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Guidance for the Nutritional Management of Cancer Patients

Printed January 2010

Guidance for the Nutritional Management of Cancer Patients

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Review July 2013
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Acknowledgements

I would like to acknowledge with thanks the help and assistance received from the following:

Tessa Aston, Macmillan Specialist Dietitian

Her work inspired and motivated me to develop this guidance document. Tessa gave her permission to use parts of her previous work within this document. All her comments and support are greatly appreciated.

Bella Talwar, Clinical Lead Dietitian and Standards Representative BDA Oncology Committee

She peer reviewed the guidance document for the BDA Oncology Group. Bella's advice, comments and positivity have been invaluable.

Professor Judy Bauer PhD, AdvAPD, Nutrition Services Manager, The Wesley Hospital and Adjunct Assoc Professor School of Public Health, Queensland University of Technology, Brisbane, Australia

Prof. Bauer has kindly gave her permission for the adaptation of the action plan that was developed for the malnutrition screening tool (MST) and provided comments on the draft document.

The Northern Ireland Oncology and Haematology Group

For their comments on the guidance document.

The Nutrition and Dietetic Department Southern Trust

For their comments on the guidance document.

Macmillan Cancer Support for support in developing and funding the printing of this document.

Preface

This guidance document aims to standardise nutritional management for cancer patients in line with best available evidence. It should prompt increased, more timely and appropriate nutritional intervention for cancer patients across the Southern Trust.

The document has been peer reviewed by the British Dietetic Association Oncology Group and is intended to be used by Staff in the Southern Health and Social Care Trust. Some aspects of the document will require training from the Community Macmillan Specialist Dietitian before full implementation is possible.

Introduction

Nutritional decline and malnutrition are often an accepted part of cancer and its treatment (Aston 2006). Malnutrition is more prevalent in patients with solid tumours for example the elderly and those with advanced disease. Weight loss has been reported to range from 9% in patients with breast cancer to 80% of patients with oesophageal cancer (Capra et al 2001).

Studies show poorer response rate to anti-cancer treatment, a reduced quality of life, change in self image and increased risk of death in those patient who have lost weight (DeWys et al 1980, Spiro et al 2006).

In addition, as many as 20% of patients with cancer die from the effects of malnutrition or treatment–related inanition (Ottery 1994).

The aetiology of malnutrition in patients with cancer is multifactorial. The systematic and local effects of the tumour, the side effects of the anticancer treatment (Capra et al 2001) along with psychological factors and existing co-morbidities contribute to malnutrition in this patient group.

There is overwhelming evidence in the literature that weight loss and malnutrition are adverse prognostic factors in patients with cancer. This highlights the need for early identification and treatment of malnutrition in patients with cancer (Capra et al 2001).

Best practice suggests that nutrition screening should form part of the assessment at appropriate points along the patient's cancer journey (Capra et al 2001; NICE 2006; RCN 2007).

Cancer care can last from a few days to months and/or years. Consequently the nutritional needs of patients with cancer can also vary widely. Evidence suggests that the key to better management of nutrition in palliative care patients is timing (Isering et al 2004), with the appropriate intervention and realistic goal setting.

This guidance document includes:

- A definition for three stages of the cancer journey discussed in this guidance document. It states the aim of nutritional care, the appropriate nutritional intervention and monitoring of patients at each of the three stages discussed.
- A malnutrition screening tool, which has been validated for use with cancer patients. **It is only appropriate to use with patients who are undergoing curative treatment or early palliative care stage of their cancer journey.** This is supported by an action and intervention plan following screening.

- A discussion on Cancer Cachexia Syndrome.
- Evidence based information on end of life care, cancer cachexia and use of EPA (nutritional supplements with Fish oils) and appetite stimulants.
- Patient information leaflets. These can be used as resources by staff trained by the Macmillan Specialist Dietitian.
- Information on oral nutritional supplements (ONS) for health professionals.
- Triggers for when and how to make referrals to the Dietitian.
- Discussion on supporting carers.

Three stages of a cancer journey are discussed in this guidance document:

1. Patients undergoing cancer treatment with a curative intent / early palliative care.
2. Patients in late stage of palliative care.
3. Patients in the terminal phase of their cancer journey or last days of life.

Although this guidance document has divided the nutritional management for cancer patients into three sections it is important to remember that supportive and palliative care may run through any stage of the patient's cancer journey.

Supportive Care

The National Institute for Clinical Excellence (NICE) on Cancer Services – Improving Supportive and Palliative Care for Adults with Cancer (2004) have used the working definition of supportive care suggested by National Council of Hospice and Specialist Palliative Care (NCHSPC).

'...helps the patient and their family to cope with cancer and treatment of it – from pre-diagnosis. Through the process of diagnosis and treatment, to cure continuing illness or death and into bereavement. It helps the patient to maximise the benefits of treatment and to live as well as possible with the effects of the disease. It is given equal priority alongside diagnosis and treatment.'

Palliative Care

NICE (2004) have used the World Health Organisation, National Cancer Control Programmes (2002) definition of palliative care.

'...the active holistic care of patients with advanced, progressive illness. Management of pain and other symptoms and provision of psychological, social and spiritual support is paramount. The goal of palliative care is achievement of the best quality of life for patients and their families. Many aspects of palliative care are also applicable earlier in the course of the illness in conjunction with other treatments.'

Guidance for the Nutritional Management for Patients Undergoing Curative Treatment or Patient in Early Palliative Care

The goals of nutritional care are to support nutritional status, body composition, functional status, and quality of life, whether the oncological aim is cure or palliation. Proactive nutritional assessment and early intervention are the cornerstones of successful management of malnutrition. Effective management of nutrition-related problems can improve quality of life. Failure to address nutrition is associated with longer hospital stays, higher health care costs, increased risk of complication such as weakness, lethargy, inability to tolerate treatment, impaired wound healing and increased susceptibility to pressure sores and infection. In those patients with radical intent, nutrition management can affect treatment outcome (Ottyer 1995; Hill and Hart 2001). Identifying and treating nutrition problems early may help the patient gain or maintain weight, improve the patient's response to treatment and reduce complications as previously stated (Langer et al 2001; Strasser 2003). Ravasco et al (2003) states that individualised nutritional counselling accounting for nutritional status and clinic condition was able to improve nutritional intake and improve patient's quality of life.

For the purpose of this guidance document

Curative intent is defined as:

To restore to normal health after an illness. The term usually means the disappearance of a disease rather than a halt in its progress. Medication or therapy that ends an illness may also be termed a cure (BMA 2002).

Early palliative care is defined as:

- *Patient diagnosed with a disease or disorder that cannot be cured. Death is not likely to be imminent and the patient may have months or even years of life and quality of life may also be good.*
- *Patient may be undergoing palliative treatment to help improve quality of life (Aston 2006).*

Aims of Care

- Identify patients who are at risk of malnutrition or who are malnourished with nutritional screening.
- Proactive dietary management to reduce or reverse malnutrition.

Nutrition screening and assessment for these patients should be a priority (Capra 2001).

Intervention

- All patients undergoing curative treatment or who are in the early palliative care stage of their journey should be screened with the Malnutrition Screening Tool (MST).
- The intervention should be as per intervention flow chart/plan.

Malnutrition Screening Tool (MST)

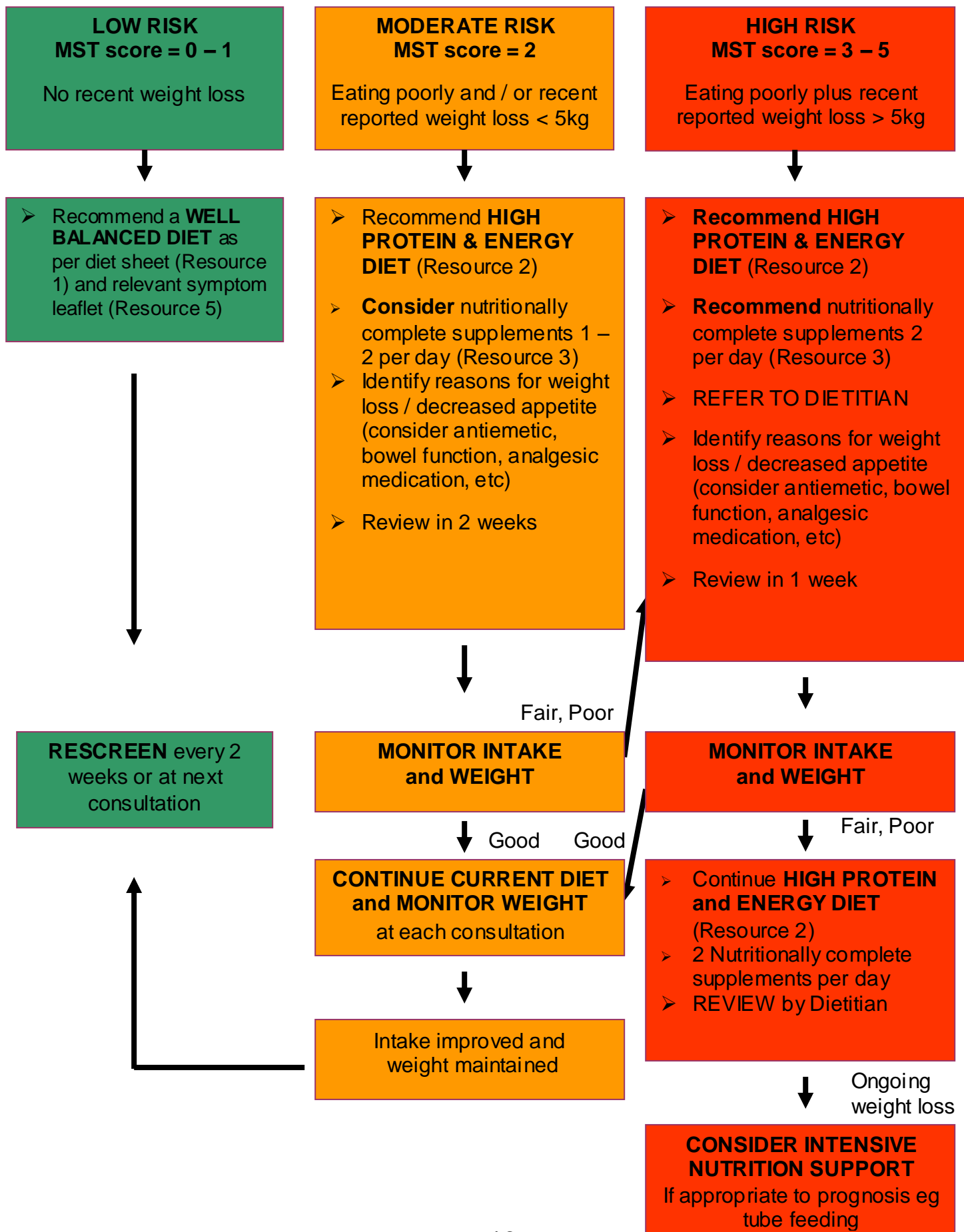
Question	Score
Have you lost weight recently without trying? <div style="text-align: right; padding-right: 20px;"> No Unsure Yes </div>	0 2 see below for score
If yes how much weight (kg) have you lost? <div style="text-align: right; padding-right: 20px;"> 0.5-5.0 >5.0-10 >10.0-15 >15 Unsure </div>	1 2 3 4 2
Have you been eating poorly because of a decreased appetite? <div style="text-align: right; padding-right: 20px;"> No Yes </div>	0 1
Total	
If total score 0 or 1 not a risk of malnutrition If total score \geq 2 at risk of malnutrition	

(Ferguson et al 1999)

Weight Conversion Chart		
Stones	Lbs	Kg
0.25	3.5	1.58
0.5	7	3.18
1	14	6.35
2	28	12.7
3	42	19.05
4	56	25.4
5	70	31.75
6	84	38.1
7	98	44.45

Malnutrition Screening Tool (MST)

INTERVENTION FLOWCHART



Malnutrition Screening Tool (MST) Intervention Plan

Screen patient with the MST screening tool

If patients score 0 - 1 LOW RISK

- The patient will report to be eating well/ normally with no recent weight loss.
- Recommend a well balanced diet (see resource 1).
- Re-screen patient every two weeks or at next consultation.

If patient scores 2 MODERATE RISK

- The patient will be eating poorly and or may present with recent weight loss < 5kg.
- Commence on a high protein/high calorie diet. (see resource 2)
- Other advice on symptom control can be accessed from the cancerbackup website (<http://www.cancerbackup.org.uk>). The nutritional status for most patients with MST score of 2 (Moderate Risk) may be able to be managed with a high protein high kcal diet alone.
- Only consider starting patient on nutritionally complete supplement(s) (by 1-2 per day (resource 3)) if nutritional intake will be compromised further in the coming weeks or if the patient is unlikely to meet requirements with food alone. **If a patient is commenced on oral nutritional supplements for longer than 6 months please refer the patient to the Dietitian (Thomas & Bishop 2007).**
- Review in 2 weeks, to monitor intake* and weight**.
- Continue patient on high protein/high Kcal diet and monitor*at each consultation.
- If intake improves and weight is maintained continue on present diet.
- Re-screening every two weeks or at next consultation.
- If weight or intake decreases further the patient will move into the high risk group. Please refer the patient to the dietitian (with the patient consent) and commence on 2 nutritionally complete supplements per day if not already started on same (see resource 3).

If patient scores 3- 5 HIGH RISK

- The patients will be those eating poorly plus recent weight loss > 5kg.
- Commence patient on a high protein / high Kcal diet. (resource 2).
- Start on 2 nutritionally complete supplements per day (resource 3).
- **Refer patient to the Dietitian with the patient consent (Appendix 7).**
- Monitor patient as per guidance until the patient is seen by the Dietitian.
- Encourage the intake of high protein / high Kcal diet and nutritionally complete supplements.
- The Dietitian will continue the nutritional management of these patients, considering aggressive nutritional support (e.g. enteral nutrition) if appropriate to prognosis.

Monitoring*

Parameters to include:

- Identify weight loss, stabilisation or gain (may repeat screening).
- Changes in nutritional (and fluid) intake – quantity, type, variety.
- Effectiveness of interventions (e.g. change of drug therapy/change texture of food/bowel function/swallowing function).
- Skin condition or other symptoms indicative of malnutrition.
- Compliance with nutritional support.
- Frequency of the monitoring will depend on clinical condition of the individual (stable, deteriorating and improving).

Identify reasons for Weight Loss/Decreased Appetite

You should find out the following information:

1. Is the patient's normal food intake reduced? If so why? Is it due to uncontrolled pain, anxiety, oral problems e.g. dry or sore mouth, taste changes etc?
2. Does the patient have difficulty eating? (Needs help with feeding, swallowing problems, poor dentition, is not able to cook for self).
3. Does the patient suffer with diarrhoea, constipation, nausea, vomiting, and/or fatigue?
4. Does the patient have poor appetite?
5. Does the patient present with psycho-social or financial distress?

Weighing Patients**

It may not be practical to weigh the patient. Patients and their carers can get very anxious about change in body weight. Only weigh the patient if the result will affect the decision you make about assessment/intervention or referral on to a dietitian.

The patient may already be able to tell you what their weight is and how much weight he/she has lost. The MST Screening Tool use patients reported weight.

Remember that body weight alone may not be an accurate indicator of the patient's nutritional status i.e. fluid retention / ascites etc.

NOTE

If you decide to prescribe/recommend an oral nutritional supplement, ensure it is nutritionally complete. These are defined as produce suitable as a sole source of nutrition (see resource 3). 1 week supply only should be requested initially to check tolerance/palatability and followed up with a further prescription for a three week period as required (Thomas & Bishop 2007).

Guidance for Nutritional Management for Patients in Late Palliative Care

The goal of nutrition therapy should NOT be weight gain or reversal of malnutrition, but it should be about quality of life including comfort, symptom relief and enjoyment of food (Kerry 2000). Aggressive feeding may not be appropriate especially if eating and drinking cause discomfort/anxiety to the patient.

Therefore weighing this group of patients or screening with the MST screening tool is not advised.

For the purposes of this guidance document late palliative care is defined as:

Patient experiencing a general deterioration in condition. Appetite reduces and the patient becomes increasingly fatigued. Other symptoms may also be increased. Carer's anxieties may increase at this time and they may become progressively more concerned about the patient's food intake (Aston 2006).

Aims of Care

- Optimal management of nutrition related symptoms.
- Improved sense of well being by the patient.
- Optimising patient's quality of life by working with the patients agreed realistic goals.

Intervention

- Reassurance and support to patients and carers that this is a normal response to their illness.
- Treat reversible symptoms (e.g. poor appetite, constipation, nausea) and consider appetite stimulants.
- Dietary intervention should focus on enjoyment of food and drinks and alleviation of pressure on the patient to maintain a normal diet. For some patients it may be appropriate to discuss a high protein/high Kcal diet but for others a focus on increasing intake may add to their anxieties and stress.
- Oral nutritional supplements may be beneficial in some patients on psychological grounds. Patients should not be made to feel that they have to take these or be given false hope that these will improve their nutritional status. If oral nutritional supplements are felt to be beneficial in psychological reasons and the patient wishes to try them, 'Over-the-counter' products should be suggested first. (e.g. Build-Up's, Complian (see resource 3)). If the patient dislikes these but would like to try a prescribable oral nutritional supplement and discuss this with the GP.

- Appropriate written information should be given to the patient to reinforce the advice given. The recipe ideas for nourishing drinks and supplement drinks may also be useful (Resource 4). Other advice on symptom control can be accessed on the cancerbackup website (<http://www.cancerbackup.org.uk>).
- It may not be appropriate at this stage to refer the patient to the Dietitian but contact should be made if you have any concerns or if the patient has queries that you are unable to answer.
- If the patient is already known to the Dietitian the focus will be on comfort and reassurance providing support to both the patient and carers. The Dietitian will liaise with other health care professionals involved with the patient and provide advice and support when needed.
- It may be appropriate to relax strict dietary restrictions e.g. diabetes diet. Please contact the dietitian if you wish to discuss.

Monitoring

The patient should be monitored as appropriate, focusing on the enjoyment of food and symptom control.

Guidance for the Nutritional Management of Patients in the Last Days of Life

The taking of food and fluid is extremely symbolic in our society. Many people see food and fluid as an essential part of sustaining life and, even in the face of a terminal illness, carers may equate the giving of food with giving love. These are natural and normal reactions and need to be considered and discussed (Higginson 2006).

There is little published robust evidence to guide the management of fluid and nutritional requirements in palliative patients in the last days of life (Bridge et al 2007).

For the purpose of this guidance document last days of life is defined as:

The patient is likely to be bed bound, very weak and drowsy with little interest in food or drinks. Evidence suggests that when patients are close to death, they seldom want nutrition and /or hydration and its provision may in fact, exacerbate discomfort and suffering (BMA 2007).

Aims of Care

- To provide comfort for the patient.

Intervention

- Mouth care, sips of food/fluid as desired by patient.
- If appropriate follow Liverpool Care Pathway Guidelines.

Dietetic referral is usually inappropriate

Cancer Cachexia Syndrome

The term cachexia is derived from the Greek words kakos and hexis meaning poor condition. There is no universally accepted definition or method of diagnosing cancer cachexia. Clinical signs include anorexia, muscle wasting, changes in taste perception, early satiety, weakness and extreme weight loss (Matthews 2000). It also presents psycho-social and emotional consequences for both patients and their carers such as anxiety, conflict around food, altered body image and low mood. It is a complex syndrome that is not completely understood. Cancer cachexia is most commonly seen with solid tumours e.g. stomach, pancreas, lung colon (DAA 2006).

The Impact of Cancer Cachexia on Nutritional Status

Its presentation is not simply due to a decreased intake. Weight loss in cancer cachexia is different from weight loss in starvation. In simple starvation the body undergoes changes to reduce the energy expenditure, conserve protein and utilize fat for energy source. With cancer cachexia these adaptations are reduced or absent, and energy requirements may be increased and protein loss continues. This causes an accelerated loss of skeletal muscle in relation to adipose tissue (fat) (Barber et al 1999).

The mediators of cancer cachexia response are produced by both the tumour and the body's response to the tumour (Kenneth et al 2006). These mediators are thought to cause the abnormalities in carbohydrate, fat and protein metabolism, with biochemical and metabolic disturbances (De Blaaw 1997 cited in DAA 2006).

Weight loss due to cachexia may not be fully reversible because the host metabolism is abnormal with derangements including anaemia, acute phase protein response and alterations in plasma lipid profile (De Blaaw 1997 cited in DAA 2006).

Aims of Care

- Weight stabilisation is an appropriate goal for weight losing patients if prognosis is greater than 2 months (DAA 2006).
- To maximise patient comfort and maintain quality of life is the aim for patients in end stage of their disease (DAA 2006).
- Provide psychological support for patients and carers (Appendix 6).

Intervention

The available therapeutic interventions for patients suffering from anorexia/cachexia syndrome include:

- Actions against the primary cause such as cancer (i.e. anti-cancer treatment).
- Management of aggravating factors (nausea, vomiting, pain, psychological distress).
- Appropriate nutritional management (see relevant section for the nutritional management of cancer patients in this guidance document).
- Use of pharmacological treatments (appendix 4 and appendix 5).
- Advice and sympathetic support for patients and carers (appendix 6 and resource 5).

Glossary of Terms

EPA

Eicosapentanoic acid, an omega-3 fatty acid found in fish oil.

GSF

Gold Standards Framework, is a framework to improve the supportive/palliative care of patients in the community nearing the end of their life.

Malnutrition

A state of nutrition in which a deficiency or excess (or imbalance) of energy, protein and other nutrients causes measurable adverse effects on tissue/body form, body function and clinical outcome (Elia 2000).

Nutrition Screening

A rapid, simple and general procedure used by nursing, medical or other staff, to detect those who have significant nutritional problems or significant risk of such problems in order that clear guidelines for action can be implemented, e.g. simple dietary measures or referral for expert help.

Nutrition

Support the provision of nutrients and any necessary adjunctive therapeutic agents to patients orally and/or by intravenous infusion (parenterally) for the purpose of improving or maintaining a patient's nutrition status.

Oral Nutritional Supplement

A commercially available product for use in oral nutrition support e.g. a sip feed.

Oral nutritional Support

The modification of food and fluid by fortifying food with protein, carbohydrate and/or fat; the provision of snacks and sip feeds as extra nutrition to regular meals; changing meal patterns or the provision of dietary advice to patients on how to increase nutrition intake by the above.

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Van Cutsem, E. & Arends, J., 2005. The causes and consequences of cancer – associated malnutrition. *European Journal of Oncology Nursing*, 9 (2), S51-63.

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Further Reading

- Aston T (2006) Guidelines for the Management of Nutrition and Palliative Care Patients.

If you would like to view a copy please contact:

The Palliative Care Team
Rutson Hospital
High Street
Northallerton
North Yorkshire
DL7 8EN
Tel: 01609 751 313

Appendix 1

Physical and Physiological Aspects of Nutrition and Hydration in the Last Days of Life

Nutrition and fluid requirements change during the course of a terminal illness. The need for nutrition and hydration may change towards the end of life when the predominant goal of care is to ensure comfort in the period leading to a natural death (Bridge *et al*, 2007). There is very little published high level evidence to guide the management of fluid and nutritional requirements in palliative patients (Bridge *et al*; NCPC 2007).

The provision of nutrition and hydration by artificial means is a medical intervention that carries the potential to cause harm through side effect or complications (Bridge *et al*, 2007).

There is no evidence that artificial nutrition prolongs survival in patients with advanced cancer. In view of the associated risks current accepted practice in many centres is *not* to routinely offer artificial nutrition to the dying patient (Bridge *et al*, 2007).

There is however a diversity of opinion of fluid administration. Viola *et al* 1996 concluded that there was insufficient evidence to draw firm conclusions regarding fluid management in palliative care patients. However there appears to be decreased fluid requirements in patients within the fasting state.

Arguments for and against artificial hydration at the end of life remain controversial.

In terminally ill patients, complaints of thirst and dry mouth were relieved with mouth care and sips of fluid. It has been shown that there is no correlation between thirst in terminally ill cancer patients and traditional biomarkers of acute dehydration (Dunlop *et al*, 1995; Mac Donald, 1996).

Those arguing against the use of fluids in the dying patient who is unable or unwilling to drink have proposed that fluid depletion in the dying patient may be beneficial as it may result in:

- A reduction in secretions, with a consequent reduction in certain symptoms (e.g. cough / nausea) and less need for interventions to manage symptoms (e.g. suction).
- A reduction in urinary output, hence less incontinence and less need for indwelling catheters.
- Less peri-tumour oedema with possible reduction of pain.
- Less oedema and ascites.

- Authors suggest that starvation and dehydration might also have analgesic effects (Bridge *et al*, 2007).

In their view Viola *et al*, 1996 also made the suggestion that artificial therapy can result in increased emotional distress in families, as the focus may be on the medical procedure as opposed to the patient.

However advocates of fluid therapy have concerns about the symptoms that may arise in dehydrated patients:

- Delirium
- Opioid toxicity
- Increased risk of constipation
- Pressures sores
- Dry mouth (Bridge *et al*, 2007).

This evidence reflects continued controversy regarding the appropriateness of artificial hydration in the last days of life and the need to assess the appropriateness of artificial hydration on a case by case basis. It may also be useful to consult the NICE Guidelines for Supportive and Palliative Care for Adults with Cancer.

Appendix 2

Ethical and Legal Implications of Fluid and Nutritional Management in Patients in Late Palliative Care or Last Days of Life

Artificial nutrition and hydration (ANH) refers specifically to those techniques for providing nutrition or hydration that are used to bypass an inability to swallow (BMA, 2007).

It includes the use of a nasogastric tube, percutaneous endoscopic gastrostomy (PEG feeding) and total parenteral nutrition (BAPEN 1998).

Non-provision of ANH is a controversial area where views differ. Some people regard ANH provision as basic care which should always be provided unless the patient's imminent death is inevitable. Others make a distinction between the insertion of a feeding tube, which is classed as a treatment and the provision of nutrition and hydration through the tube, which is considered basic care. However there is **no** such distinction in the law.

Following legal judgements

- Airedale NHS Trust V. Bland (1993)
- Frenchay Healthcare NHS Trust V. S (1994)
- Law Hospital NHS trust V. Lord Advocate)
- ANH are classed as medical treatments which may be withdrawn in some circumstances (BMA 1992)
- The GMC requires doctors to seek a second clinical opinion before withholding or withdrawing artificial nutrition or hydration from those patients whose death are **NOT** imminent (BMA 2007).

Appendix 3

Oral Nutrition and Hydration

The British Medical Association 2007 states:

Where nutrition and hydration are provided by ordinary means, such as by cup, spoon or any other method for food delivery or nutritional supplements in to the patient's mouth- or the moistening of a patient's mouth for comfort, this forms part of the basic care and should not be withdrawn.

Food or water to be given by these means should always be offered but should not be forced upon patients who resist or express a clear refusal. It should also not be forced upon patients for whom the process of feeding produces an unacceptable level of burden, such as where it is likely to cause choking or aspiration of the food or fluid (BMA 2007).

However evidence suggests that when patients are close to death they seldom want nutrition and/or hydration. Its provision may in fact exacerbate discomfort and suffering (Baines and Sykes 2000).

Good practice must however include good oral care to avoid the discomfort of a dry mouth (BMA 2007).

Omega 3 Fatty Acids and EPA

In 2007 the Cochrane Collaboration reviewed literature on Eicosapentaenoic acid (EPA, an omega-3 fatty acid from fish oils) for the treatment of cancer cachexia. Its objectives were to evaluate the effectiveness and safety of EPA in relieving symptoms associated with the cachexia syndrome in patients with advanced cancer.

Dewey *et al*'s conclusions are:

- There was insufficient evidence to establish whether oral EPA was better than a placebo.
- Comparison of EPA combined with a protein – energy supplement versus a protein energy supplement (without EPA) in the presence of an appetite supplement (Megestrol Acetate) provide no evidence that EPA improves symptoms associated with the cachexia syndrome often seen in patients with advanced pancreatic cancer.
- There was insufficient evidence to draw conclusions about its use in patients who have cancer of other tumours types.

In 2006, Kenneth *et al* compared EPA with placebo in cachectic patients with advanced gastrointestinal or lung cancer, for the effect on weight and lean body mass. They concluded that there was no statistical significant benefit in a single agent EPA in the treatment of cachexia, and that future studies should concentrate on other agents or combined regimens.

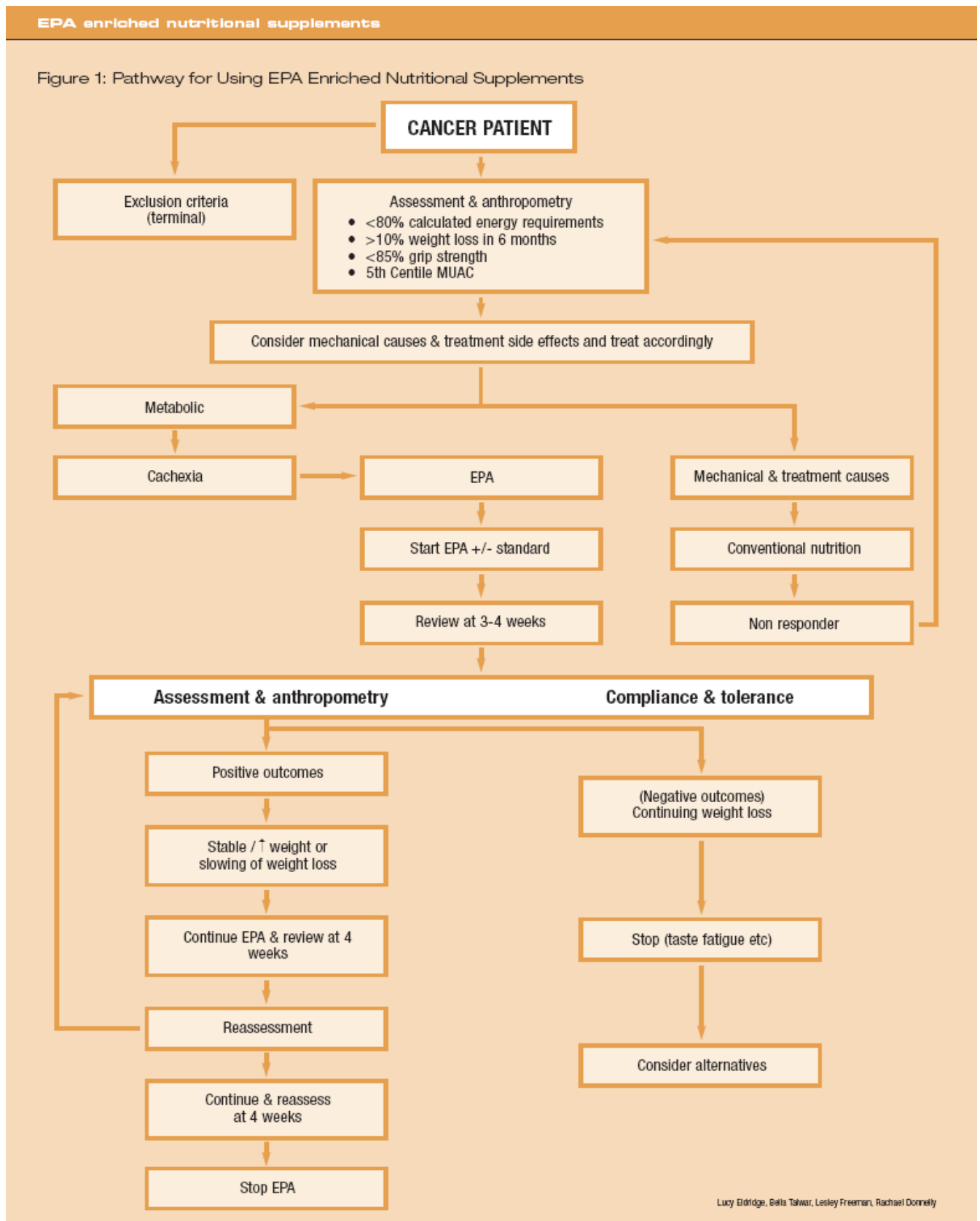
Currently, there are three nutritional supplements enriched with EPA available in the UK and prescribable on Form FP10, ACBS endorsed. They are:

- 'ProSure' by Abbott Nutrition.
- 'Forticare' by Nutricia Clinical Care.
- 'Resource Support' by Novartis / Nestle.

Correct at time of printing

Figure 1 overleaf: Details of pathway for using EPA nutritional supplements.

Figure 1



Reference: Freeman L, Donnelly R, Eldridge L, Talwar B (2006). Eicosapentanoic Acid (EPA) Enriched Nutritional Supplements - What do you do with them? Complete Nutrition; 6(1): 21-23. Full text available from www.nutrition2me.com <<http://www.nutrition2me.com/>>

EPA and Fish oil capsules

EPA is found in a range of fish oil supplements which can be purchased from both chemists and supermarkets in the UK. Outside clinical trials, these commercially available over-the-counter products may vary in EPA concentration and quality. There is currently no UK recommendation for supplement use. If your patient needs further advice contact your Dietitian.

NOTE

The general population (adults and children over 12) are advised to eat 2 portions of fish per week, one of which should be oily. This is equal to about 450mg EPA/ DHA per day. As a general guide there is no risk from eating up to 4 portions of fish weekly (450-900mg EPA/DHA), with the exception of pregnancy, those likely to become pregnant or breastfeeding (see British Dietetic Association 2005, Food Facts at www.bda.uk.com).

Appetite Stimulants

Below are some suggested strategies which may be used to help stimulate appetite. The appropriateness of these strategies for individual patients needs to be discussed with the relevant Consultant or GP.

1. **Corticosteroids: Dexamethasone / Prednisone**

There is insufficient evidence to define the optimal dose and scheduling for their use in this indication. Dexamethasone has an established role in the short-term improvement of appetite in patients with advanced cancer. Watson *et al* suggests to try 4mg once daily of dexamethasone. Dexamethasone may increase weight but not muscle mass. It can provide temporary improvement in energy and overall sensation of well-being. Side effects include fluid and fat retention, myopathy, oral candidiasis and gastric irritation. The response is usually limited to 3-4 weeks. Consideration of side effects and potential drug interactions is needed before prescribing.

Nelson (2000) and National Cancer Institute (2007) suggests when prescribing steroids for anorexia it should be given as a trial for 1 week and only continue treatment if there is a subjective or objective response. The daily dose should be given in the morning with breakfast or on a divided breakfast and lunch basis after food.

2. **Progestogens: Megestrol acetate,(Megace)**

The Cochrane Review (2005) concludes for the treatment of anorexia-cachexia syndrome, megestrol acetate improves appetite and weight gain in patients with cancer. There was not enough evidence to reach conclusions about the effect of quality of life and the optimal dose.

The most common side effect is fluid weight gain and there may also be an increased risk of deep vein thrombosis. It may take a few weeks to obtain benefit in terms of weight gain, possibly sooner for improved appetite. However, progestogens can have a more prolonged effect than steroids and therefore more appropriate in patients with a longer prognosis. The minimum efficacious dose is 160mg/day (o.d.). If there is no response, 480mg/day 160mg tds can be used. There is no evidence that doses greater than 480mg have a high efficacy (Desport *et al*, 2000).

3. **Prokinetics: Metoclopramide**

This is useful for patients with early satiety and anorexia due to gastric stasis. A dose of 10mg four times daily 30 minutes before meals has been

reported to stimulate appetite in cancer patients with early satiety (Nelson, 2000).

4. Alcohol

Known to stimulate appetite and have beneficial psychosocial effects. If a patient enjoys a little alcohol it is most beneficial when a few sips are taken 10-15 minutes before meals. There is no one drink that is better than another but it should focus on patient preference. Guidance should be given to patients on medications in which alcohol may appear to be contraindicated.

5. Exercise strategies

For consideration during early palliative care predominantly. Although it will increase energy expenditure it will also improve lean body mass, muscle strength, physical functioning and independence. Further studies are needed to determine the effects of exercise on quality of life in patients with cancer (Brown 2002).

Supporting Carers

Loss of appetite is a complex phenomenon involving the whole person; physical, social, emotional and spiritual (Hughes 2000). It affects both patients and their carers. Health and social care professionals need to be aware of the potential tensions that may arise between patients and their carers concerning the patient's loss of appetite. This is likely to become more significant as the patient moves towards late palliative care and close to end of life. The carer associates eating and drinking with nurturing. When their loved one stops eating or drinking it can be hard for the carer to accept that they are not going to get better.

Patients and their carers may require support in adjusting to, and coping with loss of appetite.

We should support the patient and carer by:

- Identifying potential reversible causes of loss of appetite through ongoing assessments and treat where possible i.e. checking symptoms and medication.
- Considering the environment, social setting, food portion, smells and presentation of food and the impact of these on appetite.
- The patient may be too weak to feed themselves, but may still wish to eat. They may prefer their carer(s) to help with this. The carer should be supported in this process by offering small amounts of food attractively presented and sips of fluid, rather than forcing the patient to eat and drink.
- Ensuring the patient remains the focus of health professionals care, protecting his/her autonomy. Promoting trust and enabling his/ her voice to be heard while also supporting the carer(s).
- Facilitating patient and carer adjustment to the patients change in appetite and what this means particularly towards the end of life when food and drink are no longer wanted or needed.

Appendix 7

Referring a Patient to the Dietitian

Patients should be referred to their local nutrition and dietetic department. The Macmillan Specialist Dietitian provides a domiciliary service to complex patients in the Craigavon and Banbridge area (initially). The Macmillan Specialist Dietitian can be contacted directly if you have any queries regarding the nutritional management of cancer patients.

- **Corrina Grimes**
Community Macmillan Specialist Dietitian
Macmillan Team
Carn Community Health
1 Carn Drive
Portadown
BT63 5RH
Tel: (028) 3839 8215
Mob: 07525 771 588
- **Armagh and Dungannon locality**
Department of Nutrition and Dietetic Dept.
F Floor, South Tyrone Hospital
Carland Road
Dungannon
BT71 4AU
Tel: (028) 8771 3478
- **Craigavon and Banbridge locality**
Department of Nutrition and Dietetic Dept
Carn Community Health
1 Carn Drive
BT63 5RH
Tel: (028) 3839 8209
- **Newry and Mourne locality**
Department of Nutrition and Dietetic Dept
Daisy Hill Hospital
5 Hospital Road
Newry
BT35 8DR
Tel: (028) 3083 5000

Resource 1

This information is suitable for patients who score 0-1 on the malnutrition Screening Tool (MST).

<http://www.cancerbackup.org.uk/Resourcessupport/Eatingwell/Healthyeatingguide>

Resource 2



Southern Health
and Social Care Trust

Acknowledgement to:

- Norfolk & Norwich University Hospital NHS Trust
- James Paget University Hospitals NHS Foundation Trust

Guide to eating well if you have a small appetite (1 of 2)

If you are losing weight unintentionally, simple changes to your meals and snacks may make a difference. You may be recommended foods that you would normally think of as unhealthy but there is good reason to do this.

Why do you need to eat well?

- If you have a poor appetite, you may have lost weight or be at risk of losing weight.
- Eating too little may also affect your energy level.
- Lack of protein, minerals and vitamins may make you more open to illness or delay the healing process.
- It is important that you eat a balanced diet, to provide all the necessary nutrients. These can be provided by simple meals and snacks.

Meal Pattern

- Eating small, frequent meals and snacks during the day will be easier to manage than 3 larger meals if your appetite is poor.
- Aim for 3 small meals each day with 2-3 snacks or nourishing drinks in between.
- Meals and drinks should be high in calories and protein to meet your daily requirements.
- Drinks, snacks and meals can be fortified to make them more nutritious.

Meat and Fish

- Include at least 75-100g (3-4oz) meat, chicken or fish if you have a cooked meal.
- “Convenience meals” are a good standby to have in the fridge or freezer. Try fish in sauce, shepherds pie or lasagne.
- For a snack meal include smaller portions of meat or fish in a sandwich or on toast e.g. ham or corned beef sandwich, sardines on toast.



Protein Foods

Milk and Yoghurt

- Aim for at least 568ml (1 pint) of milk a day
- Use whole (full cream/blue top) milk if you are at risk of losing weight.



Fortify milk by adding skimmed milk powder to increase the protein and calorie content. Whisk 4 heaped tablespoons (about 50g/2oz) skimmed milk powder into 568ml (1 pint) milk eg. Marvel, shop own milk powder.

Add milk or fortified milk to:

- Tea, coffee or other drinks, such as malted drinks and hot chocolate
- Milky puddings, custard and milk jellies
- Cereals and to make porridge
- Savoury sauces, such as parsley or cheese
- Include a milk-based dessert, such as milk pudding or custard (homemade or “ready to eat”), milk jelly or “pot desserts” such as thick & creamy yogurt, fruit fools and mousses. Use Greek yogurt or evaporated milk as toppings for fruit or cereal.

Cheese and Eggs

- Have a cheese or egg meal for a change e.g. cauliflower or macaroni cheese, quiche, scrambled eggs or omelette.
- For a snack meal have cheese or egg on toast, cheese & biscuits or cheese/egg sandwiches.
- Try making a cheese sauce to put with vegetables, fish or pasta (or use a packet sauce and sprinkle grated cheese on top).
- Grated cheese can be mixed into scrambled eggs, mashed into potatoes with extra butter or margarine, or sprinkled onto a bowl of soup or beans on toast.

Nuts

Snack on plain, salted, dry-roast or chocolate-covered nuts.

Beans and Lentils

Choose lenti/bean soups or add tinned (ready to eat) beans such as butter beans or kidney beans to soups or casseroles.

This leaflet has been given out by:

Guide to eating well if you have a small appetite (2 of 2)

High Calorie Foods

Some calories come from the protein foods we have already talked about. They also come from fats and oils, cream, starchy foods (bread, potatoes, pasta and rice and breakfast cereals) and sugar.

Margarine, butter and oil are all fats and contain similar numbers of calories.

Do not use “light” or low-fat spread if you are trying to increase your weight.

Frying foods can add extra calories.

Add lots of butter or margarine:

Spread thickly on bread and crackers.

Mash into potatoes or melt on boiled or jacket potatoes.

Stir into hot pasta or rice and serve with a meat, cheese or vegetable sauce.

Roast potatoes and chips are high in calories and are good to include in your diet

Use mayonnaise, salad cream and dressing generously.

Try adding sugar to drinks, breakfast cereals or fruit desserts.

Add jam, honey or syrup to cakes and scones.

Add dry fruits to cereals and milk puddings, or snack on raisins or dried apricots.

Fruit and Vegetables

- Fruit and vegetables are important for vitamins. Include small helpings with meals but don't fill up on these, as they are low in protein and calories.
- Use the ideas mentioned to add extra calories and protein to fruit and vegetables.
- Vegetables – frozen or tinned are just as nutritional as fresh.

Super Snacks

Here are some ideas for quick and easy snacks to have between meals. Those marked ☺ could be eaten instead of a meal if you do not have much of an appetite.

- ☺ Glass of full cream milk and biscuit or cake.
- ☺ Bowl of cereal with milk or fortified milk and sugar.
- ☺ Cheese, baked beans or sardines on toast.
- ☺ Cheese and crackers
- ☺ Sandwiches of tuna and cucumber, cheese and tomato, ham and pickle.
- ☺ Bowl of creamy soup and a roll.
- ☺ Peanut butter on toast
- Yoghurt/fromage frais/mousse/fruit fool or any other individual pot dessert.
- Scones, toasted teacakes, crumpets or muffins. Top with butter, jam, honey or cheese.
- Crisps.
- All cakes, such as fruit cake, flapjack, sponge cake and cream cakes.
- Chocolate bar.
- Nuts, any type, or mixed fruit and nuts.
- Milkshake. Try adding fresh fruit and ice-cream for a “thick shake”
- Malted drink made with milk and 2-3 plain biscuits
- Alcohol can help help to stimulate your appetite.
- Check with your doctor or nurse first that alcohol can be taken.



- Fluids – aim for 8 to 10 cups of fluids. Try milk, milky drinks, fruit juices, soups, supplement drinks, tea or coffee.

This dietary advice sheet gives some general information to help you make the recommended changes to your diet. If you need more detailed advice or if you are following a special diet that makes it difficult to make these changes, please ask your doctor to refer you to a registered dietitian.

Resource 3

Guide for Use of Oral Nutritional Supplements (ONS) in Cancer patient care

- The focus should be on encouraging food first.
- The decision if and when to use nutritional supplements should be made after consulting the section in this guidance document relevant to the stage in the patients cancer journey (i.e. curative / early palliative care, late or end of life care).
- Oral nutritional supplements **may not** always be appropriate.
- Some patients may find that a nutritionally complete oral supplement will help when food intake is compromised such as in cases of fatigue, swallowing difficulties or oral problems, were their requirements are unable to meet with food and food fortification alone.
- Patient and carers should not be given unrealistic goals or proposed outcomes that cannot be achieve through taking nutritional supplements.
- Careful attention should be made to the choice of nutritional supplement. **Only nutritionally complete supplements should be recommended by non Dietetic staff.**
- Nutritionally complete supplements are those which can be used as a sole source of nutrition (See Resource 3 Table1).
- Encourage patients to try a new food or supplement on days when they are not receiving chemotherapy or radiation therapy because it may result in better tolerance (Capra 2001).
- If a patient is not managing to take the recommended amount of oral nutritional supplement the dietitian may be contacted for advice with exception in the last days of life.

Each oral nutritional supplement has a list of prescribable indications.

These include:

- Disease related malnutrition.
- Dysphagia.
- Intractable malabsorption.
- Pre-operative preparation of patients who are under nourished.
- Total gastrectomy.

Oral nutritional supplements are prescribable on Form FP10, ACBS endorsed.

Refer to the current edition of BNF for 'Contraindications to Use' for each product.

How to use Oral Nutritional Supplements

- The milk style and juice style drinks listed in Tables 1, 2 and 3 are best taken sipped slowly throughout the day, preferably after or between meals or in the evening. A variety of recipes are provided to help patients take these drinks in different ways (See appendix 3 for Recipe Ideas).
- Most of these supplements are best served chilled, although they can also be heated gently if preferred. They should not be boiled as this will affect the taste, stability and heat sensitive vitamins. They can also be frozen into cubes or lollies.
- Soups, desserts and pudding supplements are also available and can be discussed with the dietitian.
- Supplements should be stored in a cool, dry place e.g. kitchen cupboard, store room.
- Once opened they should be stored in the fridge and any unused portion discarded after 24 hours. If opened and left at room temperature it should be discarded after 4 hours.
- Check the 'best before' date on the supplement before use. Rotate stock regularly to ensure they don't go out of date.
- If a patient is not managing to take the prescribed amount of oral nutritional supplement, consider contacting the dietitian for advice, with the exception of patients in the last days of life.

Nutritionally Complete Supplements

Can be used as a sole source of nutrition and can be initiated by trained community staff.

Table 1

Company Name	Product	Pack Size (g)	Energy / Pack (kcal)	Protein / Pack (g)	Flavours
Abbott	Ensure Plus Milkshake Style Also available in a prescribable pack is <i>Ensure Plus commence, 10 cartons of mixed flavours in one pack</i>	220	330	13.8	Banana, Blackcurrant, Caramel, Chocolate, Coffee, Fruits of the Forrest, Neutral, Orange, Peach, Raspberry, Strawberry, Vanilla
	Ensure Plus Yoghurt Style	220	330	13.8	Orange Burst, Orchard Peach, Pineapple Twist, Strawberry Swirl
	Ensure Savoury / Sweet (Can)	250	251	10	Asparagus, Chicken, Chocolate, Coffee, Egg Nog, Mushroom, Nut, Vanilla
Fresenius Kabi	Fresubin Original	200	200	7.6	Mocha, Blackcurrant, Peach, Nut, Vanilla, Chocolate
Fresenius Kabi	Fresubin Energy	200	300	11.2	Lemon, Vanilla, Strawberry, Banana, Chocolate-Mint, Cappuccino, Pineapple, Blackcurrant, Orange, Toffee Caramel, Neutral, Vegetable Cream
Nutricia Clinical Care	Fortisip Yogurt Style	200	300	12	Raspberry, Blackcurrant, Peach and Orange, Vanilla and Lemon, Pineapple
Nutricia Clinical Care	Fortisip	200	300	12	Vanilla, Banana, Toffee, Strawberry, Chocolate, Neutral, Tropical Fruits, Orange

Correct at time of printing

Supplements

To be recommended by the dietitian only

Below is a list of some more specific supplements that the dietitian may recommend in order to meet individual dietary requirements, while taking into account patient preference and tolerance. These products should only be recommended by a dietitian.

Table 2

Company	Product	K/Cal Pack	Protein / Pack	Comment	Flavour
Abbott	Ensure Plus Juice	330	10.6g	Fat Free	Apple, Fruit Punch, Grapefruit, Lemon & Lime, Orange, Peach, Pineapple, Strawberry
	Ensure Plus Fibre	305	12.5g	5g Fibre per pack	Banana, Fruit Forest, Raspberry, Vanilla, Strawberry
	Prosure (see appendix 4)	300	16g	With Omega 3 fatty acids and anti-oxidants 2 tetrapaks will provide the optimal 2g EPA daily	Banana, Orange, Vanilla
Fresubin Kabi	Fresubin Protein Energy	300	20g		Wild Strawberry, Vanilla, Chocolate, Tropical Fruits, Cappuccino
	Fresubin Energy Fibre	300	11.3g	4g Fibre	Chocolate, Strawberry, Vanilla, Lemon, Banana, Cappuccino
	Provide Extra	150	7.5g	Fat free	Lemon & Lime, Orange & Pineapple, Blackcurrant, Apple, Cherry, Melon, Citrus, Tomato, Carrot, Apple

Nutricia Clinical Care	Fortijuce	300	8g	Fat Free	Lemon, Apple, Orange, Strawberry, Tropical, Forest Fruit, Blackcurrant
	Fortisip Multi Fibre	300	12g	4.6g Fibre	Orange, Strawberry, Banana, Vanilla, Chocolate, Chicken & Tomato
	Fortisip Extra	320	20g	High Protein	Strawberry, Fruit Forest, Vanilla, Chocolate
	Forticare (see appendix 4)	200	11.25g	Enriched with EPA, 3 tetrapaks to give 2.2g of EPA	Orange Lemon, Peach, Ginger, Cappuccino
	Fortisip Fruit Dessert (3 X 150g)	200	14g		Apple
	Forticreme Complete (4 X 125g)	200	12g	Gluten free	Vanilla, Banana, Forest Fruit, Chocolate

Correct at time of printing

High Protein / High Kcal Powdered Milkshake

Table 3

Company	Product	Kcal per serving	Protein per serving	Vit / Minerals	Flavours
Abbott	Enshake Mix	600*	16g	No	Banana, Chocolate, Strawberry, Vanilla
Complan Foods	Complan Shake	387**	8.8g	Yes	Vanilla, Strawberry, Chocolate
Fresenius Kabi	Calshake Mix	600*	12g	No	Strawberry, Vanilla, Chocolate, Banana, Neutral
Nutricia Clinical Care	Scandishake Mix	598*	11.7g	No	Strawberry, Caramel, Banana, Vanilla, Unflavoured
Vitaflo	Vitasavoury	200***cup 300***cachet	4g cup 6g cachet	No	Chicken, leek & potato, Mushroom, Golden Vegetable

* Made with 240ml of full cream milk

** Made with 200ml of full cream milk

*** Made with 100ml of water

Correct at time of printing

Other Protein/Energy Supplements

Table 4

	Carbohydrate	Fat and Carbohydrate	Fat	Protein
Powdered Products	Caloreen (Nestle Healthcare Nutrition)	Duocal MCT Powder (Nutricia Clinical)		Casilan (Complan Foods Ltd)
	Maxijul Super Soluble Powder (Nutricia Clinical)	Duocal Super Soluble Powder (Nutricia Clinical)		ProMod (Abbott Nutrition)
	Polycal Powder (Nutricia Clinical)	QuickCal (Vitaflo)		Protifar (Nutricia Clinical)
	Polycose (Abbott Nutrition)			Forceval Protein Powder (Alliance Pharmaceuticals)
	Vitajoule (Vitaflo)			Pro-Cal (Vitaflo) Vitapro (Vitaflo)
Solid Products		Duobar (Nutricia Clinical)		
Liquid Products	Maxijul Liquid (Nutricia Clinical)	Duobar Liquid (Nutricia Clinical)	Calogen (Nutricia Clinical)	
	Polycal Liquid (Nutricia Clinical)		Liquigen (Nutricia Clinical)	

Correct at time of printing

Over-the-counter Supplements

These products are not prescribable and can be purchased in some pharmacies or supermarkets

Do not exceed more than three sachets / day.

Table 5

Milk Shake (powder mixed with whole milk)	Soups (powder mixed with hot water)	Powder to mix with food and drinks	Cereal (powder mixed with whole milk)
*Build-up Instant Drink (Nestle) 200ml, 263kcal, 15g protein, 3g fibre/sachet. Strawberry, chocolate, vanilla, banana.	Build-up Soup (Nestle) 200ml, 200kcal, 7.5g protein, 3g fibre/sachet. Chicken, tomato, vegetable, potato & leek.	Build-up Original (Nestle) 35kcal & 2.4g protein per tablespoon, 12 vitamins and 6 minerals.	
Build-up Custard (Nestle) 155kcal, 5g Protein/40g serving.			
*Complan Original/Flavoured (Complan Foods) 440kcal, 15.5protein/57g serving. Original strawberry, vanilla, chocolate, banana, peach & raspberry	*Complan Savoury (Complan Foods) 435kcal, 15.5g protein / 57g serving. Chicken vegetable.		*Complan + Oats (Complan Foods) 410kcal, 17g protein, 4g fibre/per 57g serving

Correct at time of printing

Resource 4

Recipe Ideas for Milk Based Supplements

You can use supplement drinks in the following recipes:

Hot Chocolate Delight (serves 1)

1 carton milk based supplement – chocolate flavour
2 – 3 tablespoons Whipped cream
A few drops of vanilla essence
Chocolate flake and 1 teaspoon cocoa

To make:

- Heat the supplement drink in a pan but do NOT boil.
- Pour warm drink into a mug.
- Add a few drops of vanilla essence.
- Top with whipped cream.
- Sprinkle with cocoa and decorate with pieces of chocolate flake.
- Serve immediately.

Banana Shake (serves 1)

1 carton Milk based supplement chilled – banana flavour
75g / 2.5oz ice cream (vanilla)
Half ripe banana

To make:

- Blend ingredients together.
- Serve immediately in a tall glass and decorate with banana slices.
- Alternately try substituting banana with strawberry flavour drink and fresh strawberries.

Yoghurt Supreme (serves 2)

1 carton Milk based supplement chilled - Fruit flavour to match flavour of yoghurt
125g / 4.5oz Thick and Creamy yoghurt

To make:

- Blend ingredients together.
- Serve immediately in a tall glass and decorate with fresh fruit sliced.
- Alternately freeze and serve as an ice cream.

Rice Pudding (serves 1-2)

Knob of butter
45g / 1.5oz pudding rice
150ml / ¼ pint of whole milk
1 tablespoon caster sugar
1 carton of milk supplement

Set oven to 150C Gas Mark 2.

To make:

- Grease a 300ml oven proof dish using the butter. Put the rice in the bottom of the dish.
- Heat the milk until steaming, stir in the sugar and pour over the rice. Bake in the oven for 1-1 ½ hours, stirring occasionally, until the rice has absorbed the milk.
- Pour in the carton of milk supplement and return to the oven for 30-40 mins, until the vanilla is slightly absorbed and the pudding creamy.

Strawberry Whip (serves 2)

1 carton milk based supplement drink chilled – strawberry flavour
1 packet instant whip
1 -2 scoops ice cream – strawberry or vanilla flavour

To make:

- Whisk ingredients together in a bowl.
- Place in a fridge until set.

Custard (serves 2)

1 tablespoon of custard powder
30g / 2 oz of sugar
50ml / 2 floz of full cream milk
1 carton of milk based supplement

To make:

- Blend the custard powder and sugar with the cold milk to a smooth paste
- Heat the milk supplement drink but do not boil
- Pour onto the custard mixture
- Return to heat, stir continuously until it thickens

Fruit Sorbet (serves 4)

450g / 16oz mixed fruits (raspberries, blackcurrants, redcurrants, blackberries, strawberries etc)

1 carton of milk based supplement

To make:

- Blend the fruits and the milk supplement for about one to two minutes
- Pour into an airtight container with a lid
- Freeze for about an hour
- Remove lid and mix well with fork
- Freeze for further 2-3 hours

Porridge (serves 1)

1 carton of milk supplement

50g / 2oz of porridge oats

100ml / 4oz of full cream milk

To make:

- Mix porridge with one carton of milk supplement in a saucepan
- Gently heat until just before boiling and simmer for 5 minutes stirring occasionally
- Add sugar or honey to taste as desired

Chicken Soup (serves 1-2)

1 x 295g tin condensed chicken soup

1 x carton of milk supplement

To make:

- Put tin of soup in saucepan
- Empty milk supplement into the empty tin and fill with water
- Gradually stir into the soup
- Heat without boiling

Ice Cream (serves 1)

50ml / 2 floz of double cream and one carton of milk based supplement

To make:

- Stir the supplement into whipped cream
- Place in the freezer to set

Leek Soup (serves 1-2)

150g / 5oz leeks

¼ of a medium onion peeled and chopped

15g / ½ oz butter

300ml / ½ pint of chicken stock, salt and ground black pepper

½ carton of milk supplement

To make:

- Cut the leeks in half lengthways and remove the outer leaves. Rinse well under running water and chop finely. Finely chop the onion.
- Melt the butter into a small saucepan. Add the leeks and onion, cover and cook gently until very soft – about 10 minutes.
- Pour on the stock and season with salt and ground black pepper. Simmer for 20-30 minutes until the leeks are well cooked and the stock reduced.
- Puree in a blender or food processor until smooth. Return to the pan. Stir in half the carton of milk supplement and reheat without boiling.

Resource 5

Symptom management link

For advice on symptom control can be accessed on the cancerbackup website
<http://www.cancerbackup.org.uk/resourcessupport/eatingwell/eatingproblems>