Implementation of National Nutrition Quality Standards for Residential Care for Older People

A Publication of the Nutrition Division - Ministry of Health 2020



Guidelines for Implementation of National Nutritional Quality Standards for Residential Care for Older People

ISBN 978-955-3666-92-5

Published by: Nutrition Division, Ministry of Health, Public Health Complex, 555/5, Elvitigala Mawatha, Narahenpita.

With the technical and financial support from World Health Organization

Printed by: New Karunadhara Press No 97, Maligakanda Road, Colombo 10.

Message from Director General of Health Services

Nutrition problems among the elderly population is evident in many parts of the world and according to the available data, under nutrition among the elderly is an emerging concern globally. The prevalence of under nutrition among the elderly varies according to their residence where approximately 12% of the community dweling and 20% of the elderly in residential care are undernourished. It is most prevalent among 40% of the elderly admitted to hospitals for treatment.

In Sri Lanka, the nutritional status of the elderly living in residential care is inadequately monitored and institutionalized elderly mostly depends on the diet they receive from donors or occasionally prepared by the institution.

This document supports to implement the developed National Nutrition Quality Standards by steering the nutrition care services in institutions and also by assessing the quality of diet for residents. Going beyond nutrition, this publication describes the measures of a healthy food environment and capacity development of the working staff which is instrumental for the provision of good quality nutrition. Moreover, these guidelines also help the supervisory personnel to monitor and maintain the quality of the nutrition care provided to the elderly much efficiently.

I expect all relevant stakeholders to benefit from this publication to ensure the optimum quality of nutrition for elderly residing in institutions.

Dr. Anil Jasinghe Director General of Health Services Ministry of Health

Preface

Elderly population under the institutional care is growing as a result of demographic transition and also due to socio-economic constraints faced by society in taking care of them. The Nutrition Division of the Ministry of Health has developed a set of National Nutrition Quality Standards for residential care for elderly in view of optimizing nutrition care services provided to the institutionalized.

As the elderly population is vulnerable to nutrition issues, the residential care personnel should be adequately skilled in order to support a healthy dietary and nutritional regimen for elders. This publication provides guidance for implementation of the National Nutritional Quality Standards for residential care for older people. It helps the staff of the residential care institutions to gain knowledge on aspects needed for the implementation of National Nutrition Quality Standards. The necessary formats for self-monitoring and evaluation of nutrition care services to be made available.

Nutrition Division expects this guideline to be helpful for the institutions to uplift their care by properly implementing the Nutrition Quality Standards. We would like to commend the valuable contribution by all relevant technical officers from the Ministry of Health, Elderly Secretariat and other governmental and non-governmental organizations and the World Health Organization for their technical and financial assistance in preparing these guidelines.

Our gratitude goes out to the staff of the Nutrition division with special thanks to Dr. Samantha Wijewardhana, Registrar in Community Medicine for compiling this document, Dr. Hamsananthy, Dr. Jinani Mahipala and Ms. Sajeewani Mirihagalla for their valued contribution.

Dr. Lakmini Magodaratna

Director (Actg.) Consultant Community Physician Nutrition Division Ministry of Health

Dr. Anoma. C.M. Basnayake

Head – Community Nutrition Unit Consultant Community Physician Coordinator for the development of Implementation Guidelines for the National Nutrition Quality Standards

Contents

Message from Director General of Health Services	
Preface	IV
Introduction	1
Standard 1	
Rapid nutritional assessment using Mini nutritional assessment	
Standard 2	
2.1 Nutrition care plan for healthy older adults	
2.2. Nutrition care plan for older adults with chronic disease conditions	
2.3. Nutrition of older adults in acute disease conditions	6
2.4. Nutrition of the elders with special conditions	
2.4. Post –operative	
2.4.2. Hip fracture	
2.4.2. The fracture	
2.5. Nutrition problems of the elders with eating issues	
2.5.1. Food does not taste good	
2.5.2. Constipation.	
2.5.2. Consupation	
2.5.4. Choking or coughing of food	
Standard 3	
3.1. Assessment of the quality of food	
3.1.1. Purchased food	
3.1.2. Donor food.	
3.2. Food safety measures	
3.2.1. Purchase	
3.2.2. Storage	
3.2.3. Preparation and cooking	
3.2.4. Serving area	
3.3. Food environment.	
3.3.1. Water	
3.3.2. Garbage disposal	
3.3.3. Pest control	
Standard 4	
Physical activities and entertainment	
4.1 Physical activities for older persons	
4.1 Physical activities for older persons	
Standard 5	
5.1. Feedback check list on the foods	
Standard 6	
6.1. Performance appraisal of the staff	
Standard 7	
Annexures	
Contributors	
Technical Contribution.	
100mmai Conti Iuttiuii	



Introduction

A guideline for implementation of National Nutrition Quality Standards for residential care for older people is a supplementary document to be used by the management and care givers of those institutions.

It was recognized that some tools are needed for implementation of National Nutrition Quality Standards for residential care for older people. Hence, this guideline was prepared with necessary tools and information under the relavent standards.

Rapid nutrition assessment tool was introduced under the standard 1 to carryout nutritional assessment for provision of immediate nutrition care on admission. This is a validated Mini Nutritional Assessment tool which was agreed by nutrition experts.

Eating the right food in right portions with a variety to receive all necessary nutrients is important for wellbeing of older people. Therefore, food groups recommended in food based dietary guidelines for Sri Lankans are explained under the standard 2 to give knowledge to provide proper diet for healthy elderly people. Under this section, recommended servings of various food groups, portion sizes of foods and sample menu for a week are annexed. Nutrition care plan for older adults with acute and chronic diseases, nutrition of the elders in special conditions such as post-operative, in hip fractures, in dementia and nutrition of the elderly with eating problems were included in the implementation guideline.

Guideline on implementation of the standard 3 provides the assessment of the quality of both purchased and donor food. Standard 3 includes the safety measures of food to be adhered by the institution in purchasing, storing, preparing and serving food for the elderly. In addition to that, guideline on implementation of standard 3 facilitates maintaining a safe and clean food environment including water, garbage disposal and pest control.

The fourth standard includes a guideline on the provision of physical activity and recreation for mental and physical well-being of older people.

Under the standard 5, guideline includes feedback on food given to the residential elderly which has to be assessed periodically by a designated person from the institution, facilitating the improvement of the quality of food.

With the aim of capacity development of human resources, guideline on implementation of the standard 6 includes a performance appraisal form for the staff of the institution.

In fulfilling the standard 7, guideline to facilitate the implementation Institution a check list, which comprehensively assesses the quality of nutrition care and services available for the institutionalized elderly.

Standard 1: Nutrition support and care services

Rapid nutritional assessment using Mini Nutritional Assessment

A trained staff member of the institution should assess residents' nutrition status on admission using the following format and documented in new comer's health record.

Last name:			First name:			
Sex:	Age:	Weight, kg:	Heigh	ht, cm:	Date:	
Complete the	screen by filling in the	boxes with the approp	riate numbers. T	otal the num	nbers for the final s	screening score.
Screening	9					
0 = seve 1 = mod	d Infake declined ove ving difficulties? are decrease in food interate decrease in food decrease in food intake	ake	due to loss of ap	opetite, dige	estive problems,	chewing or
0 = weig 1 = doe: 2 = weig	loss during the last 3 ht loss greater than 3 is s not know ht loss between 1 and weight loss	g (6.6 lbs)				
	or chair bound to get out of bed / chai	r but does not go out				
D Has suf 0 = yes	Tered psychological a 2 = no	tress or acute diseas	e in the past 3 r	months?		
0 = seve 1 = mild	eychological problem re dementia or depress dementia sychological problems					
0 = BMI 1 = BMI 2 = BMI	ass Index (BMI) (welgi less than 19 19 to less than 21 21 to less than 23 23 or greater	ht in kg) / (height in n	n)²			
		T AVAILABLE, REPLA ER QUESTION F2 IF				
0 = CC	cumference (CC) in cr less than 31 31 or greater	1				
Screenin (max. 14						00

Please refer to the page 6 of the National Nutrition Quality Standards for Residential Care for Older People.

If a **newly admitted** older person;

- 1. Has a *normal nutrition status*: If he/she scores between 12 to 14 points and can be given a nutritious diet for a healthy person until a comprehensive nutrition assessment is done by a professional (please refer to annexure 1 of National Nutrition Quality Standards for Residential Care for Older People for further clarification).
- **2.** Is at risk of malnutrition: If he/she scores between 8 to 11 points and can be given a nutritious diet for a healthy person on admission but need referral to a health /nutrition professional for a comprehensive nutrition assessment within two weeks(please refer to annexure 1 of National Nutrition Quality Standards for Residential care for Older People for further clarification).
- 3. Is malnourished: If he/she scores between 0 to 7 points and need referral to a health /nutrition professional for a comprehensive nutrition assessment immediately (please refer to annexure 1 of National Nutrition Quality Standards for Residential care for Older People for further clarification).



Standard 2: Nutrition care plan/s

The institution should have nutrition care plans with nutrient requirement, feeding methods and consistency and serving sizes for the residents according to their health conditions. These nutrition care plans may be a regular diet or prescribed special diet or therapeutic diet.

2.1 Nutrition care plan for healthy older adults

• Consume variety of foods from following food groups

1. Cereals and Starchy food (Grains & yams)

- 55% of daily energy requirement comes from this food group.
- Serving sizes of this food group depends on level of physical activity, nutrition status and individual health.



2. Vegetables and green leaves

- At least two vegetables and green leaves need to be consumed every day.
- Vegetables provide vitamins, minerals, photochemical and fiber that protects you from illnesses.



Please refer to the page 7 of the National Nutrition Quality Standards for Residential Care for Older People.

3. Fish, eggs, lean meat & pulses

- This food group mainly provides proteins necessary for maintenance of muscle mass and optimal functioning of the body.
- They are a good source of vitamin and minerals like iron and calcium.
- Small fish like sprats give calcium to maintain bone mass.



- 4. Fruits At least two varieties of fruits in recommended servings should be included in daily diet.
 - Fruits too provide vitamins, minerals, fiber, antioxidants and phytochemicals



5. Fresh milk and its fermented products

- They offer energy, protein, vitamins and minerals.
- Fresh milk and its fermented products reduce the loss of bone mass. Fermented dairy products such as curd and yoghurt is good for bowel health.



6. Nuts and oily seeds

- Fat in nuts and seeds (peanuts, gingelly/sesame, kottang, cashew, pumpkin etc) are healthy when taken in recommended amounts
- These are rich in essential fatty acids which cannot be produced by the body.
- They increase good cholesterol (HDL) and prevent heart attacks.



- Reduce intake of sugar.
- Limiting salt at old age is not necessary except for doctor's recommendation. Recommended salt intake is one teaspoonful (5 mg) per day.
- Drink at least 8-10 glasses of fluids including water each day.
- Exposure to sun in the morning through these physical activities gives vitamin D which is good for bone health.

Please refer to;



Annexure I for recommended servings of various food groups.

Annexure II for Serving sizes of various foods.

Annexure III for Sample menus prepared for the meals throughout the week.

2.2. Nutrition care plan for older adults with chronic disease conditions

The nutrition care plan for older adults with chronic disease conditions should be as recommended by the Physician/ Medical Nutritionist/ Nutritionist. As some older adults are having multiple chronic disease conditions.

2.3. Nutrition of older adults in acute disease conditions

- Dehydration can occur as a result of excessive diarrhoea or vomiting and inadequate fluid intake.
- Signs of dehydration -Sunken eyes.
 - Loss of skin turgor
 - Reduced urine output
 - Increased thirst
 - Constipation
 - lethargy
 - Muscle cramps
- Maintain an input-output chart.
- In mild dehydration conditions, Oral Rehydration Solution (ORS) can be given. It can be prepared as instructed in the packet.
- In moderate and severe dehydration conditions medical advice should be sought.
- Do not restrict foods. Refer to a doctor.

The nutrient demand is more in illnesses hence, nutritious foods should be given to the patient.

- Palatable food should be given according to the patient preferences, as the appetite lowers.
- In conditions like nausea / vomiting and diarrhoea, energy dense semisolid food like soup or kanji can be given.
- Vitamin and mineral supplements can be given as recommended.

2.4. Nutrition of the elders with special conditions

2.4.1Post –operative

• Nutrition care plan for an elderly who has undergone a surgical procedure should be as recommended by the surgeon and the medical nutritionist.

• In general, protein containing foods like fish, eggs, meat and pulses as well as carbohydrate containing foods like grains and yams should be increased.



• Macronutrients important for wound healing should be increased.

Vitamin A containing foods –eggs, milk products, fish oil, dark green leaves, yellowish vegetables and fruits like carrot, pumpkin, papaw, mango and orange



Vitamin B- pulses, red raw rice

Vitamin C- nelli, guava, orange, papaya, local olives etc. and dark green leafy vegetables



• May need maintenance of fluid balance charts as recommended by doctors advice.

2.4.2. Hip fracture

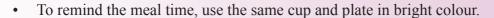
- At the time of discharge from the hospital, a dietician should review the nutritional status of the patient to decide his/her nutritional care plan. The care taker has to follow that care plan.
- In general, calcium containing foods like dairy products and small fish like sprats should be consumed more.



- Dairy products and exposure to sun are considered as good sources of Vitamin D which helps to heal fracture.
- Mobilize the patient as per medical instructions.

2.4.3. Dementia

- Special attention should be given to the patients with dementia as they are more prone to be malnourished.
- Dementia patients need a calm and quiet environment for eating with adequate light.



- Encourage them to eat independently.
- Get a balanced diet as recommended by the Physician/ Nutritionist.
- Patient can take meals as usual with other elders at the early phase of dementia.
- But at the late phase, specialized opinion should be sought depending on the patient's condition.
- Some patients with dementia have particular eating difficulties.

1. Refusing foods/drinks

• Encourage them to eat by offering them familiar foods.

2. Distracted easily

- Remove distractions like TV/ Radio, talking to to a person while eating.
- Continue to encourage eating.

3. Stares at food without eating

Always remind them to eat.

4. Difficulty in chewing

• Check for dental/ gum problems and make necessary arrangements to solve correctable issues.

Offer them smaller pieces of softer food.



5. Slow eaters

- Always remind them to swallow.
- Make sure that the food is not too hot/ cold.
- Offer help if needed.

6. Impatient behavior before or during meals.

- Bring the person to the dining table just before serving meals.
- Avoid waiting at the table before the meals are served.

2.5. Nutrition problems of the elders with eating issues

2.5.1. Food does not taste good

- Common cold or blocked nose may weaken the sense of smell. Without aroma the foods tends to be dull. Consult a doctor to treat the cold.
- If the resident is a heavy smoker or a beetle chewer, it is recommended to stop smoking or beetle chewing to improve the taste and appetite.
- As some medication/s also can interfere with the taste, consult your doctor for a possibility of changing drugs.
- Always keep the mouth clean.
- Try local remedies like "rasam", "thambumhodi" or lemon juice, vinegar and spices.





2.5.2. Constipation

- Recent onset constipation needs medical attention.
- Increase the intake of fluid.
- Include foods rich in fiber such as fruits, vegetables, green leaves and wholegrains more in meals
- Try to schedule toileting after meals.
- If constipation persists, seek medical treatment. May need extra fiber supplementation according to physician's advice.

2.5.3. Sticky uncomfortable feeling of mouth or 'dry mouth'

- Encourage them to drink plenty of liquids.
- Cleaning/rinsing mouth 2 to 3 times per day.
- Discuss with the doctor to change the medication as required.

2.5.4. Choking or coughing of food

- If the resident is having frequent choking problem he/she should pay more attention to eating.
- It is recommended to have meals under the supervision of a care taker.
- Avoid watching television or doing other activities while eating.
- Do not drink fluids or talk while eating.
- Eat slowly and do not eat while lying down.



Standard 3: Safe food environment

The institution should make environment safe by assessing the quality of food, water and intake of meals as mentioned below.

3.1. Assessment of the quality of food 3.1.1. Purchased food

- All food items should be inspected for insect infestation, expiry dates and suitability for human consumption.
- Rice and grains should not be infested with insects/ worms or mould.
- Fruits, vegetables and green leaves should be fresh and clean.
- Fresh fish can be identified by shinny skin, bright eyes, bright red gills and it should be without foul smell.
- Eggs should be undamaged and heavier eggs are better than lighter eggs.
- Canned food should be checked for the expiry dates, observe for the puffiness, rust or damage of the container.
- A designated staff member should be assigned to check the quality of both purchased/supplied and donor food.



Please refer to the page 8 of the National Nutrition Quality Standards for Residential Care for Older People.

3.1.2. Donor food

- Check the above mentioned factors in the uncooked donor food.
- Check following factors in cooked donor food;
- -Whether the donor food comply with the given meal plan.
- -Rice, vegetable, fish/meat curries and salads should be fresh and unspoiled.
- -All cooked food should be brought covered to avoid contamination
- All cooked food should be kept on a table (at least 18 inches height from the floor level)
 - Better to assign a staff member to taste every food item before offering to the residents.



3.2. Food safety measures

3.2.1. Purchase

- All the measures should be taken to purchase good quality fresh fruits, vegetables, pulses, fish, egg, meat, and other uncooked food.
- A permanent supplier/ suppliers who can provide quality food can be appointed to supply food.

3.2.2. Storage

- Separate store room with adequate lighting and ventilation should be available to store food.
- The windows should be fenced with net to avoid entering of animals in to the store room.
- The floor of the store should be kept clean and dry.
- Dry rations (rice, grains, dried fish etc) should be stored in dry containers to prevent contamination from rodents and mould.
- The platform of the racks and shelves storing food should be at least 18 inches' height from the floor level and 9 inches away from the wall.
- The shelves and racks should be free of dust and debris and the floor beneath should be able to clean easily.
- The supplies should be neatly stored for easy reach.
- The uncooked fruits and vegetables should be stored in rodent /insect proof containers or in a refrigerator.
- Fish or meat need to be stored in deep freezers within 15 minutes of delivery.
- Refrigerators and freezers should be in good working condition.
- Refrigerators and freezers should be cleaned regularly.
- Refrigerators and freezers should not be overstocked.



- All cooked or ready to eat food in the refrigerators and freezers should be covered to avoid contamination.
- The first in, first out (FIFO) mode of issue should be followed when issuing food from stores.
- Consider to store packaged items according to expiry date.

3.2.3. Preparation and cooking

Adequate number of cleaned equipment and kitchen utensils should be available for preparation of food (Annex IV).

- Walls, floor and drains in the vicinity of the kitchen should be kept clean.
- Fruits, vegetables, fish, meat eggs etc. should be washed thoroughly before preparation.
- Any cleaning procedures like sweeping or dusting should not be carried out during food preparation.
- Avoid usage of artificial food flavours.



- Frozen food should be left in the room temperature to thaw before preparation.
- Food stuffs, utensils, equipment equipment and cotainers with food should not be placed on the floor.
- Sharp equipment like knives, peelers etc. should be cleaned well before and after use.

- Separate chopping boards should be used for vegetables and meat or sea food. They should be cleaned well after use.
- Food handling areas should be away from toilets and garbage disposal sites to avoid contamination.
- Food handlers should maintain their personal hygiene.
- They should wash and keep their hands clean; finger nails should be cleaned, trimmed and kept unvarnished.
- Separate hand washing place in food preparation area should be available for food handlers
- Those who suffer from infections (diarrhoeal diseases, skin diseases etc.) should refrain from food preparation.
- The food handlers should use Personal Protective Equipment (PPE) to avoid contamination of food when preparing.
- Hair should be covered fully with caps to avoid contamination of food by hair.
- They should not cough or sneeze on food.
- The institution should provide provide Personal Protective Equipment (PPE) such as glove, caps, aprons etc.
- Periodical medical inspection, stool sample checking and vaccination against Typhoid should be given to the food handlers.



- Prepared food should be stored in food grade clean containers and should be kept covered to avoid contamination.
- Store cooked food in the refrigerator separated from the uncooked food.

3.2.4. Serving area

- The dining room should be sufficient to accommodate the number of residents. Area should be well maintained with adequate number of tables and seats with good lighting and ventilation. Maximum space for a person shall be 75 cm x 45 cm.
- Tables and chairs should be with appropriate height for the elderly and also to facilitate wheel chair access.

- Plates, cups and spoons should not be heavy and light coloured.
- It should be provided separately for each person and should be cleaned after use.



- Separate spoons should be used to serve each food.
- Adequate number of racks or cupboards should be available to store the utensils in hygienic conditions.



- Dining area should be clean and well maintained to be attractive.
- Serve warm foods as much as possible.

3.3. Food environment

3.3.1. Water

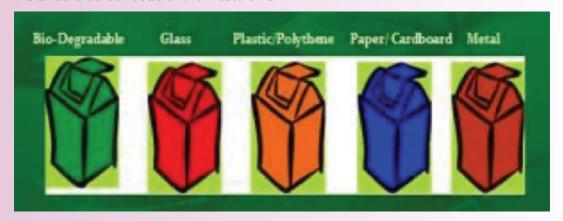
- The premises should be provided with adequate potable water and should be stored in clear containers immediately before drinking.
- Hand washing facilities with soap should be available according to the number of residents and the taps should be with a lever system for a convenient use by the elderly.
- Floor of the hand washing area should be covered with a water absorbing mat to avoid falls.
- The water sources should be periodically tested for detecting chemical and microbiological quality. Inform Public Health Inspector for water sampling



3.3.2. Garbage disposal

- Reduce the waste and re- use the materials as far as possible.
- Kitchen waste should be segregated as food waste, plastic or polythene or paper waste, glass and metals and put in bins with relevant colour codes.
- Garbage bins should be in adequate number and covered with lids.

Standard colour code of the waste bins



- Garbage bins should be emptied in to the main garbage collection bin regularly and kept cleaned.
- There should not be signs of pests breeding in around garbage bins or in garbage collecting areas.



- Biodegradable waste can be used to produce compost or produce bio- gas.
- Liquid waste should be properly drained in a covered drainage in to a sewage pit.
- If the above mechanisms are not in place, collected garbage need to be handed over to the Municipal Council collecting trucks everyday.
- Glass, plastic, metal and e-waste (batteries of cellular phones and electrical items, computers) can be handed over to the collecting centers.
- Waste water need to be disposed according to the local plans.

3.3.3. Pest control



- Continuous measures should be adopted to control pests like, rodents, cockroaches, ticks and mites.
- Keep the area open and clean to avoid breeding of pests.
- Regular inspection for the signs of pest harboring (rat droppings, dead cockroaches) is necessary.
- If the above measures fail, go for the chemical use.

Precautions should be taken to avoid contamination of food for human consumption with chemicals used for pest control.

Standard 4: Physical activities and entertainment

4.1 Physical activities for older persons

Key Guidelines on Physical activity for Adults 65+ years:

- Good physical and cognitive functions are key benefits of participating in physical activity.
- Some physical activity according to person's ability is better than none, and more physical activity within individual's capacity provides greater health benefits.
- Minimize the amount of time spent being sedentary for extended periods.
- Moderately-intense physical activities will make older people sweat a little and breathe harder.
- Starchy and oily food should be consumed in lesser quantity by over-weight elderly persons who engage in physical activity, because excess energy generated will be deposited in the body as fat if it is not burnt by physical activity.
- Should aim to make them active daily. Activity over a week for a healthy adult should add up to at least 150 minutes (2 ½ hrs) of moderate intensity activity in bouts of 10 minutes or more a way to approach this is to do 30 minutes on at least 5 days a week.
- Leisure time physical activity (for example: walking or cycling -even a short distance, dancing, gardening, hiking, swimming), occupational (if the individual is still engaged in work), household



Please refer to the page 9 of the National Nutrition Quality Standards for Residential Care for Older People.

chores, play games or sports or planned exercise, should be carried out daily. This may be done involving family or relatives or as community level activities for better physical and mental health.

• Older people with risk of falls should incorporate neuro-motor physical activity on at least two to three days a week to improve flexibility and balance.(standing on heel or toes, standing one leg, jumping over an object, standing and turning with eyes closed, yoga etc)

(Source: Technical Report On Physical Activity and Sedentary Behavior Guidelines For Public Discussion Sri Lanka SLSEM Conference 2018-Institute of Sports Medicine, Sri lanka and https://www.who.int/dietphysicalactivity/factsheet olderadults/en/)



4.2 Entertainment for older persons

- ♦ The personal preferences vary, but it is not always possible to give attention individually to an institutionalized resident. Different structured leisure activities performed individually or collectively, may improve the emotional well-being of older persons.
- ♦ The following are recommended as recreational activities for older persons enhancing mental wellbeing and mental stability.
- Arts and/or crafts such as drawings, handmade flowers, cushions, cards, toys, sewing etc

- Games and/or sports such as board games like carom, chess, card games etc
- ♦ Intellectual activities such as reading and writing, sudoku, crossword puzzles, jigsaw puzzles etc
- ♦ Attending cultural events such as Sinhala Tamil new year events and games, religious activities like bodhi puja, vesak festival, christmas etc
- Family and social interactions such as playing with grandchildren, pilgrimages, annual trips, short vacations, paduru parties, dramas
- ♦ Hobbies such as playing a musical instrument, dancing, collecting stamps, coins etc, gardening, pets and maintaining fish tank etc
- ♦ Shopping such as for groceries, cloths, daily necessities, items for hobbies
- Television viewing of different programmes, movies, documentaries
- ♦ Yoga and meditation
- Any other outdoor activities and competitions based on individual preference



Standard 5: Feedback on services

Feedback received on foods can be assessed periodically by the responsible person in the institution.

5.1. Feedback check list on the foods

Description	Feedback
Presentation	
Diversity	
Quantity	
Quality	
Timeliness	
Other (Specify)	



Please refer to the page 10 of the National Nutrition Quality Standards for Residential Care for Older People.

Standard 6: Human resources

A responsible person from the institution should appraise the performance of the staff periodically.

A sample of Performance Appraisal form has been given below.

Name of the worker:

6.1. Performance appraisal of the staff

1. Personal details

Post:

Date of employment:	
Period of review:	
2. Assessment : 1= good 2=av	erage 3= bad
Assessment area	Rating
1. Attendance	
2. Timeliness	
3 Job knowledge	
Diversity/Variety of food	
Basic nutrition	
Food preparation and Special Diets	
Cleanliness	
Pest control	
Garbage disposal	
4 Skill	
House keeping	
Food preparation	
Food diversifying	
Food presentation	

Please refer to the page 11 of the National Nutrition Quality Standards for Residential Care for Older People.

25

5. Quality of work	
6. Motivation	
7. Team work	
8. Personnel hygiene /health	
9. General conduct	
10. Training participated (or)	
in-service training	
special training	
3. Comments	

Standard 7: Institutional governance

The institution's governing body is accountable for the delivery of safe and quality nutrition care and services for residents. Following format can be used to monitor the compliance with the standards.

7.1. Check list for nutrition care services

Please tick in the relevant cage.

	Factor	Yes/No/ Partially	Standard
1	On admission rapid nutrition assessment using Mini nutritional assessment is conducted for all residents		1
2	Comprehensive nutrition assessment by a health professional facilitated within 2 weeks of admission for all residents.		1
3	Periodical nutrition assessments by a health professional facilitated.		1
4	Residents' participation and suggestions for food choices according to cultural preferences are considered in planning meals.		1
5	Nutrition care plans are available according to the health conditions of the residents.		2
6	Nutrition support services are available for the needy older adults.		2
7	Quality of the purchased/donor food is assessed by an assigned staff member.		3
8	Food are stored as recommended in guideline.		3
9	Equipment are adequate for food preparation.		3
10	A spacious kitchen is available for food preparation as per recommendations.		3

Please refer to the page 12 of the National Nutrition Quality Standards for Residential Care for Older People.

11	Spacious equipped dining area is available as recommended.	3
12	Hand washing facilities are available in dining area.	3
13	Food handlers have undergone periodical medical examination.	3
14	Food handlers have been vaccinated against Typhoid.	3
15	Potable drinking water / water for cooking is available.	3
16	Source of water (drinking water/water for cooking)	3
17	Proper garbage disposal methods are available as recommended.	3
18	Safer pest control methods are used.	3
19	Adequate number of staff is available as recommended, for the provision of nutrition care	6
20	Facilities for physical activities are available in the institute.	4
21	Residents are engaged in physical activities according to their capabilities.	4
22	Facilities for the entertainment of the residents are available	4
23	Availability of a complaint/ suggestion box/ consider outsiders' complaints.	5
24	The institution appreciate suggestions from guardians/donors in provision of nutrition care.	5
25	Staff members have undergone training programmes/ skill development programmes on nutrition /nutrition support of the elderly.	6
26	Information management mechanism on individual's health, food environment and staff is available.	7
27	Periodical performance appraisal among staff members is carried out.	6

Scoring system

Proposed scoring	Number of criteria in place	Number of criteria partially in place	Number of criteria not in place
Standard met Good quality of care			
Standard partially met Need some improvement			
Standard partially met Need substantial improvement to meet the standard			
Standard not met			

Annexures

Annexure I: Recommended servings of various food groups.

Food Groups	Servings per day
Cereals and starchy foods	7 - 13
Vegetables and Green leaves Vegetables Green leaves	3 1
Plant protein (Pulses)	3 – 4
Animal protein fish /lean meat	2 - 4
Egg	1
Fruits	2-3
Fresh milk and its fermented products	1 – 2
Nuts, oily seeds and oil	2

Annexure II: Serving sizes of various foods.

Table showing the serving sizes of different food groups

Food groups	1 serving size equal to:	
Cereals and starchy	½ cup cooked rice (65 g)	
foods	½ cup cooked noodles / pasta	
	1 slice of bread (30 g)	
	2 string hoppers, medium size (10 g each)	
	1 hopper (25 g)	
	½ roti (about 9 cm diameter and 0.5 cm thick)	
	¹ / ₄ th large pittu (3 cm height and 5 cm diameter)	
	1 thosai (20-25 g)	
	½ cup jack / bread fruit (boiled)	
	1 medium potato	
	½ cup boiled sweet potato / Manioc/ other yam	

Vegetables and Green leaves	3 tbsp	
Vegetables	Beans/ Murunga/ Wetakolu/ Pathola/ Dambala/ Karawila/ Tibbatu/ Elabatu/ Brinjal/ Cucumber/ Cabbage /Capsicum/ Tomato/ Keselmuwa/ Cauliflower/ Amberella/Pumpkin etc.	
Root vegetables	Carrot/ Beet/ Radish/ Nokol/ Kohila/ Lotus roots etc.	
Green leaves	3 tbsp Gotukola/ Kathurumurunga/ Mukunuwenna/ Spinach/ Kankun/ Anguna/ Thembu/ Sarana/ Thampala/ Murunga leaves/ Pumpkin leaves/ Carrot leaves/ Beet leaves/ Radish leaves/ Nokol leaves/ Cabbage leaves/ Passion leaves/ Manioc leaves/ Tender kohila leaves/ Onion leaves etc.	
Pulses/ Fish / Egg / lean meat		
Pulses	3 tbs cooked dhal 3 tbs cooked kadala parippu 3 tbs cooked mung parippu ½ cup cooked/boiled chickpea (75 g) ½ cup cooked/boiled cowpea (75 g) ½ cup cooked/boiled mungbeans (75 g)	
Fish /lean meat	30 g fish / chicken / beef/ pork / mutton 15 g dried sprats (9 – 10 sprats) 15 g dry fish (1 match box size piece)	
egg	1 egg	

Fruits	1 medium banana 1 small beli ½ cup anona 2 dates 4 tsp rasins	High carb fruits
	2 cups cubed papaya 1 – 2 small guava 2 slices pine apple 1 medium mango 1 small orange 1 small wood apple 1 small apple 1 medium pomegranate 10 – 15 grapes 10- 15 jambu 1 small pear	medium carb fruits
	veralu, lovi, uguressa, dan, , lemon, nelli , water melon	low carb fruits
	½ medium avocado	- healthy fat fruit
Fresh milk & its fermented products	1/2 cup fresh milk 1/2 cup curd 1 yoghurt cup 15 g cheese	
Nuts, oily seeds & oil	1 tbsp full of peanuts 7 cashews 15 g gingelly seeds	
Coconut - grated	1 tbsp (10 g)	
Oil	1 tsp (5g)	

1 tea cup = 200 ml tea cup 1 tea spoon = 5 ml (~5 g) 1 Table spoon (tbsp) = 15 ml (~ 15 g) Cooked items quantities measured without gravy.

Annexure III: Sample menus prepared for the meals throughout the week.

Sample menus

Menu	01	02	03	04	05	90	10
6.00 a.m.	Fresh milk / milk tea						
Breakfast	Chick pea/ Cowpea/ Mung beans/ Scraped coconut/ Maldive fish sam- bolaya	Milk rice, fish curry, seenisam- bolaya / kattasambo- laya	Bread, egg-om- lette, mixed vegetable curry	String hoppers, fish white curry/egg curry/chicken curry, pol sambolaya	Mung beans milk rice, Lunumiris with maldive fish	Rice dried fish /sprats tempered/curry any kind of veg- etable	Dosai with mixed vegetable curry & coconut sambolaya, soya tempered or curry
10.00 a.m.	Lavariya/ helapa/ pan Yoghurt cake/ with a frwalithalapa, milk tea/ plain tea	uit	Kola kanda/ Sago drink	Samaposha aggala milk tea/ plain tea	Banana, sesame pellets, milk tea/ plain tea	Sesame pellets / semolina, herbal drinks like belimal, ranawara etc.	Yoghurt with a fruit
Lunch	Rice/ two vegetables + green leafy vegetable or leafy salad	- green leafy v	egetable or leafy sa	ılad			
	fish	chicken	sprats/ dried fish	egg	fish	soya bean	chicken
Dessert	Papaw / mango/ ripe j	ak/ water melo	on/avocado/wood ap	Papaw / mango/ ripe jak/ water melon/avocado/wood apple /pine apple/ fruit salad/ banana	alad/ banana		
4.00 p.m.	Sesame pellets, banana, milk tea/ plain tea	Cake/ cream cracker biscuit, plain tea	Cake/ cream Vegetable soup cracker biscuit, plain tea	Samolina/ walitha- lapa/lawariya/ pan cake/ milk tea/ plain tea	Vegetable or chicken soup	Sandwitches , milk tea/ plain tea	Samaposh aaggala, milk tea/ plain tea
Dinner	Rice, vegetable curry, dried fish tempered, salad	Pittu / fish roti/ soya / egg/chicken curry	Noodles, veg- etable, chicken curry	Bread, coconut sambo- laya,mixed vegeta- ble curry, fish/ sprat curry	Dosai/idli, coco- nut sambolaya, mixed vegetable curry, soya meat tempered	String hoppers, coconut sambola, fish /soya /egg/ chicken curry	Rice, salmon/ egg curry, a vegetable
Dessert	banana / papaw / water melon / guava / mango /pine apple / yoghurt	r melon / guav	/a / mango /pine ap	ole / yoghurt			
Vegetarians	Soya (TVP), beans, wing beans, dhal, mung beans, Bean curd / tofu can be given instead of meat/fish	ing beans, dha e given instea	ıl, mung beans, chic d of meat/fish	chick pea, cowpeas boiled or curry.	l or curry.		

Annexure IV

Minimum number of utensils/items that should be available in the kitchen

Kitchen/Pantry Items	Minimum No
1. Cutting board and knives (for handling meat/fish & veggies)	At least 2
2 Cutting board and knives (for handling cooked food)	At least 1
3.Refrigerator/freezer	At least 1
4. Rice cooker	At least 1
5. Hot water boiler	At least 1
6.Food grade container for storage of water/ water filter	At least 1
6.Litter bin with a lid (for biodegradable)	At least 1
7. Litter bin with a lid (non-biodegradable waste)	At least 1
8. Notice board/white board (menu displaying)	At least 1
9. Notice board/white board 1 (necessary items to purchase)	At least 1
10. Need of Exhaust fan according to ventilation	
11. Cooking utensils	Adequate number
12. Dining utensils	Adequate number
13. Kitchen equipment (Blender, Cookers / gas cylinders etc.)	Adequate number
14. Cupboards with doors (for storage of cooking equipment/utensils)	Adequate number
15. Cupboards with doors (raw food)	Adequate number

References

Elbana, H.M., Tolba, K.G., Darwish, O. A. (1996). Dietary management of surgical patients; effect on incisional wound healing. Eastern mediterreon health journal. Volume 2(2).

Huddleston, Jeanne M. et al.(2018). Medical care of elderly patients with hip fractures.

Mayo clinic proceedings, Volume 76, Issue 3, 295 – 298.

Manual for the Sri Lankan Pubic Health Inspectors. (2010). Ministry of Health, Sri Lanka.

Ministry of Health. (2011). Food based dietary guidelines, Sri Lanka.

Ministry of Sports. (2018). Physical activity and Sedentary behavior guidelines for Sri Lankans. Ministry of Sports and Exercise medicine, Sri Lanka.

Contributors

Focal Point - Dr. Lakmini Magodaratne, Actg.Director/Nutrition, Nutrition Division, Ministry of Health

Authors -

Dr. Anoma C.M.Basnayake, Consultant Community Physician, Nutrition Division Ministry of Health

Dr. Samantha Wijewardene, Registrar, Community Medicine, Nutrition Division, Ministry of Health

Dr. Jinani Mahepala, Medical Officer, Nutrition Division, Ministry of Health

Dr.Hamsananthy, Senior Registrar, Community Medicine, Nutrition Division, Ministry of Health

Ms.Sajeewani Mirihagalla, Development Officer, Registered Nutritionist(CMCC), Nutrition Division, Ministry of Health

Tamil Translation - Dr. Hamsananthy, Senior Registrar, Community Medicine, Nutrition Division, Ministry of Health

Technical Contribution

- 1. Dr. Rasanjalee Hettiarachchi, Former Director, Nutrition Division, Ministry of Health
- 2. Dr. Renuka Jayatissa, Head Nutrition Unit, Medical Research Institute
- 3. Dr. Pathma Gunerathne, President, Sri Lanka Association of Geriatric Medicine
- 4. Dr. A. Balasuriya, Head, Public Health & Family Medicine, Department of Public Health Sri Jhon Kotalawela Defence Academy, Faculty of Medicine
- 5. Dr. Priyankara Jayawardene, Visiting Physician, General Hospital, Colombo
- 6. Dr. Lakmini Magodaratne, Actg.Director, Nutrition Division, Ministry of Health
- 7. Dr. Anoma C. M. Basnayake, Consultant Community Physician, Nutrition Division, Ministry of Health

- 8. Dr. Y. K. Weerasekara, Consultant Community Physician, Nutrition Division, Ministry of Health
- 9. Dr. Bhanuja Wijethilaka, Consultant Community Physician, Nutrition Division, Ministry of Health
- 10. Dr. Shiromi Maduwege, Consultant Community Physician, Directorate Youth, Elderly & Disable Unit, Ministry of Health
- 11. Dr. Amanthi Bandusena, Consultant Community Physician, Directorate Estate and Urban Health
- 12. Dr. H. Yakandawela, Director, Village 60 plus
- 13. Dr. Hamsananthy, Senior Registrar, Community Medicine, Nutrition Division, Ministry of Health
- 14. Dr M. P Gamage, Senior Registrar, Nutrition
- 15. DR J.R Thenakoon, Senior Registrar, Nutrition
- 16. Dr. Samantha Wijewardene, Registrar, Community Medicine, Nutrition Division, Ministry of Health
- 17. Dr. Sajani Nadeeka, Registrar- Community Medicine, Nutrition Division, Ministry of Health
- 18. Dr. Kanishka Athukorala, Registrar, Community Medicine ,Nutrition Division, Ministry of Health
- 19. Dr. Nishani Fonseka, Registrar, Community Medicine, Nutrition Division, Ministry of Health
- 20. Dr. Dilusha Udugama, Registrar, Community Medicine, Nutrition Division, Ministry of Health
- 21. Dr. Erandi Weerasekara De Silva, Medical Officer, Nutrition Division, Ministry of Health
- 22. Dr. Eranga Pathirana, Medical Officer, Base Hospital Panadura
- 23. Dr. Nipuni Amerasekara, Medical Officer, Nutrition Division, Ministry of Health
- 24. Dr. Amila Liyanage, Medical Officer, Nutrition Division, Ministry of Health
- 25. Dr. Jinani Mahepala, Medical Officer, Nutrition Division, Ministry of Health
- 26. Dr. Chameera Yapa Abeywardene, Medical Officer, Nutrition Division, Ministry of Health

- 27. Dr. Virginie Mallawaarchchi, National Professional Officer, World Health Organization
- 28. Dr. Oshini Liyanaarachchi, Consultant of Community Health Unit, Sarvodaya Movement
- 29. Mrs. V. Pasqual, Senior Deputy Director Food Standards ,Sri Lanka Standard Institute
- 30. Mr.M.K.R.U. Krisantha, Deputy Director- National Secretariat for elderly
- 31. Mr. A. M. Asiri, National Secretariat for elderly
- 32. Mrs.P.S.P. Fernando, Public Health Nursing Officer
- 33. Mr. Tharmaseelan, Assistant Director, Nutrition Division, Ministry of Health
- 34. Mrs. R.M.L.R. Thilakarathne, Nutritionist, Nutrition Division, Ministry of Health
- 35. Ms. A.D.D.C. Athauda, Nutritionist, Nutrition Division, Ministry of Health
- 36. Mrs. Sajeewani Mirihagalla, Development Officer, Registered Nutritionist(CMCC), Nutrition Division, Ministry of Health
- 37. Mrs. C.S Ilangamge, Planning & Programming Assistant, Registered Nutritionist(CMCC), Nutrition Division, Ministry of Health
- 38. Mrs.T. Sutheravathney, Development Officer, Registered Nutritionist (CMCC), Nutrition Division, Ministry of Health
- 39. Mrs. M. Tharini, Development Officer, Nutrition Division, Ministry of Health
- 40. Mrs. Nirosha Saman Kumari, Development Officer, Nutrition Division, Ministry of Health