



Nutrition and Menu Planning for Meals on Wheels Services in Western Australia



Delivering a Healthy WA



This publication was adapted and revised from the *Menu Planning and Food Costing Guide to Meals and Wheels Services 2002* developed by the Department of Health WA for Home and Community Care Services WA.

Revised by:

Pam Digby APD
 Department of Environmental Health - Food Unit
 2008

Acknowledgements

Thanks and appreciation to:

Jan Lewis(original author) and Sarah Kepert for their involvement in the initial development of *Menu Planning and Food Costing Guide to Meals and Wheels Services 2002* and to Bruce Reynolds for some of the original concepts used in the assessment of menus.

This booklet and the accompanying work sheets are designed for caterers, chefs and cooks, administrators, and volunteers who provide Meals on Wheels services.

It provides a simplified method of assessing your menus and ensuring you provide at least the minimum requirements for your Meals on Wheels clients.

Included is:

- Information on the foods that are recommended for good health.
- The minimum amounts of foods recommended to be provided by Meals on Wheels services

- Menu planning and menu assessment
- Ways to help improve your menus

Follow the steps using the worksheets provided for a comprehensive assessment of your menus and the foods you need to provide to your clients

Step 1 Menu planning and review

Use the Main Course Variety Checklist, Vegetable Variety Checklist and the Dessert Variety Checklist

Step 2 Menu assessment

Check your menu meets
 MOW Core Food recommendations

Use Core Food Groups Daily Worksheets

Step 3 Improve your menu

Use the ideas provided to help you make menu changes

Step 4 Proportion your food budget to match a healthy menu

Step 5 Using your food budget information

Use the ideas to help your food budget

Recommended foods for meals on wheels services

Food can be grouped together according to the major nutrients they provide, these have been called Core Food Groups. Together they provide the minimum number of serves that meet the recommended intake of the nutrients essential for good health.

The **minimum number of daily serves** needed by adults aged 60+ years, from each group is given in the table below. Remember some people will need more than this depending on appetite and activity level.

The recommendations for the minimum amount of Core Foods required to be provided by Meals on Wheels are based on the contribution to the total intake each day of the **lunch meal and the additional foods that clients provide themselves.**

The table lists the Core Foods and serving sizes in equivalent amounts in each food group so that you can vary the type of food in that group.

Example: one cup of milk (250mL) is the equivalent of 40 g cheese (2 slices).

Core food recommendations

Core foods	Size serves	Minimum number of Core food serves per day	Recommended serves from MOW
Meat / Alternatives	90g cooked meat 120 g cooked fish fillet ½ cup cooked legumes 2 small eggs	1-1.5	1
Milk	250 ml milk 125 ml evaporated milk 40 g cheese 200 g yogurt 250 ml custard	2-3	½ - 1
Fruit	150 g fruit 1 medium or 2 small pieces 1 ½ tbs sultanas ½ cup fruit juice 1 cup canned fruit	2	½ - 1
Vegetables	75 g vegetable 1 cup salad vegetables 1 small potato	5	3 - 4
Cereals	60 g bread (2 slices) 60 g dried pasta, rice (1 cup cooked) ½ cup muesli 1 cup porridge 40g cereal flakes/ready to eat cereal 40 g flour	3 - 6	0 - 1

Step 1: Menu planning and review

Menus should offer the recommended serves of the Core Food Groups for Meals on Wheels services. It is also important to offer a variety of foods within these groups.

Plan menus over at least two weeks to ensure a variety of foods and cooking styles. A cycle using two fortnightly menus (four week cycle) works well for many.

The texture of foods is particularly important when planning menus for Meals on Wheels services. Many elderly people experience difficulty in chewing and swallowing.

To check menu variety (see example below)

Using your new or existing menu:

1. Complete *Table 1: Main Course Variety Checklist* to ensure that the menu is using a variety of ingredients and textures.
2. Check main course dishes (meat or meat alternative dish) on the menu and put total in column 3 'Frequency'
3. Check if this dish is soft ie: moist, easy to chew and swallow, e.g. fish mornay or hard ie. dry, requires chewing before swallowing, e.g. roast meat. Place total in appropriate column.

Example: Table 1: Main Course Variety Checklist

Lunch dishes	Recommended frequency/fortnight	Frequency	Soft	Hard
Beef	4	2	2	
Lamb		1		1
Chicken	3	2	1	1
Fish		1	1	
Other white meat (pork, veal)		1		1
Sausage/pies/chicken nuggets.etc	0 - 1	2	2	
Egg	1 - 2	1	1	
Dried peas /beans/ lentils				

What does this information tell you?

Compare your menu to the recommendations for serving red meat, white meat and other dishes, see column 2. In the example above, more red meat and less pre-prepared foods are needed to meet the recommendations.

Compare the number of soft and hard meals, how does this compare to the needs of most of

your clients? Changes to the texture of meals or offering alternatives may be needed. Using moist sauces eg. gravies can help keep meats from drying out which may help with the harder to chew foods.

Table 1: Main course variety checklist

Lunch dishes	Recommended frequency/fortnight	Frequency	Soft	Hard
Beef	4			
Lamb				
Chicken	3			
Fish				
Other white meat (pork, veal)				
Sausage/pies/chicken nuggets. fried prawns etc	0 - 1			
Egg	1 - 2			
Dried peas /beans/ lentils				

Two copies required for assessing a monthly menu

Table 2: Vegetable variety checklist

Check the variety of vegetables that you are using. Remember vegetables can be fresh, frozen or canned.

1. Check through your menu and place a 1 (one) for each time one of the vegetables appears on the menu.

2. Place the 1 in the column that best describes the way the vegetable is cooked.

3. Add the total for the fortnight for each vegetable.

4. Add the sub totals for yellow and green vegetables.

Example: Table 2 Vegetable Variety Checklist

Variety	Steamed/ boiled/ mashed	Roast/ Fried	Grilled/baked	Soup	TOTAL
Potato	1111 1111	1	1		10
Onions	111		1	11111 11	11
<i>Yellow/red vegetables</i>					
Carrot	11 11			11 1	7
Corn	11 1			1	4
Pumpkin	11 1			1	4
Sweet potato		1			1
SUBTOTAL					16

What does this information tell you?

- Does your menu have at least one green and one yellow vegetable each day? ie. a sub total of 10 (on a 10 day menu).
- Green and yellow vegetables provide a range of important vitamins eg. vitamin A (as beta-carotene), vitamin C and folate.
- Look for pleasing colour and taste combinations.

- Selecting a green and yellow vegetable adds colour particularly to meat dishes that are pale eg. fish, or chicken, or meats served with a white sauce.
- Make sure you are not serving too many roast or fried vegetables, these are high in fat.
- Baking without fat or steam/baking can be a good alternative to vegetables roasted in fat.

Table 2 Vegetable variety checklist

Add any other varieties of vegetables/salads you use to this list

Variety	Steamed/boiled/ mashed	Roast/ Fried	Grilled/ Baked	Soup	TOTAL
Potato					
Onions					
YELLOW/RED VEGETABLES					
Carrot					
Corn					
Pumpkin					
Sweet potato					
SUBTOTAL					
GREEN VEGETABLES					
Asparagus					
Beans					
Broccoli					
Brussel Sprouts					
Cabbage					
Cauliflower					
Celery					
Egg plant					
Parsnip					
Peas					
Silverbeet/ Spinach					
Squash					
Zucchini					

SUBTOTAL					
SALAD VEGETABLES					
Beetroot					
Capsicum					
Cucumber					
Lettuce					
Mushroom					
Radish					
Tomato					



Dessert variety

Desserts may be high in sugar such as jelly and mousse, or high in fat such as pastries and pies, however, many desserts include important Core Foods such as eggs, milk, fruit and cereal foods.

Desserts for Meals on Wheels services should aim to include at least ½ to one serve of fruit and ½ to one serve of milk. All desserts should include milk foods except on days where milk foods are included in soups or main courses. Fruit should be included in desserts at least four days in the week.

Complete Table 3: Dessert Variety Checklist

- Check the frequency that selected types of desserts appear on the menu.
- Note if desserts are served with custard.
- Add desserts not listed into the space provided.

Example: Table 3: Dessert Variety Checklist

Dessert	Frequency/fortnight	With custard
Cereal/fruit Eg. Fruit sponge, Fruit crumble Fruit pie (Less than ½ serve fruit)	3	2
Fruit only Eg. Stewed/canned/fresh fruit (Equals one serve fruit)	1	1
Jelly with fruit (Equals ½ serve fruit)	2	2
Milk based desserts eg Baked custard, milk jelly (Equals ½ to 1 serve milk)	2	
Milk/cereal Eg. bread and butter custard, creamy rice (½ serve milk+½cereal)		
Cereal only Eg. steamed jam pudding, cake (½ to 1 serve cereal)		
Jelly no fruit	1	
Flummery/mousse (Less than ½ serve fruit or milk)	1	

Table 3: DESSERT VARIETY CHECKLIST

Two copies required for assessing a fortnightly menu

Dessert	Frequency/fortnight	With custard
Cereal/fruit Eg. Fruit sponge, Fruit crumble Fruit pie (Less than ½ serve fruit)		
Fruit only Eg. Stewed/canned/fresh fruit (Equals one serve fruit)		
Jelly with fruit (Equals ½ serve fruit)		
Milk based desserts eg Baked custard, milk jelly (Equals ½ to 1 serve milk)		
Milk/cereal Eg. bread and butter custard, creamy rice (½ serve milk+½cereal)		
Cereal only Eg. Steamed jam pudding, cake (½ to 1 serve cereal)		
Jelly no fruit		
Flummery/mousse (Less than ½ serve fruit or milk)		
Note: Including a custard in a dessert item will add a 1/2 milk group to the meal		
Total number		

Step 2: Menu assessment

To check if your menu provides the recommended serves of Core Foods for Meals on Wheels services, complete *Table 4: Core Food Groups Daily Worksheets*.

Copy additional worksheets so that you can check the daily menus for your complete menu cycle.

From your menu add the total number of serves of Core Foods per day and write the total in the third column *Number of serves from menu*.

Use the table below to help you estimate the number of serves that your menu provides. It is also a useful exercise to check the size of serves by weighing the components in a sample meal.

Shade the boxes to represent the number of serves per day

Compare the number of serves your menu provides with the recommended serves for Meals on Wheels. *For example see page, half a serve of fruit and one more serve of vegetables are required to meet the minimum recommendations.*

■ **Tip:** use different colours for each Food Group to highlight your menu at a glance.

If necessary alter the menu so that it meets the minimum recommendations.

Core foods	Size serves	Practical application
Meat / Alternatives	90 g cooked meat 120 g cooked fish fillet 150g cooked legumes 2 small eggs	A normal size serve for adults (not active) is about 1 serves
Milk	250 ml milk 125 ml evaporated milk 40 g cheese 200 g yogurt 250 ml custard	Milk for custard for sweets is about ½ a serve. A slice of cheese or 1 tablespoon of grated cheese is ½ serve 4 - 6 cups of tea/coffee is about ½ serve
Fruit	150 g fruit 1 medium or 2 small pieces 1 ½ tbsl sultanas 1 cup cut up fruit/ canned fruit 125 mL 100% juice (1/2cup)	For fruit based desserts check weight used and divide by number of serves (eg. 4 Kg fruit divide by 50 serves = 80 g approx ½ serve)






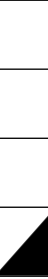




Vegetables	75 g vegetable (1/2 cup cooked) 1 cup salad 1 small potato	Main meal vegetable portions vary from ½ to 1 serve. Soups vary from 0 to 1 serve Mixed dishes vary from 0 to 1 serve Check serves by adding total weight of vegetable used and divide by number of serves)
Cereals	60 g bread (2 slices) 60 g dried pasta, rice (1 cup cooked) 1 cup cooked porridge 40 g cereal flakes/ready to eat cereal 1/2cup muesli 40 g flour	Breakfast cereal is 1 to 1 ½ serves A scone or large piece of cake is 1 serve.

Note: A strict vegetarian meal plan will require the addition of extra foods to provide the required nutrients. Contact a Dietitian for advice.



Table 4: Mow core food groups daily worksheets (example)

Day _____ Date _____ Menu _____











Core food groups	Recommended serve sizes	Number of serves from menu	Recom. serves from MOW	Actual Core Foods per day from MOW	Recommended Core Foods per day from MOW
Meat/ alternatives	90 g meat, chicken, 120 g fish	1	1		
Milk foods	250 mL milk or custard, 200 g yoghurt, 40 g cheese, 20 g milk powder	1/2	1/2 - 1		
Fruit	150 g	0	1/2 - 1		
Vegetables	75 g	2	3 - 4		
Bread and cereals	2 slices bread, 60 g raw pasta or rice, 50 g flour	1	0 - 1		

Full serve  Half serve 


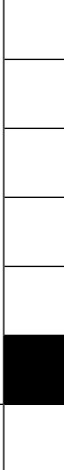
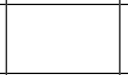







Table 4: Mow core food groups daily worksheets

Five copies required for assessing a fortnight menu

Day _____ Date _____ Menu _____

Core food groups	Recommended serve sizes	No. of serves from menu	Recom. serves from MOW	Core foods from MOW	Recommended core foods per day from MOW
Meat/ alternatives	90 g meat, chicken, 120 g fish		1		
Milk foods	250 mL milk / custard, 200 g yoghurt, 40 g cheese, 20 g milk powder		1/2 - 1		
Fruit	150 g		1/2 - 1		
Vegetables	75 g		3 - 4		
Bread and cereals	2 slices bread, 60 g raw pasta or rice, 50 g flour		0 - 1		

Day _____ Date _____ Menu _____

Core food groups	Recommended serve sizes	No. of serves from menu	Recom. serves from MOW	Core foods from MOW	Recommended core foods per day from MOW
Meat/ alternatives	90 g meat, chicken, 120 g fish		1		
Milk foods	250 mL milk / custard, 200 g yoghurt, 40 g cheese, 20 g milk powder		1/2 - 1		
Fruit	150 g		1/2 - 1		
Vegetables	75 g		3 - 4		
Bread and cereals	2 slices bread, 60 g raw pasta or rice, 50 g flour		0 - 1		

Five copies required for assessing a fortnightly menu

Step 3: How to improve your menu

To see if your menus are meeting the recommendations look at your completed *Core Food Groups Daily Worksheets* and compare the Core Foods from your menu with the Recommended Core Foods per Day).

Use **Table 1: Main Course Variety** and **Table 3: Dessert Variety Checklist** and see how the Core Foods are offered, this will help you decide the type of dishes to include on your menu.

Example: milk and fruit based desserts will help ensure sufficient milk and fruit is provided. Soup can provide approximately a half serve of milk and half to one serve of vegetables.

Use **Table 2: Vegetable Variety Checklist** to ensure that you are providing a variety of different types of vegetables on the menu.

Check the 'other' foods on the menu, these may be displacing other healthier choices. Make sure menus meet the recommendations for Core Foods before adding 'other' foods.

Way to increase foods from the bread and cereals group

- Bread and breakfast cereals are foods that many people can easily serve themselves. However, they can be included in dessert recipes eg: bread and butter custard, oatmeal (or muesli) as a topping for fruit crumble.
- There are many delicious pasta dishes, remember eating long spaghetti can be difficult for some people to manage but the sauces work very well with short varieties such as macaroni, penne or shell noodles.
- Rice can be used as an accompaniment and also in both savoury dishes and desserts.

Ways to increase foods from the fruit group

- People with difficulties chewing and swallowing may find it difficult to eat hard, fresh fruit. Cooked or tinned fruits can be used.
- Use fruit in desserts eg: fruit crumbles, fruit sponge, fruit custard.
- Add fruit sauces to desserts
- Try some main dish recipes that use fruit eg: Apricot chicken.

Ways to increase foods from the meat and meat alternatives group

- Offer red meat at least four times per fortnight. Remember cheap cuts of meat can be wasteful if large amounts of bone or fat need to be trimmed, or meat is too tough to eat. On the other hand some cheaper cuts are ideally suited to slow, gentle cooking as in stews and casseroles.
- Offer white meats at least three times per fortnight. Consider the edible portion eg: the bone waste in whole chicken, consider buying portions eg: legs or thighs.
- Tinned fish can be the basis to nutritious meals (remember to mash up the soft bones and leave in the dish, this is a good source of calcium).
- Meat dishes can be extended by adding dried peas, beans or lentils.
- If offering a vegetarian dish improve the absorption of iron by offering vegetables or fruits high in vitamin C at the same meal.

Tip: *It is often the small finishing touches to the menu that make the difference to enjoyment of the meal. E.g. serve a garnish of lemon with fish or a little apple sauce with roast pork.*

Ways to increase foods from the vegetable group

- Serve vegetables with every main meal.
- Include vegetables in the main meal dish eg: stew or casserole.
- Serve a variety of different vegetables to meet different tastes.
- Frozen or canned vegetables can be just as nutritious as fresh and can be used when some varieties are expensive or unavailable.
- Include vegetables in soups either using a variety of vegetables as in vegetable soup or a single vegetable such as pumpkin soup.
- Include extra vegetables in meat sauces eg: for pasta dishes.

Ways to increase foods from the milk group

- Offer milk based desserts such as custards, milk jellies, or flummeries made with evaporated milk.
- Serve custard sauce with other desserts.
- Try white (or cheese) sauce on vegetables or in fish dishes like Fish Mornay
- Sprinkle cheese on vegetables
- Use powdered milk in soups and sauces

What about the sugars?

- The amount of sugar used in many recipes can be cut down to make them enjoyable and suitable for most people, including people with diabetes.
Note: most desserts shouldn't need to have a special "diabetes" option.
- Depend more on the natural sweetness in some foods eg. pure unsweetened fruit juice can be used as a 'sweetener' when cooking fruits.
- A squeeze of orange or lemon juice can bring out the natural flavours of many fruits without using extra sugar.
- Try cutting back the amount of sugar in baked goods. Most standard recipes can cut sugar back ¼ to ½ without greatly affecting the texture. Recipes using dried fruits do not need too much sugar.
- Honey is not a substitute for sugar, it has the same amount of carbohydrate as white sugar.
- Artificial sweeteners are sometimes used by people with diabetes or those trying to lose weight, however, many types do not cook well as they give a bitter after taste to the dish. It is better for people to cut back the total amount of sugar rather than depend on sugar substitutes.

What about the fats and oils?

- Fats and oils are already found in the Core Foods, particularly in meat and milk foods, therefore, use only small amounts of fats and oils in food preparation and cooking.
- It is recommended that unsaturated fats are used, these are the fats found in poly or mono unsaturated margarines and oils.
- Avoid using the saturated fats that are found in butter, lard and dripping, also in vegetables fats and hydrogenated vegetables oils used in many commercial foods.



Step 4 Proportioning your food budget to match a healthy menu

Healthy Menu Budgeting

Reviewing the amount spent on each Food Group in your weekly/fortnightly/ monthly budget may help you to estimate if you are providing healthy menu guidelines

Firstly, find the percentage amount of your budget spent on each of the above groups and compare to the recommendation in this example.

Example:

Total weekly /fortnightly/monthly expenses	= \$3213
Amount spent on meat/milk	= \$1228
Amount spent on fruit/vegetables/bread/cereals	= \$1486
Amount spent on other foods	= \$ 499

$$\frac{1228 \times 100}{3213} = 38\%$$

$$\frac{12228 \times 100}{3213} = 46\%$$

$$\frac{499 \times 100}{3213} = 16\%$$

What is recommended:

40%	Meat and Milk
50%	Fruit & Vegetable, bread & cereals
10%	Other foods

Step 5 Using your food budget information

Use the budgeting information in Step 4 to improve your menu.

Meat and meat alternatives

Check that the amounts of meat purchased provide the recommended serve size. Your portion sizes may be too large. Large portions of meat are not always appreciated by older people.

Check the menu for the cuts of meat you need. Distribute dishes using cheaper cuts among more expensive cuts or pre-prepared dishes

Seek advice from your meat supplier on different cuts of meat for different uses.

Be fussy about quality, if you are wasting too much meat because of a need for excessive trimming of fat and bone, or complaints from clients on the toughness of meat, take up the issues with your supplier.

Milk foods

Don't forget to include the amount of milk that is used as 'free' milk in tea and coffee for staff and volunteers.

Powdered milk can be an economical substitute for fresh milk when used in cooking. Most people are not keen on the taste when used in drinks.

Fruit

You may also find you are not spending your budget allocation for fruit.

Wastage of fruit can be expensive. Consider delivery of smaller quantities to avoid waste through spoilage.

Check the quantities that your receive. Order by weight and obtain a price per kilo.

Be fussy about quality. Reject damaged, under ripe or over ripe fruit.

Be flexible with the menu, if a spell of hot weather is causing fruit to spoil, swap or substitute a menu item to use it quickly.

Some flexibility in the menu will allow you to take advantage of the cheaper prices of fruits in season.

Fruit juices can be a costly item, watch the amount of 'free' juice consumed by staff or volunteers. Fruit juice concentrates are usually the best buy in fruit juices. These are reconstituted with water. Cordials and powdered fruit flavoured drinks are not substitutes for fruit juice.

Tinned fruit can be stored for longer periods and might be a cheaper option than fresh fruit.

Vegetables

As with fruit, wastage of vegetables is expensive. Look at the quality, buy in season (substitute with frozen and canned products if necessary).

Take care to avoid over production.

Breads and cereals

Over spending of breads and cereals is most likely to occur if you are buying at retail prices. Consider how you can purchase bulk supplies, be sure you have adequate and appropriate dry storage facilities.

Extras

High expenditure of fats and oils could mean that you are using cooking methods that use too much fat. Dispense with the deep fryer and you save on cooking oil as well as cutting the cleaning bills.

Check the use of package sauces, soups and desserts, these items are sometimes justified on the basis of convenience, but sometimes better planning of staff time allows you to use the Core Foods to produce a cheaper and more nutritious dish.

Condiments, garnishes and decorations may add that "extra touch" to a meal at a reasonable cost.





Services

Home and Community Care (HACC) in collaboration with State and Local Governments provide a wide range of service and care options. This means people can live comfortably in their own homes, in spite of increasing frailty or disability

If you need extra help in and around the home, assistance with shopping, transport, social support, allied health and nursing care, contact the HACC Office or Commonwealth Carelink (1800 052 222) to find out what services are available.

Useful contacts

Department of Health WA
Home and Community Care
PH: (08) 9222 4060
Website: <http://www.health.wa.gov.au/hacc/>

Contact details for your local Meals on Wheels service

