NUTRITIONAL ISSUES IN CANCER

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What is nutritional care?

Learning objectives

- To understand contributory factors to compromised nutritional status in cancer patients
- To describe three psychosocial factors that can impact the dietary intake of cancer patients
- To identify ways that nurses can help cancer patients and their family members live with weight loss- and eating-related problems

Macmillan weight and eating studies

Helping people with advanced cancer and their families live with the symptoms of cancer cachexia syndrome

What do you eat?

What does someone with cachexia eat?
What is cachexia?

Cachexia is a complex metabolic syndrome associated with underlying illness and characterized by loss of muscle with or without loss of fat mass. The prominent clinical feature of cachexia is weight loss in adults (corrected for fluid retention) or growth failure in children (excluding endocrine disorders). Anorexia, inflammation, insulin resistance and increased muscle protein breakdown are frequently associated with wasting disease. Wasting disease is distinct from starvation, age-related loss of muscle mass, primary depression, malabsorption and hyperthyroidism and is associated with increased morbidity.

Hojkinson JB; MacDonald J; Wright DNM; Corner J.L. (2006) The prevalence of concern about weight loss and change in eating habits in people with advanced cancer. Journal of Pain and Symptom Management. 32(4) 322-331


Number and percentage of participants reporting weight loss, eating less and concern about the symptoms

<table>
<thead>
<tr>
<th></th>
<th>n (%)</th>
<th>95% CI</th>
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<tbody>
<tr>
<td>Weight loss (n=199)</td>
<td>156 (79%)</td>
<td>73%-85%</td>
</tr>
<tr>
<td>Eating less (n=199)</td>
<td>151 (76%)</td>
<td>70%-82%</td>
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<tr>
<td>Concern about weight loss or eating less (n=199)</td>
<td>87 (52%)</td>
<td>44%-60%</td>
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Cancer cachexia syndrome

Primary  Secondary  Tertiary

Weight loss and anorexia


Primary cachexia

Cancer

Immune system

Tumour products

Metabolic abnormalities

Anorexia

Protein loss

Lipolysis

Cachexia
The solution: pharmacology

Progestins
- Megestrol acetate: 23 studies, 3436 patients
- Positive dose response 480-800mg/d but minimal measurable benefit on qol

Corticosteroids
- 6 studies, 647 patients
- Improved appetite and qol

Systematic review of RCTs, Yavuzsen et al. (2005)

The future:
- On going trials e.g. multimodal therapies
- Future trials e.g. Muscle growth stimulating agents

Cancer cachexia syndrome

Primary
Secondary
Tertiary

Treat

Metabolic change

Weight loss and anorexia

Secondary cachexia

Nutritional impact symptoms (the eating obstacle course)
- Nausea and vomiting
- Localised pain e.g. mouth
- Taste and smell abnormalities
- Diarrhoea/constipation
- Fatigue
- Mechanical obstruction

The solution: nutrition

Nutritional counselling, for example:
- Poor appetite - small meals & snacks high in protein and energy.
- Sore mouth – choose soft, moist foods and avoid hot and spicy foods/ drinks
- Taste changes – if food lacks taste add herbs, spices, try sharp tasting foods

Enriched/fortified foods, for example:
- Fortify full cream milk with milk powder
- Grate hard cheese onto vegetables, rice, noodles, potato, soups, casseroles and sauces
- Use cream in cereals, soups, puddings, sauces

Nutritional supplements
- Tube feeding
- The future:
  - On going trials e.g. nutraceuticals
  - Future trials e.g. cancer control diets
Cancer cachexia syndrome

Primary
Metabolic change
Treat

Secondary
Mahnutrition
Feed

Tertiary
Weight loss
and anorexia

Eating well

Can nurses help cancer patients to

Eat well for someone with a small appetite and weight loss?

I'm not eating vegetables, I'm not eating fruit. It scares me..... I feel that, as well as the cancer, I'm abusing my body. (Stella)

Healthy eating

I ate an apple today....First one for ages. I managed it! (Craig)

Eating well

I have gone on to tinned fruit, which is easy. I like blackberry and apples....I can eat a whole bowl full of that. (Craig)

Food and identity

To be honest I've got to the stage that I would rather (eat alone) because they are all tucking away at full sized meals. The size I had before and I am there with this 3 year olds portion and they were getting the full meal into the stomach and I was still messing around with this 3 year olds meal and it was embarrassing in a way. (Frank)
Can nurses help cancer patients to manage the challenge to identity?

The PRO approach to therapeutic story telling:
- **Problem**
- **Resources**
- **Outcomes**

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**Conflict over food**

- I’m forced to eat.
- I don’t want the things you dish up.
- It’s only porridge like you had in the hospice!
- She won’t try to eat.

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Mum, will go through, would you like this? Or would you like that? The end product is that it is even harder for me to try and stomach something. (Emma)

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Can nurses help cancer patients to manage the response of others?

- You’ve got to make the people around you understand what your limitations are…so that they can understand what you are going through.
- Interviewer: How have you done that?
- I had to sit down with (my family) and explain. (Steven)

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• Healthy eating messages
  +
• Challenge to identity
  +
• Conflict over food
  =

Socially constructed obstacles to eating well with advanced cancer

Cancer cachexia syndrome

Primary
  - Metabolic change
    - Treat
Secondary
  - Malnutrition
    - Feed
Tertiary
  - Distress
    - Support

Weight loss and anorexia


Weight loss and anorexia

The Macmillan Approach to Weight and Eating (MAWE): a complex psychosocial intervention

Breaking through the weight loss taboo
Telling healing stories
Managing conflict
Eating well
Support for self-action

http://learnzone.macmillan.org.uk/
The exploratory trial of MAWE found that it was

i/ deliverable by CNSs

ii/ acceptable to patients

iii/ may mitigate weight- and eating-related distress.

The findings warrant further investigation, but any follow-on study should be of revised design.

QUESTIONS

- Can tertiary cachexia present across the whole cancer journey?
- Can intervention for tertiary cachexia relieve suffering and save lives?
- Should the management of weight loss and anorexia in people with advanced cancer differ from people receiving active treatment?

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The future:

- Ongoing trials, e.g., multimodal therapies
- Future trials, e.g., muscle growth stimulating agents

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Secondary

Tertiary

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Treat

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- Future trials? Cancer control diets
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