Nutritional management during cancer treatment: a focus on side effects of chemo and radiotherapy

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Dietary Needs of Cancer Patients

- Importance of nutritional intervention
- Common nutritional symptoms in chemotherapy
- Common nutritional symptoms in radiotherapy
- Practical dietary advice
Importance of Nutritional Intervention

- Nutrition should be a key element in cancer management strategies

- Good nutritional intervention is multi-disciplinary
  - Screen and assess if risk identified

- Aims of nutritional intervention:
  - Ensure sufficient energy and nutrients to maintain/improve nutritional status & immune function
  - Minimise GI symptoms
  - Improve quality of life

Argiles 2005
Chemotherapy

- Drug treatment

- Use of chemical agents to destroy cancer cells

- Destroys cells which are reproducing – both cancer and normal

- Regimes depend on:
  - Tumour site
  - Patient size
  - Aim of treatment
Chemotherapy – side effects

- Reduced bone marrow function
  - Neutropenia, anaemia

- Damaged GI mucosa
  - Sore mouth, nausea, diarrhoea, taste changes

- Hair loss

- General – fatigue/ loss of appetite/ anxiety
A patient’s experience

- Chris wrote a diary while undergoing his chemotherapy treatment at Velindre Cancer Centre. This story is a selection of diary entries from Chris' second cycle of chemotherapy when he became acutely unwell and was admitted to Velindre Cancer Centre (VCC). Thank you to Chris and his wife Gaynor for their help.
Radiotherapy

- High energy X-rays
  - Treat a specific area of the body

- Factors affecting side effects:
  - Area treated
  - Total amount of treatment
  - Concurrent therapies
  - Individual sensitivities

- Early and late effects
Radiotherapy - side effects

Head & Neck
- Dry/ sore mouth
- Difficulty with eating
- Mouth ulcers

Chest
- Cough, shortness of breath,
- Sore gullet

Breast
- Skin irritation

Pelvis
- Urinary and bowel symptoms
Nutritional symptoms during treatment

Nutrition impact symptoms

- Early satiety
- Taste changes
- Nausea & vomiting
- Diarrhoea
- Fatigue
- Sore mouth
- Dry mouth
- Anorexia
- Pain
- Dysphagia
- Mucositis
- Constipation

Nutritional symptoms include:

- Early satiety
- Taste changes
- Nausea & vomiting
- Diarrhoea
- Fatigue
- Sore mouth
- Dry mouth
- Anorexia
- Pain
- Dysphagia
- Mucositis
- Constipation
What are our patients faced with?

How?

What?

Who?

Why?

Where?

When?
Anorexia & Early Satiety

- Small, frequent meals
- Advise high calorie/protein foods and drinks
- Ready meals and convenience foods can be useful standbys
- Alcohol may improve appetite try to relax and enjoy what you eat
- Avoid low fat, diet or reduced sugar foods
- Avoid drinks with food or near mealtimes
- Serve food on a smaller plate and don’t overload
- Allow plenty of time for meals and eating in company may be helpful
Dysphagia

- Small, frequent meals
- Soft, moist or liquidised diet
- Eat foods that can be mashed up easily
- Add extra sauces or gravies
- Drink plenty of fluids
Sore or Dry Mouth

- Soft, moist or liquidised diet
- Add extra sauces and gravies
- Drink plenty of fluids
- Avoid foods that irritate such as salty, spicy and acidic foods
- Avoid alcohol and smoking
- Consider the following points:
  - Temperature of food
  - Food texture
Diarrhoea & Constipation

- **Diarrhoea**
  - Drink plenty of fluids
  - Have weak tea/ coffee, decaffeinated varieties or fruit teas
  - Small, frequent meals
  - Avoid foods that irritate the gut such as fatty or spicy foods and alcohol
  - If diarrhoea persists seek further guidance from GP

- **Constipation**
  - Advise higher fibre foods
  - Ensure adequate fluid intake
Nausea & Vomiting

- Foods that may help:
  - Cold food and drinks
  - Salty foods such as crisps, beef yeast extract, salt and salted biscuits
  - Bland foods
  - Foods that contain ginger

- Avoid greasy and/or spicy foods
- Drink between meals, not with or before meals
- Avoid strong cooking smells
- Avoid lying down for at least two hours after eating
Conclusion

- Identify nutrition needs of the patient
  - Proactive intervention
  - Nutrition screening

- Provide first line information/ advice about nutrition in cancer
  - Macmillan resources
  - Local dietetic resources

- Signpost to a registered dietitian for complex patients