Notice to readers

The way in which the following manual refers to DoCS residences was correct at the time of publication. Any reference in the manual to DoCS residences should now be read as Family and Community Services NSW, Ageing, Disability and Home Care (ADHC) Large Residential Centres.

Food Services Manual – Update September 2003

This manual was first published in August 2000 by the Department of Community Services to provide standards and information about quality and safety to larger residential services for people with a disability.

The information provided in this manual continues to be useful. However, it should be noted that since publication of this manual the NSW Government in May 2001 adopted the *Food Standards Code* under **Food Regulation 2001**, thereby replacing the previous **Food (General) Regulation 1997**.

Since this update in 2003 the Standards in the *Australia and New Zealand Food Standards Code* have been made legislative instruments under the *Legislative Instruments Act 2003.*

The current (2012) *Food Standards Code* can be accessed at:
http://www.foodstandards.gov.au/foodstandards/foodstandardscode.cfm/
Food Regulation 2001 can be accessed at:
http://www.legislation.nsw.gov.au/

NSW Family and Community Services, Ageing, Disability and Home Care is making the resource available to provide a good practice framework for Large Residential Centres.

Food safety measures outlined in the manual need to be linked to Food Safety Standard 3.2.2 – **Food Safety Practices and General Requirements**, which includes:

Food handling – skills and knowledge

Food handling controls – storage
                                          processing
                                          disposal
                                          recall

Health and hygiene of food handlers

Cleaning, sanitising and maintenance

Temperature control

Compliance with the *Food Standards Code* is monitored by the NSW Food Authority.

Services should also refer to the *Food Standards Code* in relation to waste management, equipment and staff. Services are advised to contact the **NSW Food Authority** on **1300 552 406** if they have any questions or require additional information.

Links to Food Standards Code updated July 2012

FOOD services
manual

MESSAGE
from the director-general

Food is love, or that's what my mother always said. Food warms, nourishes and fuels the body, stirs the heart, entices with its fragrance, colour and taste. Enjoying food is one of life's pleasures. We want to increase our clients' enjoyment of their food and increase its nourishment.

Healthy nutrition is something most of us take for granted. In our own homes we recognise the important contribution to our health of a balanced diet and safe food handling.

At work, in our residences, staff work together to give the best nutritional care for our clients. The more staff there are involved in the preparation of clients' food, the clearer the guidelines need to be about practice and quality.

This *Food Services Manual* provides us with clear guidelines and standards for healthy meal planning and preparation. It also provides our staff with guidance on mealtime practices.

This Manual is the first of its kind for DoCS' residences. It includes input from dietitians who are specialists in food handling as well as feedback from our community partners, staff and managers in our residences.

I recently funded additional dietitians for our residences so that at each location you will gain specialist input while you are implementing the practice guidelines.

We will accompany the distribution of this Manual with training for our managers who are responsible for food services management. This training will include details about how to use the Manual and work with your dietitian in the continuous improvement process of planning and reviewing your residence's food services.

Recently I outlined the progress our residences are making in improving food services to the Minister, the Community Services Commissioner and some of our community partners. This Manual will assist you to continue to improve our nutrition services to our clients and help you create a sense of well being in our clients from enjoyable and nourishing food.

Carmel Niland
Director-General

ACKNOWLEDGMENTS

CONTENTS

INTRODUCTION

Who is this Manual for?

The *Food Services Manual – Disability Services* provides a framework for food service management in residential services for people with disabilities. These residences provide meals for *"large"* groups of people, which may in reality be as few as 10 people or as many as 600. Generally, the Manual applies to services that prepare food for larger numbers than a "family" unit in a home.

It is also intended to apply to residences where one or more cooks are employed to prepare food for the clients. This Manual also applies to those residences that receive food prepared by another service at a different location.

What are the uses of this Manual?

The Manual aims to be a useful resource for people who are:

- developing policies and procedures for a food service;
- monitoring the quality of a food service;
- developing and implementing a quality improvement program for a food service; and
- developing and delivering training programs for staff working in food services.

What does the Manual contain?

The Manual is divided into sections that highlight various topic areas that are fundamental to building a quality food service.

Each section begins with the standard for a particular topic area and suggests procedures for successfully obtaining this standard. Each section also lists a number of methods to monitor the quality, as well as examples of poor and good practice.

The Manual highlights the basic aspects for each topic area and is not intended to be fully comprehensive.

Using this Manual to write policies and procedures for your service

There are policies that can be adopted by a service organisation as they stand in this Manual. Alternatively, these policies can also be used as a guide and adapted to suit an individual service.

In order to successfully implement each standard and achieve a high standard in food service, the organisation should follow as closely as possible the procedures listed within each topic area.

Developing a Mission Statement

A statement of an organisation's purpose is called a "Mission Statement". It defines in simple, clear language what the organisation is trying to do and the outcomes it hopes to achieve. Mission statements for catering organisations or government departments are usually customer focused expressions of the overall aim of the service.

The following Mission Statement can be used by organisations providing food services for people with disabilities:

The mission of the (insert name of service) food service is to provide all our clients with high quality nutritious food that is enjoyable, safe to eat and meets their individual needs.

Note that "individual needs" includes nutritional and social needs.

Other sources of information

The Institute of Hospital Catering (NSW) published a manual in 1997 entitled *Food Service Guidelines for Healthcare*, which has been drawn heavily in developing sections of this Manual. *Food Service Guidelines for Healthcare* can be used as a companion volume to this Manual, particularly for large-scale food service operations. It provides more detailed guidelines on topics such as cook-chill production and storage, descriptions for typical roles and responsibilities for common staff positions in food service operations, and model HACCP plans for individual menu dishes.

1 SUMMARY
of standards for food services in DoCS residences

1

- Our food service will continually strive to improve the quality of the food and the service we provide.

- Each Client with a disability will be offered, or have access to, food of good quality that they can enjoy. Food provided will meet their nutritional needs and their cultural requirements. Food will be offered to them in a way that is appropriate to their physical capabilities and level of independence.

- Each client with a disability who requires texture-modified food will be offered visually appealing, palatable meals and snacks that meets their nutritional and swallowing needs. They will be served in a safe manner.

- Each client with a disability will be offered good quality food that is prepared, assembled and distributed in a safe manner. This will be achieved by the development and implementation of a food safety program in accordance with Hazard Analysis Critical Control Point (HAACP) system requirements.

- Our food will be ordered, received and managed in a way that ensures the preservation of its quality, provides value for our money, provides reliable delivery and minimises its waste.

- We will take all necessary precautions to ensure a safe working environment for our food service staff and to comply with all Occupational Health and Safety (OH & S) regulations.

- Each client with a disability will have access to visually appealing meals served in a safe manner. They can expect flexibility at meal time. They will receive a consistent and appropriate level of service when they are unwell or need a change in meal time due to an appointment or other changes to their usual routine.

- Each client with a disability will have access to clean, sanitised utensils for eating and drinking.

- Our waste will be stored and disposed of so it does not to contaminate our premises, equipment or food.

- We will have cleaning and sanitation programs together with pest control programs which minimise the risk of our food being contaminated.

- Our equipment will be purchased according to our needs and in a cost effective manner. Our equipment will be maintained to provide optimum service and safety.

- We will select the right staff for the tasks required. Our staff will undertake appropriate orientation and ongoing training as necessary.

2 CONTINUOUS
Quality Management

2

STANDARD

Our food service will continually strive to improve the quality of the food and the service we provide.

PROCEDURES FOR QUALITY ASSURANCE

We use a system of Continuous Quality Management (CQM). This means that all our food service staff are committed to, and involved in a creative process of improvement.

1. A Continuous Quality Management (CQM) program focuses on client needs and improvement of service, even when no "problems" are identified. This differs from Quality Assurance (QA) which focuses on compliance of regulations or standards and follows a problem solving approach.

2. CQM involves the following steps:

   Step 1: Assign responsibility

   Step 2: Define the scope
   Define the scope of service which is to be monitored and evaluated. In a food service, the scope should be all aspects of service from food procurement of food ingredients to service at the meal table or a client's chair.

   Step 3: Identify important areas
   Identify important areas which may have the greatest impact on the quality of service to our clients and use these for monitoring and evaluation. Examples for food service would include quality of food purchased, food safety, recipe testing and documentation, and training of staff.

   Step 4: Identify indicators
   These should be objective and measurable and should help to direct attention to potential problems or opportunities to improve the service. For example, temperature control and mealtime satisfaction surveys.

   Step 5: Collect and organise information
   This should follow a pre-determined pattern and time interval. It could be routine or at random.

   Step 6: Evaluate and assess information gathered
   This may be on the basis of a pre-determined standard or in comparison with previous evaluations. The assessment should occur in a collaborative and inclusive way involving, amongst others, staff who have been responsible for the monitoring.

   Step 7: Take action to improve the service
   When problems are identified, action plans should be developed and enacted to solve the problem or improve the service. This may involve a change to procedures, use of different equipment or administrative changes. Staff members should be fully informed and involved.

   Step 8: Evaluate the actions
   This is necessary to make sure that the actions taken have been effective. All

actions should be documented. Evaluation of the actions taken (changes made) should include the views of the staff members involved and those who are performing the on-going monitoring.

Step 9: Communication
The findings from, and conclusions of, monitoring and evaluation, including actions taken to improve the service, should be documented and clearly communicated to staff.

QUALITY IMPROVEMENT (MONITORING ACTIVITIES)

A checklist of all monitoring activities for the quality improvement program.

EXAMPLES OF POOR PRACTICE

- When there is insufficient monitoring.
- When monitoring shows there is a problem, nothing is done about it.
- Information collected by monitoring activities is filed without further examination.

EXAMPLES OF GOOD PRACTICE

- A quality improvement program applies to various aspects of the food service such as the menu, food safety and staff training.
- All staff members are involved in CQM and are kept fully informed of the results.

3 MENU
planning

3

STANDARD

Each client with a disability will be offered, or has access to, food of good quality that they can enjoy. Food provided will meet their nutritional needs and their cultural requirements and will be offered to them in a way that is appropriate to their physical capabilities and level of independence.

PROCEDURES FOR MENU PLANNING

1. Minimum food quantities

The menu will be designed in consultation with a dietitian and will provide at least the minimum quantities shown in Table 3(1).

When menus are assessed for nutritional adequacy they may be compared against the minimum food quantities indicated in Table 3(1). The menu should supply the minimum food quantities per day on average over the whole menu period.

Serving sizes may, in practice, be larger than the minimum. (Please refer to the example of the menu pattern on page 13). Furthermore, the variation in individual needs also means that serving sizes will be different for different clients.

Table 3(1) Minimum food quantities to be provided by the menu

FOOD GROUP	MIN. No. OF SERVES PER DAY	MIN. SERVING SIZE	COMMENTS
Fruit	2	1 medium fresh fruit 120g canned fruit 100ml fruit juice	Can be fresh, canned or juice (juice should provide no more than 1 serve)
Vegetables & Legumes	5	60g offer a variety of colours at each meal	Legumes can be counted as both vegetable and meat alternative. Fruit may occasionally substitute for vegetable.
Breads, cereals, rice and pasta	5c	1 slice bread 120g hot cereal 30g cold cereal 90g rice, pasta	Wholemeal or white high fibre breads should be used. Use breads and cereals as thickening agents in blended food
Meat, poultry, fish, eggs. Legumes, nuts and seeds	1	75g cooked weight 1-2 eggs	Legumes can be counted as both vegetable and meat alternative
Milk, cheese & yoghurt	3a	1 cup milk 40g cheese 200g yoghurt 1 cup custard	Desserts based on milk can help meet the requirement for milk foods
Fats and spreads	Minimum quantities are not applicable	Not applicable	Unsaturated spread to be available for bread and unsaturated fats and oils used in cooking
Indulgences	≤ 2	b	Foods that are generally enjoyed but are not essential to a balanced diet, and may, if consumed in excess, lead to nutritional problems

a. It is difficult to provide more than one serve of milk within each meal's menu. Providing milk drinks between meals is a recommended way towards meeting the requirement for milk and milk foods.

b. Indulgences are foods that are generally enjoyed but are not essential to a balanced diet, and may, if consumed in excess, lead to nutritional problems. Indulgences include 1 medium piece of plain cake or 1 bun, 1 small piece of rich cake or sweet pastry, 2-3 biscuits, 40-50g processed meat, 30g (1 small packet) potato crisps or similar snack, 2 scoops ice cream, 2 standard glasses of alcohol, soft drink or cordial.

1 meat pie	=	3 indulgences
1 pasty	=	3 indulgences
1 sausage roll	=	2 indulgences
1 slice pizza	=	2 indulgences
1 chocolate covered bar	=	2 indulgences

c. Depending on what supplies are available at the residential unit only 2-3 serves of bread/cereal may need to be supplied in the mealtime menu itself.

2. Choice

Menus will be planned as selective menus in order that clients have a choice of food. This implies that the menu has a choice of dishes **AND** that these alternatives are available for clients to choose from, or alternatively for staff to choose on their behalf.

In all our larger residences, information about menu choices must be promoted (such as through a display) so they can be ordered by a client. To avoid undue food wastage, and to allow for forward estimation of food requirements, menus may indicate that an alternative dish is available in limited or specific quantities.

In smaller residences, the variety of alternative dishes may be less than for a large residence with a bigger food service operation. Nevertheless, the variety of alternative dishes should be wide enough so that clients are not repetitively offered the same limited alternatives. *(Please refer to examples of poor practice and good practice at the end of this Section).*

For clients who are totally dependant on others to choose from the menu on their behalf, there should be a mechanism by which they are provided with an acceptable alternative food or meal when they obviously dislike or reject a food.

Menu plans showing alternative items available should be able to be produced if requested by a person monitoring or evaluating the food service.

The following table represents the minimum choices recommended in a menu.

Table 3(2) Minimum choices recommended in the menu

BREAKFAST	LIGHT MEAL	MAIN MEAL
Fruit	One hot protein based dish; and One cold protein based dish (eg salad or sandwich)	Two hot protein-based dishes
Hot and cold cereal	Potato or pasta or rice* if sandwich not served	Potato or pasta or rice*
White and wholemeal toast and bread	One vegetable	Two vegetables
Hot dish available to those who need it for their energy requirements	White and wholemeal bread	White and wholemeal bread
Unsaturated margarine	Unsaturated margarine	Unsaturated margarine
	Fruit	Fruit and milk-based dessert
Whole and low fat milk available	Whole and low fat milk available	Whole and low fat milk available
Tea, coffee, water	Tea, coffee, water	Tea, coffee, water
Pepper, sugar	Pepper, sugar	Pepper, sugar
MORNING TEA	**AFTERNOON TEA**	**SUPPER**
Coffee, tea, water, other cold beverage	Coffee, tea, water, other cold beverage	Coffee, tea, water, other cold beverage, hot milk
Biscuit or fruit	Biscuit or fruit	Biscuit or fruit

*Care must be taken when substituting rice and pasta for potato to ensure that the minimum number of vegetable servings are available.

3. Guidelines for promoting health

The menu will be planned using the following general guidelines based on the Dietary Guidelines for Australians (1992). Some of these guidelines are applicable to a menu offering choice. Some specific guidelines may need the assistance of a dietitian for interpretation into the menu, particularly for children, very underweight people, the aged and those on special diets.

The following is adapted from IHC Food Service Guidelines for Healthcare.

- **Offer a selective menu with a wide variety of foods**

  Plan menus using The Core Food Groups as shown in Table 3(1).These were developed to up-date the Five Food Groups by translating the Dietary Guidelines and Recommended Dietary Intakes (RDIs) into recommended amounts of foods to consume from the cereals, vegetables, fruit, meat and alternatives and milk groups to provide the basis of a healthy diet.

- **Provide lower fat options**

  The menu should have a no more than 15% high fat main dishes each week.

- **Examples of high fat dishes are fried foods, sausages, pastry based, cream based foods**

  – *Provide reduced fat dairy products*

  – *Use cooking methods such as steaming, grilling and baking more often than frying*

  – *Minimise addition of fats (eg. margarine, oil)*

  – *When meat is on the menu, maximise use of lean cuts of meat, poultry and fish.*

  – *Minimise the use of roux based gravies and sauces*

- **Use monounsaturated or polyunsaturated fats**

  – *Use unsaturated oils for frying*

  – *Make sandwiches with unsaturated margarine*

  – *Use unsaturated or no oil salad dressings*

  – *Provide unsaturated margarine for spreading on bread and toast*

- **Provide plenty of wholegrain cereals, wholemeal bread, vegetables and fruit**

  – *Offer a choice of breakfast cereals, including wholegrain*

  – *Offer fruit at every meal*

  – *Incorporate more legumes, brown rice and wholemeal pasta in menus*

  – *Provide a wide variety of salads as alternatives to hot meals*

  – *Make sandwiches on wholemeal bread or high fibre white bread*

  – *Offer wholemeal bread at each meal or high fibre white bread*

  – *Offer wholemeal, low fat biscuits or cakes/slices or wholemeal bread/bread products for mid-meal snacks*

- **Use less salt**
  - *Prepare sandwiches and other meals without added salt*
  - *Minimise added salt and/or boosters in cooking and utilise reduced salt stock, soup bases and boosters*
  - *Buy reduced salt products where possible*
  - *Minimise inclusion of foods containing high amounts of salt or sodium, such as bacon, ham, corned beef*
  - *Enhance the flavour of dishes with herbs and spices*
- **Offer products with lower sugar levels**
  - *Offer fruit-based desserts as alternatives to cakes*
  - *Buy canned fruits packed in natural juice or water*
  - *Provide unsweetened juices*

4. Integration of special diets into the menu

- The menu should specify selections for texture-modified meals eg minced, puree.
- The menu will be designed in such a way that most special diets can be chosen from the main menu items as much as possible.

For example, the modern approach to diabetic diets allows the diabetic menu to be integrated into the main menu. By working with a dietitian it is possible to design a low fat, high fibre menu items that provides adequate choice for clients with diabetes and those without diabetes.

5. Standardised recipes

A standardised recipe is one which has been "tailored" to suit a particular purpose in a foodservice operation. Advantages of this process include:

- A uniform and consistent product quality
- Reliability of total yield
- Consistent portion sizes
- Improved workflow in preparation
- Efficiency in menu planning and ordering
- Cost control and minimisation of wastage
- Assists in staff training

Recipe development

Steps to standardise a recipe:

1. Secure recipes to test by either buying a recipe book or recording the procedures currently used by cooks.
2. Determine the base recipe amounts for the required yield eg 25, 50 or 100 servings

3. Develop an evaluation form for testing recipes, including important criteria such as:
   – Aesthetic characteristics including appearance, taste, aroma
   – Nutritional considerations eg fat and sodium content
   – Texture suitability, especially for texture-modified diets
   – Yield to match portion sizes
   – Problems in preparation eg equipment and staff skills
   – Cost

4. Determine the yield by using the following steps:
   – Determine and write down: "The total weight of cooked product equals…"
   – Determine and write down: "The portion size required is…"
   – Determine the number of portions you have produced by the following calculation:

   "Total weight of cooked product divided by portion size required…"

5. Prepare the item and record any changes in the trial recipe if necessary

6. Test the recipe with an employee who is unfamiliar with recipe to ensure consistency.

7. Incorporate the recipe in the recipe file

Recipe format

Recipes should be easy to access and protected to keep clean (ie stored in a plastic sleeve or laminated).

Format should be easy to read and allow for a variety of yields.

Sample format is given in Appendix 1.

Use the menu planning checklist when developing a menu.
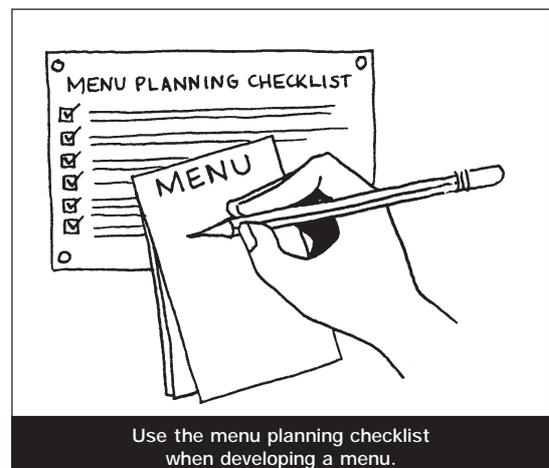
6. Writing your menu – the steps

Writing the menu is best done in a sequence of steps. The following step-by-step guide is usually helpful:

Step 1. Write your overall sample daily menu pattern which provides the framework on which you build your menu.

For Example:

Breakfast: 100ml orange juice

              30g cold ready-to-eat cereal OR 120g cooked hot cereal

              150ml milk

              2 eggs OR 60g protein equivalent OR
180g tomato spaghetti OR baked beans

              1-2 slices toast

              10g polyunsaturated margarine

              10g jam/honey/Vegemite

              30ml milk for tea/coffee

Lunch/light meal:

              150ml soup (in winter)

              Light dish:

              90g meat or equivalent in dry dish
or with salad OR 140-220g wet dish
(75g-90g as edible meat portion)

              90g potato or rice or pasta

              60g vegetable

              OR

              Sandwich:

              30g meat or equivalent

              60g vegetable

              4 slices bread

              20g polyunsaturated margarine

              1 piece fresh fruit

              30ml milk for tea/coffee OR water or cold beverage

Dinner/main meal:

              90g meat or equivalent in dry dish or with salad OR
140-220g wet dish (75g-90g as edible meat portion)

              90g potato or rice or pasta

              2 x 60g vegetable

              120g canned fruit + milk/other dessert

Midmeals/snacks:

              Biscuit, cake, bread, muffin, scone, sandwich or fruit

              30mls milk for tea/coffee OR cold beverage

Step 2. Determine the length of your menu cycle. A 4 week cycle is a useful length.

Step 3. Choose the lunch and dinner protein based dishes. Decide proportion of different meats and meat alternatives. Ensure 3-4 serves of red meat per week and sufficient variety of protein equivalents.

Step 4. Add the vegetables which are appropriate for each meal - consider which vegetables, rice or pasta may already be in the dish. Include salads if appropriate, consider colour and texture combinations.

Step 5. Add bread if part of a meal.

Step 6. Add soup if appropriate to the season - consider what flavours may already have been used in the main dishes.

Step 7. Add desserts – consider what grains may have already been used in each meal, consider variety in texture and flavour that may complement the meal.

Step 8. Add hot breakfast dish if desired.

Step 9. Add fruit.

Step 10. Add cereals to breakfast.

Step 11. Add between meal nourishments (snacks) ie. morning tea, afternoon tea and supper.

Menu planning checklist

O Does the menu provide the minimum food quantities for nutritional adequacy?

O Are the foods offered in season, available and within budget?

O Is there sufficient variety of colour, taste, shape, cooking styles, textures?

O Is there sufficient separation times between similar dishes?

O Is there repetition of same foods on certain days of the week?

O Are the combinations visually appealing and suited to the needs of the residents?

O Is there seasonal variation?

O Are the workloads balanced for the staff and equipment resources?

O Do the staff have the skills and equipment necessary for production?

O Have the clients and staff been consulted in menu development to the maximum extent possible?

O Are there standardised recipes for all dishes?

O Is the menu regularly evaluated and reviewed?

Menu substitutions

It is occasionally necessary to make menu substitutions when there are shortages or problems with food deliveries to the kitchen or facility. The substitutions should be as similar as possible to the original menu item. If there is a dietitian on staff, he/she should be notified of any menu changes as they may need to adjust the meal plan for a client.

The need to substitute should be minimised, documented and reviewed. If substitution occurs frequently, a change in ordering systems or suppliers should be investigated.

QUALITY IMPROVEMENT (MONITORING ACTIVITIES)

- Review of reliability of standardised recipes with evaluation criteria
- Audit of use of standardised recipes
- Audit of menu for compliance against menu planning policy and procedures
- Nutritional assessment of the menu by a dietitian
- Taste testing panel of menu items

EXAMPLES OF POOR PRACTICE

- The menu is not cyclic or repeated but there is a new and different menu every week.
- The menu has a cycle of only 2 weeks.
- The menu offers no choice to clients.
- When a client rejects a menu dish, the only alternatives they are offered are tinned spaghetti or baked beans.
- The menu is not reviewed at least once per year.
- Standardised recipes are not used.
- There is no menu documentation.
- The workload in the kitchen is not balanced, and is, at times, overwhelming for staff.
- Take-away/convenience foods are used more than once a week.
- Fried chips are on the menu more than once per week.
- Cultural or religious food preferences are not catered for.
- There are no special celebration arrangements eg Christmas, birthday.
- Nutrition and quality of food is compromised by poor cost control measures.
- Recipes not used, are inadequate or not representative of dishes on menu.
- When meals are plated there are no portion control guidelines used.

EXAMPLES OF GOOD PRACTICE

- Reflecting general community practice, the main meal is consumed in the evening and not in the middle of the day.
- White bread served is high in fibre.
- Between meal nourishment (snacks) and supper includes "healthy cake" or sandwiches, fruit or yoghurt.
- A cold alternative choice is offered as well as two hot choices at the main meal.

- Clients who are totally dependant on others to choose from the menu on their behalf have a list of food likes and dislikes which is regularly updated and reviewed. This information is gathered by care staff as they assist the client at meal times. When new food items are added or deleted, the entries are dated.

- Residential units receiving food from a main kitchen or from an outside contractor order a small number of alternative dishes to the main dish as stand-by or contingency meals for clients who may unexpectedly reject a meal.

- Nutritional assessment of the menu by a dietitian.

- Documentation is able to demonstrate that the menu meets planning standards.

- A menu board is displayed for the residents - dishes can be shown pictorially, if more appropriate.

- A refrigerator is available to certain identified clients who can have access to their own food and drink at any time.

- Where clients are independent in eating and drinking, tea and coffee-making facilities are available at all times.

- A bowl of fresh fruit is available at all times for client choice.

- Water coolers are situated for easy access by clients.

- Community access is available for meals where appropriate, however, take-away/convenience food is used no more than once a week.

- The menu does not rely on the purchase of pre-made products. Menu dishes are made from basic ingredients.

- The Summer menu is different from the Winter menu.

- The menu includes changes for special holidays and celebrations across different cultures.

- The menu includes foods and dished from different cultures.

- Documented evidence to show that recipes are tested and standardised.

- On-going program of recipe development and taste testing.

4 TEXTURE-MODIFIED meals

4

STANDARD

Each client with a disability who requires texture-modified food will be offered visually appealing, palatable meals and snacks that meets their nutritional and swallowing needs. They will be served in a safe manner.

PROCEDURES FOR TEXTURE-MODIFIED MEALS

1. Consult a speech pathologist and/or dietitian to determine the appropriate textures required for the clients.

2. Using standardised terminology, define a range of texture consistencies which will be available to the clients of your food service. Do this in consultation with a dietitian and speech pathologist.

3. Ensure that the carers understand the range of texture consistencies available.

4. Experiment with menu items to achieve correct textures.

5. Ensure the food service has appropriate equipment to modify textures.

6. Construct standardised recipes to ensure repeatability of the food items and dishes.

7. Specify texture-modified meals in the menu.

8. Use bread, wheat flake (eg Wheat-Bix, Vita-Brits) biscuits or Farex as a thickening agent in savoury dishes if possible (breads & cereals are usually deficient in a texture-modified diet) or otherwise a commercial thickener recommended by the dietitian or speech pathologist.

9. Vegetable purees can thicken some dishes.

10. Texture-modified meal components are prepared and served separately.

11. Ensure maximum nutrient density of texture-modified meals in consultation with a dietitian.

QUALITY IMPROVEMENT (MONITORING ACTIVITIES)

• Audit of texture-modified meals for compliance with texture guidelines.
• Conduct taste testing of texture-modified food items.

EXAMPLES OF POOR PRACTICE

• No guidelines exist for a range of textures in the texture-modified menu.
• There is no consultation with a speech pathologist and dietitian.
• Puree (or vitamised) foods are mixed together when prepared or served. This results in food that is unappealing in colour and where foods cannot be distinguished in taste from another.
• Food items on the main (regular) menu are pureed without consideration of texture, suitability or stability of the product during hot and cold storage.

EXAMPLES OF GOOD PRACTICE

- Specialised publications* are used to develop standardised recipes.
- Texture-modified meals are specified in the menu and follow the standard menu planning guidelines.
- Food moulds or extrusion guns are used to enhance the appearance of texture-modified food.
- Tasting panels assist food production staff in recipe development of texture-modified dishes.
- Descriptions of texture-modified food items is user-friendly and may include drawings or photographs.

*Specialised publications on texture-modified foods include:

- Martin, J & Backhouse, J: (1993) *Good Looking, Easy Swallowing Creative Catering for Modified Texture Diets*, JFC Foundation, Adelaide, South Australia.
- *Smooth Food Cuisine* – a series of recipe booklets. Titles include *Breakfasts, Lunches, Vegetables, Main Meals, Party Foods, Desserts, Thickened Drinks.*

  Available from: Senior Dietitian, Disability Services Commission
  146-160 Colin Street
  West Perth WA 6005
  Tel (08) 8426 9211
  Switchboard (08) 9426 9200
  E-mail: mlane@dsc.wa.gov.au

5 MEAL TIMES,
dining environment
& meal service

5

STANDARD

Each client with a disability will have access to visually appealing meals served in a safe manner. They can expect flexibility at meal time. They will receive a consistent and appropriate level of service when they are unwell or need a change in the time of their meal due to an appointment or other changes to their usual routine.

PROCEDURES FOR MEAL TIMES, DINING ENVIRONMENT & MEAL SERVICE

1. Meal times

There should be no more than 14 hours between the evening meal and breakfast.

The evening meal should not commence before 17.30. If the time between dinner and the following breakfast is greater than 14 hours, then a substantial supper such as sandwiches, fruit, yoghurt or cake must be served.

Meal times are to be planned to offer an optimal pattern that suits the physiological needs of clients for food. This means that the periods between meals should not be so short that people have no hunger for the next meal. Similarly, the periods should not be so long that the people experience undue and uncomfortable hunger.

Meal times should be determined by the needs of the clients rather than the constraints of the units within the residency. The following are **suggested** meal times:-

Breakfast	07:00 – 08:00
Morning Tea	10:00 – 10:30
Mid-day meal	12:00 – 13:00
Afternoon tea	14:30 – 15:00
Evening meal	17:30 – 18:30
Supper	19:30 – 20:30

Flexible meal times

There should be flexibility to allow for those people who have community engagements, are ill or may wish to have meals at different times. In these situations, meals that are safe and of a high quality must be available.

2. Dining environment

The dining area should reflect community standards and provide a pleasant, safe and social environment.

The environment should enable and encourage interaction between residents and staff in a social and positive manner. Small numbers of people in the same dining area should be preferred to large numbers.

3. Meal service

Consistent with identified needs of the client

Mealtime management recommendations should be specified and followed.

For example:

- All food and drinks offered to residents are in accordance with their identified needs including nutrition, texture modification, personal preference, cultural or religious preferences.
- Adaptive utensils and equipment.
- Positioning guidelines.
- Level of supervision required.
- Behaviour support.

These requirements necessitate regular and reliable communication between the food service personnel, therapy staff and direct care personnel. Mealtime management guidelines for residents should be documented and readily accessible in the dining area.

Service of food items

Important considerations:

- *Visual appeal* – food items should be presented in an appealing manner. Foods should not be mixed together on the plate.
- *Quantities* consistent with standard portions or as recommended by an individual mealtime management plan. Standardised serving utensils should be used.
- *Cutlery and crockery* – should be visually appealing, suited to the needs of the residents. It should not be cracked, chipped or discoloured.
- *Food handling practices* – as discussed in Section 6.

Meal substitution

Residents should be offered choice at meal times. If a person refuses a meal, a nutritious alternative should be offered.

QUALITY IMPROVEMENT (MONITORING ACTIVITIES)

To monitor the standard of the meals being served, an audit should regularly take place that compares the meals to the standards set out in the guidelines.

EXAMPLES OF POOR PRACTICE

- Staff and residents do not know what is on the menu before the meal begins.
- Meal service is so inflexible that residents who are away from the dining area at meal times have no way of having their meal kept for later or served later.
- There is no time limit on keeping hot meals hot for late service.
- The evening meal is early and there is no supper for some or all of the clients.

- The breakfast is more than 14 hours after the evening meal.
- The dining areas are unattractive and do not reflect community standards.
- There is poor portion control during meal plating.
- Sometimes, there is insufficient food available.

EXAMPLES OF GOOD PRACTICE

- Photographs of food portions are displayed for staff.
- Photographs of plated meals are displayed for clients.
- Dining areas have tablecloths/place mats and, for special occasions, appropriate table decorations.
- Temperature of food is maintained for slow eaters.
- The time period before meals is used as a time for positive interaction between staff and residents, and between residents.
- Large groups of residents have been divided into smaller groups (6-8) for dining.

6 **FOOD**
safety

6

STANDARD

Each client with a disability is offered, good quality food that is prepared, assembled and distributed in a safe manner. This will be achieved by the development and implementation of a food safety program in accordance with HAACP system requirements.

FOOD SAFETY PROCEDURES

Food safety *means* safe food handling practices. Safe food handling means that food is secured, received, stored, prepared, cooked, transported and served in such a way as to minimise contamination and growth of bacteria.

Safe food handling practices should be standard practice in a food service. Safe food handling practices are fundamental to the preparation of food that is nutritious, palatable and enjoyable to eat.

1. Personal hygiene

Clothing

A clean uniform or other clean protective clothing must be worn daily. The uniform should not be worn outside the food service area prior to or during work hours.

Clothing, including aprons, which become excessively soiled (contaminated) during the day should be changed.

Staff working in the kitchen food preparation area should have their hair protected to minimise the possibility of hair contaminating food. Hats which cover the hair and keep hair off the face should be worn.

Loose jewellery such as bracelets, wrist watches, drop ear rings, brooches, and necklaces must not be worn whilst in food preparation area.

Finger nails should be short and nail polish must not be worn.

Hands must not be wiped on clothing.

#### Hand washing

The following steps are essential:

- Washing your hands in warm running water in a separate wash basin to that used for food preparation.
- Rinse with warm water.
- Use soap or detergent so that hands and forearms are lathered.
- Use a nail brush to scrub dirty hands and nails.
- Rinse with warm running water.
- Dry hands thoroughly with disposable paper towel or hot air dryer.

Staff must wash hands:

- Immediately before commencing work, including after a break and/or smoking a cigarette.
- Immediately after visiting the lavatory.
- Immediately after using a handkerchief or nasal tissue.
- Immediately after touching hair, nose or other facial areas.
- Immediately after coughing into their hands.
- Whenever hands become contaminated – eg after handling raw food or garbage.
- Between handling uncooked and cooked food.
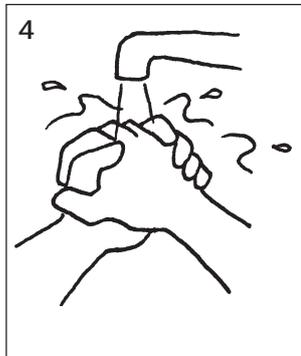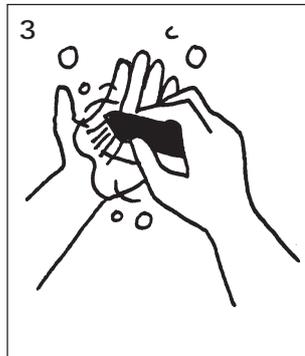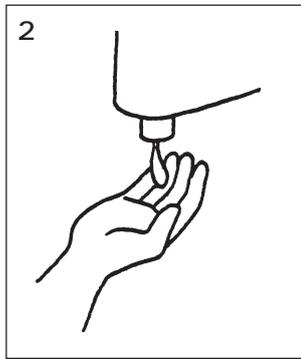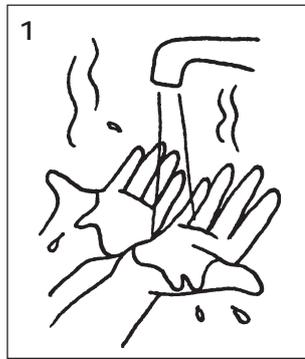
5 steps to effective hand washing.
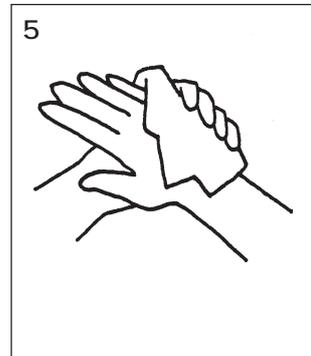
Cuts and sores

Staff with cuts and sores on their hands must cover the area with a waterproof dressing or covering. Blue coloured dressings are the industry standard. Disposable gloves, which are changed with each new task, are recommended under these circumstances.
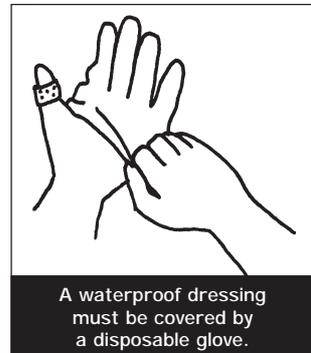
A waterproof dressing must be covered by a disposable glove.

2. Staff illness

Staff cannot work with food when they have an infectious illness (such as gastroenteritis, hepatitis A and salmonella infection) or condition such as boils, abscesses or other lesions containing pus.

3. Food handling practices

Cross-contamination

Care needs to be taken to ensure that cooked foods are not contaminated by raw foods. For example, micro-organisms on raw meat could cause severe food poisoning if allowed to cross contaminate a ready to eat food.

Staff practices

- Personal hygiene is important as outlined above.
- If disposable gloves are worn, they must be changed between different tasks.
- Staff should not have unnecessary contact with food.
- Access to the Food Service area should be limited to those who have a legitimate reason for being there, eg store or managerial personnel.
- Smoking must be prohibited in the food preparation and storage area.
- It is not permissible to sit, walk, stand or lie on surfaces that are used for preparing or serving food.
- Bags or wrappers should not be opened by staff person's breath.
- Eating in the kitchen, other than legitimate food tasting, should be avoided.
- Utensils used for tasting must be clean and thoroughly washed and sanitised between tastes.

INAPPROPRIATE KITCHEN BEHAVIOUR

DO NOT blow into a bag before putting food inside it.

DO NOT make unnecessary contact with food.

DO NOT smoke in the kitchen.

DO NOT sit on kitchen counters.

Equipment/Utensils

Equipment (e.g. slicers, trays, racks) and utensils such as knives all need to be considered as possible sources of cross-contamination. Staff need to understand how the incorrect use of equipment, and the use of unclean equipment can cause cross-contamination.

Food must be prepared on stainless steel working surfaces or plastic cutting boards. The use of wooden cutting boards is not recommended. Plastic boards should be discarded when the surface becomes rough or grooved.

All equipment must be sanitised between the use of raw and cooked foods. A commonly used colour code for cutting boards in the food service industry is:

GREEN	salads, vegetables and fruit products
WHITE	bakery and dairy products
RED	raw meat, raw poultry
YELLOW	cooked meats
BLUE	raw fish

Utensils used in food preparation (eg knives, spoons and thermometers) must not be stored in a pocket of clothing.

4. Temperature control

Time temperature control is an essential factor in preventing the growth of food poisoning bacteria.

The time at which high risk foods (eg perishable and cooked foods) are left in the Danger Zone of 5°C to 60°C must be kept as short as practically possible. Food service operations should adopt an operating standard of high risk foods staying no longer than 2 hours in the temperature danger zone. Current legislation in NSW provides for a maximum of 4 hours.

- *Hot food*, which is to be kept hot, should be held at or above 60°C between preparation or reheating and consumption. This time interval should be as short as possible, to ensure nutrient retention and product quality;

- *Cold food* should be held at or below 5°C;

- *Frozen food* (such as icecream) should be held cold at or below -18°C.
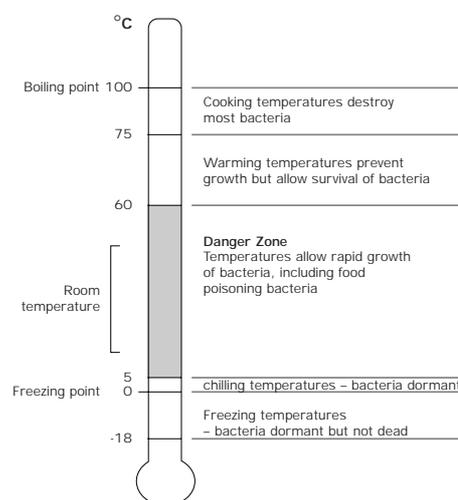
Foods when received – Chilled foods should have a temperature between 0°C and 5°C. Frozen food should be at or below -18°C.

Prepared ingredients – If large quantities of ingredients or components are prepared in excess of the available capacity for immediate cooking, then these prepared food ingredients must be used within one hour or returned to refrigeration.

Thawing frozen food – Frozen food must not be thawed at room temperature. Thawing should be preferably under refrigeration. Once thawed, the food must be used or cooked and not refrozen. Food that is thawed by use of a microwave, must be cooked or eaten immediately.

Cooking – The duration and temperature of the cooking must be sufficient to ensure heat penetration to the centre of the food. The centre of the food must reach 70°C for 2 minutes. A practical way of ensuring this is to use a probe thermometer and make sure the core temperature reaches 75°C.

Cooling – This is an important high risk stage of production because some bacteria can form spores if the food temperature is allowed to drop too slowly and remain above 5°C for too long. Under the current legislation in NSW, the *Food Act (1989)* and *Food (General) Regulation (1997)*, food should be cooled rapidly to 5°C within 4 hours.

Food safety standards proposed in 1999 by the *Australia New Zealand Food Authority (ANZFA)*, but not yet enacted, are as follows:

> "… when cooling cooked potentially hazardous food, cool the food:
>
> > a. within two hours – from 60°C to 21°C; and
> >
> > b. within a further four hours – from 21°C to 5°C."

Note: For cook-chill food service systems rapid cooling standards are itemised in Appendix 4.

Reheating – Chilled food which is being reheated should be heated to a core temperature above 75°C as quickly as possible. Bain maries should not be used for reheating. They should already be heated when hot food is placed in them.

Some micro-organisms produce heat-stable toxins which will not be destroyed by re-heating the food. The reheating of food must not be relied upon to make food safe. Hygiene is important throughout each stage.

Leftover food – Any food excess to requirement and which is to be held over to the next day should be refrigerated promptly. The food containers should be covered and marked with the date, and the food used within 24 hours or thrown out.

Cook-chill food service systems

Some services are producers or receivers of food using a cook-chill system. The following points apply to those services. Cook-chill means a food service based on the cooking of food, followed by a rapid chilling and storage at a controlled low temperature.

- The maximum storage time for a short-term cook-chill product is 5 days.
- Time/temperature controls are a critical factor in a cook-chill operation.
- Cook-chill food systems require extra care to be taken with temperature control of food storage and reheating. If prepared food rises above 5°C but remains below 10°C during chilled food storage and distribution, the product must be used within 12 hours. If the food temperature rises above 10°C during this

period, then the food must be regarded as unsuitable for use and it must be discarded.

- Chilled prepared food using a cook chill system, has a maximum storage life of 5 days, including the day of production and the day of consumption.

- Should a cold-plated meal, which has not been heated, require holding at the point of service, the chilled meal may be covered, menu attached and kept under refrigeration for a short time. A time limit should be placed on this meal before it must be thrown out. The temperature history of the meal will help determine the time limit set and the rule which a service should impose on this procedure. If appropriate, serving staff may heat the meal to the required temperature when required.

- Cook-chill food that has been reheated for service should be served or, if not required, discarded. Any meals which are not used can be held hot for a short time (no longer than 1 hour). They must not be rechilled and held for later reheating and use.

See Appendix 3: Temperature standards for a cook-fresh food service system

See Appendix 4: Temperature standards for a cook-chill food service system

5. Food Safety Plans (or Programs) using HACCP principles

Food services are expected to develop and implement a food safety plan which helps them keep their food safe. The following information about HACCP food safety plans provides background information and is not intended to be an A to Z guide on developing a plan. Services will need to assemble their food safety team and access training about food safety planning before they are ready to develop and implement a plan.

Why do we need food safety plans?

- People are more likely to get food poisoning today than 20 years ago.

- There are more dangerous and a higher number of poisonous micro-organisms in food now.

- People eat food outside of the home more than before and food prepared outside the home is prepared in more risky ways than before.

- It is important to Australia's ability to compete internationally in exporting food.

- The follow groups of people are more vulnerable to food poisoning as they are more likely to be eating food prepared outside the home.
    - infants and children
    - elderly
    - the sick and immuno-suppressed
    - pregnant women

What is HACCP?

HACCP stands for Hazard Analysis and Critical Control Points and is pronounced "HASSUP".

It is a practical and preventative technique that is used by food manufacturers and food service operations to help ensure that their food products are safe.

It was developed in the early 1960's in the USA for the NASA space program. It was adopted by the World Health Organisation as a model for developing food safety programs in food industries from agricultural production of food to service of food to consumers. Today the concept is used by the food industry throughout the world.

Definitions:

Hazard	a potential to cause harm
Risk	the possibility that a given hazard will occur
Critical Control Point (CCP)	a point, step or procedure at which control is applied to prevent, eliminate or reduce an identified food safety hazard
Hazard Analysis Critical Control Point (HACCP)	is a practical system of food control which involves a systematic approach to the identification and assessment of the hazards and risks within the food operation and defines the means of their control

HACCP suggests **two stages**, first the HAZARD ANALYSIS, followed by the identification of POINTS in the process where CONTROL IS CRITICAL.

Which hazards need to be identified? Those ones which have the potential to endanger the safety of the consumer or the quality of the food. The hazards are usually from food poisoning bacteria and their multiplication or other forms of contamination such as foreign bodies or chemicals.

When are they likely to occur? At any stage of the whole process from purchasing, receipt, through storage, preparation, cooking, delivery and serving.

When are the points critical? When the problem could be a real risk to the consumer and could have the potential to result in hazardous food being consumed.

What controls are needed? Potential problems must be assessed to ensure that they are eliminated or reduced to a safe level.

See Appendix 5 – Common microbiological hazards and their controls

The seven HACCP Principles

PRINCIPLE 1	Conduct a hazard analysis
PRINCIPLE 2	Determine critical control points (CCPs)
PRINCIPLE 3	Establish critical limits
PRINCIPLE 4	Establish a system to monitor control of the CCPs
PRINCIPLE 5	Establish the corrective action to be taken when monitoring indicates that a particular CCP is not under control
PRINCIPLE 6	Establish procedures for verification to confirm that the HACCP system is working effectively
PRINCIPLE 7	Establish documentation concerning all procedures and records appropriate to these principles and their application

The steps to food safety planning

Assemble the food safety team
▼
Draw process flow chart
▼
Confirm flow chart on site
▼
Conduct hazard analysis and establish preventative measures at each step
▼
Determine critical control points
▼
Establish critical limits for each control point, monitoring procedures and corrective actions
▼
Establish documentation and record keeping
▼
Train staff and implement one step at a time
▼
Establish verification procedures – and review the full system

A HACCP food safety plan (or program) does not stand alone.

- **HACCP food safety plans (or programs) are part of a quality management program.**

  Continuous quality improvement programs use a method called the quality improvement cycle. The quality improvement cycle focuses on customer needs, incorporating the following stages: monitoring, assessment, action and evaluation. The HACCP process also incorporates this approach.

monitoring   assessment

evaluation   action
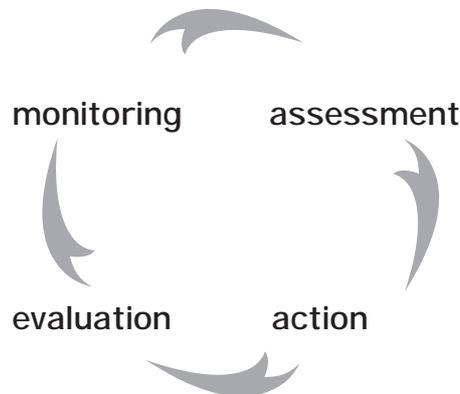
- **It is part of establishing good quality food. Food of good quality is:**
  - clean
  - unspoiled
  - safe
  - and… meets other standards relating to the particular food or dish eg. lettuce is fresh, crisp, correct colour, washed/unwashed, and so forth.

- **The support programs for your HACCP food safety plan therefore must include**
  - cleaning and pest control
  - equipment maintenance and maintenance of facilities
  - ordering and receiving (including specifications for purchased food)
  - personal hygiene
  - control of chemicals – use and storage
  - training

Food safety is best ensured by focusing on the elimination (or at the very least, minimising) of any compromise to product safety. Hazard Analysis Critical Control Point (HACCP) is a practicable, preventative approach to food safety management. HACCP requires that a food safety program is implemented, enforced and reviewed by a facility producing food and that this program is audited.

Any HACCP plan must be prepared by a person or persons with adequate knowledge of food safety programs (see Section 13 on training). In addition, this person or persons must have an intimate knowledge of the products and process details unique to the facility.

QUALITY IMPROVEMENT (MONITORING ACTIVITIES)

- Personal hygiene checklist
- Regular inspections of personal hygiene
- Audit of food handling practices
- Audit of hand washing facilities

- Visual check of safe food handling procedures
- Chilled food temperature audit during storage
- Time-temperature audit during preparation
- Time-temperature audit during cooking
- Time-temperature audit during bulk portioning
- Food temperature audit during chilling
- CCP monitoring as in the HACCP plan
- Monitor temperature of bulk food before and after reheating (rethermalisation)
- Cross contamination inspection
- Monitor temperature of hot and cold foods at plating
- Monitor temperature of cool rooms used to hold bulk cooked food or chilled plated meals
- Internal audit of Food Safety Plan at least once a year

EXAMPLES OF POOR PRACTICE

- No monitoring or checking of safe food handling procedures
- Disposable gloves are not changed for each new task
- Staff receive no training in food safety
- Frozen food is thawed at room temperature
- Calibrated thermometers are not used for temperature testing
- Food is held hot for long periods before being plated and served to residents
- The temperature of food at plating is not monitored
- The Food Safety Plan is not a working document

EXAMPLES OF GOOD PRACTICE

- Staff participate in food safety audits and checks
- Documented and implemented HACCP food safety plan
- Staff wash hands in approved manner
- Chopping boards are colour coded and are cleaned and sanitised in approved manner
- In cook-fresh food service systems, the period between the completion of cooking and service of hot food to residents is minimised
- In cook-chill food service systems, the period of time between reheating of chilled food and service of hot food to residents is minimised
- The steps outlined in the Food Safety Plan are implemented and monitored
- When non-conformity to the Food Safety Plan is identified, the appropriate manager discusses the non-conformity with the staff member responsible and ensures that the issues and corrective action is understood. (This is a very important part of a successful Food Safety Plan).
- External audit of the Food Safety Plan occurs at a regular interval.

7 ORDERING,

receiving, storage & inventory control

7

STANDARD

Food should be ordered, received and managed in a way that ensures the preservation of its quality, provides value for our money, provides reliable delivery and minimises its waste.

PROCEDURES FOR ORDERING, RECEIVING, STORAGE AND INVENTORY CONTROL

1. Suppliers

- Compare purchasing by retail, wholesale and contract procedures to ensure the most cost effective and reliable supply. Keep the number of suppliers to a minimum.

- Prepare simple but complete specifications or descriptions of food items required, to include details such as size, type, pack size, quality, variety and food safety criteria.

- Document all agreements with suppliers.

If tenders or contracts are prepared, the following issues should be considered:

- Evidence of supplier compliance with a suitable food safety plan
- Adequate pick-up and delivery arrangements
- Reliability to meet delivery times
- Disposal of waste
- Arrangements for after hours and emergency services
- Mechanisms for maintaining the quality of the services
- Mechanisms for dealing with problems in service delivery
- Amounts (volumes/weights/numbers) of items to be included in tender
- Food Service Managers must ensure that the information is an accurate estimation of consumption for the period specified in the tender
- Specific details should be listed that incorporate the above issues

2. Ordering food and supplies

The person responsible for ordering food and supplies should establish a systematic ordering schedule to ensure an adequate flow of goods to meet production needs. He/she should consider the following:

- Prepare a food order schedule which details the types and quantities of ingredients needed for each day of the menu cycle to yield the required number of serves.

- Determine minimum and maximum stock levels to suit the production requirements.

- Develop communication strategies between production staff and the person responsible for ordering the food and beverages.

3. Receiving of goods

- All food items must be of good quality to ensure an end product that is palatable and safe.

- The ingredients should show no visible signs of physical damage, contamination, odour, dirt and slime. Canned food should not be damaged. All packaging should be intact. Frozen food should not show evidence of previous thawing and refreezing (such as ice in the packaging).

- Food which is of doubtful quality, or above the temperature specified for chilled or frozen foods, should not be accepted from the supplier.

- If the raw material has a 'use-by date code' or 'best before', make sure there is adequate shelf-life remaining before accepting delivery.

- Check the quantity received compared to the order and/or tender specifications. Adequate scales should be available to check weights.

- Arrange for replacement of poor quality items or arrange for extra deliveries for items not received.

- Adjust invoices or delivery dockets for replacement goods or items not received. A Return for Credit Note may be appropriate to submit with invoices or delivery dockets for replacement goods or shortages. A procedure for the handling of the inappropriate goods should be documented for each operation.

- All raw food should be received in a clean area in the kitchen. Raw foods should be received and stored as far away as practicably possible from cooked foods, so as to reduce the risk of cross contamination.

Always check delivered goods against the order list.

4. Food storage

- Storage areas should be placed near as possible to receiving and relevant preparation areas to achieve good work flow and to minimise cross contamination.

- Provide a designated storage area for damaged/unsuitable food to be returned to suppliers.

- Perishable foods are transferred immediately on delivery to chilled or frozen storage.

- All unnecessary packaging should be removed from food items before storage.
- Stock is rotated to prevent perishable, frozen goods and dry goods exceeding their use-by date. A first-in-first-out (FIFO) system of inventory can assist with ensuring adequate stock rotation.
- Condensation in cool rooms and refrigerators is minimised to reduce the potential for *Listeria* growth and contamination in and on foods.
- Storage room and food temperatures are monitored and action taken if standards are not achieved.

Dry storage

- Used for non-perishable foods including dried food, canned and bottled foods
- Must be clean, dry, cool and well ventilated environment
- Check any manufacturer's storage instructions on label – some canned hams may need to be refrigerated below 4°C
- All food must be stored in suitable containers at least 15cm off the ground
- Shelving design should maximise storage efficiency and air circulation
- All food must be labelled with name of product and either its use by date or the date product was purchased
- Clean on a weekly basis
- Check regularly for signs of insect infestation

Fruit and vegetables

- Store in cool, dry environment
- Allow sufficient air circulation
- Fresh fruit and vegetables deteriorate quickly – order only amounts to be used in appropriate storage time
- Store in containers at least 15cm off the floor

Cool rooms and refrigerators

- Used for perishable food items, including meat, fish, poultry, egg products and milk
- All food should be covered
- All food should be date marked
- Cooked and raw foods should be stored separately, ie in different areas to prevent cross contamination
- Allow sufficient air circulation
- Floor and shelving must have a regular cleaning schedule
- Temperature is checked weekly and must be between 0°C and 5°C
- Store in containers at least 15cm off the floor

Freezers

- All frozen food should be placed in freezer immediately upon delivery
- All frozen food is wrapped, sealed and labelled with name and date
- Temperature is checked weekly and should be between -18°C and -22°C

- A regular cleaning schedule is in place
- The freezer is not overloaded beyond capacity
- In a walk in freezer, food should be stored at least 15cm off the floor

5. Stock control and issue of supplies

- Maintain inventory level records for all food and non-food items
- Keep storage areas secure and only allow access to authorised people
- Frozen foods are issued to cover menu requirements allowing sufficient time for thawing at a temperature below 5°C
- The Food Services Manager or delegate to review and authorise requests from staff for stock from the dry and perishables stores

QUALITY IMPROVEMENT (MONITORING ACTIVITIES)

- Audits of quality and temperature of foods during reception
- CCP monitoring as documented in the HACCP plan
- Refrigeration/freezer temperature audits
- Audits to check that purchase specifications are met
- Audit of stock taking procedures and stock levels
- Audit of cleaning schedules of storage areas
- Monitoring of food requisitions from stores

EXAMPLES OF POOR PRACTICE

- Food items are not checked at delivery
- Storage areas are overcrowded
- Food and or food containers are stored on the ground
- Temperatures of cool rooms, refrigerators and freezers are not checked
- Frozen foods are thawed at room temperature

EXAMPLES OF GOOD PRACTICE

- A food purchasing guide is developed from the menu, regularly checked and adjusted against production requirement
- Suppliers who do not comply with the contract requirements are noted and reported to the Manager or person in charge of purchasing
- There is evidence of stock rotation
- Food is stored in containers or covered appropriately
- All storage areas have documented cleaning schedules
- Raw foods are separated from cooked foods

8 KITCHEN
safety

8

STANDARD

We will take all necessary precautions to ensure a safe working environment for our food service staff and to comply with all OH & S regulations.

PROCEDURES FOR KITCHEN SAFETY

Regulations relating to Occupational Health & Safety Act should be reflected in work practices. Some important safety considerations include:

1. Equipment

- All equipment should be installed to meet Australian design and safety standards. It should be regularly inspected and maintained.
- Cutting machines should be fitted with safety guards in place.
- All relevant personnel should be trained in the safe operation of each piece of equipment.
- Safe storage area for knives should be provided.

2. Premises

All areas should be maintained to minimise the risk of accidents.

- Floors will be of non-slip construction and maintained in a clean fashion.
- Electrical connections must be carried out by licensed and qualified personnel and regularly inspected for defects.
- Work areas will be designed to allow easy access and work flow.
- Adequate lighting and ventilation will be provided.

Always clean up floor spills as soon as possible.

3. Chemicals

- Chemicals must be adequately labelled and stored separately from food items.
- Material Safety Data Sheets (MSDS) information should be available and accessible to staff.
- Chemicals should be used in accordance with manufacturer's recommendations.

4. Fire Precautions

- All personnel should know the procedures for reporting fires, and know the location and use of fire extinguishers and fire exits.
- All food service staff should be trained in the prevention of fires, burns and scolds.

5. Lifting

- All personnel should receive training in correct manual handling and lifting procedures.

QUALITY IMPROVEMENT (MONITORING ACTIVITIES)

- Audit of equipment maintenance records
- Visual audit of floor safety
- Audit of Material Safety Data Sheets (MSDS)
- Equipment safety checklist
- Audit of fire safety equipment

EXAMPLES OF POOR PRACTICE

- Suspected faulty equipment is not appropriately serviced
- First aid equipment is not available
- Work areas are cluttered with items inappropriately stored

EXAMPLES OF GOOD PRACTICE

- All floor spills are cleaned up as soon as possible
- Staff wear non-slip shoes
- Regular fire drills take place
- Staff receive on going training in safe work practices

9 DISHWASHING

9

STANDARD

Each client with a disability will have access to clean, sanitised utensils for eating and drinking.

PROCEDURES FOR DISHWASHING

The steps in dishwashing are pre-cleaning, cleaning, sanitising and drying.

1. **The minimum equipment requirements for dishwashing must be met**

   Food services must provide and use a dishwashing machine or a double bowl sink with two compartments to wash up crockery, cutlery and any other kitchen equipment.

   Clause 15 of the Food (General) Regulation 1997 states:

   (1) Any premises or vehicle in which food is prepared for customers:

   (a) for consumption on the same premises or vehicle, or

   (b) for consumption on some other premises or vehicle (being the premises or vehicle on which it is sold or otherwise provided), must be provided with a dishwashing machine, a glass washing machine (if appropriate), a double bowl sink or a tub containing 2 compartments.

   Food scraps should be scraped or rinsed off. Heavily soiled items may need pre-soaking in warm water and detergent.

2. **The minimum water temperature requirements for dishwashing must be met**

   Clause 15 (4) and (5) of the Food (General) Regulation 1997 states:

   (4) A dishwashing machine:

   (a) must be connected to a water supply that provides potable water to the machine at a minimum temperature of 60°C, and

   (b) must be designed and equipped to automatically provide and maintain the following conditions during each cycle of operation:

   (i) the temperature of the water (measured at the outlet of the wash spray assembly) is to be at least 55°C,

   (ii) the minimum machine setting for the wash cycle time is to be at least 60 seconds,

   (iii) the temperature of the water in the rinse tank is to be at least 82°C,

   (iv) the rinse cycle time is to be at least 10 seconds,

   (v) the temperature of rinse water (measured at the outlet of the rinse spray assembly) is to be at least 77°C, and

   (c) must befitted with controls that prevent the machine from being operated unless:

   (i) the temperature of the water in the wash tank is at least 60°C, and

   (ii) the temperature of the water in the rinse tank is at least 82°C, and

(d) must be designed and equipped to use sufficient appropriate soap or detergent in the wash tank to clean eating utensils and drinking utensils adequately, and

(e) must be able to wash eating utensils and drinking utensils completely in one operation, and

(f) must be fitted with:

(i) separate thermometers (visible to the operator and accurate to within 1°C) to indicate the temperature of the water in the wash tank and rinse tank, or

(ii) separate pilot lights (visible to the operator and accurate to within 1°C) to indicate that the water in the wash tank and rinse tank is at the temperatures required by paragraph (c).

(5) The provision of subclause (4) (a), (b), (c) and (d) do not apply to a dish washing machine that cleans by chemical sanitising.

Specific reference to machine washing is also made in Clause 34 (b) and (c) of the Food (General) Regulation 1997:

(b) by using a dish washing machine which chemically sanitises the utensils using rinse water containing at least 50 milligrams per kilogram of sodium hypochlorite throughout the rinse cycle at a rinse cycle temperature of at least 50°C, or

(c) by using a dish washing machine that complies with clause 15(4) and to which an appropriate amount of detergent or another suitable cleaning agent has been added.

3. Other considerations

- Food scraps must be removed from all areas of the machine, including spray openings and washer screens.
- Dish/pot washing machine should be free from any scale deposits.
- Crockery, cutlery and pots should be correctly stacked as recommended in the dish/pot washing machine instructions.
- An appropriate type and amount of detergent as recommended by the dish/pot washing machine manufacturer or the chemical supplier must be used.
- Quick drying racks should be used if a blower dryer is not available.

4. If dishwashing and pot washing are done by hand the minimum equipment requirements must be met as follows:

As in Clause 15 (2) and (3) of the Food (General) Regulation 1997:

(2) A double bowl sink or 2 compartment tub:

(a) must have one bowl or compartment supplied with potable water at a temperature of at least 45°C and sufficient soap or detergent to wash utensils, and

(b) must have the other bowl or compartment supplied with potable water at a temperature of at least 77°C for use for rinsing utensils.

(3) A thermometer, accurate to 1°C, is to be provided adjacent to the sink or tub.

Regular changing of water in sinks is required as the water dirties or cools. The sink's water level should not be topped up, or detergent added to the cool/dirty water.

Dishes and utensils should be air-dried in racks. The use of tea towels should be avoided but if their use is necessary, they must be clean and used once only.

Always rinse dishes in a second sink filled with hot water.

QUALITY IMPROVEMENT (MONITORING ACTIVITIES)

- Audit dishwashing procedure
- Monitor wash and rinse temperatures
- Visual audit of washed wares
- Critical Control Point (CCP) monitoring as documented in the HACCP plan

EXAMPLES OF POOR PRACTICE

- Dishes and utensils are washed by hand in water which is dirty and not changed regularly
- Tea towels are used for drying and are not changed regularly

EXAMPLES OF GOOD PRACTICE

- Staff are trained in correct dishwashing procedures
- Dishwasher is checked regularly for temperature control of washing and rinsing water

10 WASTE
disposal & recycling

10

STANDARD

Our waste will be stored and disposed of so it does not to contaminate our premises, equipment or food.

PROCEDURES FOR WASTE DISPOSAL AND RECYCLING

- Suitably designed and identified waste containers should be placed conveniently around the food service areas.
- Plastic liner garbage bags must be used and must be tied before collection or prior to deposit into bulk waste containers.
- Waste containers must be fitted with tightly fitting lids when not in use.
- Garbage must be removed from the kitchen frequently and no garbage must be left in kitchen areas overnight.
- Cleaning schedules should be maintained for garbage containers.
- Garbage storage containers should be placed on a concrete base which is regularly cleaned with detergent and water. The area should be protected from direct sunlight and the containers closed with lids.
- Recyclable waste should be placed in appropriate and labelled containers and stored safely away from food service area.

Reducing waste

To determine your opportunities for waste reduction use the following checklist. Some of these opportunities may be useful to your food service operation.

Waste reduction opportunities	Current action YES	Current action NO	Opportunity
Purchasing			
Buy in bulk* to avoid excess packaging	☐	☐	☐
Purchase products in concentrated forms	☐	☐	☐
Purchase products with minimal packaging	☐	☐	☐
Purchase products made from recycled materials	☐	☐	☐
Purchase products for multiple use	☐	☐	☐
Deliveries			
Return system for cardboard boxes (especially waxed boxes)	☐	☐	☐
Suppliers provide food in reusable crates	☐	☐	☐
Suppliers provide food in plain cardboard boxes	☐	☐	☐
Suppliers refill or exchange empty containers	☐	☐	☐
Food			
Portion control	☐	☐	☐
Produce according to client numbers	☐	☐	☐

Waste reduction opportunities	Current action YES	Current action NO	Opportunity
Storage			
Store leftover food in airtight containers	☐	☐	☐
Use reusable delivery containers	☐	☐	☐
Recycling			
Set up recycling programs	☐	☐	☐
Collection bins for waxed cardboard	☐	☐	☐
Collection bins for coloured and clear glass	☐	☐	☐
Collection bins for aluminium cans	☐	☐	☐
Collection bins for food scraps only	☐	☐	☐
Area-wide collection services	☐	☐	☐
Transport polystyrene boxes to collection centres for recycling	☐	☐	☐
Donate corks to community organisations eg. Girl Guides	☐	☐	☐

*Note that purchasing in bulk can be a false economy if the amount purchased is in excess of short-term needs. The extra storage required may also present unnecessary food safety risks.

QUALITY IMPROVEMENT (MONITORING ACTIVITIES)

- Waste audit
- Critical Control Point (CCP) monitoring as documented in the HACCP plan

EXAMPLES OF POOR PRACTICE

- Garbage is exposed either in the kitchen or storage area

EXAMPLES OF GOOD PRACTICE

- Increasing use of recyclable packaging
- Inspection reveals appropriate treatment of garbage and waste material
- System in place to monitor and reduce food waste

11 CLEANING
& pest control

11

STANDARD

We will have cleaning and sanitation programs together with pest control programs that minimise the risk of our food being contaminated.

PROCEDURES FOR CLEANING AND PEST CONTROL

1. Clean and sanitise all kitchen surfaces and equipment according to a planned schedule

The schedule should identify the staff member responsible for each cleaning task as well as the frequency, method and equipment necessary to clean the area. Please refer to Appendix 2.

The schedule should include cleaning of the following areas:- bench tops, cooking utensils, cooking equipment, refrigerators (or cool rooms), freezers, all food storage areas, chemical storage areas, walls, floors (including drains), ceilings (including light fittings, fans and exhaust vents) and doors. It should also include toilet facilities, amenity rooms, canteens and offices.

Consider the following:

- Spoilage organisms and food poisoning organisms (such as *Listeria monocytogenes*) can grow under refrigeration. Shelving, door seals and door handles on refrigerators and cool rooms all require regular cleaning and sanitation.

- The use of porous and absorbent materials (such as rags and sponges) is not acceptable unless they are to be used once only. Porous and absorbent materials can harbour micro-organisms and can lead to cross contamination.

- Reusable cleaning materials should be sanitised between uses.

- Overhead air vents, conveyor belts, pot and pan storage shelves, cupboards, crockery and cutlery storage equipment and all hot or cold food holding equipment must be regularly cleaned and sanitised.

Regularly clean overhead vents.

- Cleaning methods for floor surfaces must ensure that water splash does not contaminate kitchen surfaces.
- Equipment should be dismantled before cleaning.
- Mops and other cleaning equipment used in food service areas should not be used in other areas (eg. toilets).

2. Sanitising

Cleaning removes obvious grime and food particles. Sanitising is the reduction of microbes to a safe level (ie. an acceptably low level). Sanitising follows cleaning and it is usually carried out by one of the following methods:

- Hot water for a time and temperature combination that is effective in killing micro-organisms. This method is used usually for small utensils. A minimum temperature of hot sanitising water in a sink must be 77°C (or 82°C for a pot or dishwasher).
- Chemical sanitiser application after cleaning. This is usually the preferred method of sanitising floors and kitchen surfaces.

Kitchen chemical sanitisers are usually either iodine compounds, quaternary ammonium compounds or phenolics. Micro-organisms can become resistant to some sanitisers. For this reason it is good practice to change the type of sanitiser you use occasionally.

Sanitisers should always be used at the strength recommended by the manufacturer.

3. Cleaning of kitchen floors

Floors must be kept free from spillage (clean up spillages as you go).

At the end of each day kitchen floors should be scrubbed (manually or with a machine) with soap or detergent and water of at least 45°C. A sanitiser may also be used but is generally more effective if used after the detergent or soapy water are removed from the surface rather than mixed in with the soap or detergent.

Floors should not be hosed or cleaned in a manner which would cause splashing.

Straw and wooden brooms should not be used. Kitchen mops, buckets and other cleaning equipment should be cleaned and sanitised daily. Sanitising methods should be using hot water above 77°C or by washing clean and soaking in sanitising solution at the strength recommended by the manufacturer.

4. A pest and rodent control program should be in operation to prevent pest infestations that may lead to the contamination of raw food ingredients, food products or equipment

The premises* and equipment should be designed and maintained to reduce access of pests such as rats, mice, flies, cockroaches, ants and birds. This may include the use of insect screens, electric insect killers, baits or the use of pest control contractors.

*Note: There are construction requirements legislated for food service areas.

- External entrances and windows are kept closed or provided with screens to prevent pest access.
- Store all foods appropriately *(See Section 7 – Food Storage).*
- Schedule cleaning of all potential areas of risk.
- Kitchen garbage containers should be cleaned daily or more frequently if required.
- Store waste and garbage in vermin and fly proof containers away from food service area.
- Schedule regular inspections for evidence of pests and nesting areas.
- When pests are found contact a pest control agency.

QUALITY IMPROVEMENT (MONITORING ACTIVITIES)

- Sanitation checklist
- Audit of cleaning schedules
- Audit of Material Safety Data Sheets (MSDS)
- Microbiological swabs of equipment and surfaces
- Pest control records

EXAMPLES OF POOR PRACTICE

- No cleaning schedule exists.
- Kitchen mops are left in dirty water in wringer buckets.
- No regular pest control program exists.
- Insect screens are in poor condition and allow entry of insects.
- On inspection there is evidence of pest infestation in food stores.
- The kitchen premises do not meet the standards required under the *NSW Food Act 1992* and *Food (General) Standards 1997.*
- MSDS is not available on each cleaning chemical used.
- Pets are allowed in the kitchen area.

EXAMPLES OF GOOD PRACTICE

- A cleaning schedule is displayed for the use of food service staff.
- Records can be produced of cleaning and sanitation monitoring.
- Cleaning chemicals are clearly labelled and stored securely away from food.
- Advice from a local government Environmental Health Inspector is sought in developing quality improvement goals for the kitchen premises, cleaning and sanitation, and pest control programs.
- Cracks in walls and floors are repaired immediately.

12 EQUIPMENT
purchasing & maintenance

12

STANDARD

Our equipment will be purchased according to our needs and in a cost effective manner. Our equipment will be maintained to provide optimum service and safety.

PROCEDURES FOR EQUIPMENT PURCHASING AND MAINTENANCE

1. Equipment purchase

Purchase of equipment can be a very expensive exercise. It is important to research needs and available equipment thoroughly even if only one piece of equipment is being purchased.

- Document needs
  - list all the activities the equipment is required to perform
  - what capacity is required
  - what space is available for the equipment
  - consider cleaning requirements
  - consider service and repair, replacement parts
- Collect information/brochures for all the equipment that could fulfil the needs.
- Construct a table including every feature desired in the equipment. Show how each product is able (or not) to meet the requirements.
- Make a decision and purchase the equipment. If purchasing a large amount of equipment, specifications should be written and put to tender.

Smaller facilities should consider commercial grade equipment. Whilst it may be more expensive, the life of the equipment should be longer and more trouble free.

2. Equipment must be maintained in optimal working order

- There should be an inventory of all equipment.
- Each piece of equipment should have a log kept of its:
  - Purchase date and cost
  - Repairs
  - Routine maintenance
  - Warranty documents
- A routine maintenance schedule should be established according to manufacturer's recommendations.
- Thorough records will help to determine when an item of equipment is becoming too expensive to repair and would be better replaced.
- Equipment should be calibrated when relevant. That is, steps are taken to ensure that the item is working correctly. For example, hand held thermometers are checked for accuracy using the manufacturer's guidelines.

QUALITY IMPROVEMENT (MONITORING ACTIVITIES)

- Audit maintenance records
- Monitor age, breakdowns and cost of repair

EXAMPLES OF POOR PRACTICE

- Frequent and unexpected equipment breakdown.
- Equipment is unsuitable for production of quality food.

EXAMPLES OF GOOD PRACTICE

- Equipment is calibrated according to the requirements of the Food Safety Plan.
- Key personnel within the food service department are consulted regarding equipment specifications.

13 STAFF
selection, orientation & training

13

STANDARD

Appropriate staff should be selected for the tasks required. Staff are to undertake appropriate orientation and ongoing training as necessary.

PROCEDURES FOR STAFF SELECTION, ORIENTATION & TRAINING

1. Staff selection

The requirements of the job to be done should be carefully assessed and an appropriately trained person selected for the job.

- A Job Description should be available for each position in the Food Service. It will include the role of the person holding that position, an organised list of duties which reflect the required skills and responsibilities, as well as the line of authority.

- A Job Specification should be available for each position. This will state the duties or role of the position and the minimum standards or desirable qualities/ experience required for applicants.

For example:-

Position: Chef

Role: The Chef is responsible to the Food Service Manager for the daily supervision of staff in food production, for the requisitioning of supplies for this area and for ensuring food production standards are maintained.

Desirable Qualities or Experience:

- Recognised trade qualifications in commercial cookery
- Proven experience as a commercial cook
- Proven supervisory experience
- Experience in the implementation of HACCP program
- A knowledge of Equal Employment Opportunity principles, Occupational Health and Safety standards and Quality Improvement practices

For other examples of Job Specifications, refer to the Institute of Hospital Catering Manual.

2. An orientation program

Orientation should be provided for each new member of staff at their induction and should include all of the usual information about the residence and legislation, but must also include:-

a) OH&S as it relates to food service areas;

b) Safe food handling practices;

c) Personal Hygiene;

d) Food preparation techniques appropriate to the facility and their duties, and

e) Discussion of work schedule.

A Policy and Procedure Manual should be clearly written and available to all employees.

3. Education and training

Training is an integral part of successful food production and is mandatory for safe food. It is management's responsibility to ensure that ongoing training is provided and understood by staff.

Ongoing training should include:

- Food safety including HACCP monitoring and hygiene procedures
- Infection control
- Kitchen Safety (OH&S including Fire Procedures)
- Manual Handling (consult with Occupational Health and Safety Department/ Committee and Physiotherapy Department)
- Nutrition
- Texture modification
- Meal Presentation
- Quality Improvement

Training programs should be competency based. Training outcomes should be identified for each training program/module.

For example, the training outcome for food service managers and consultant dietitians undertaking food safety training could be "Write a HACCP based Food Safety Plan" and "Implement the Food Safety Plan". The training outcome in food safety training for cooks and kitchen hands could be "Implement food safety procedures and monitor procedures of the Food Safety Plan".

An example of one-on-one training.

A Minimum Training Schedule should be developed for all new employees who are involved in food service to residents. A sample schedule is listed below in Table 1.

Table 1: Training schedule

Training	Personnel	Time frame
Orientation	Food preparation staff Food delivery staff Food service staff Direct Care Worker	Immediately on employment – before commencement of duties
Food safety (including HAACP monitoring and hygiene procedures)	Food preparation staff Food delivery staff Food service staff Direct Care Worker	Within 6 months of commencing service Refresher annually
Infection control	Food preparation staff Food delivery staff Food service staff Direct Care Worker	Within 3 months of commencing service Refresher annually
Kitchen Safety (fire, safety, manual handling)	Food preparation staff Food delivery staff Food service staff Direct Care Worker	Within 3 months of commencing service Regular training sessions
Nutrition	Direct Care Worker Food preparation staff	Within 12 months of commencing service
Texture modification	Food preparation staff Food service staff Direct Care Worker	Within 3 months of commencing service
Meal presentation	Food preparation staff Food service staff Direct Care Worker	Within 3 months of commencing service
Quality improvement	Food preparation staff Food delivery staff Food service staff Direct Care Worker	Within 12 months of commencing service Refresher annually or as scheduled by CQM program

4. Feedback on staff performance

A staff feedback or supervision system should be developed and each employee should receive regular supervision or feedback on how effectively they fulfil their role and responsibilities. The supervisor should also assess the employee's goals and aspirations and encourage effective utilisation of demonstrated strengths. If improvement is desirable, further training or education should be encouraged and if necessary, performance improvement strategies put in place.

QUALITY IMPROVEMENT (MONITORING ACTIVITIES)

- Audit staff records
- Audit training program documentation
- Audit appraisal records

EXAMPLES OF POOR PRACTICE

- Training is not provided
- Staff are not informed of all training opportunities
- Poor employee performance is not addressed adequately

EXAMPLES OF GOOD PRACTICE

- Staff are informed of all training opportunities
- A positive learning environment exists
- An annual appraisal system is in place

RESOURCES

1. USEFUL REFERENCES

Recipes for Large Numbers
Ashley and Anderson 1996
Hospitality Press Pty Ltd
PO Box 426
Elsternwick Vic 3185

Cooking for Plenty - no longer in print
Heart Foundation Cookbook - in print
National Heart Foundation
407 Elizabeth St, Surry Hills NSW 2010
Tel 1300 362 787

Food Service Guidelines for Healthcare
Institute of Hospital Catering (NSW)
PO Box 1220
Chatswood NSW 2067

Food Book for Licensed Residential Centres, Hostels & Group Homes
(Central Sydney Area Health Service 1996)
Copies available from:
The Manager, Boarding House Team
Central Sydney Area Mental Health Services
PO Box 1386
Rozelle NSW 2039

Reference Code for a Cook Serve Food System
(Technical Series TS21. NSW Health Department, March 1998)
Available from:
Better Health Centre
Locked Mail Bag 5003
Gladesville NSW 2111
Tel 02 9816 0452

Reference Code for a Conventional Cook Chill Food System
(Technical Series TS16. NSW Health Department, March 1998)
Available from:
Better Health Centre
Locked Mail Bag 5003
Gladesville NSW 2111
Tel 02 9816 0452

Safe and Sound: Food Safety for Supervisors and Managers in the Food Service Industry
Mary Johnston, Susan Shackleton and Pip Duncan
Longman Paul, Auckland, NZ, 1994

Food Poisoning Prevention in Australia
Merry, G.
MacMillan, Australia, 1989

2. USEFUL CONTACTS

WorkCover Authority of NSW
For information on MSDS for cleaning chemicals
400 Kent St
Sydney NSW 2000
Internet: www.workcover.nsw.gov.au

Australia New Zealand Food Authority (ANZFA)
Mailing list for the ANZFA newsletter:
Information officer
ANZFA
PO Box 7186
Canberra Mail Centre ACT 2610
Tel: 02 6271 2241
Fax: 02 6271 2278
Internet: www.anzfa.gov.au

Commonwealth Government Bookshop
32 York St
Sydney NSW 2000
Tel: 02 9299 6737

Better Health Centre
For NSW Health Department publication
Tel: 02 9816 0452

Food Science Australia Information Services (part of CSIRO)
Internet: www.dfst.csiro.au
Food Safety & Hygiene quarterly newsletter
Tel: 02 9490 8397

Food Safety Campaign Group
Internet: www.safefood.net.au

Local Government Offices (Local Councils)
Environmental Health Officers

Communicable Diseases Intelligence
Australian food poisoning statistics
Internet: www.health.gov.au/hfs/pubs/cdi

GLOSSARY

The following table defines some of the terms used in this Manual.

Residential unit:	A residential location where meals are served and which is remote from the main kitchen or place where food is prepared.
Continuous Quality Management (CQM):	All food service staff are committed to and involved in a creative process of improvement.
Quality Improvement (Monitoring activities):	Ways in which we can make sure we achieve and maintain the level of quality required.
Between meal nourishments:	This term is used interchangeably with **snacks**. It refers to morning tea, afternoon tea and supper.
Rethermalisation:	Reheating.
Standards:	Formally documented requirements, against which performance can be judged.
Potable:	Clean water that is safe for drinking.
MSDS (Material Safety Data Sheet):	Material Safety Data Sheet is a document prepared by a manufacturer for the safe use of a hazardous chemical.
HACCP (Hazard Analysis Critical Control Point):	Hazard Analysis Critical Control Point is a practicable, preventative approach to food safety management.
Audit:	A process that checks if a system is actually working as it is intended. For example, to audit a HACCP plan means to systematically check that the procedures used in the HACCP plan are achieving the outcomes they are designed to achieve.
Hazard:	A biological, chemical or physical agent that may contaminate food and pose a risk to the safety of the food.
Listeria:	*Listeria monocytogenes* is a food poisoning bacterium

APPENDICES

Appendix 1: Example of format for a recipe card

Dish:						Preparation time:		Cooking time:
Number of portions/serves:						Portion size (weight/volume):		
Ingredient	Quantity (for standard numbers)	Quantity for other multiple	Quantity for other multiple	Unit Cost	Actual Cost	Method		
Date:								

Appendix 2: Sample cleaning schedule

Item:	Workbenches and counters
Person responsible:	
Frequency:	Start and end of each day and as required with usage.
Material/products used:	Scraper, brush, clean cloths, detergent, sanitiser
Procedure:	Remove food particles Rinse with warm water Apply detergent and wash (ensure correct concentration and contact time by following manufacturer's instructions) Apply sanitiser (ensure correct concentration and contact time by following manufacturer's instructions) Rinse with clean water or air dry.

Appendix 3: Temperature standards for a cook-serve food service system

Adapted from the *Reference Code for a Cook Serve Food System*. Technical Series TS21. NSW Health Department, March 1998

PROCESS STEP	CONTROL POINT	TEMPERATURE STANDARD
Receiving food	Point of delivery	Chilled food 0-5°C Frozen food ≤ -18°C
Food storage	Refrigeration	Vegetable chiller 4-10°C Chiller 0-5°C Freezer ≤ -18°C
Thawing	Refrigeration	Thawing food 0-4°C
Preparation	Using perishable foods	Use within 1 hour of removal from Chiller. Holding time in preparation area can be longer if temperature of food does not exceed 10°C.
Cooking	Cooking process	Centre of food 70°C for 2 minutes, or equivalent heat process (eg. 75°C core temperature)
Bulk portioning of bulk hot food	Portioning process	Food temperature of each batch at the end of portioning > 70°C
Hot holding	Hot storage	Food temperature > 60°C (core temperature)
Transportation of bulk hot food	Hot transportation container	Food temperature > 70°C (core) at beginning of delivery run and food temperature ≥ 60°C at the end of the delivery run.
Hot plating (followed by hot transportation or on-site hot distribution)	Plating process	Food Temperature ≥ 60°C (core temperature) Ensure plates heated to ≥ 70°C before plating. Plating room air temperature 22-25°C
Transportation of hot plated meals	Plated meal in insulated transport container	Food temperature ≥ 70°C (core) at beginning of delivery run and food temperature ≥ 60°C at the end of the delivery run.
On-site distribution to consumer	Plated meal	Food temperature ≥ 60°C at point of delivery to consumer.

Appendix 4: Temperature standards for a cook-chill food service system

Adapted from *Reference Code for a Conventional Cook Chill Food System.* Technical Series TS16. NSW Health Department, March 1998

PROCESS STEP	CONTROL POINT	TEMPERATURE STANDARD
Receiving food	Point of delivery	Chilled food 0-5°C Frozen food ≤ -18°C
Food storage	Refrigeration	Vegetable chiller 4-10°C Chiller 0-5°C Freezer ≤ -18°C
Thawing	Refrigeration	Thawing food 0-4°C
Preparation	Using perishable foods	Use within 1 hour of removal from Chiller. Holding time in preparation area can be longer if temperature of food does not exceed 10°C.
Cooking	Cooking process	Centre of food 70°C for 2 minutes, or equivalent heat process (eg. 75°C core temperature)
Bulk portioning of bulk hot food	Portioning process	Food temperature of each batch at the end of portioning ≥ 60°C. Portioning time limit if 30 minutes.
Bulk chilling	Rapid chilling	Food in trays: core temperature reduced from 70°C to 3°C within 1.5 hr. Whole portions of meat, poultry or fish: core temperature reduced from 70°C to 3°C within 2.5 hr. Air temperature ≤ 0°C
Refrigerated storage for bulk cooked chilled food	Chilled storage	Food temperature 0-3°C Air temperature ≤ 3°C
Chilled bulk portions commercially produced	Point of delivery	Food temperature 0-3°C
Chilled plating	Plating room	Air temperature ≤ 15°C. If the plating time cannot be kept to less than 30 minutes after removal from refrigerated storage, then air temp of the plating room must be ≤ 10°C
Chilled distribution	Delivery	Temperature of plated meals 0-5°C. Delivery vehicle air temperature ≤ 3°C.
Chilled storage of plated meals	Chilled storage	Temperature of plated meals 0-5°C. Air temperature ≤ 3°C.
Rethermalisation (reheating)	Reheating of bulk chilled food or of plated chilled food	Temperature at centre of food ≥ 70°C within 1.5 hr of being removed from refrigerated storage.

Hot plating followed by consumption.	Plating process	Plating time ≤15min of completion of heating or removal from hot storage. Hot storage at ≥ 70°C. Food Temperature ≥ 60°C (core temperature) Ensure plates heated to ≥ 70°C before plating. Plating room air temperature 22-25°C.
Hot plating followed by hot distribution	Plating process	Plating time ≤ 15min of completion of heating or removal from hot storage. Hot storage at ≥ 70°C. Food Temperature ≥ 60°C (core temperature) Ensure plates heated to ≥ 70°C before plating. Plating room air temperature 22-25°C.
Packing of hot plated meals	Packing	Time ≤ 5 min following completion of reheating or removal from hot storage. Temperature of packing room air 22-25°C.
Transportation of hot plated meals	Plated meal in insulated transport container	Food temperature ≥ 70°C (core) at beginning of delivery run and food temperature ≥ 60°C at the end of the delivery run.
Hot storage	Hot storage	Food temperature ≥ 60°C (core temperature)
On-site distribution to consumer	Plated meal	Food temperature ≥ 60°C at point of delivery to consumer.

Appendix 5: Common microbiological hazards and their controls

Following is a list of activities involved in common food service operations. For each activity, the microbiological hazards are defined and the control measures identified.

(adapted from Bryan, F. L. (1982) 'Microbiological hazards of feeding systems', in *Microbiological Safety of Foods in Feeding Systems*, National Academy Press, Washington DC, ABMPS Report no. 125, pp 64-80).

ACTIVITY	MICROBIOLOGICAL HAZARD	CONTROL
Purchase	Food poisoning organisms in foods; foods from unsafe sources; contaminated dry and tinned stock	Purchase food only from reputable suppliers; specify no damaged stock or tins
Receipt	Growth of organisms during delivery period	Ensure supplier uses refrigerated (below 5°C) vehicle; frozen food transported at -18°C or below
Refrigerated storage	Microbial growth if temperature too high or storage too long; cross contamination	Ensure cold rooms/fridges operate below 5°C; rotate stock; store raw foods below cooked foods; keep food covered
Frozen storage	Microbial growth if temperature too high	Maintain freezers below -18°C
Dry storage	Microbial contamination via insects, rodents etc	Keep foods covered and protect from contamination; maintain low temperature and humidity
Thawing	Growth of bacteria during thawing; incomplete thawing	Thaw in cold room, fridge or using microwave oven; thaw completely before cooking
Rehydration	Contamination during rehydration; bacterial growth in rehydrated product	Use clean utensils, containers; use food promptly or refrigerate
Preparation	Cross contamination from raw products; contamination from food handler, dirty utensils and equipment	Avoid handling raw food and then cooked food; avoid handling food not to be cooked; exclude sick food handlers; good personal hygiene
Cooking	Inadequate cooking allowing pathogens to survive; survival of spores during cooking	Ensure time-temperature parameters are sufficient to kill pathogens; keep food hot or cold after cooking to prevent growth from spores
Handling foods that are not subsequently heated	Pathogens in food; cross contamination from raw food; contamination from food handler's hands, equipment, utensils	Keep food cold to inhibit microbial growth; avoid handling raw food and then foods not to be cooked; avoid handling foods with hands – use gloves, utensils; exclude sick food handlers; good personal hygiene

Holding perishable foods at room/outdoor temperatures	Growth of pathogens	Minimise such holding; keep food above 60°C or below 5°C
Hot holding	Growth of pathogens if temperature too low	Keep hot foods above 60°C; preheat devices before transferring foods to them; do not stack foods in bain maries above heating level
Cooling after cooking	Growth of pathogens	Minimise time at room temperature; cool foods rapidly; use shallow containers; store at less than 5°C; ensure fridge/cold room is operating below 5°C
Reheating	Growth of pathogens during reheating	Reheat quickly to minimise time between 5 and 60°C; ensure foods reach adequate temperature to prevent growth of pathogens during hot storage
Displaying food	Contamination from consumers; incorrect storage temperatures; contamination from decorative items, labels	Cover foods; protect from contamination by consumers; if self-service display provide sneeze guards, supervise and remove contaminated equipment and food; keep perishable food above 60°C or below 5°C; avoid using decorative tems, labels etc. on food for direct consumption
Serving food	Contamination from food handler	Use utensils, gloves; avoid touching parts of cutlery and crockery that will be in contact with food; avoid separating wrapping papers by licking finger first; good personal hygiene
Cleaning and sanitising of equipment and utensils	Failure to remove pathogens from surfaces	Pre-clean by scraping/rinsing; wash with detergent and hot water (at least 45°C); rinse well; sanitise using water at 77°C or above or use chemical sanitiser; measure sanitiser carefully and allow correct contact time; air dry and store away OR use dishwashing machine