondary care phenomenon: the growth of our older population suggests that the burden of community malnutrition will increase.

Disease-related malnutrition has detrimental physiological, psychosocial, and clinical effects impairing quality of life, delaying recovery from illness and surgery, plus increasing morbidity and mortality.4 One only needs to recall the misery of temporary, appetite-suppressing illness to imagine enduring chronic malnutrition. Malnutrition is costly, triggering more GP contacts than well-nourished individuals, and correlating directly with increased length of hospital stay, treatment costs, time to return to usual life, and rates of hospital readmission. Overall, malnutrition leads to an estimated £13 billion annual cost to the public sector (2007 prices).3

**CLINICALLY COSTLY**

Unravelling the costs of malnutrition from the inevitable costs of the coexisting chronic diseases, that it is strongly associated with, is not easy,5 but the high ranking of NICE Clinical Guideline 32 (Nutrition Support in Adults)6 in NICE’s cost-saving guidance7 supports assertions that ignoring malnutrition is inefficient; even if commissioners may be anecdotally plucking oral nutritional supplements (ONS) prescribing as the low-hanging fruit of prescribing budget savings.

The importance of malnutrition has now been endorsed by the new NICE Quality Standard for Nutrition Support in Adults8 which aims to promote cost-effective improvements to the care of those needing nutritional support by:

- preventing people from dying prematurely;
- enhancing quality of life and positive care experiences for people with chronic conditions; and
- hastening recovery from episodes of illness or following injury.

The NICE Quality Standard outlines the need to:

- screen for the risk of malnutrition in care settings using a validated screening tool;
- provide those affected with a management care plan addressing nutritional requirements;
- ensure that screening information and nutrition support goals are documented and communicated between healthcare settings; and
- train people and/or their carers who manage their own nutritional support.

**WHY IS MALNUTRITION OFF THE RADAR?**

For such a widespread significant problem, why has malnutrition attracted so little attention in primary care?

One recently addressed factor may be nutrition’s notable absence from most UK medical school curricula and postgraduate training, resulting in poor awareness, large knowledge gaps, and a deficit of nutrition-related competences. Lack of ownership among clinicians is another factor, because malnutrition, like other processes such as obesity, pain, and inflammation, cuts across traditional clinical specialty boundaries instead of falling neatly within one or other. Together, these factors are likely to have allowed technological and pharmaceutical approaches to overshadow nutritional and behavioural interventions in tackling major public health disorders including obesity and diabetes.

Reflecting this collective uncertainty and patchy knowledge, a host of unhelpful nutritional myths have also propagated and stabilised within our culture and have normalised nutritional problems. Although the myth of ‘eating for two’ in pregnancy and dismissive views of childhood obesity as ‘puppy fat’ are slowly being challenged, it is also timely to debunk the perception that weight loss is an inevitable part of ageing or that lower energy ‘healthy foods’ are appropriate for everyone.

But are clinicians actually unaware of malnutrition? Weight loss is a red flag for even the most inexperienced history taker, being commonly explored as a well-recognised symptom of underlying disease. Less commonly, clinicians recognise malnutrition as a modifiable entity that may influence disease outcome. Rarely, is there appreciation that malnutrition in the absence of disease is a risk factor for development of chronic disease. The social determinants influencing food intake and hence malnutrition, for example isolation and loneliness, poverty, poorly fitting dentures, inaccessible food outlets, difficulty in cooking, or supporting oneself to eat and drink, may be in operation long before associated comorbidities appear.

**FOOD, SUPPLEMENTS, OR BOTH?**

Following identification of at-risk patients by screening, is it clear what is the most appropriate and effective treatment of malnutrition for community patients? There is ongoing debate about the merits of ONS compared to first-line dietary advice (‘food first’; information on food fortification, snacks, food choices). Scepticism regarding ONS relate to its largely hospital-focused evidence base, the cost of ONS prescribing, and concerns around poor compliance. Issues around palatability, taste fatigue (particularly in the chronically sick requiring long-term supplementation), patient preference for ‘normal food’, and psychological factors...
that affect medication compliance such as motivation and perceived susceptibility may all impact, although a recent meta-analysis suggests this scepticism may be unjustified.10

Conversely, superficial dietary advice runs the risk of at-risk patients simply increasing calories without addressing essential protein and micronutrient requirements, and it is unfeasible for a food first approach to redress nutritional deficits in some patients, particularly those with anorexia and/or early satiety. Although dietary fortification and counselling can improve nutritional intake, the evidence base is weak for improved outcomes relative to the evidence for ONS, questioning whether food first can replicate the combination of nutrients found in ONS. In practice, both approaches are often used. Interestingly, a 2011 Cochrane review concluded that although it is possible to boost energy intake and weight gain with dietary advice with or without ONS, neither approach impacted on survival.10 This may reflect difficulties in influencing the multifaceted nature of chronic diseases. Still, there remains a need for high quality, randomised controlled trials comparing the clinical, economic, and nutritional consequences of different strategies in patients of similar nutritional status and risk category with a range of clinical conditions in a variety of community settings, to determine who will benefit from which nutritional intervention(s).

TARGETING ACTION

In the interim, we need to balance appropriate food first approaches for those at low to medium risk of malnutrition with ... targeted dietary advice and/or prescribing for those with established malnutrition, where benefit on morbidity is likely to counteract prescribing costs.

Rachel Pryke, Winyates Health Centre, Winyates, Redditch.

Berenice Lopez, Consultant Chemical Pathologist (Metabolic Medicine), Harrogate and District NHS Trust, Chemical Pathology/Metabolic Medicine, Harrogate District Hospital, Harrogate.

Provenance Commissioned; not externally peer reviewed.

DOI: 10.3399/bjgp13X665495

REFERENCES