



Nutrition Prehabilitation Passport

Your guide and personal goals for your nutrition
before head and neck radiotherapy treatment





Introduction

What is prehabilitation?

Prehabilitation (or “prehab”) means getting ready for cancer treatment. It helps you build up your strength and look after your wellbeing before treatment starts. This can make treatment easier to cope with and can *help you recover* afterwards.

Why is nutrition prehab important before head and neck radiotherapy?

- Being told you have head and neck cancer can be a shock.
- Nutrition prehab can help you find out what your body needs and how to eat well before treatment.
- Radiotherapy for head and neck cancer is a big treatment and it can affect your body a lot.
- Radiotherapy can make it harder to eat and drink. It can cause loss of weight, muscle and strength.
- You might feel very tired, and treatment may feel harder to manage.
- It is important to stop any weight and muscle loss, or build up if you need and can. This will help you to stay as strong as you can before treatment.

Will I need a feeding tube?

Some people may need a feeding tube to help get enough food before, during or after radiotherapy. Your care team will talk about this with you and answer your questions. If you need a feeding tube, it can help you get the nutrition your body needs to stay strong and recover.



Introduction

What else can be part of prehab, besides nutrition?

- Physical activity and support for your mental health.
 - Feeling as strong as possible in your body and mind can help you eat well.
- Advice to stop smoking and stop or reduce drinking alcohol.
 - This will help your body respond better to treatment and help you feel more hungry.



Who & what is this passport for?



Helps you understand prehab and what you can do to help yourself before, during and after treatment.

You & your caregivers

To communicate

To tell other healthcare staff about your nutrition prehab care plan and goals.

What do I need to do?

Be motivated

Get ready to make small lifestyle changes that can help you eat well before, during and after treatment.

Set goals

Think about why it matters to you to eat well, be strong and to make small changes or set goals.

Where can I get more information?

Scan the QR code for prehabilitation videos from Macmillan





Contact Information



Professional	Name	Contact
Dietitian (Research prehab)	Linda Cantwell	linda.cantwell@liverpool.ac.uk 07385414647
Dietitian (Community)		
Dietitian (Radiotherapy)		

Why have I been given this passport?

You have been given this passport because you are taking part in a study. The study is looking at if this passport can help people with head and neck cancer to set goals and use nutrition prehab to get ready for radiotherapy.



= You fill this in

(Write your answers here. You can ask a friend or family member to help you if you want)



= We fill this in together

(You and your dietitian will talk about this and write the answers together.)





About me



Name

Date of birth

Job:
(if you have one, or previous)

I live: On my own ☐ With friend/family ☐ Other ☐

If you would like, write here

.....

Who can support me with treatment:

.....

Things I like to do:



Clinical information

Where is my head and neck cancer

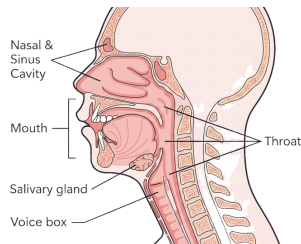
Mouth ☐

Voice box ☐

Throat ☐

Salivary gland ☐

Nasal Cavity ☐



My treatment

Radiotherapy

Chemotherapy

Surgery

Other

(start / end dates if known)

.....

Medical history
(include allergies)

.....

Medications- Regular

.....

Medications- New

.....



Nutrition prehab assessment



Location

Date

Body weight & strength

Weight (kg)	Previous weight (3-6 months ago) (kg)	Weight (on diagnosis) (kg)	Weight change (kg/%)	Height (m)

BMI (kg/m ²)	Handgrip Strength (kg)	Muscle Mass (kg/m ²)	5 Sit to Stand (time)	Other _____

Do you do any regular physical activity? Yes ☐ No ☐

(i.e. as swimming, walking, gardening, dancing)

If yes, what, and how often each week?

.....

Food & Fluid intake - what did you eat & drink yesterday?

Record in food & fluid diary

Do you have protein with your meals or snacks? Yes ☐ No ☐

(i.e. beans, lentils, dairy, eggs, nuts, seeds, tofu, quorn, meat, fish)

During the day, do you go longer than 4 hours without eating or having a nourishing drink ? Yes ☐ No ☐ Sometimes ☐

(i.e. milkshake, smoothie)

Have you any problems that make it hard to eat and drink? (circle)

Reduced appetite

Nausea

Constipation

Sore mouth

Taste changes

Problems swallowing

Vomiting

Diarrhoea

Dry mouth

Fatigue

Feel full quickly

Smells

Other _____

Do you choke or cough on any foods or drinks?

Yes ☐

No ☐

Sometimes ☐



Assessment



Who does the shopping?

Who does the cooking?

Do you have any food likes or dislikes?.....

Have you any cultural food traditions that you would like to share?

.....

Do you have a cooker? Yes ☐ No ☐

Do you have a fridge? Yes ☐ No ☐

Do you have a freezer? Yes ☐ No ☐

Do you have a blender? Yes ☐ No ☐



The dietitian will estimate your nutritional needs here:

Calories (kcal)

Protein (g)

Fluids (l)

.....

.....

.....

Any other
information

.....
.....
.....

The dietitian will use all the information to check if you are getting enough nutrition, to get ready for radiotherapy.



Goal setting



The dietitian will discuss a nutrition focused aim for prehab. It is also important that you have your own personal aim for prehab.

What is your nutrition focused aim?

.....

What is the aim that is important to you? Patient aim.

.....

How important is this aim? (circle)

Where **1**, is extremely **not** important and **10** is extremely **important**

1 2 3 4 5 6 7 8 9 10

What changes or goals do I need to make to help me reach my patient or dietetic aim? (set 1-3 goals)

Goal 1

How confident do I feel to achieve this goal?

Where, **1** is **not** at all confident and **10** is **extremely** confident

1 2 3 4 5 6 7 8 9 10

How will you achieve this goal?

Think when, where, with whom or any help you need

1.

2.

3.



Goal setting



Goal 2.....

How confident do I feel to achieve this goal?

Where, **1** is **not** at all confident and **10** is **extremely** confident

1 2 3 4 5 6 7 8 9 10

How will you achieve this goal?

Think when, where, with whom or any help you need

- 1.....
- 2.....
- 3.....

Goal 3.....

How confident do I feel to acheive this goal?

Where, **1** is **not** at all confident and **10** is **extremely** confident

1 2 3 4 5 6 7 8 9 10

How will you achieve this goal?

Think when, where, with whom or any help you need

- 1.....
- 2.....
- 3.....

Any questions?



.....

.....



Nutrition Prehab Review



Location

Date

Goal review

Goal 1

How often are you achieving this goal? (circle)

Never Rarely Sometimes Often Always

How confident do I feel with this goal?

Where, **1** is **not** at all confident and **10** is **extremely** confident

1 2 3 4 5 6 7 8 9 10

To achieve this goal, is there anything else I need to do? Yes ☐ No ☐

1.

2.

Goal 2

How often are you achieving this goal? (circle)

Never Rarely Sometimes Often Always

To achieve this goal, is there anything else I need to do? Yes ☐ No ☐

1.

2.

Goal 3

How often are you achieving this goal? (circle)

Never Rarely Sometimes Often Always

To achieve this goal, is there anything else I need to do?

1.

2.



Nutrition Prehab Review



Location

Date

Body weight & strength (record if able)

Weight (kg)	Previous weight (kg) (on assessment)	Weight change (kg/%)	Height (m)	BMI (kg/m ²)

Muscle Mass (kg/m ²)	Handgrip Strength (kg)	5 Sit to Stand (time)	Other _____	Other _____

Any changes in your physical activity? Yes ☐ No ☐

Food & Fluid intake- look at your food & fluid diary

Do you have protein with your meals or snacks? Yes ☐ No ☐
(i.e. beans, lentils, dairy, eggs, nuts, seeds, tofu, quorn, meat, fish)

During the day, do you go longer than 4 hours without eating or having a
nourishing drink? Yes ☐ No ☐ Sometimes ☐
(i.e. milkshake, smoothie)

Have you any problems that make it hard to eat and drink? (circle)

Reduced appetite Nausea Constipation Sore mouth Taste changes
Problems swallowing Vomiting Diarrhoea Dry mouth Fatigue
Feel full quickly Smells Other _____

Are you choking or coughing on any foods and/or drinks?

Yes ☐ No ☐ Sometimes ☐

Do you want to make any new goals? Yes ☐ No ☐ Continue the goals set at
my first appointment

.....



More goal setting



Date

(if needed)

Goal

How confident do I feel with making this change/goal?

Where, **1** is **not** at all confident and **10** is **extremely** confident

1 2 3 4 5 6 7 8 9 10

How will you achieve this goal?

Think when, where, with whom or any help you need

1.

2.

3.

Goal

How confident do I feel with making this change/goal?

Where, **1** is **not** at all confident and **10** is **extremely** confident

1 2 3 4 5 6 7 8 9 10

How will you achieve this goal?

Think when, where, with whom or any help you need

1.

2.

3.

Any questions?

.....

.....





More goal review



Location

Date

Goal review

Goal _

How often are you achieving this goal? **(circle)**

Never Rarely Sometimes Often Always

How confident do I feel with change/goal?

Where, **1** is **not** at all confident and **10** is **extremely** confident

1 2 3 4 5 6 7 8 9 10

Is there anything else that I need to do, or support that I need?

1.

2.

Goal _

How often are you achieving this goal? **(circle)**

Never Rarely Sometimes Often Always

Is there anything else that I need to do, or support that I need?

1.

2.

Goal _

How often are you achieving this goal? **(circle)**

Never Rarely Sometimes Often Always

Is there anything else that I need to do, or support that I need?

1.

2.

Getting the best out of your nutrition

Practical ways to optimise your nutrition to increase or maintain your calories and protein



✓ Little and often approach



- ✗ Try not to leave long periods of time between eating
- ✓ Try something every 2-3 hours (small snack or a nourishing drink)

✓ Fortifying foods – add “extras” to meals and snacks to increase the calories and protein without increasing the volume of food

✓ To increase calories

- + Add butter, oils, margarine to vegetables
- + Add double cream, evaporated milk into coffee, soups & desserts
- + Add cheese or mayonnaise to sandwiches or salads
- + Add honey, jam, or sugar to cereals and hot drinks



✓ To increase protein

- + Add skimmed milk powder into milk, puddings, potatoes
- + Add cheese, nuts, eggs, beans or lentils to soups, stews, curry
- + Add nut butters or ground nuts into porridge, yogurts, puddings



✓ Try homemade milkshakes or smoothies

source of calories *and* protein

- ✓ See examples on the next page and tips below



Tips

- Use frozen or tinned fruits
- If you find it hard to swallow avoid berries with seeds (unless you are using a high-power blender) - Try bananas, mangoes, peaches, cherries, blueberries
- Make a large portion, you can use through the day (keep in fridge 24hours, bring in cold flask or cool bag later on during treatment)
- Add cinnamon, ginger, cloves, cardamon, vanilla or other spices to stimulate taste



Getting the best out of your nutrition

Milkshakes & Smoothies



Optional

Add ice cream for thicker milkshake

Approx. energy & protein

kcal=calories

g=grams



Optional Add

1 tbsp peanut butter

90kcal + 5g protein

Swap dairy

Use dairy free options and pea protein powder

Swap fruit

Use berries or fruits you like



Tip

Frozen Avocado
Add more juice or less avocado if too thick

Measurements & weights

tbsp= tablespoon- a large spoon

tsp= teaspoon- a small spoon



ml= millilitres of fluid



Milkshake

215 kcal, 10g protein

1 tbsp Milkshake powder or syrup (any flavour)
200ml full cream milk
1 large tbsp milk powder
1 tsp honey or sugar



Stir or shake together

Tropical smoothie

310 kcal, 12g protein

Cup of fruit - Mango/banana
1 tbsp Greek Yoghurt
200ml full cream milk
1 tbsp milk powder

Blend together



Juice smoothie

Dairy free

420 kcal, 7.5g protein

½ avocado
Cup of chopped fruit
200ml apple juice
1 tbsp tahini
1-2 drop vanilla essence

Blend together



Protein

Quick guide



Why does protein matter?



Keeps muscle strong



Helps healing and repair



Helps fight infection

Approx. protein

Highlighted= 20g protein

No highlight= 10g protein

Meat, fish & Eggs



Guide weight

What it looks like

Chicken

90g

Palm of hand

Red Meat

80g

Deck of cards

Fish (fresh)

100g

Hand

Tinned Tuna/Salmon

100g

Small tin or ½ large tin

Eggs

150g

3 medium eggs

Dairy



Milk 560ml

560ml

1 pint

High protein yoghurt

150-200g

8 tbsps

Greek yoghurt

250g

1 pot

Cottage cheese

100g

⅓ of 300g

Cheddar cheese

40g

2x portion packs

Paneer cheese

60g

3x 1 inch cubes

Beans & Pulses



Baked beans

200g

½ tin

Chickpeas or cannellini beans

120-130g

½ tin

Butter beans or green lentils

160g

⅔ tin

Red lentils- dry

50g

2 tbsps

Hummus

160g

5 tbsps



Protein

Quick guide



Plant based options



Guide weight

What it looks like

Tofu- Firm



125g

¼ block

Tofu- Silken

150g

½ 300g pack

Quorn Mince

125g

6 tbsp

Tempeh

90g

see packet

Soya yoghurt

250g

1/4 large pot

Soya Greek Style

180g

7-8 tbsp

Soya Milk



330ml

large glass

Nuts & Seeds



Unsalted nuts or seeds

50g

A handful

Tahini or peanut butter

40g

2 large tbsp

Measurements & weights



g= grams of weight

ml= millilitres of fluid

tbsp= tablespoon- a large spoon



Tips

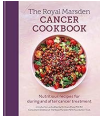
- Include protein with each meal or snack
- Mix to suit your taste & budget
- Use hand measure or spoons sizes as a guide

Remember fluids

- Aim for at least 6-8 glass a day
- Water, tea, juices, smoothies & soups all count



Further resources and cookbooks



Royal Marsden Cancer Cookbook – (General cancer)



Whizz it up- Sussex cancer fund



Not So Porridge- Sussex cancer Fund



World cancer research fund (WCRF) **free** recipe books online or posting available



World cancer research fund (WCRF) **free** online cooking classes <https://www.wcrf.org/living-well/living-with-cancer/cook-through-cancer/>

If cooking is difficult, you can use supermarket ready meals.
Some companies can deliver direct to door.

Examples include:

Wiltshire farm foods

Oakhouse foods

Parsley box





Keep your mouth clean



Good mouth care is important to keep your mouth clean. This can make eating and speaking easier and more enjoyable.

Radiotherapy can make your mouth more sore and more likely to get ulcers and infections

Start good mouth care before radiotherapy if you can. This can help you during treatment and after.

You will see a dentist before you start radiotherapy. They will give you advice on how to look after your teeth and mouth.

Being Active



Being as active as you can is important for your body and mind. It can help during radiotherapy and with living well after cancer:



- ✓ Manage symptoms and treatment side effects
- ✓ Improve quality of life and clinical outcomes
- ✓ Control cancer fatigue
- ✓ Improve or maintain strength



What are UK health recommendations?

Be active
150 minutes a week
moderate

Walk Swim Garden Sport

Build strength
2 days a week

Squats Gym Carry Bands

Improve balance
2 days a week

Tai chi or Yoga Bowls Dance

If new, start slowly. Follow key safety advice. If you have any concerns, speak with a health professional

Practical Tips

- Choose an activity you enjoy
- Do it with a friend or partner if you can
- Try to use the stairs instead of the lift
- Housework counts as activity too
- If you can, try to do a bit more before radiotherapy starts.
- Try to drink enough fluids, especially during radiotherapy
- During radiotherapy, **do less on “bad days” or when side effects are worse**



✗ Try not to sit still all day

Visit Macmillan online or information centres for
Move More leaflets

Where to get more advice?

Macmillan
exercise videos



Scan here



Stay connected & care for your mental health



It's important to stay connected and to have support from others

You can:

- ✓ Bring someone with you to your appointments, including prehab
- ✓ Keep in touch with friends, family or people in your community
- ✓ Ask for social care support if you need it
- ✓ Contact or join a head and neck cancer support group



Mental Health



Patients & caregiver peer support groups



For details of local support groups, ask your dietitian, cancer support worker or clinical nurse specialists

Radiotherapy can mean lots of appointments which can effect your daily life. This can make people feel frustrated, angry, sad or low.

Please let your health care team know if you find it hard



"I shut people out but I shouldn't have"





Patient and caregiver advice



"I joined a local support group before I started my treatment. This was a great help to me. I was able to contact a couple of the members of the group about eating and drinking after my treatment and what side effects I was experiencing. No one

has to be on their own"

(Patient, 1 year after radiotherapy treatment)

"What helped me was staying active. I walked a lot with others the week before treatment. The social interaction with the people I walked with continued during and after treatment through visits

and messaging"

(Patient, 1 year after radiotherapy treatment)

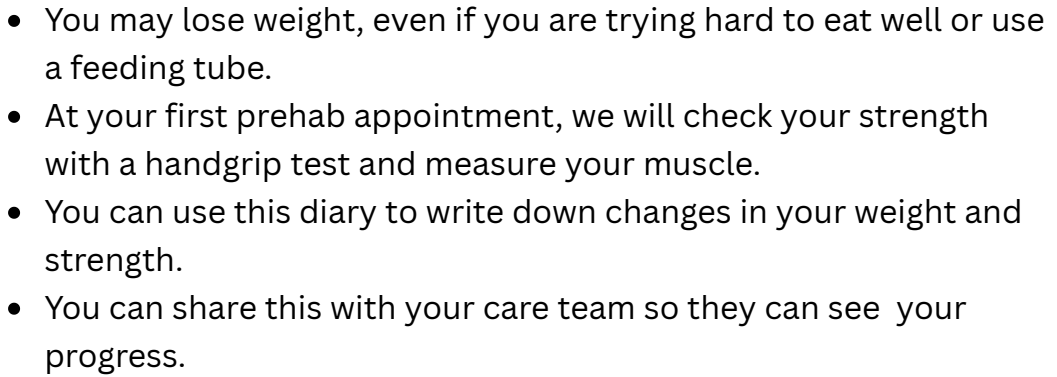
"You have been diagnosed with cancer and it must feel very strange but you can help yourself and your body to get through this and enhance your recovery. If you can make your body stronger it will help you, you can do this by getting the best nutrition possible to help your body through this journey."

(Patient, 8 years after radiotherapy treatment)

"The reason for nutrition prehabilitation is not to frighten, but to enlighten"

(Caregiver, 5 years after radiotherapy)



[illegible]



Any notes or questions



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