Response of the British Dietetic Association Specialist Oncology Group to the *European Society of Parenteral and Enteral Nutrition (ESPEN) guidelines on nutrition in cancer patients Arends J et al, Clinical Nutrition 2016*

The ESPEN guidelines on nutrition in cancer patients were published in 2016. This short paper is a response from the committee of the British Dietetic Association Specialist Oncology Group following a discussion held at a committee meeting in July 2017 and agreed by the membership prior to publication.

National and international guidelines are often used in the clinical setting as a resource to influence nutritional management of people with cancer and to underpin evidence based dietary advice given to patients, either as verbal advice or in written format. Dietitians will also review individual papers to form a basis of their practice. The BDA Oncology Specialist Group welcomes the publication of the ESPEN guidelines and thanks ESPEN for the comprehensive review. They have stimulated discussion amongst those in clinical nutrition and oncology. We look forward to using these alongside international guidelines from other countries.

The following paragraph is taken from the ESPEN guidelines and outlines the development of the published paper.

These evidence-based guidelines were developed to translate current best evidence and expert opinion into recommendations for multi-disciplinary teams responsible for identification, prevention, and treatment of reversible elements of malnutrition in adult cancer patients. The guidelines were commissioned and financially supported by ESPEN and by the European Partnership for Action Against Cancer (EPAAC), an EU level initiative. Members of the guideline group were selected by ESPEN to include a range of professions and fields of expertise. We searched for meta-analyses, systematic reviews and comparative studies based on clinical questions according to the PICO format. The evidence was evaluated and merged to develop clinical recommendations using the GRADE method. Due to the deficits in the available evidence, relevant still open questions were listed and should be addressed by future studies.

The paper provides a comprehensive summary and background to the nutrition and cancer, particularly the disease trajectory, catabolic alterations in cancer, muscle depletion as a hallmark of cancer cachexia and the systemic inflammation syndrome. The effects on clinical outcome are described along with the aims of nutrition therapy.

The guidance is divided into the following sections:

B1 Screening and assessment
B2 Energy and substrate requirements
B3 Nutrition interventions
B4 Exercise training
B5 Pharmaconutrients and pharmacological agents

Interventions relevant to specific patient categories
C1 Surgery
C2 Radiotherapy
C3 Medical Oncology: Curative or palliative anticancer treatment
C4 Medical Oncology: High dose chemotherapy and hematopoietic stem cell transplant
C5 Cancer survivors
C6 Patients with advanced cancer receiving no anticancer treatment

Strengths of the guidelines

The guidelines provide a good starting point for the consideration of nutrition in cancer as they cover a broad range of topics applicable to clinical nutrition. They cover a wider scope than traditionally associated with ESPEN guidelines and include nutritional aspects for cancer survivors. It is useful to have the evidence systematically graded and the gaps in evidence highlighted using the recognised gold standard approach to guideline development i.e. GRADE. A prime strength of this paper has been the development of key research questions which require the formulation of appropriate studies with which to answer these. It was noted that the document is due to be reviewed in 3 years which is more timely than previous ESPEN guidelines. We welcome this plan to incorporate more recent work.

Weaknesses of the guidelines

The overall strength of published evidence to support the guidance is low or very low. Of the 42 recommendations, 30 are graded as low or very low evidence. Only 3 are strong with high evidence. The guidelines provide more questions than answers. As a result they rely on clinical experience and opinion of the authorship which is diverse both in country of origin and in profession. It is noted that although all have expertise in cancer this may vary in terms of their role in the provision of nutritional support, use of pharmacological agents and in appropriate advice and support to those living with and beyond cancer.

There are some important questions that were not addressed in the guidelines and examples including many of the key questions people with cancer ask health care professionals were not covered, such as, should I eat sugar? and should I take a vitamin and mineral supplement?

Some of the advice may impact on clinical practice eg. suggestion to recommend more fat in the diet than carbohydrate in those with insulin resistance. However, this is done without knowing the impact of increasing n3 or n6 fat in the diet. It is not clear from some recommendations whether they have been trialled in practice and whether they are actually achievable, for example, the suggested protein intakes.

Some key aspects of dietary counselling were not reviewed in detail, for example, the most effective advice to increase dietary intake (dietary counselling advice and impact of change in meal pattern). Also, the most effective way of managing symptoms with dietary intervention such as taste changes, poor appetite, anorexia and the most appropriate timing of nutritional support ie. the reactive versus the proactive approach

Reference is made to cancer survivors and the importance of body weight and lifestyle, however, this is a complex area with different dietary priorities in varying diagnostic groups for example, lung versus breast or prostate cancer which is not really explored

Late effects of cancer treatment are now well recognised and include gastrointestinal, cardiac, haematological, bone, endocrine and metabolic effects. The guidelines do not include reference to the contribution of nutrition to the development of these effects, nor to the therapeutic use of nutrition in their management. As survival continues to increase this is going to become an increasingly important aspect of management of such effects of cancer treatment.

Summary

The British Dietetic Association Oncology Specialist Group welcomes the publication of the work and thanks ESPEN for the production of these important guidelines. They are being used in the clinical setting and will also encourage our membership to continue to use critical appraisal skills and consider the strength of evidence when changing practice.

The lack of evidence to support the basic and life sustaining intervention of nutrition is of great concern. Research in cancer is so focused on novel treatments with trials, often funded by pharmaceutical companies, yet we still do not have the research data to support basic questions on the best time and method for providing nutrition to those with cancer and how this impacts on overall toxicity of treatment, tolerance to treatment, quality of life and survival. Many key questions that patients ask are not answered by the guidance, nor is there sufficient research evidence to provide such answers.

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The provision of dietary advice and nutritional support is recommended, however, there continues to be little research on the optimal approach to providing such dietary counselling and how best to manage nutrition related symptoms arising as a result of cancer and its treatment.

The BDA Oncology Specialist group has developed an outcome tool which allows goal setting by both the Dietitian and the patient. We see the ESPEN paper as an opportunity for Dietitians to collect information regarding the practical implementation of the advice and whether it is achievable. For example, the recommendations for dietary protein intake, could be monitored and assessed by the routine use of dietary assessment tools and the appropriate use of the outcome measure.

We would strongly recommend that the implementation of the ESPEN guidance should be led by a Registered Dietitian, the most appropriate health care professional managing food and drink. We would also recommend that the research questions raised, in addition to other questions raised in this paper and by those with cancer, are addressed as a priority through national and international collaboratives.