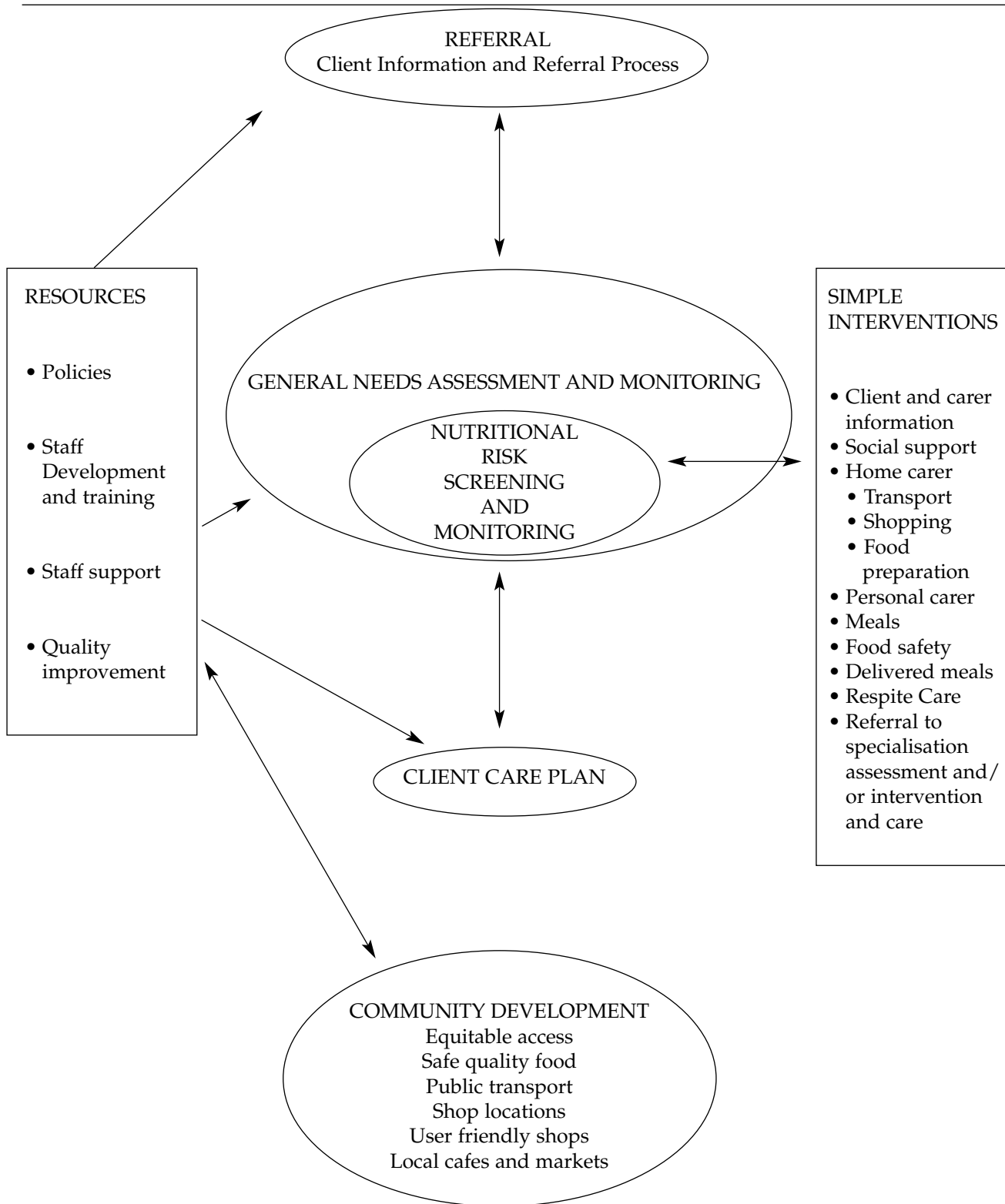


# **SECTION 2**

## **NUTRITIONAL RISK SCREENING AND MONITORING**

## 2.1 NUTRITIONAL RISK SCREENING AND MONITORING AS PART OF THE ASSESSMENT AND INTERVENTION PROCESS



## 2.2 THE NUTRITIONAL RISK SCREENING AND MONITORING TRIGGER QUESTIONS

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**Nutritional risk definition:** “The risk factors of poor nutritional status are characteristics that are associated with an increased likelihood of poor nutritional status” (Nutrition Screening Initiative, 1992).

**Nutritional risk screening and monitoring definition:** “The process of discovering characteristics known to be associated with dietary or nutritional problems” (Nutrition Screening Initiative, 1992).

The purpose of nutritional risk screening and monitoring is to identify:

- 1) Individuals at high risk of food and nutrition problems
- 2) Individuals who already have poor nutritional status

Screening then facilitates intervention.

### **Nutritional risk screening and monitoring:**

The first level of nutritional risk screening and monitoring applies to all clients at initial assessment, and then at each monitoring stage thereafter: YES, to ONE OR MORE of the following questions means that nutritional risk exists for the client.

#### **1) Obvious underweight-frailty?**

- This factor is more important if underweight is not the normal situation for the client.
- A stable body weight at a low level (say 80-90%) over a period of years can be consistent with apparent health, but a bout of poor food intake and/or increased energy and nutrient needs can precipitate severe weight loss. As far as we know, it is unlikely that life can be sustained when body weight drops below say 60% of the reference weight.
- To regain weight more energy must be taken in food and drink than the body requires. This is particularly difficult for a vulnerable person to achieve on a consistent daily basis for weeks and perhaps months.
- Prevention of underweight is highly desirable in vulnerable people.

#### **2) Unintentional weight loss?**

- When a person loses a lot of weight without trying (say 5 kg over six months or less), it is a serious sign of decline into a poor nutritional state and perhaps malnutrition. This decline is more rapid and worse if the person was underweight before the weight loss began.
- Of all the signs and symptoms of malnutrition, severe weight loss is the factor most clearly associated with relatively higher rates of morbidity and mortality. It is not a sign to be ignored.
- Check that fluid retention is not masking weight loss or that dehydration has not contributed to this weight loss.

### **3) Reduced appetite or reduced food and fluid intake?**

- In the underweight vulnerable person, a short period (more than one or two days) of reduced appetite and reduced food intake can rapidly lead to severe weight loss.

### **4) Mouth or teeth or swallowing problem?**

- It is very difficult for a person to ingest enough nourishing food (with variety) if their teeth or dentures are loose, broken or missing, or if they have a sore tongue and gums, or swallowing difficulties.

### **5) Follows a special diet?**

- Any acute or chronic illness which causes distortion of the usual diet puts the person at nutritional risk.

### **6) Unable to shop for food?**

- A person may not be physically capable of shopping for food. This independence lack may seriously affect their enjoyment, appetite, choice and intake of food and fluids.

### **7) Unable to prepare food?**

- A person who is unable to prepare food for themselves may not eat enough because of lack of choice, a reduced independence level, and possible dislike of foods offered.

### **8) Unable to feed self?**

- In this difficult situation, the person may have reduced food and fluid intake because of lack of independence, embarrassment, possible lack of care and attention to feeding by the Carer, and possible dislike and monotony of the foods offered.

### **9) Obvious overweight affecting life quality?**

- People who are moderately overweight will have more protection from any stress which reduces food intake (even temporarily).
- To lose weight, an older person must follow a very strict diet for a long time. This affects their life quality and their health may also deteriorate.
- Even if life quality is obviously affected by overweight, the decision has to be made as to whether the harm caused by any strict weight reduction will be too great.

### **10) Unintentional weight gain?**

- This factor is only really important in younger disabled people who are already on the brink of being overweight or who are obese.
- In the frail vulnerable person of any age, weight gain may be due to fluid retention.
- Unintentional weight gain (unless due to fluid retention) is likely to be useful to vulnerable people who are underweight or of normal weight.
- Unintentional weight gain may be disadvantageous in overweight people with severe heart disease or lung disease or diabetes or problems with mobility (see above).

When there is YES, to ONE OR MORE of these questions, it means that nutritional risk exists for the client. The diagram in Section 2.3 shows these trigger questions listed in a way which can be easily attached to the assessment form. More detailed exploration of these trigger questions can be found in Section 3.

## 2.3 THE NUTRITIONAL RISK SCREENING AND MONITORING TOOL FOR HOME-BASED ADULTS

<b>NUTRITIONAL RISK SCREENING AND MONITORING TOOL</b>	
CLIENT:	DATE:
<b>INSTRUCTIONS:</b> Fill in the client's name and the date you use the tool: tick the box when the answer to your observation is YES	
<input type="checkbox"/>	Obvious underweight-frailty?
<input type="checkbox"/>	Unintentional weight loss?
<input type="checkbox"/>	Reduced appetite or reduced food and fluid intake?
<input type="checkbox"/>	Mouth or teeth or swallowing problem?
<input type="checkbox"/>	Follows a special diet?
<input type="checkbox"/>	Unable to shop for food?
<input type="checkbox"/>	Unable to prepare food?
<input type="checkbox"/>	Unable to feed self?
<input type="checkbox"/>	Obvious overweight affecting life quality?
<input type="checkbox"/>	Unintentional weight gain?
SIGNATURE:	POSITION:
<b>OUTCOME:</b> <ul style="list-style-type: none"> <li>■ YES to one or more questions means that nutritional risk exists</li> <li>■ Nutritional risk increases when the person is affected by an Increasing number of general needs assessment factors</li> <li>■ In particular, deterioration in health and loss of independence can result from under-nutrition and perhaps malnutrition</li> </ul> <b>ACTION:</b> <ul style="list-style-type: none"> <li>■ Try TWO weeks of simple intervention strategies (less time if severe weight loss); if no response refer to a specialist</li> <li>■ Monitoring at monthly intervals (or more frequently) by a team member is required to ensure that nutritional risk has decreased through the most effective intervention</li> </ul>	

**CONDUCTED WITH CLIENT INFORMATION AND SERVICES RECORD AND CLIENT-CARER INPUT**

**OPTIONAL PLACEMENT ON ASSESSMENT FORM**

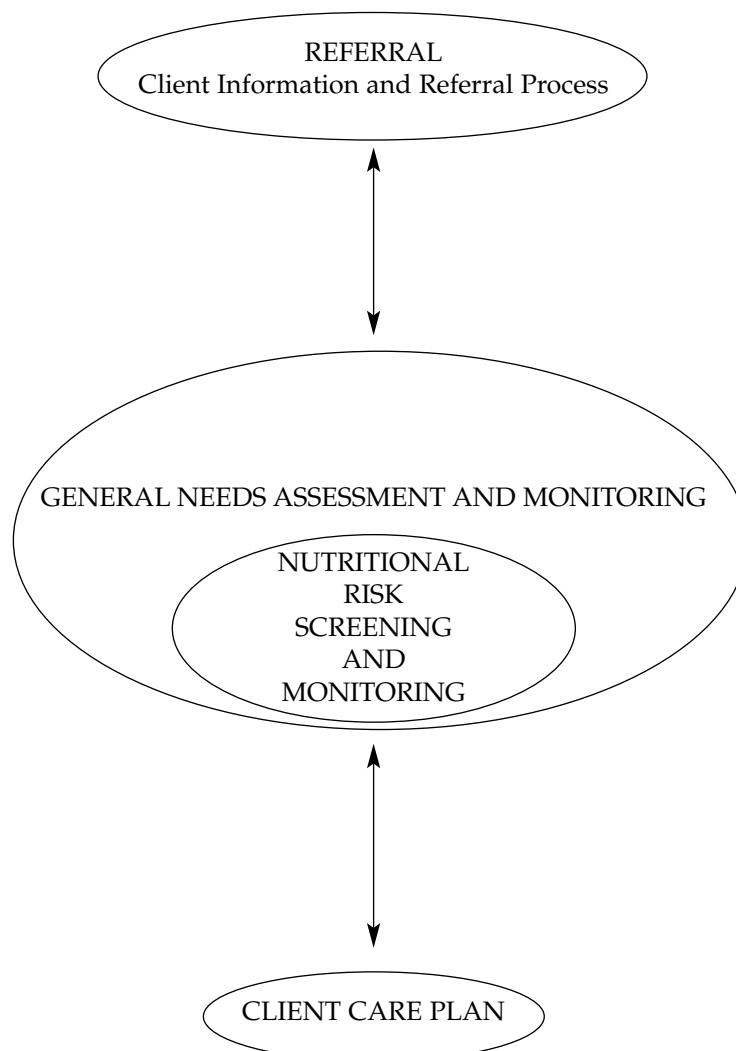
**OPTIONAL PLACEMENT IN CLIENT INFORMATION AND SERVICES RECORD**

## 2.4 HOW DOES NUTRITIONAL RISK SCREENING AND MONITORING FIT INTO ASSESSMENT AND PLANNING ASSISTANCE FOR INTERVENTION?

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The next diagram shows where this simple and quick method of nutritional risk screening and monitoring can be used in association with the Client Information and Referral process or forms or any other assessment form or process. The Nutritional Risk Screening and Monitoring Tool may also be placed in the client Information and Services Record book (refer Section 2.3).

This diagram also shows that further nutritional risk screening is embedded in the General Needs Assessment and Monitoring conducted with the client, which will probably reveal the reasons why the client is at nutritional risk.



## 2.5 GENERAL ASSESSMENT INCLUDES FACTORS RELEVANT TO NUTRITIONAL RISK

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### 1) Household management problems

- a) Financial difficulties?
  - Has food run out in the past week with no \$ to get more?
  - Less than \$30 for food a week?
- b) Organisational difficulties?

### 2) Social problems

- a) Bereavement, depression, social isolation (reduced food intake common)?
- b) Reduced motivation to eat or drink for known or unknown reasons?
- c) Unable to access or use secure, clean food storage and preparation area?
- d) Rummaging, foraging, begging or stealing food?

### 3) Personal and food hygiene problems:

- a) Possible food contamination and diarrhoeal illnesses?

### 4) Dietary problems.

- a) Irregular meals or less than 3 meals a day?
- b) Doesn't take 1 3 3 4 5+ food plan most days (frail older person)?
- c) Doesn't take 1 2 3 4 5+ food plan most days (younger adults)?
- d) Did not have one or more of the food groups yesterday?
- e) Excessive use of sweet or savoury foods?
- f) 2+ alcoholic drinks daily?
- g) Housebound? No direct exposure to sunlight?
- h) High dependency with food and fluid texture modification?
- i) Tube (enteral) feeding is required?
- j) Eats inedible objects such as dirt, soap (pica)?
- k) Inappropriate and challenging behaviours which involve food?

### 5) Mental health problems

### 6) Poly-drugs (more than three types of medications daily)

The more medications taken, the more likely these medications are to interact to produce side effects such as loss of appetite, taste change, nausea, diarrhoea, constipation, fatigue and drowsiness (causing reduced food intake).

## 7) Gastro-intestinal problems

- a) Nausea and vomiting
- b) Diarrhoea
- c) Constipation
- d) Incontinence
- e) Regurgitation
- f) Rumination

## 8) Breathing problems

## 9) Other medical problems

- a) Medical problems reducing ability to access enough food and fluids
- b) Medical problems increasing the need for nourishment
- c) Major medical disorders which change the client's need for nourishment

## 10) Alcoholism and substance abuse

More detailed explanation can be found in Section 4 for the general needs assessment factors which are related to nutritional risk.

**Nutritional risk increases when the person is affected by an increasing number of these factors.**

**Deterioration in health and loss of independence can result from under-nutrition and perhaps malnutrition.**

## Nutritional risk can be a client safety issue

Low body weight?	Section 3.1
Unintentional weight loss?	Section 3.2
Unable to feed self?	Section 3.8
Rumination?	
Regurgitation?	
Choking?	
Food contamination?	Section 4.4
Unable to recognise food?	Section 4.5
Rummaging for food?	
Alcohol withdrawal?	Appendix 2

## 2.6 CHECKLIST FOR INTERVENTION

---

Simple intervention strategies have been provided throughout this Manual and an outline of these strategies has been given below.

### 1) Food and nutrition information

- a) Client
- b) Carer

### 2) Client care plan with client-carer input

CLIENT CARE PLAN

### 3) The most appropriate INTERVENTION then follows:

- |  |                                  |
|--|----------------------------------|
| a) Family, person responsible,<br>key worker   | g) Case management               |
| b) Home care, personal care,<br>social trainer | h) Medical care, dental care     |
| c) Day care, respite care                      | i) Nutritional care              |
| d) Nursing care                                | j) Counselling, information      |
| e) Social support                              | k) Living skills program         |
| f) Volunteer transport                         | l) Other allied health resources |
|  | m) Disability services           |

#### SIMPLE INTERVENTIONS

- Client and carer information
- Social support
- Home carer
- Transport
- Shopping
- Food preparation
- Personal carer
- Meals
- Food safety
- Delivered meals
- Respite care
- Referral to specialisation assessment and/or intervention and care

### **3) Client referral for further assessment and/or intervention**

- |                           |                      |
|---------------------------|----------------------|
| a) Visiting nurse         | g) Physiotherapist   |
| b) Doctor                 | h) Dentist           |
| c) Dietitian              | i) Psychologist      |
| d) Occupational therapist | j) Delivered meals   |
| e) Speech pathologist     | k) Diabetic educator |
| f) Social worker          | l) Other             |

## 2.7 MONITORING IS CONDUCTED AS REQUIRED

Try TWO weeks of simple intervention strategies (less time if severe weight loss); if no response refer to a specialist. Monitoring at monthly intervals (or more frequently), by one of the team members to determine if nutritional risk still exists.

To determine if nutritional risk still exists, this is accomplished by review of outcomes, and best determined by repeat of Nutritional Risk Screening:

<b>NUTRITIONAL RISK SCREENING AND MONITORING TOOL</b>	
<b>CLIENT:</b>	<b>DATE:</b>
<b>INSTRUCTIONS:</b> Fill in the client's name and the date you use the tool: tick the box when the answer to your observation is YES	
<input type="checkbox"/>	Obvious underweight-frailty?
<input type="checkbox"/>	Unintentional weight loss?
<input type="checkbox"/>	Reduced appetite or reduced food and fluid intake?
<input type="checkbox"/>	Mouth or teeth or swallowing problem?
<input type="checkbox"/>	Follows a special diet?
<input type="checkbox"/>	Unable to shop for food?
<input type="checkbox"/>	Unable to prepare food?
<input type="checkbox"/>	Unable to feed self?
<input type="checkbox"/>	Obvious overweight affecting life quality?
<input type="checkbox"/>	Unintentional weight gain?
<b>SIGNATURE:</b>	<b>POSITION:</b>
<b>OUTCOME:</b>	
<ul style="list-style-type: none"> <li>■ YES to one or more questions means that nutritional risk exists</li> <li>■ Nutritional risk increases when the person is affected by an Increasing number of general needs assessment factors</li> <li>■ In particular, deterioration in health and loss of independence can result from under-nutrition and perhaps malnutrition</li> </ul>	
<b>ACTION:</b>	
<ul style="list-style-type: none"> <li>■ Try TWO weeks of simple intervention strategies (less time if severe weight loss); if no response refer to a specialist</li> <li>■ Monitoring at monthly intervals (or more frequently) by a team member is required to ensure that nutritional risk has decreased through the most effective intervention</li> </ul>	

### **The care process and plan then begins again**

On the next page (Section 2.8), a Case Study form has been provided for clients in Nutritional Risk Screening. A number of Case Studies have been shown in Sections 7 to 9, and Section 10 is about *Quality Improvement* using Nutritional Risk Screening processes.

# 2.8 NUTRITIONAL RISK SCREENING CASE STUDY FORM

<p>Nutritional risk increases when the person is affected by an increasing number of general needs assessment factors.</p> <p>Deterioration in health and loss of independence can result from undernutrition and perhaps malnutrition.</p>		<p><b>NAME:</b></p>																					
		<p><b>ADDRESS:</b></p>																					
<p><b>NUTRITIONAL RISK SCREENING</b></p> <p>YES, to one or more of these questions means that nutritional risk exists</p>	<p><b>GENERAL NEEDS ASSESSMENT</b></p> <p>The factors which are relevant to nutritional risk for this client</p>	<p><b>INTERVENTION</b></p> <p>Briefly consider what, if any, action you can take (including referral)</p>	<p><b>MONITORING*</b></p> <p>Repeat nutritional risk screening How often should this be done? Who can monitor?</p>																				
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td style="width: 30px; text-align: center;"><input type="checkbox"/></td><td>Obvious underweight-frailty?</td></tr> <tr><td style="text-align: center;"><input type="checkbox"/></td><td>Unintentional weight loss?</td></tr> <tr><td style="text-align: center;"><input type="checkbox"/></td><td>Reduced appetite or reduced food or fluid intake?</td></tr> <tr><td style="text-align: center;"><input type="checkbox"/></td><td>Mouth or teeth or swallowing problem?</td></tr> <tr><td style="text-align: center;"><input type="checkbox"/></td><td>Follows a special diet?</td></tr> <tr><td style="text-align: center;"><input type="checkbox"/></td><td>Unable to shop for food?</td></tr> <tr><td style="text-align: center;"><input type="checkbox"/></td><td>Unable to prepare food?</td></tr> <tr><td style="text-align: center;"><input type="checkbox"/></td><td>Unable to feed self?</td></tr> <tr><td style="text-align: center;"><input type="checkbox"/></td><td>Obvious overweight affecting life quality?</td></tr> <tr><td style="text-align: center;"><input type="checkbox"/></td><td>Unintentional weight gain?</td></tr> </table>	<input type="checkbox"/>	Obvious underweight-frailty?	<input type="checkbox"/>	Unintentional weight loss?	<input type="checkbox"/>	Reduced appetite or reduced food or fluid intake?	<input type="checkbox"/>	Mouth or teeth or swallowing problem?	<input type="checkbox"/>	Follows a special diet?	<input type="checkbox"/>	Unable to shop for food?	<input type="checkbox"/>	Unable to prepare food?	<input type="checkbox"/>	Unable to feed self?	<input type="checkbox"/>	Obvious overweight affecting life quality?	<input type="checkbox"/>	Unintentional weight gain?			
<input type="checkbox"/>	Obvious underweight-frailty?																						
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<p>*Try TWO weeks of simple intervention strategies (less time if severe weight loss); if no response refer to a specialist. Monitoring at monthly intervals (or more frequently) by one of the team members is recommended to ensure that the most effective intervention has been implemented.</p>																							
<p><b>Signature:</b></p>		<p><b>Position:</b></p>																					
		<p><b>Date:</b></p>																					

**Checklist of general needs assessment factors which are related to nutritional risk:**

<p><b>1) Unable to feed self</b>  a) Physical disability  b) Sensory disability  c) Mental/ behavioural problems</p>	<p><b>4) Social problem affecting food/fluid intake</b>  a) Bereavement, depression, social isolation  b) Reduced motivation</p>	<p><b>7) Medical problems/increased food and drink needs</b>  a) Elevated body temperature, fever  b) Impaired wound healing</p>
<p><b>2) Household management problems</b>  a) Financial difficulty  b) Organisational difficulty</p>	<p><b>5) Medical problems/reduced access food/fluid.</b>  a) Weight loss, muscle wasting, reduced mobility  b) Breathing problems</p>	<p><b>8) Major disorders/changed nourishment needs</b>  a) Metabolic disorders (diabetes/renal/liver)  b) Cancer  c) Gastro-intestinal disorders</p>
<p><b>3) Personal hygiene and food hygiene problems</b></p>	<p><b>6) Medical problems/reduced intake/absorption</b>  a) Nausea and vomiting b) Diarrhoea  c) Constipation d) Incontinence  e) Regurgitation f) Ruminantion</p>	<p><b>9) Poly-drugs (more than three types daily)</b></p>

**Checklist for intervention and referral: the most appropriate supply of client needs may then be provided**

<p><b>1a) Client food and nutrition information</b>   <b>1b) Carers food and nutrition information</b></p>	<p><b>2) a) Family, person responsible, key worker</b>  b) Home care, personal care, social trainer  c) Day care, respite care  d) Nursing care  e) Social support  f) Volunteer transport  g) Case management  h) Medical care, dental care  i) Nutritional care  j) Counselling, information  k) Living skills program  l) Other allied health resources  m) Disability services  n) Client care plan with client-carer input</p>	<p><b>3) Client referral for assessment and intervention</b>  a) Visiting nurse  b) Doctor  c) Dietitian  d) Occupational therapist  e) Speech pathologist  f) Social worker  g) Physiotherapist  h) Dentist  i) Psychologist  h) Delivered meals  i) Diabetic educator  j) Other</p>
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## 2.9 NUTRITIONAL RISK SCREENING IN OTHER SETTINGS

### 2.9.1 Discharge Planning and Temporary Home Care

Emergency or temporary home care may be required for a person under the following circumstances:

- 1) Client discharged from hospital or respite care on a Friday, or just prior to a public holiday, and/ or
- 2) No able or responsible person nearby to provide support, shop and prepare food for the client.

<b>NUTRITIONAL RISK SCREENING AND MONITORING TOOL</b>	
<b>CLIENT:</b>	<b>DATE:</b>
<b>INSTRUCTIONS:</b> Fill in the client's name and the date you use the tool: tick the box when the answer to your observation is YES	
<input type="checkbox"/>	Obvious underweight-frailty?
<input type="checkbox"/>	Unintentional weight loss?
<input type="checkbox"/>	Reduced appetite or reduced food and fluid intake?
<input type="checkbox"/>	Mouth or teeth or swallowing problem?
<input type="checkbox"/>	Follows a special diet?
<input type="checkbox"/>	Unable to shop for food?
<input type="checkbox"/>	Unable to prepare food?
<input type="checkbox"/>	Unable to feed self?
<input type="checkbox"/>	Obvious overweight affecting life quality?
<input type="checkbox"/>	Unintentional weight gain?
<b>SIGNATURE:</b>	<b>POSITION:</b>
<b>OUTCOME:</b>	
<ul style="list-style-type: none"> <li>■ YES to one or more questions means that nutritional risk exists</li> <li>■ Nutritional risk increases when the person is affected by an Increasing number of general needs assessment factors</li> <li>■ In particular, deterioration in health and loss of independence can result from under-nutrition and perhaps malnutrition</li> </ul>	
<b>ACTION:</b>	
<ul style="list-style-type: none"> <li>■ Try TWO weeks of simple intervention strategies (less time if severe weight loss); if no response refer to a specialist</li> <li>■ Monitoring at monthly intervals (or more frequently) by a team member is required to ensure that nutritional risk has decreased through the most effective intervention</li> </ul>	

## 2.9.2 Retirement Villages, Supported Residential Services, and Day Care Centres, Sheltered Workshops, and Shelters

---

### 1) Nutritional Risk Screening

The Nutritional Risk Screening tool can also be used in these settings. It is possible to observe and monitor the trigger questions, as follows.

- Obvious underweight - frailty?
- Unexplained weight loss?
- Reduced appetite or food and fluid intake?
- Mouth or teeth or swallowing problem?
- Follows a special diet?
- Unable to shop for food?
- Unable to prepare food?
- Unable to feed self?
- Obvious overweight affecting life quality?
- Unintentional weight gain?

Always record your observations about different people, and if these observations persist try to achieve some preventive strategies or intervene in some way.

If you have the opportunity to apply the trigger questions of *Nutritional Risk Screening* with the group (either directly, or indirectly by observation), use the forms in Section 10 to create your report and to look at the group as a whole.

### 2) Discussion of food and health issues

Opportunities may also be available to discuss food and nutrition issues with the group of people. On the first occasion, ask them one of the screening questions and use their response to create some discussion and increase their awareness of the importance of what they eat and drink.

A creative and colourful wall poster or signboard can also be used to focus attention and act as a reminder to them. The material in this *Resource Manual* can be simplified and used for this purpose. The local dietitian will be able to assist in the development of your program, provide appropriate brochures and leaflets, and perhaps attend on some occasions.

A mealtime is an ideal time to talk about food, nutrition, and health.

### 3) Apparently healthy and active older people

If the older group is apparently healthy and active, you may wish to ask them to fill in the ten trigger questions in Nutritional Risk Screening above. This will increase awareness of food and nutrition and health issues and promote much discussion.