

# Dietetics in Aged Care

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# Topics

 Aged Care Standards

 Dietetic Process

 Reasons for referral

 Malnutrition

# What are the Aged Care Quality Standards?

- 8 Standards that all organisations providing Commonwealth subsidised aged care services are required to comply with.
- Came into effect 1 July 2019 in Australia
- Developed by the Aged Care Quality and Safety Commission
- Government agency whose role “is to protect and enhance the safety, health, well-being and quality of life of people receiving aged care.” <sup>(1)</sup>

# 7 Important Concepts

Standard 1 recognises the importance of a consumers' sense of self.

1. Dignity and Respect
2. Identity, culture & diversity
3. Cultural safety
4. Choice
5. Dignity of Risk
6. Information
7. Personal privacy

## Standard 1

Consumer outcome

*I am treated with dignity and respect, and can maintain my identity. I can make informed choices about my care and services, and live the life I choose.*



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of Australia

# Assessment & Planning with Consumers - Individuals

- Engaging with consumers = meeting their expectations and choice of nutrition care processes
- Communication with Consumer:
  - Reason for the referral;
  - Purpose of our assessment and input;
  - How we can support them to maintain their QOL through optimal nutrition
  - How nutrition support can improve their condition eg #NOF, pressure injury, malnutrition
  - A copy of the plan so they can monitor their own progress

## Standard 2

Consumer outcome

*I am a partner in ongoing assessment and planning that helps me get the care and services I need for my health and well-being.*



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# Standard 3: Personal care & Clinical care

## Standard 3

Consumer outcome

*I get personal care, clinical care, or both personal care and clinical care, that is safe and right for me.*

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**How does the organisation provide or help consumers to access other providers, organisations or individuals to improve their health and well-being?  
(Such as allied health and other therapies.)**

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Providing safe and effective clinical care for nutrition and hydration includes:

- Processes to identify consumers at risk or requiring nutrition support
  - Processes to refer to dietitians
- If these processes are not in place, it is our role to develop & implement them for nutrition



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# Dining Experience – Are we involved?

Dietitians need to be involved!

Factors to consider:

- **Environment** – lighting, space, room between tables, noise level, distractions (medication trolley or waste trolley in the dining room, tv on), ambient sounds (soft music)
- **Staff** – are there enough staff to assist? Are they socially engaged with consumers? Are they knowledgeable about the meal provided?
- **Meal service processes** – is dietary information at point of service? When is the choice of meals? Portion sizes documented and followed? Timing and temperature of meals?



## Human Resources – Staff Training

### Standard 7

Consumer outcome

*I get quality care and services when I need them from people who are knowledgeable, capable and caring.*

### Organisation statement

*7(2) The organisation has a workforce that is sufficient, and is skilled and qualified to provide safe, respectful and quality care and services.*

- A skilled and qualified workforce is required to deliver sufficient services to consumers.
- There is a **current gap in skills training for care staff relating to nutrition** and requirements for older people, including dysphagia and texture modified diets

# ADIME



## ASSESSMENT (ABCD)

- Anthropometry
    - Weight, Weight Hx, BMI (23-30), Mid Upper Arm Circumference, Calf Circumference
  - Biochemistry eg albumin, CRP, vit D, iron, B12, GFR, BSLs
  - Clinical History
    - Medical Hx, Medications, Nutrition intake symptoms, Bowels/GI, Social Hx, Mobility, Swallow, Pressure Injuries, Cognition/Mood, Dentition
    - Malnutrition Assessment **Mini Nutritional Assessment (MNA)**
    - Requirements: Energy , Protein, Fluid, Fibre. 30-35kcal/kg 1.2g/kg Protein.
  - Diet History
    - Energy, Protein, Fibre, Fluid.
- Core Foods, micronutrient adequacy. Patterns





# Referral reasons

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## Malnutrition/Weight Loss

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Obesity

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Constipation or diarrhea, bowel obstruction

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Texture modified diet

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Pressure Injuries/Wounds

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Diabetes

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Nutritional Deficiency eg Anemia

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Special diets eg Vegetarian/Vegan.

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Bone Health

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Kidney Disease

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Heart Health – Blood Pressure/Cholesterol

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Dementia related

# Malnutrition – The skeleton in the closet.

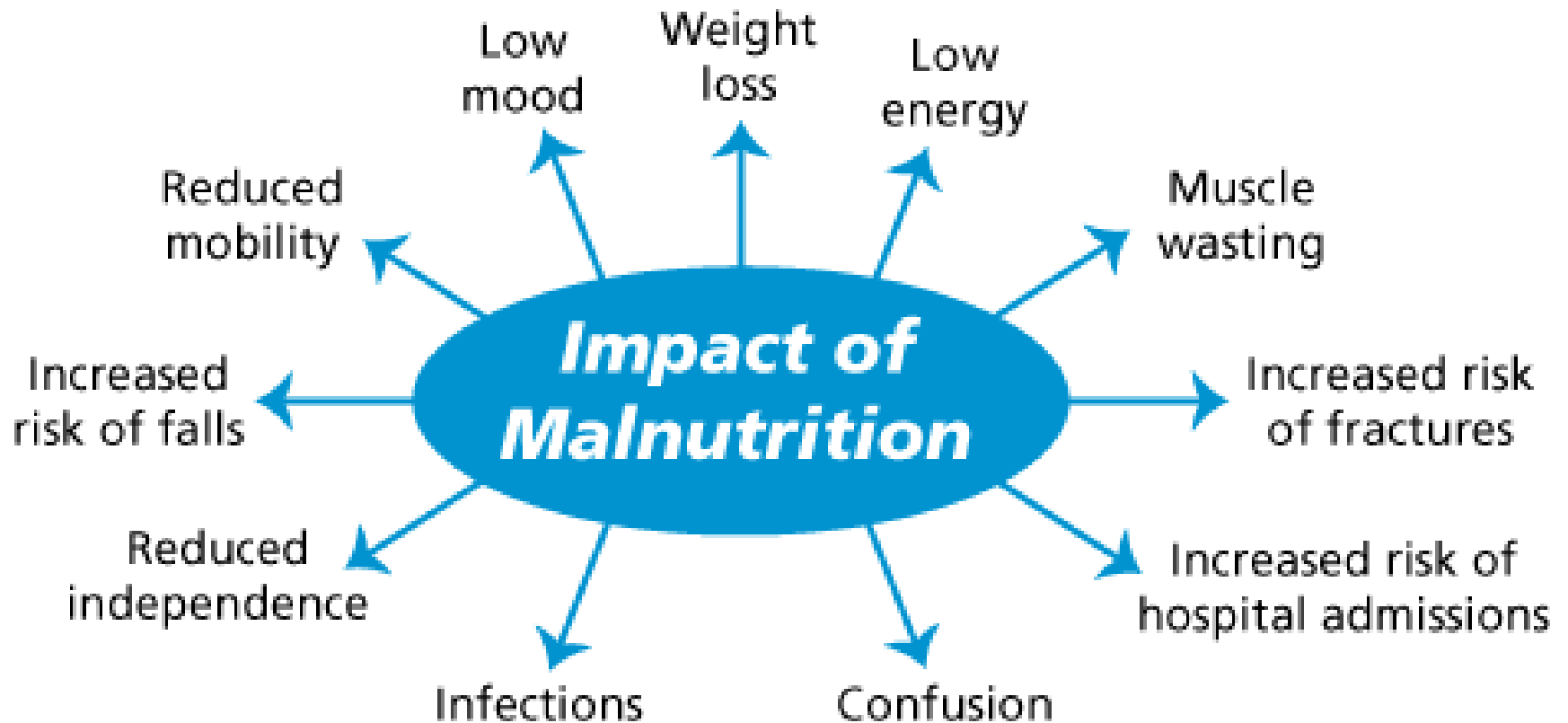


Malnutrition = a deficiency of nutrients such as energy, protein, vitamins and minerals causes ***measurable adverse effects*** on **body composition, function or clinical outcome.**



Malnutrition is both a ***cause*** and a ***consequence*** of ill health.

**Approximately 50% of nursing home residents are malnourished (up to 68%).**



**Malnutrition is  
everyone's  
responsibility..**

***Being proactive and aiming for  
prevention ,timely screening is essential.***

# Malnutrition Causes

## *Decreased intake*

Poor appetite

Needing assistance with meals

Lack of access to food

Dysphagia

Taste change

Depression

Texture Modification

Lack of education, beliefs

## *Increased requirements*

✘ Infection

✘ Post-surgical

✘ Wound healing /Pressure injury

✘ Cancer

✘ Trauma

### • *Malabsorption/nutrient losses*

✘ GI diseases

✘ Bowel resection

✘ Interactions with medications

✘ Wounds/drains

# Mini Nutritional Assessment MNA<sup>®</sup>

Nestlé  
Nutrition Institute

Last name:		First name:			
Sex:	Age:	Weight, kg:	Height, cm:	Date:	

Complete the screen by filling in the boxes with the appropriate numbers.  
Add the numbers for the screen. If score is 11 or less, continue with the assessment to gain a Malnutrition Indicator Score.

Screening	
<b>A Has food intake declined over the past 3 months due to loss of appetite, digestive problems, chewing or swallowing difficulties?</b> 0 = severe decrease in food intake 1 = moderate decrease in food intake 2 = no decrease in food intake	<input type="checkbox"/>
<b>B Weight loss during the last 3 months</b> 0 = weight loss greater than 3kg (6.6lbs) 1 = does not know 2 = weight loss between 1 and 3kg (2.2 and 6.6 lbs) 3 = no weight loss	<input type="checkbox"/>
<b>C Mobility</b> 0 = bed or chair bound 1 = able to get out of bed / chair but does not go out 2 = goes out	<input type="checkbox"/>
<b>D Has suffered psychological stress or acute disease in the past 3 months?</b> 0 = yes      2 = no	<input type="checkbox"/>
<b>E Neuropsychological problems</b> 0 = severe dementia or depression 1 = mild dementia 2 = no psychological problems	<input type="checkbox"/>
<b>F Body Mass Index (BMI) (weight in kg) / (height in m<sup>2</sup>)</b> 0 = BMI less than 19 1 = BMI 19 to less than 21 2 = BMI 21 to less than 23 3 = BMI 23 or greater	<input type="checkbox"/>
Screening score (subtotal max. 14 points)	<input type="checkbox"/> <input type="checkbox"/>
12-14 points: Normal nutritional status	
8-11 points: At risk of malnutrition	
0-7 points: Malnourished	
For a more in-depth assessment, continue with questions G-R	
Assessment	
<b>G Lives independently (not in nursing home or hospital)</b> 1 = yes      0 = no	<input type="checkbox"/>
<b>H Takes more than 3 prescription drugs per day</b> 0 = yes      1 = no	<input type="checkbox"/>
<b>I Pressure sores or skin ulcers</b> 0 = yes      1 = no	<input type="checkbox"/>

<b>J How many full meals does the patient eat daily?</b> 0 = 1 meal 1 = 2 meals 2 = 3 meals	<input type="checkbox"/>
<b>K Selected consumption markers for protein intake</b> • At least one serving of dairy products (milk, cheese, yoghurt) per day • Two or more servings of legumes or eggs per week • Meat, fish or poultry every day 0.0 = if 0 or 1 yes 0.5 = if 2 yes 1.0 = if 3 yes	yes <input type="checkbox"/> no <input type="checkbox"/> yes <input type="checkbox"/> no <input type="checkbox"/> yes <input type="checkbox"/> no <input type="checkbox"/> 0.0 <input type="checkbox"/> 0.5 <input type="checkbox"/> 1.0 <input type="checkbox"/>
<b>L Consumes two or more servings of fruit or vegetables per day?</b> 0 = no      1 = yes	<input type="checkbox"/>
<b>M How much fluid (water, juice, coffee, tea, milk...) is consumed per day?</b> 0.0 = less than 3 cups 0.5 = 3 to 5 cups 1.0 = more than 5 cups	<input type="checkbox"/> <input type="checkbox"/>
<b>N Mode of feeding</b> 0 = unable to eat without assistance 1 = self-fed with some difficulty 2 = self-fed without any problem	<input type="checkbox"/>
<b>O Self view of nutritional status</b> 0 = views self as being malnourished 1 = is uncertain of nutritional state 2 = views self as having no nutritional problem	<input type="checkbox"/>
<b>P In comparison with other people of the same age, how does the patient consider his / her health status?</b> 0.0 = not as good 0.5 = does not know 1.0 = as good 2.0 = better	<input type="checkbox"/> <input type="checkbox"/>
<b>Q Mid-arm circumference (MAC) in cm</b> 0.0 = MAC less than 21 0.5 = MAC 21 to 22 1.0 = MAC 22 or greater	<input type="checkbox"/> <input type="checkbox"/>
<b>R Calf circumference (CC) in cm</b> 0 = CC less than 31 1 = CC 31 or greater	<input type="checkbox"/>
Assessment (max. 16 points)	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Screening score	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Total Assessment (max. 30 points)	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>

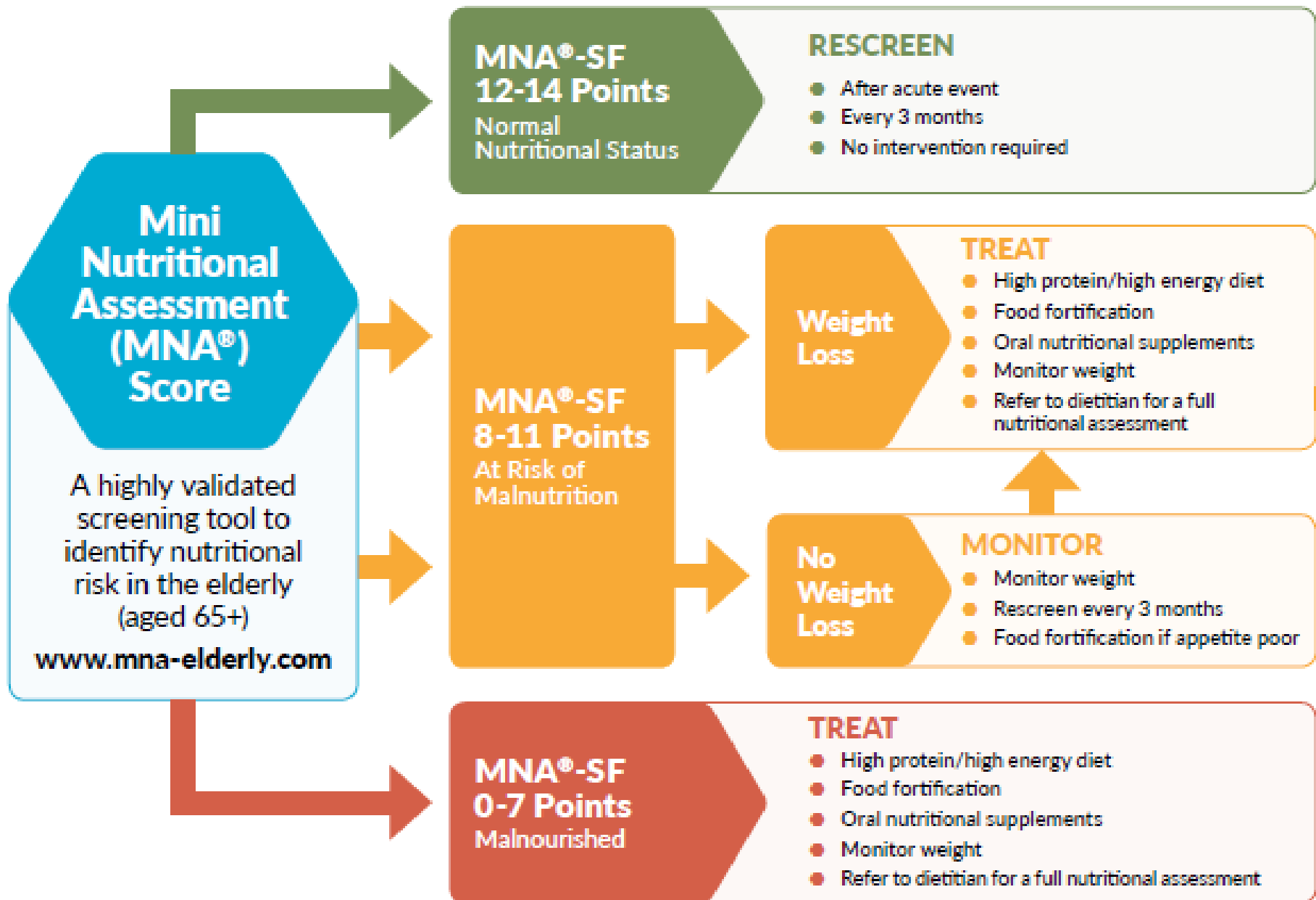
Malnutrition Indicator Score	
24 to 30 points	<input type="checkbox"/> Normal nutritional status
17 to 23.5 points	<input type="checkbox"/> At risk of malnutrition
Less than 17 points	<input type="checkbox"/> Malnourished

**References**  
 1. Velaz B, Villars H, Abellan G, et al. Overview of the MNA® - Its History and Challenges. *J Nutr Health Aging*. 2006; 10:468-465.  
 2. Rubenstein LZ, Hanker JO, Salva A, Gulgoz Y, Velaz B. Screening for Undernutrition in Geriatric Practice: Developing the Short-Form Mini Nutritional Assessment (MNA-SF). *J Geront*. 2001; 56A:1036-377.  
 3. Gulgoz Y. The Mini-Nutritional Assessment (MNA®) Review of the Literature - What does it tell us? *J Nutr Health Aging*. 2006; 10:466-487.  
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 © Nestlé, 1994, Revision 2005. N67200 12/99 10M  
 For more information: [www.mna-elderly.com](http://www.mna-elderly.com)

# MNA

- Validated
- Quick and easy
- Facilitate early intervention
- Cheap

# RECOMMENDATIONS FOR NUTRITION INTERVENTION



# Sarcopenia

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= age-related loss of muscle mass & strength.

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Strongly associated with functional impairment and physical disability → greater effect on ADL's

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More common with multiple comorbidities

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Protein signalling, hormonal, malnutrition and inflammatory components

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Anabolic resistance – blunted response to stimuli

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***Combination of progressive resistance training and adequate protein intake is most efficient to increase muscle mass and muscle strength. Collaboration between physiotherapist/exercise physiologist and dietitian is essential.*** (Kim et al. 2012)







## Physiotherapist / Exercise physiologist

### Strength training

Progressive resistance training with a high intensity has the most effect on increasing muscle mass and -strength. Take into account the dose-response relationship, recovery period and co-morbidities.

*Reference: Peterson et al. 2010*



## Dietitian

### Nutritional intervention

The nutritional intervention is focused on maintaining or increasing muscle protein through adequate consumption of protein, energy, calcium and vitamin D. The dietitian translates the nutritional advice into a diet that is sustainable in the long-term.

## Resistance training advice

### Exercises

- 8 to 10 different large muscle groups
- Muscle group of arms, legs and trunk

### Intensity

- High intensity (BORG scale 7-8/10)
- 80% of one repetition maximum (1RM)

### Frequency

- 3 or more times per week

### Repetitions

- 8 to 12 repetitions, 1 set

### Rest between exercises

- Approximately 2 minutes

*Reference: Montero-Fernandez et al. 2013*

## Nutritional advice

### Protein

- 1.2 to 1.5 g/kg body weight/day
- Equal distribution over the three main meals
- Aim towards  $\pm 25$  g per main meal

### Energy

- WHO equation  $>60$  years + 30% activity/stress factor
- Females: at least 1500 kcal/day
- Males: at least 1700 kcal/day

### Calcium

- 51-70 years: 1100 mg per day
- $>70$  years: 1200 mg per day

### Vitamin D

- 51-70 years: 10  $\mu$ g per day
- $>70$  years: 15  $\mu$ g per day

*Reference: Deutz et al. 2014, Paddon-Jones et al. 2009, WHO 2001*

# Protein Target

	Serves	Protein per serve	Total
Meat and Alternatives	2.5 serves	20	50
Dairy	4	8	32
			82g



# HPHE extras

Flavoured milk (250mL) (950kJ, 9g protein)

Cheese (20g) and 3 crackers (500kJ, 6g protein)

Yoghurt (200g) (800kJ, 8g protein)

Custard (150g) (560kJ, 5g protein)

Enriched milk (full cream milk + milk powder)

Commercial nutritional supplements, e.g., Sustagen, Resource, Ensure, Flavour Creations

# Sample HPHE meal plan

## Standard Meal

Provides 8400kJ and 55g protein

<b>Breakfast</b>	Rice bubbles (+ 2 sugar) + low fat milk White bread with margarine + vegemite Apple juice + tea with 2 sugars
<b>Morning Tea</b>	Instant coffee (+ 2 sugar) + 2 sweet biscuits
<b>Lunch</b>	Carrot soup Garden salad (no meat) Slice of white bread + margarine Apple Juice Banana
<b>Afternoon Tea</b>	Instant coffee (+ 2 sugar) + 2 sweet biscuits
<b>Dinner</b>	Spaghetti bolognaise Pumpkin + beans Fruit salad Orange Juice
<b>Supper</b>	Tea(+ 2 sugar) + 2 sweet biscuits

## High Protein; High Energy Meal

Provides 14000kJ and 105g protein

<b>Breakfast</b>	Porridge (+2 sugar) + full cream milk + cream White bread with margarine + jam Apple Juice + Tea (+ 2 sugar)
<b>Morning Tea</b>	Iced coffee + cheese and crackers
<b>Lunch</b>	High protein soup Quiche or meat + salad Slice of white bread + margarine Banana + custard Flavoured milk
<b>Afternoon Tea</b>	Flavoured milk + yoghurt + fruit
<b>Dinner</b>	Spaghetti bolognaise Pumpkin + beans Dairy dessert / pudding Orange Juice
<b>Supper</b>	Milk milo + fruit cake

# Food Fortification

Standard	HPHE Option
Pumpkin Soup	Creamy Pumpkin and Lentil Soup
Porridge	Porridge with skim milk powder
Cauliflower	Cauliflower Cheese
Plain Biscuits	Cheese + Crackers
Apple Crumble	Apple Crumble with HPHE custard.

**SUSTAGEN**

# Neutral Mixing Instructions

Adding SUSTAGEN® Hospital Formula Neutral Flavour to food or taking it as a drink can help boost energy, protein, calcium, vitamin D and essential micronutrients in a quick and convenient way to make every mouthful count.

**CH2**  
ENABLING AUSTRALIAN HEALTH

FOOD	QUANTITY	SUSTAGEN®	METHOD	ADDED PROTEIN	COMMENTS
Water/Milk	200mL	60g	Whisk powder into cold milk or water. Use accordingly.	13.8g	Add your favourite flavouring or fruit if desired.
Tea/Coffee	1 cup or 250mL	20g	Stir into tea or coffee as a replacement to milk.	4.6g	
Juice (Orange, Apple)	1 cup or 250mL	20g	Whisk into juice with a fork just before serving.	4.6g	May separate on standing, simply mix to combine
Pureed Vegetable	½ cup or approximately 125g	20g	Blend into vegetables whilst pureeing or stir into pureed vegetables.	4.6g	Texture of vegetables may thin slightly.
Soup	1 cup or 250mL	20g	Whisk into soup after heating.	4.6g	Gives a creamy appearance. Works well in tomato, pumpkin and corn. Add 20–40g depending on taste.
Porridge	½ cup or 40g raw oats	20g	Stir into cooked porridge.	4.6g	Add 20–40g depending on taste.
Cereal	½ cup	20g	Stir into cereal and add milk.	4.6g	
Mashed Potato	1 cup mashed potato or 250g raw peeled potatoes	40g	Add to cooked potato and mash together.	9.2g	Can be used instead of milk.
Scrambled Eggs	2 eggs	20g	Stir into 125mL (½ cup) milk. Whisk into eggs and cook over a medium heat, stirring continually for 2–3 minutes.	4.6g	
Natural Yoghurt	½ cup or 125g	40g	Stir into yoghurt 5 minutes before serving.	9.2g	Initial grainy appearance but grains dissolve.
Custard	½ cup	20g	Stir into hot or cold custard 5 minutes before serving.	4.6g	Initial grainy appearance but grains dissolve.
White Sauce	1 cup or 250g	80g	Gradually blend into white sauce just before serving.	18.4g	Initial grainy appearance but grains dissolve.
Casseroles	400g	60g	Gradually stir into heated casserole just before serving.	13.8g	Gives a creamy appearance. Texture of casserole may thin slightly.
Baked Beans	1 cup or 250g	20g	Gradually stir into heated baked beans just before serving.	4.6g	Gives a creamy appearance. Add 20–40g depending on taste.
Pasta Sauce or Tomato Puree	1 cup or 250mL	40g	Stir into sauce. Use accordingly.	9.2g	Gives a creamy appearance.
Jelly	1 cup or 250mL	100g	Shake or mix vigorously.	23g	Forms the consistency & texture of a pudding.

## Safe feeding tips for staff and families

- Wash hands.
- Seat patient upright.
- Reduce distractions – close the curtain if needed.
- Cut into small pieces.
- Offer protein/dessert first.
- Alternate mouthfuls of food and drink.
- Encourage independence - help the patient hold cup/cutlery
- Model and cue the patient e.g. "open mouth" "chew" or "swallow"
- Check patient has swallowed before offering more.
- **Keep it positive!**

*If concerned with intake:*

Please call Dietitian

*If concerned with swallowing:*

Please call Speech Pathologist

**DRINK TEA AND WATER LAST**



**EAT MEAT/ PROTEIN + DESSERT 1ST**

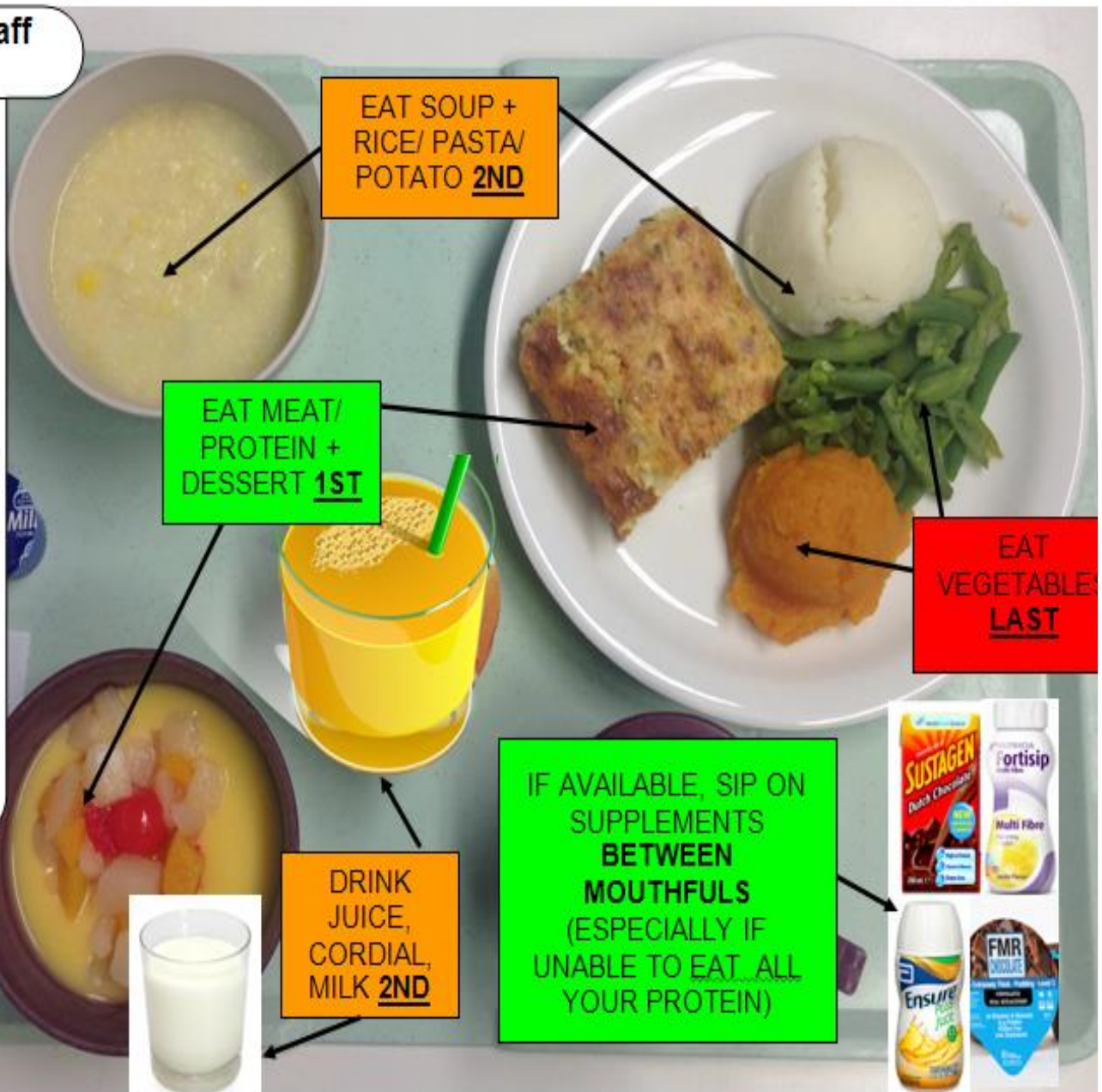
**DRINK JUICE, CORDIAL, MILK 2ND**



**EAT SOUP + RICE/ PASTA/ POTATO 2ND**

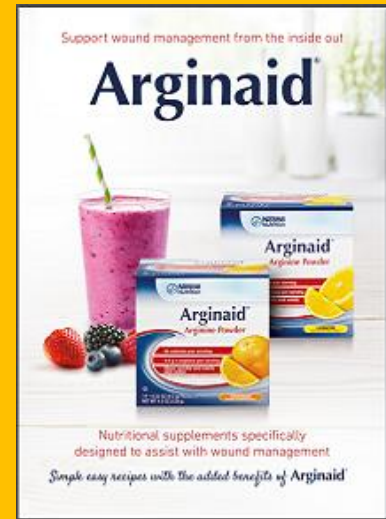
**IF AVAILABLE, SIP ON SUPPLEMENTS BETWEEN MOUTHFULS (ESPECIALLY IF UNABLE TO EAT ALL YOUR PROTEIN)**

**EAT VEGETABLE LAST**



# Pressure injuries/Wounds

- Patients with malnutrition are ***twice as likely*** to develop a pressure injury compared to well-nourished patients.
- Patients with infections often have poor appetites, resulting in lower nutritional intake.
- Patients with pressure injuries and wounds have higher protein and energy needs in order to promote wound healing.
- Refer to the dietitian as early as possible for nutritional intervention.





# Nutrition and Wound Healing

Stage	Calories <sup>1</sup>	Protein <sup>1</sup>	Fluid <sup>2</sup>	RDA/DRI	Vitamin C <sup>3</sup>	Zinc <sup>4</sup>
Stage I	>25 Kcal/kg	1-1.2 gm/kg	>30 mL/kg	Multivitamin/mineral supplement if intake does not meet 100% Recommended Dietary Allowance/ Dietary Reference Intake	100-200 mg/day	If deficiency suspected: 50 mg elemental zinc twice daily x 14 days
Stage II	28-30 Kcal/kg	1.25-1.4 gm/kg	>30 mL/kg	Same as above	Same as above	Same as above
Stage III-IV small, non-draining	30 Kcal/kg	1.5 gm/kg	>30-40 mL/kg	Same as above	< 2,000 mg/day in divided doses x 14 days if stressed or deficient	Same as above
Stage III-IV large, multiple, draining	33-35 Kcal/kg	1.5-2 gm/kg	>30-40 mL/kg	Same as above	Same as above	Same as above
Maximum	40 Kcal/kg	2.2 gm/kg	Adequate to maintain hydration	Multivitamin/mineral supplement twice daily	2,000 mg/day	Same as above

# NUTRITIONAL SUPPORT FOR WOUND HEALING

## INFLAMMATORY PHASE

**VITAMIN A | 25000IU per day**

Enhances early immune response.

**BROMELAIN | 500-1000mg per day**

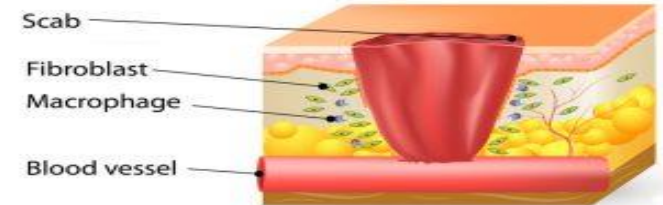
Prevents prolonged inflammatory phase.

**PROTEIN | At least 0.8g/kg of body weight**

Prevents prolonging inflammatory phase.

**VITAMIN C | 1-2g per day**

Optimizes immune response.



## PROLIFERATIVE PHASE

**VITAMIN C | 1-2g per day**

Necessary for collagen synthesis.

**GLUCOSAMINE | 1500mg per day**

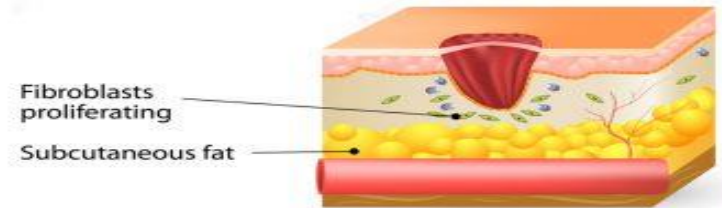
Enhances hyaluronic acid production.

**VITAMIN A | 25000IU per day**

Supports epithelial cell differentiation.

**ZINC | 15-30mg per day**

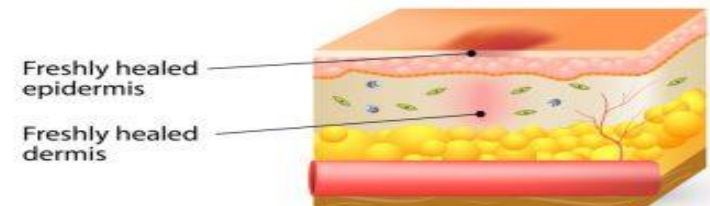
Helps cells proliferate and protein synthesis.



## REMODELING PHASE

**PROTEIN | At least 0.8g/kg of body weight**

Inadequate protein intake can prolong inflammation and increase susceptibility to infection.



# Diabetic Screening and Intervention

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- ✧ Older adults with long life expectancy and are relatively healthy, follow current general screening recommendations.
- ✧ For very old adults, those with multiple comorbidities, and those with a short life expectancy, it is best to focus managing complications that could further impair patients' functional status or quality of life.

**TABLE 3. A Framework for Treatment Goals for Diabetes in Older Adults From the ADA**

Patient Category and Associated Characteristics	Suggested A1C Goal (%)	Suggested Average Fasting Glucose Target Range (mg/dL)	Suggested Average Bedtime Glucose Target Range (mg/dL)	Rationale
Healthy <ul style="list-style-type: none"> <li>• Few comorbidities</li> <li>• Functionally and cognitively intact</li> </ul>	<7.5	90–130	90–150	<ul style="list-style-type: none"> <li>• Significant life expectancy</li> <li>• Goal is to prevent future macrovascular and microvascular complications</li> </ul>
Complex/intermediate <ul style="list-style-type: none"> <li>• Multiple chronic comorbidities or</li> <li>• Two or more IADL impairments or</li> <li>• Mild to moderate cognitive impairment</li> </ul>	<8	90–150	100–180	<ul style="list-style-type: none"> <li>• Intermediate life expectancy</li> <li>• High treatment burden</li> <li>• At risk for hypoglycemia and falls</li> </ul>
Very complex/poor health <ul style="list-style-type: none"> <li>• Residency in a long-term care facility or</li> <li>• End-stage chronic illnesses or</li> <li>• Two or more IADL impairments or</li> <li>• Moderate to severe cognitive impairment</li> </ul>	<8.5	100–180	110–200	<ul style="list-style-type: none"> <li>• Limited life expectancy</li> <li>• Benefit uncertain</li> <li>• High risk of hypoglycemia and falls</li> </ul>

*ADL, activities of daily living (e.g., bathing, toileting, transferring from place to place, dressing, and eating); IADL, instrumental ADL (e.g., using the telephone, managing medications, handling finances, performing housework, cooking, and arranging transportation).*

# Diabetes and/or Weight Loss Management

## High energy/sugar

- ✧ Higher sugar cereals
- ✧ Morning and afternoon Tea
  - ✧ Cakes, muffins, slices, scones,
- ✧ Desserts
  - ✧ Crumble, slices, cream, meringue
- ✧ Drinks
  - ✧ Lemonade
  - ✧ Juice
- ✧ Snacks in room!
- ✧ Fried/Battered
- ✧ Double servings



- ✧ Fruit
- ✧ Cheese + Biscuits
- ✧ Soda Water/Tea
- ✧ Greek Yoghurt + Berries
- ✧ Portion Control
- ✧ Fruit Salad
- ✧ Jelly, LF ice cream
- ✧ Wholegrains
- ✧ Grilled/Steamed
- ✧ Salads



# Hypoglycemia

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Major limiting factor when trying to achieve recommended glycemic control

**Older patients have a higher risk of hypoglycemia and poor outcomes due to altered physiologic responses to low glucose levels.**

- ✦ potential to precipitate or trigger cardiovascular events,
- ✦ worsen cognitive function,
- ✦ Reduced quality of life
- ✦ increase in falls and fractures, fear of falling.

Hypoglycemia unawareness is also common in older adults.

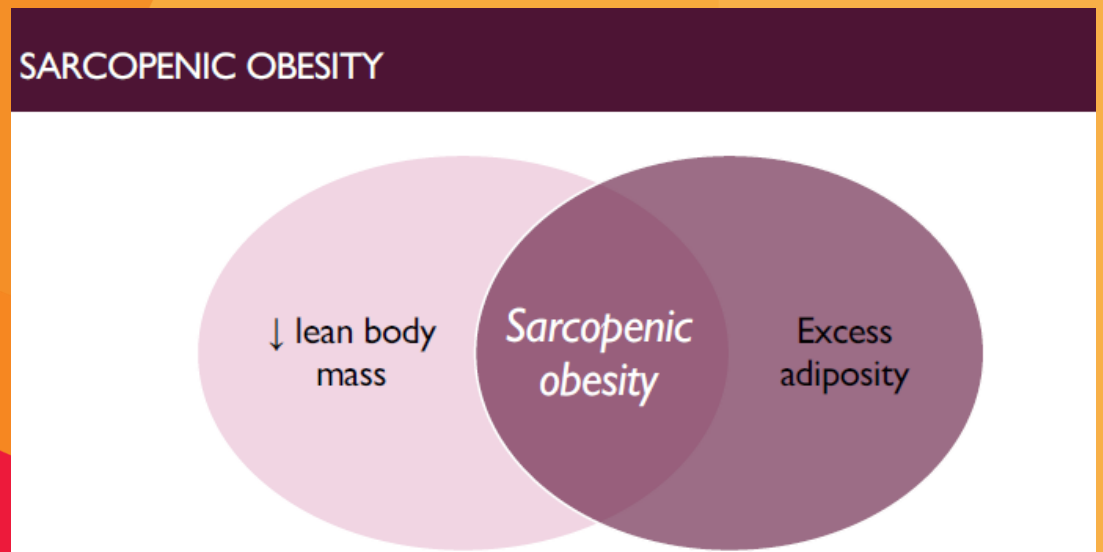
# Precautions

At risk of malnutrition








Deconditioned/ Sarcopenic Obesity.

Wound Healing

Palliative

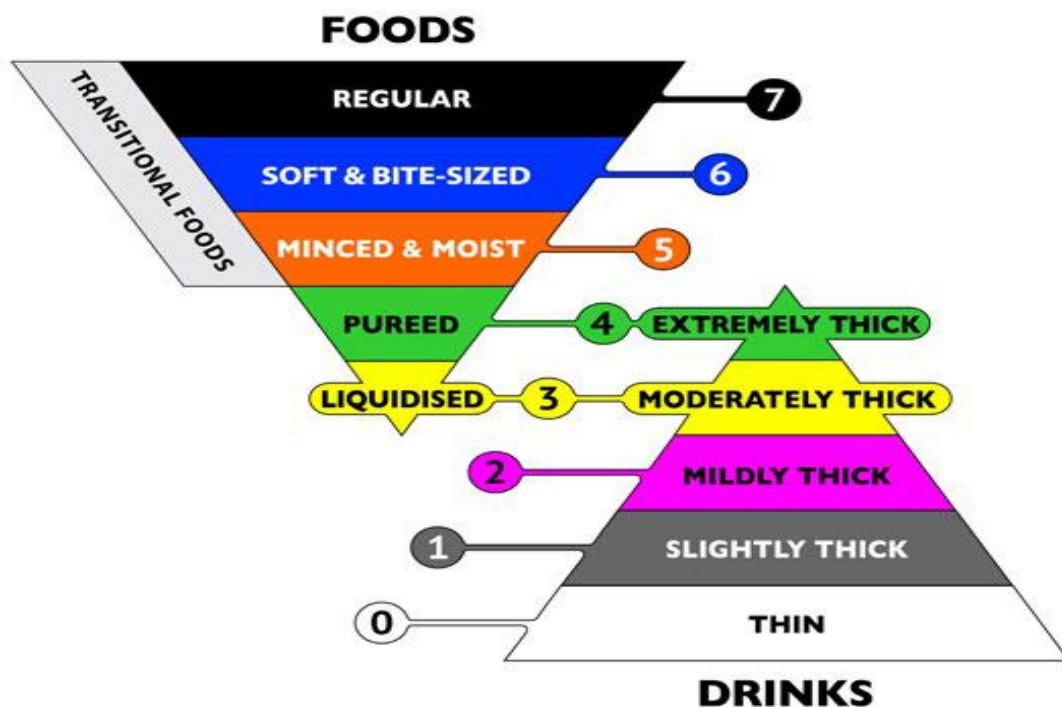


# The Bristol Stool Chart

	Looks like	Consistency	Indicates
Type 1		Separate hard lumps	Very constipated
Type 2		Lumpy and sausage like	Slightly constipated
Type 3		Sausage shaped with cracks in the surface	Normal
Type 4		A smooth, soft sausage or snake	Normal
Type 5		Soft blobs with clear-cut edges	Lacking fibre
Type 6		Mushy consistency with ragged edges	Inflammation
Type 7		Liquid consistency with no solid pieces	Inflammation



# Texture Modification/Dysphagia



- ✦ Consider effect on enjoyment of meals and overall energy/protein
- ✦ Consider Fibre/ Fluid
- ✦ Menu adequacy
- ✦ Presentation
- ✦ Support mealtime independence and appropriate level of assistance
- ✦ Support Speech Pathology plan

The International Dysphagia Diet Standardisation Initiative 2014 <http://iddsi.org/Framework>. Attribution is NOT PERMITTED for derivative works incorporating any alterations to the IDDSI Framework that extend beyond language translation. Supplementary Notes: Modifications of the diagrams or descriptions within the IDDSI Framework is DISCOURAGED and NOT RECOMMENDED. Alternatives to elements of the IDDSI Framework may lead to confusion and errors in diet texture or drink selection for patients with dysphagia. Such errors have previously been associated with adverse events including choking and death.

# Other – Functional Foods

RESEARCH PAPER

## Mediterranean diet improves cognition: the PREDIMED-NAVARRA randomised trial

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## Kiwifruit improves bowel function in patients with irritable bowel syndrome with constipation

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## Enhanced task-related brain activation and resting perfusion in healthy older adults after chronic blueberry supplementation

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# Dietitian Role in Coordinating Nutrition Care Processes

## Dietitian

### Clinical/Nursing:

- Monitoring DT recommendations, how staff are implementing
- Monitoring consumers dietary intake
- Documentation of changes/ updates/ preferences for meals
- Weight monitoring
- Providing assistance with meals & fluids where possible
- Monitoring of meal and fluid suitability, according to nutrition care plan

### Catering:

- Providing meals and fluids as per DT nutrition plan
- Food fortification
- Texture modified processes
- HPHE fluids and snacks
- Meal services – to check portion sizes of meals, quality of food, protein component
- Dining environment – reducing distractions, creating an ambient dining room



# Questions



Thank you for listening