

# Nutrition screening and support for adults during CAR T

This document aims to provide an overview of general guidance on nutrition screening and support needs. It has been developed based on best-practice evidence-based nutrition guidelines in oncology/haematology, in the absence of sufficient research in CAR T-cell therapy patients. It is not a substitute for appropriately qualified professionals but may be helpful to others in the multidisciplinary team (MDT).



## Why is nutrition screening important?

- People with cancer are at high risk of malnutrition, particularly those who have undergone previous treatments and/or have advanced disease. Although research specifically in the context of CAR T-cell therapy is still emerging, malnutrition and reduced muscle mass are associated with significantly poorer outcomes in patients with cancer.
- Nutrition screening tools offer a simple way to identify malnutrition risk in your patients early, as well as provide strategies to prevent, treat and monitor. Malnutrition is preventable if action is taken early and it should not be considered an expected result of cancer treatment.

## How should malnutrition screening be completed?

- In cancer care - malnutrition risk can change rapidly; catching this early through **regular nutrition screening is key**.
- **Make every contact count**. Patients should be screened **on referral**, and **at each stage of the treatment pathway**.
- Many different nutrition screening tools can be used. **Adhere to your local Trust's nutrition screening policy**, including recommended tools to use, and site-specific monitoring, care planning and documentation processes.
- **Engage with your local dietitians** and MDT for advice, training, resources and to effectively implement nutrition screening pathways into your service.



## ASK & ASSESS

- Take patient **measures** including: weight and height, calculate BMI.
- Screen all patients for malnutrition risk** using a valid tool recommended by your Trust. (Example shown on next page).
- Ask** patients about recent nutrition history. This helps to determine malnutrition risk, and actions to take:
  - How is your appetite lately?
    - Are there symptoms that have kept you from eating lately (e.g. low appetite, nausea/vomiting, swallowing difficulties, bowel issues, taste changes, pain)? If so, for how long?
  - How are you managing with your eating and drinking? Same, less or more than usual for you?
  - What is a usual weight for you? Have you had any weight loss in the last few weeks/months?
    - Was this unplanned, or was it intentional?
    - How are your clothes, belt, and jewellery fitting? Differently to usual (i.e. looser)?
- Consider:** are there additional factors which may impact your patient's ability to eat and drink?
  - Bulky disease in gastrointestinal or head and neck region?
  - Ongoing acute/chronic symptoms from prior anti-cancer treatments?

## Patients with high BMI:

Malnutrition and low muscle mass can occur in **any** patient with cancer, regardless of weight or BMI. Malnutrition risk **cannot** be determined solely on patient's BMI, or physical appearance. Screening tools are quick but not comprehensive - some people at risk may be missed. **Use clinical judgement** alongside the screening score to decide if your patient may be at risk and require a dietitian referral.



## ADVISE & ACT

- Take steps to manage your patient's malnutrition risk (example shown on next page). **Share some of the benefits** of maintaining weight and eating well throughout treatment, and **refer patients at risk of malnutrition to your local dietitian immediately**.
- Dedicated prehabilitation/rehabilitation services are not yet widely available for most cancer services, including CAR T. However, there can be huge benefits in just discussing the benefits of nutrition and signposting patients to available supports in your centre or local communities.

## Pre-CAR T

From initial outpatient appointment to apheresis to bridging therapy to lymphodepletion



### ALL PATIENTS SHOULD BE SCREENED FOR MALNUTRITION RISK:

- 1) At INITIAL appointment, and
- 2) Re-screened at REGULAR intervals, including:
  - a) When starting treatments (holding therapy, bridging therapy, lymphodepletion)
  - b) At regular intervals throughout treatment, and immediately after.
  - c) When there is a clinical concern, or changes to their clinical situation which could affect nutritional status. Examples: onset of symptoms that may impact ability to eat/drink, hospital admission, clinical deterioration.
- 3) At follow-up appointments: Be opportunistic - incorporate nutrition screening into routine patient contacts.

#### Example malnutrition risk scoring:

##### 'Malnutrition Screening Tool' (MST)

\*Use Trust-recommended screening tool. Additional validated and reliable malnutrition screening tools in cancer patients include: [Malnutrition Universal Screening Tool \(MUST\)](#) [Nutrition Risk Screening 2002 \(NRS-2002\)](#) [Patient Generated Subjective Global Assessment \(PG-SGA\)](#)

Only choose 'unsure' after exploring whether you can quantify weight loss; use prompts on first page and check medical records.

#### Q1) Has the patient lost weight recently without trying (in the past 6 months)?

- Yes → if so, how much?
  - 1 to 5kg = Score 1
  - 6 to 10kg = Score 2
  - 11 to 15kg = Score 3
  - >15kg = Score 4
- Unsure = Score 2
- No = Score 0
- Unsure = Score 2

#### Q2) Has the patient been eating poorly because of a decreased appetite?

- Yes = Score 1
- No = Score 0

Eating poorly may be due to other eating issues (not just decreased appetite); such as difficulty chewing or swallowing. Use your clinical judgement to score accordingly.

Add scores from Q1 and Q2 together for the total MST risk score



#### MST Score <2

Low malnutrition risk: Routine Care

##### ACT - Nutritional Care Plan:

- Explain the benefits of maintaining weight and eating well.
- Provide nutrition support leaflets; signpost to local or online resources (see below).
- Monitor and re-screen regularly.

##### RESOURCES:

- [Malnutrition Pathway Resources](#)
- [Macmillan Cancer Support](#)
- [Peter Mac CanEAT pathway](#)



#### MST Score ≥2

High malnutrition risk: REFER TO DIETITIAN & TREAT

##### ACT - Nutritional Care Plan:

→ REFER TO DIETITIAN immediately for comprehensive assessment and intervention.

- Follow Nutrition Care plan as in 'Low Risk' (left green box).
- Provide advice to optimise dietary intake e.g. encourage high protein/calorie choices, small frequent meals and snacks.
- Provide nutrition support leaflets, including those specific to managing your patient's identified barriers/symptoms.
- Consider referral to MDT, based on patient needs/risks.
- Monitor and re-screen regularly.

## During CAR T

During CAR T inpatient admission



### ALL PATIENTS SHOULD BE SCREENED FOR MALNUTRITION RISK:

- 1) Within 24 hours of admission, and weekly thereafter
- 2) When there is clinical concern, or changes to patient's clinical situation (e.g. CAR T infusion, onset of adverse events) which could affect nutritional status.

If you are concerned or think there are barriers/risk factors that could affect your patients' ability to eat and drink - refer to a dietitian.



#### MST Score <2

Low malnutrition risk: Routine Care

##### Follow the Nutritional Care Plan as in 'Low risk' above, and:

- Provide help and advice on appropriate menu choices.
- Weigh and re-screen weekly.



#### MST Score ≥2

High malnutrition risk: REFER TO DIETITIAN & TREAT

##### Follow the Nutritional Care Plan as in 'High risk' above, and:

- Encourage appropriate high protein/calorie menu choices.
- Protected mealtimes, feeding assistance as required.
- Monitor intake e.g. food record charts.
- Weigh and re-screen weekly.

## Post CAR T

Following discharge from inpatient admission

### Early post-treatment period (e.g. up to 3 months post infusion):

- During the early period, patients can remain nutritionally at-risk.
- Continue to screen all patients for malnutrition risk at their routine follow-up appointments (telephone/face to face).
- Educate, and encourage patients to self-monitor.
  - [Peter Mac CANEAT self-screening](#)

### Post-treatment (e.g. after 3 months post infusion):

- Nutrition needs/goals vary depending on: patient's clinical/nutritional status, CAR T response, if further treatment indicated, and prognosis.
- Continue re-screening. Use clinical judgement to determine the frequency required for each patient.
- Encourage patients to self-monitor.
- Long-term survivorship: where appropriate (for patients not at risk of malnutrition), signpost to resources on healthy lifestyle and wellbeing.
  - [Macmillan lifestyle and well-being after cancer treatment](#)