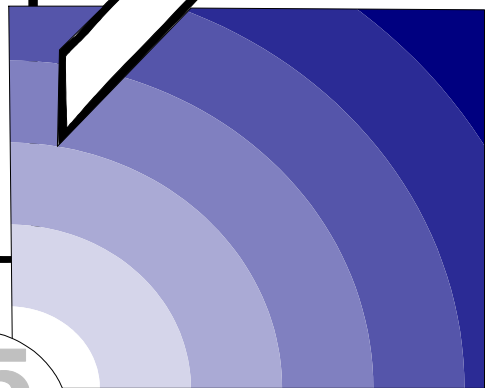
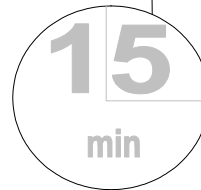


CLIP

15 minute Worksheet



Helping the patient with reduced hydration and nutrition

2: Balancing the diet

Intermediate level

Produced by
**Coleman Education
 Centre**
St. Oswald's Hospice
 Regent Avenue
 Gosforth
 Newcastle-upon-Tyne
 NE3 1EE

Tel: 0191 285 0063
 Fax: 0191 284 8004

This version written and edited
 by:

Dorothy Matthews
 Senior Nurse
Lynn Gibson
 Senior physiotherapist
 Northgate Hospital Learning
 Disability Palliative Care Team

Claud Regnard
 Consultant in Palliative Medicine
 St. Oswald's Hospice, Newcastle
 Hospitals NHS Trust and
 Northgate&Prudhoe NHS Trust

Development of this worksheet was
 supported by
**the NHS Executive
 BEACON initiative**

Northgate Palliative Care Team
 NHS Beacon site

Aim of this worksheet

To understand the principles of maintaining a balanced diet

How to use this worksheet

- You can work through this worksheet by yourself, or with a tutor.
- Read the case study below, then work on the questions overleaf.
- The work page is on the right side, the information page is on the left.
- Work any way you want: you can try answering from your own knowledge (in which case fold over the information page), you can use the information page (this is not cheating- you learn as you find the information), or you can use other sources of information
- It should take you about 15 minutes. If anything is unclear, discuss it with a colleague.
- If you think any information is wrong or out of date let us know
- Take this learning into your workplace using the activity on the back page.

Case study

Ben is a 33-year-old man, who has moderate learning disability together with hydrocephalus, spastic diplegia, and visual impairment and epilepsy. He enjoys life but his plan to settle in a small group community home was halted when he is diagnosed as having a carcinoma of the kidney with lung metastases. He is normally well nourished but staff are now concerned about maintaining Ben's adequate nutritional status. He weighs 68kg and is 2m tall

Importance of a balanced diet

Nutrition is a priority in an individual's treatment and provides the foundation for all other care. The only exception to this are the end stages of a life-threatening illness when it becomes more important to give hydration and feeding for pleasure rather than survival.

Having a correct diet means eating a variety of foods in the correct proportions. The six basic food groups – and the amounts to be eaten from each group for a healthy, balanced diet, are:

Milk and dairy foods 17% total intake	Vitamins, minerals, essential fats Less than 1%
Meat, fish and alternatives 12% total intake	Fruit and vegetables 32% total intake
Fats and sugars 5% total intake	Bread, other cereals and potatoes 33% total intake

Despite these figures, the concept of a 'healthy' diet is based on averages for a population and is based on current knowledge. Some people can remain healthy on different proportions- this particularly applies to 'micronutrients' (vitamins, minerals and essential fats) whose requirements are probably genetically determined and will vary with individuals.

How much food do people need? People differ in the amount of energy (calories) they require and that is what affects the amount of food, in total, that individuals need. However much people need, the proportions of food from the different groups should remain the same. So for example, someone with a low daily energy requirement of say 1200 calories, would need the same proportions of food from the five food groups, as someone with a high daily requirement of 3000 calories.

Things that affect people's overall energy needs are:

Gender – women tend to need less energy than men.

Age – older adults need less energy than adolescents and young adults.

Being overweight – being heavier than the healthy weight range for an individual's height means less energy is required to achieve a healthy weight.

Being very inactive – the less active a person is, the lower their energy needs.

Recommended daily calorie needs: Women = 2000 calories Men = 2500 Calories. A man with a physically demanding job would need 3000 calories, while a frail, elderly woman may only need 1500 calories. Ben is a young man who would need 2000 calories normally, but if he becomes less active because of his illness he may manage with smaller amounts.

Planning Nutritional Support

Nutritional support should be considered for anybody unable to maintain their nutritional status by their usual diet. There are many factors which may influence food intake and need to be considered when planning nutritional support. Examples are surgery, radiotherapy, chemotherapy, physical or mental illness, advanced disease, and Ben's behaviour and his environment

If Ben has difficulty accepting a balanced diet, he will start to lose weight. This can be checked by calculating his *Body Mass Index (BMI)*. This should normally be more than 20.

It is calculated by dividing the weight in kilograms by the square of the height:

for Ben this is 68kg divided by 2m x 2m, so $68 \div 4 = 17$

A BMI of 17 is low, showing that Ben is undernourished.

The effects of a poor diet include muscle weakness, fatigue, skin problems (dryness, thinning, oedema, pressure ulcers), vitamin and mineral deficiencies, anaemia, infections, heart failure, hypoglycaemia and a reduced ability to withstand infection, physical injury and emotional stress.

Modifying the Diet

Timing and frequency of food and drink. Patients may be unable to eat their usual portions. Ben may prefer to 'graze' all day with snacks 'little and often' rather than main meals.

Altering food consistency. Ben may benefit from very soft foods or even liquids if he finds it difficult to chew or has a sore mouth.

Altering food choice: taste changes may mean foods that Ben previously liked are now disliked and those previously disliked now enjoyed.

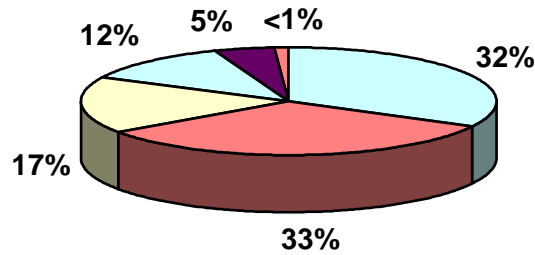
Fortifying food: food may be fortified with protein and energy if Ben is unable to eat and drink sufficient amounts.

This can be done using commercial products or store cupboard ingredients (see the CLIP worksheet: *Enriching the Diet*)

Write

This pie chart shows the proportions of the six basic food groups in a healthy diet. Join each food type with the correct section of the chart

- | | | | | | |
|-------------------------|---------------|-----------------|------------------------|----------------------|--------------------------|
| Milk and dairy products | Meat and fish | Fats and sugars | Vitamins, minerals etc | Fruit and vegetables | Bread, cereals, potatoes |
|-------------------------|---------------|-----------------|------------------------|----------------------|--------------------------|



Reflect

Ring the number of calories you think the following people should be eating each day

- | | | | | | | |
|---|-----|------|------|------|------|------|
| • A man with a physically demanding job | 500 | 1000 | 1500 | 2000 | 3000 | 5000 |
| • An frail, 95 year old, inactive woman | 500 | 1000 | 1500 | 2000 | 3000 | 5000 |
| • Ben (33 year old man with cancer) | 500 | 1000 | 1500 | 2000 | 3000 | 5000 |



Calculate

The Body Mass Index (BMI) is $\frac{\text{weight in kilograms}}{\text{height squared}}$

Work out Ben's BMI – what does this tell you about Ben?

Reflect

Think how you could increase Ben's nutrition *without* increasing the amount of food given at one sitting

FURTHER ACTIVITY: Balancing the diet

- For one of your patients:
work out what proportion of the 5 basic food groups make up their daily intake.
- Work out your own BMI (if you dare!)

FURTHER READING: Balancing the diet

Journal articles

Lesourd B, Mazari L. Nutrition and immunity in the elderly. *Proceedings of the Nutrition Society*. 1999; **58**(3):685-95.

Stratton RJ, Elia M. Are oral nutritional supplements of benefit to patients in the community? Findings from a systematic review. *Current Opinion in Clinical Nutrition & Metabolic Care*. 2000; **3**(4):311-5.

Wilkes G. Nutrition: the forgotten ingredient in cancer care. *American Journal of Nursing*. 2000; **100**(4):46-51.

Williams J, Copp G. Food presentation and the terminally ill. *Nursing Standard*, 1990; **4**:29-32.

Books and reports

Joint working party of the National Council for Hospice and Palliative Care Services and the ethics committee of the Association for Palliative Medicine of Great Britain and Ireland. Artificial hydration (AH) for people who are terminally ill. *European Journal of Palliative Care* 1997; **4**: 124.

BMA. *Withholding and Withdrawing Life-prolonging Medical Treatment- Guidance for Decision-making*. London: BMJ Publishing Group, 1993.

D.O.H. *The Essence of Care: Patient focused Bench Marking for Health Care Practitioners* London D.O.H., 2001

Mealtime participation guide. Klein M.D., Morris S., Dunn M. Tuscan: Therapy Skill Builders, 1999.

Nutritional oncology Herber H, Blackburn GL, Go VLG. San Diego : Academic Press, 1999.

CLIP

**Current
Learning
In
Palliative care**
An accessible
learning programme
for health care
professionals

Fifty seven 15 minute worksheets are available on:

- An introduction to palliative care (3 worksheets)
- Helping the patient with pain (9 worksheets)
- Helping the patient with symptoms other than pain (11 worksheets)
- Moving the ill patient (2 worksheets)
- Psychological needs (8 worksheets)
- Helping patients with reduced hydration and nutrition (8 worksheets)
- Procedures in palliative care (4 worksheets)
- Understanding and helping the person with alternative communication (learning disabilities) (5 worksheets)
- The last hours and days (4 worksheets)
- Bereavement (3 worksheets)

© 2004

Helping the Patient with Advanced Disease: a Workbook
Regnard C. ed.

Oxford: Radcliffe Medical Press www.radcliffe-oxford.com