CLiP

15 minute Worksheet

Helping the patient with reduced hydration and nutrition

2: Balancing the diet

Intermediate level

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Aim of this worksheet

To understand the benefits 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, and then turn to the Work page overleaf.
- Work any way you want. You can start with the exercises on the Work page using your own knowledge. The answers are on the Information page - this is not cheating since you learn as you find the information. Alternatively you may prefer to start by reading the Information page before moving to the exercises on the Work page.
- This CLiP worksheet should take about 15 minutes to complete, but will take longer if you are working with colleagues or in a group. 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- If you think any information is wrong or out of date let us know.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 tall 33-year-old man, who has moderate learning disability together with hydrocephalus, spastic diplegia, visual impairment and epilepsy.

He enjoys life but his plan to settle in a small group community home was halted when he was 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.

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INFORMATION PAGE: Balancing the diet

The role of a balanced diet

Research has shown that appropriate nutrition and hydration supports a person's health and wellbeing. It is therefore a priority in an individual's treatment and provides the foundation for all other care. Poor nutrition and hydration causes problems with mobility (muscle weakness reduces mobility; dehydration causes dizziness; both will increase the risk of falls); energy (fatigue; lethargy); recovery from illness (skin breakdown; poor wound healing; a weakened immune system); bowels and bladder (constipation; colic; renal impairment; urinary tract infection); thinking (slowness, delirium).

Healthy eating guidelines, designed for healthy people with a healthy appetite, are often unrealistic and inappropriate for someone with cancer who has a smaller appetite. However the aim to maintain some balance in the diet remains important for a person like Ben who is still eating regularly. Towards the end stages of a life-threatening illness, it is normal for a person to eat and drink less, weight loss is to be expected and balanced eating becomes less of a concern. **The emphasis changes to giving hydration and food for pleasure rather than survival.**

What is Balanced Eating?

No single food contains all the nutrition we need to support our health. It is important to eat a variety of foods from the 5 main food groups to ensure a balance of nutrients

1. Starchy carbohydrate foods such as bread, rice, potatoes, pasta, chapatti, crumpet, breakfast cereal, crackers These foods provide the body with energy, vitamins and minerals, it is therefore important to try and include them at every meal. Wholegrain versions of these foods also provide fibre which helps to prevent constipation.

2. Foods high in protein such as meat, fish, eggs, peas, beans, lentils, tofu and Quorn. These foods contain protein which is essential for tissue to grow and repair itself. Protein is also important to keep our muscles strong. They are also often the best source of Iron in our diets which helps to keep our blood healthy. Aim to include a good source of protein at two main meals during the day.

3. Milk and dairy foods such as yogurt and cheese. These foods contain calcium which helps to keep bones and teeth strong. They are also a good source of protein. Full fat versions are often useful to boost calories for a person with a smaller appetite.

4. Fruit and vegetables provide fibre, vitamins and minerals that help us to keep us well. A good variety is important fresh, frozen, tinned, dried fruit and vegetables can all be used. Baked beans and fruit juice also count. Include small amounts where possible e.g. add a few spoons of tinned fruit to milk puddings, ice cream or yogurt.

5. Food and drinks high in fat and or sugar, such as cakes, chocolate, puddings, desserts, butter, cream, crisps, pop and margarine. This group are high in calories or energy. They are useful to encourage regularly with people who have a very small appetite or losing weight (See the CLIP worksheet: Enriching the diet).

Planning Nutritional Support

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. Although Ben's weight seems normal he is very tall (6½ feet), so his BMI 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 ÷ 4 = 17

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

BMI charts are now common and can be used to avoid having to calculate the BMI.

Putting the above into practice takes a little imagination and planning. Often it's about looking at the person's preferred meals and thinking how I can make it more balanced? For example Ben prefers a bowl of tomato soup when he is feeling tired. An average can of tomato soup is a lot of water, some vegetables and not a lot else (no protein and low in calories) but here are some examples of how to make it more balanced:

(i) Add a dash of cream to boost calories and serve with a small meat sandwich (protein & carbohydrate) or a slice of cheese (protein) on toast (carbohydrate).

(ii) Make homemade, add lentils (protein), potato (carbohydrate) and cream (calories)

Hydration is also important. Aim for at least 6-8 drinks per day. Mild dehydration is a common problem and can cause or make worse many problems including confusion, constipation, urine infections, skin breakdown.

Monitoring Progress

Keeping a record of food and fluid intake can be very helpful. Records enable you to check the balance of a person's diet over the day. They also inform you of preferences which may help you plan and improve a person's diet e.g. preferred times of eating, flavours, quantities or textures. A small and often approach will suit Ben's smaller appetite and if Ben finds chewing difficult or tiring he may eat more of softer foods. People can also experience taste changes and often start favouring different foods to what they previously liked. Monitoring weight may also be helpful; if weight is stable the diet is providing adequate calories or energy. Weekly checks of Ben's weight show it is dropping so effort to boost calories is needed (see CLIP work sheet*: Enriching the diet*).

Write down some consequences of malnutrition and poor hydration on the following

Effect on mobility:

Effect on energy:

Effect on recovering from illness:

Effect on the bowels and bladder:

Effect on the ability to think:

Link up the characteristics with foods
(some foods will have several characteristics)
The first has been done for you

High in energy	Fruit and vegetables
Good source of vitamins	Starchy foods eg. potatoes
High in protein	Meat, fish and eggs
High in calcium	Milk and dairy products
High in fibre	Cakes and puddings
Good source of minerals	Double cream

The Body Mass Index (BMI) =
weight in kilograms ÷ height squared

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

Think how you could increase Ben's nutrition *without* increasing the amount of food given at one sitting
How would you know he is getting enough?

FURTHER ACTIVITY: Balancing the diet

- For one of your patients work out if they are getting a reasonable balance or nutrition
- Work out your own BMI (if you dare!)

FURTHER READING: Balancing the diet

Journal articles

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