



# METHODS OF COOKERY

## Teacher's Guide



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## Support resources for Hospitality training.

As a precursor to undertaking Hospitality training, Fliplets eLearning resources introduce students to the operations and terminology used in kitchens in the hospitality industry. Fliplets were initially developed for Aboriginal and Torres Strait Islander students in remote locations but will also have value for students in other contexts. This resource will be valuable both for students undertaking specific vocational learning and those interested in the food preparation and hospitality aspects of Technologies and Work Studies subjects of the Australian Curriculum.

## RECOMMENDATION

It is recommended that students examine the 'Fliplet' several times prior to commencement of training, this gives the student basic underpinning knowledge of the subject being taught by the teacher / trainer. Once this has been done it is time for you to begin facilitation of the students learning. It is suggested that you use the recommended activities, questions or group discussions outlined at the end of each topic to develop and test the students understanding of the information in the 'Fliplet'.

## OVERVIEW

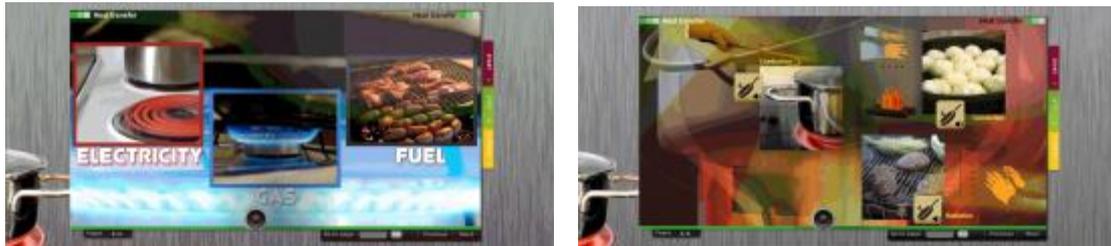
This resource is designed to assist students in gaining an understanding of the different methods of cooking. Understanding the methods helps the student to choose the appropriate method for different food types. Specifically, it focuses on the following topics:

1. Heat transfer
2. Dry Heat Cooking Methods
  - Shallow and Stir Frying Methods
  - Deep Frying
  - Grilling
  - Roasting
  - Baking
3. Moist Cooking Methods
  - Poaching
  - Boiling
  - Steaming
4. En Papillote
5. Microwaving

# 1

## HEAT TRANSFER

Refer pages 3 – 6 of 'Fliplet'



### Outline

- Discusses the principles of cooking and outlines what is happening when heat is applied to food.
- Examines where the heat for cooking is generated and the methods of heat transfer.

### Suggested Activities

#### **QUESTIONS:**

1. Identify the different methods used to generate heat for cooking?
2. What are the three principles of heat transfer and provide at least one example of a piece of equipment relating to each method?

#### **ANSWERS:**

1. Electricity, Gas and Burning fuel (for example, coals or wood).
2. Conduction – is the transfer of heat from one item to another through direct contact. For example, when heat touches the bottom of a pan.

Convection – is the transfer of heat through liquid or air. For example, hot fat in a deep fryer and the hot air in an oven.

Radiation – heat that cooks food using waves of heat. For example, a toaster or a salamander.

# 2

## DRY HEAT COOKING METHODS

Refer pages 7 – 8 of 'Fliplet'



### Outline

- Provides examples of dry cooking methods including sautéing, shallow frying, roasting, baking, grilling, stir frying and deep frying.

### Suggested Activities

#### **QUESTIONS:**

1. List different food types which you might cook using the following cooking methods:

- Sautéing
- Shallow Frying
- Roasting
- Baking
- Grilling
- Stir frying
- Deep frying

2. Why would you use dry cooking methods?

# 2

## DRY HEAT COOKING METHODS

Cont...



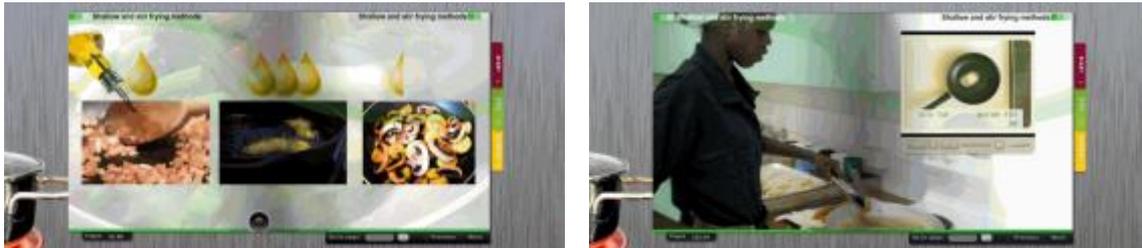
### **ANSWERS:**

1. Sautéing – vegetables, strips of meat, mushrooms.  
Shallow Frying – chicken schnitzel, crumbed fish fillet.  
Roasting – leg of lamb, whole chicken.  
Baking – cake, scones, pastries, bread.  
Grilling – steaks, sausages, hamburger patties.  
Stir Frying – noodles, rice, Asian dishes.  
Deep Frying – chips, battered or crumbed food items, pineapple fritters.
2. Dry heat cooking methods are used as a quick method of cooking to add crispness and flavour to the food and retain moisture. This method does not tenderise, therefore it's a good idea to use already tender cuts of meat.

# 3

## SHALLOW FRYING AND STIR FRYING

Refer pages 9 – 12 of 'Fliplet'



### Outline

- Defines sautéing, shallow frying and stir frying and outlines the types of foods/ dishes cooked using these methods.
- VIDEO - page 12
  1. How to fry an egg?
  2. Tips when cooking chicken
  3. Stir Frying Tips

### Suggested Activities

#### **QUESTIONS:**

1. What is the common denominator when using sautéing, shallow frying and stir frying methods of cookery?
2. What is the difference between sautéing and shallow frying?
3. What piece of equipment would you use to cook a stir fry and what are the most important things to remember when cooking a stir fry?

#### **ANSWERS:**

1. They all use oil to cook with, just differing amounts depending on the method.
2. Sautéing uses only a thin coating of oil on the pan whereas shallow frying uses enough oil to cover approx one third of the food when placed in oil.
3. To cook a stir fry, you would use a wok. The most important things to remember are that the ingredients are cooked very quickly at a high temperature, all ingredients need to be prepared (and cut into small even sized pieces) ready to go before starting.

# 4

## DEEP FRYING

Refer pages 13 – 14 of 'Fliplet'



### Outline

- Defines deep frying and different methods used to deep fry food.
- Deep frying is often used to retain moisture in food, however as it is fried in oil it can be extremely high in fat, therefore deep fried foods are not good to consume regularly.

### Suggested Activities

#### **QUESTIONS:**

1. List the three different methods of deep frying and explain.
2. What safety precautions do you need to take when using a deep fryer?
3. Provide examples of food that is good to be deep fried and why?

#### **ANSWERS:**

1. Basket Method – food is placed in a wire basket and then lowered into the hot deep fry oil.  
Double Basket Method – same as the single basket method, however another wire basket is placed on top of the first basket to ensure the food does not float to the top. This ensures the food cooks evenly.  
Swimming Method – food is placed in the deep fry oil and allowed to float to the surface and cooked on one side then turned and cooked on the other.
2. Use utensils or baskets to remove food from hot oil, NEVER put your hands into hot oil, be careful when placing items into deep fryer to ensure fat isn't splattered on you, NEVER put other liquids near a deep fryer, ensure the deep fryer is completely cooled before you attempt to empty and clean it.
3. Chicken fillets, potatoes, fish, vegetables, some fruits. Most products are coated with a batter or crumb to protect the food while cooking and retain moisture.

#### **GROUP DISCUSSION:**

List all the deep fried foods you can think of and where they are available? Are they healthy?

# 5

## GRILLING

Refer pages 15 – 18 of 'Fliplet'



### Outline

- Grilling refers to food that is cooked by radiated heat with the heat coming from either above or below. Examples of foods that can be grilled include steak, sausages and hamburgers.
- VIDEO – page 18 - How to grill?

### Suggested Activities

#### **QUESTIONS:**

1. What food products would be good to grill?
2. What types of equipment is used for grilling?

#### **ANSWERS:**

1. Examples include Chops, steaks, sausages.
2. Salamander (top heat), char grill (bottom heat), griddle plate or solid top plate, BBQ or Weber.

# 6

## ROASTING

Refer pages 19 – 20 of 'Fliplet'



### Outline

- Roasting uses convection heat method of cooking, and refers to cooking large cuts of meat.
- Outlines the three different techniques used to ensure tender meat, larding, barding and basting.

### Suggested Activities

#### **QUESTIONS:**

1. What types of meats can we roast?
2. What are the three ways we can retain moisture when roasting meat?
3. What vegetables do you think might be suitable for roasting?

#### **ANSWERS:**

1. Whole or cut up poultry, large joints of meat (leg of lamb, sirloin, rump).
2. Basting – pouring fat or cooking juices over the meat.  
  
Larding – fat is inserted into the meat.  
Barding – fat is wrapped around the outside of the meat.
3. Potatoes, pumpkin, swede, other root vegetables, capsicums, eggplants, however DO NOT roast green vegetables as they lose flavour and colour and can easily burn.

# 7

## BAKING

Refer pages 21 – 22 of 'Fliplet'



### Outline

- Baking uses convection heat to cook and is similar to roasting but with different outcomes. For example, baking refers to breads, biscuits, cakes and pastries.
- REMEMBER – be careful opening the oven door and when removing items from the oven make sure you are wearing oven-mitt or use a dry clean tea towel.

### Suggested Activities

#### **QUESTION:**

1. Why is it important to not open the oven door all the time?

#### **ANSWER:**

1. This lets the heat escape and will either change the length of time taken to cook the food or may change the appearance.

#### **ACTIVITY:**

Do you bake at home? What have you baked? Maybe you can try baking a simple chocolate cake or sponge cake with the students.

# 8

## MOIST COOKING METHODS

Refer pages 23 – 24 of 'Fliplet'



### Outline

- Outlines the different techniques that use moist cooking methods.
- Moist cooking methods use liquid to cook the food, examples include poaching, boiling or simmering and steaming.

### Suggested Activities

#### **QUESTIONS:**

1. What types of liquid can be used in moist cooking methods?
2. Why would you use a stock to poach foods in rather than water?
3. List the three types of moist cooking methods, and provide an example of a food you might cook using these methods.

#### **ANSWERS:**

1. Water, stock (chicken, beef, vegetable, fish), sugar syrup, wine, milk.
2. The flavour from the stock adds flavour by penetrating into the food.
3. Poaching – egg, tender cuts of meat, fruit.

Boiling – vegetables, starches, for example, potato.

Steaming – vegetables, small pieces of tender meat, for example, chicken fillets, Yum cha items.

# 9

## POACHING

Refer pages 25 – 28 of 'Fliplet'



### Outline

- Explains the requirements needed when poaching food.
- VIDEO – page 28 - two ways to poach an egg.

### Suggested Activities

#### **QUESTIONS:**

1. What types of foods can be poached?
2. What is the temperature of the liquid when poaching?
3. What should you add to the water when poaching an egg?

#### **ANSWERS:**

1. Eggs, fish, chicken fillets soft vegetables for example zucchini, mushrooms, fish, chicken fillets
2. Around 95 degrees.
3. Vinegar, it assists to set the egg white, do not use salt as the white and yolk will separate.

# 10

## BOILING

Refer pages 29 – 32 of 'Fliplet'



### Outline

- Boiling is the most common form of moist cooking, this 'Fliplet' examines the types of foods that can be boiled and provides tips on how to improve your products when boiling.
- Blanching is also a form of boiling and refers to partially cooking foods for various reasons.

### Suggested Activities

#### **QUESTIONS:**

1. What happens to green vegetables when boiling if you put the lid on the pot?
2. What is blanching and why is it important to 'refresh' foods after blanching?
3. What temperature does the liquid need to be to be boiling?

#### **ANSWERS:**

1. Green vegetables go a brown colour and lose a lot of their vitamin and mineral content to the water.
2. Blanching is a form of boiling where foods are partially cooked. It is important to 'refresh' (refers to placing the food in ice water after partially cooking in boiling water) foods after blanching to stop the cooking process.
3. 100 degrees Celsius.

# 11

## STEAMING

Refer pages 33 – 34 of 'Fliplet'



### Outline

- Steaming refers to food being cooked suspended above boiling or simmering liquid. This Fliplet outlines a number of devices that can be used to steam foods and many examples of foods that can be steamed.

### Suggested Activities

#### **QUESTIONS:**

1. Why is steaming considered to be so healthy?
2. What are the two ways you can steam?

#### **ANSWERS:**

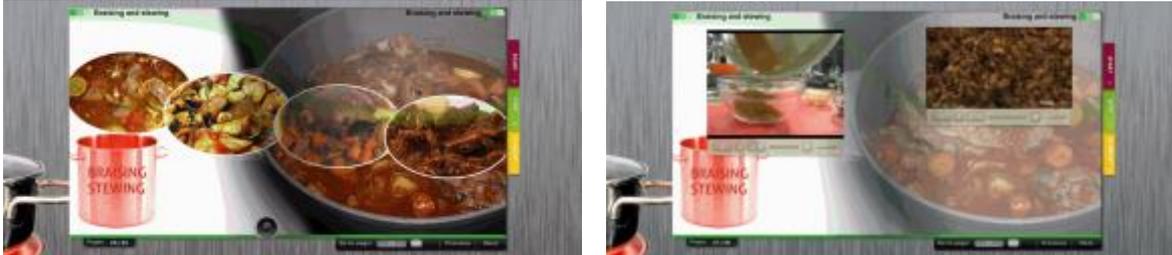
1. Because no oil is added in the cooking process.
2. Steaming in a basket suspended over boiling or simmering water.

Commercial steamers also known as Pressure cookers or Combi ovens.

# 12

## BRAISING AND STEWING

Refer pages 35 – 38 of 'Fliplet'



### Outline

- Suggests a new method of cooking which incorporates both dry and moist cooking used together.
- Looks at the difference between braising and stewing and how to stew and what cuts of meat are good to stew or braise.
- VIDEO – Pg 37 Examples of braising and stewing. 1. Vegetable Curry (stew) 2. Braising Beef (braise).
- VIDEO – Pg 38 Mushroom Duxelle (stewing).

### Suggested Activities

#### **QUESTIONS:**

1. Explain how you would produce a stew.
2. Cheaper cuts of meat are often used to stew or braise. Why is this and why is it important not to boil the liquid?
3. What is the difference between a stew and a braise?

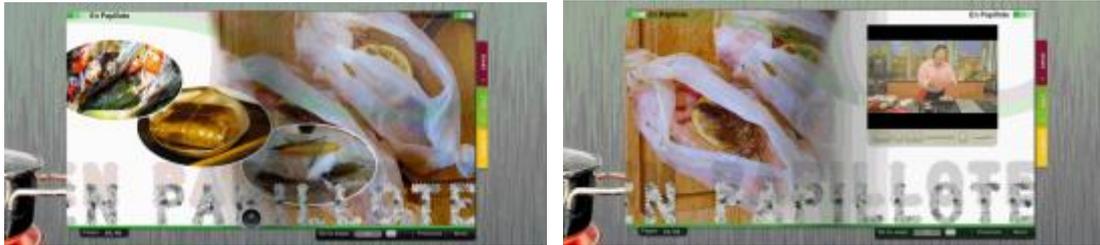
#### **ANSWERS:**

1. Dice the meat and vegetables into even size pieces. Brown off meat pieces in batches and put aside, sauté off the vegetables, add the meat, cover with liquid and cook slowly until meat is tender.
2. Due to the longer much slower cooking method, cheaper/ tougher cuts of meat are tenderised and broken down. Its important not to boil the meat as this actually toughens the meat.
3. A braise refers to whole pieces of meat (eg joints or lamb shanks) and half covered in liquid and stews refer to pieces of meat cut up (eg cubed beef) and are just covered with liquid.

# 13

## EN PAPILOTE

Refer pages 39 – 42 of 'Fliplet'



### Outline

- En Papillote is a French term that refers to food that is cooked in a parcel. It outlines what food can be cooked in and why it is a good method to use.
- VIDEO – Pg 42 cooking En Papillote.

### Suggested Activities

#### **QUESTIONS:**

1. What can you wrap your food in to cook it?
2. Why would you wrap your food to cook it?

#### **ANSWERS:**

1. Paperbark, banana leaves, palm leaves, baking paper, tin foil, clay
2. To help protect from heat and retain moisture and nutrients. Healthy cooking method.

#### **ACTIVITY:**

Try using different types of wrap, taste and discuss the different flavours the dish has.

# 14

## MICROWAVING

Refer pages 43 – 44 of 'Fliplet'



### Outline

- How microwave cooking works is discussed, along with why it might be necessary in commercial kitchens.
- Importance of knowing how to use a microwave.

### Suggested Activities

#### **QUESTIONS:**

1. How does a microwave cook food?
2. What are microwaves mostly used for in a commercial kitchen?
3. List two advantages of a microwave and two disadvantages.

#### **ANSWERS:**

1. A microwave uses electricity to create microwaves which heats the moisture in the food.
2. Reheating food, melting ingredients and defrosting quickly if required.
3. Advantages – quick cooking method for small items only, healthy cooking method  
Disadvantages – cooks unevenly, cannot be used for large amounts of food items.

# 15

## REVIEW

Refer pages 45 – 46 of 'Fliplet'



- Reviews all aspects that have been covered in the 'Fliplet'
- 1. Heat transfer
- 2. Dry Heat Cooking Methods
  - a. Shallow and Stir Frying Methods
  - b. Deep Frying
  - c. Grilling
  - d. Roasting
  - e. Baking
- 3. Moist Cooking Methods
  - a. Poaching
  - b. Boiling
  - c. Steaming
- 4. En Papillote
- 5. Microwaving

# 16

## QUIZ

Refer pages 47 – 48 of 'Fliplet'



### Questions / Answers

#### Activity 1:

How much oil do you need for these methods of cooking?

**Sauté – 1 oil**

**Shallow Fry – 3 oils**

**Stir Fry – ½ oil**

#### Activity 2:

Grilling is a type of what heat transfer?

**Radiation**

#### Activity 3:

What is it called when we wrap meat in fat before cooking?

**Barding**

# 17

## GLOSSARY

Refer pages 49 – 50 of 'Fliplet'



- The glossary reviews the key words from the Fliplet in the written word, a picture format and audio format. This is so the students can practice identification and pronunciation of the key words.

# 18

## RESOURCE SUGGESTIONS/WEBSITES

### RESOURCE SUGGESTIONS/WEBSITES

#### Resource

Make flash cards of signs found in the kitchen and have the students either in groups or pairs, take turns in identifying what they mean. You could divide the class into teams and make a game out of it with a reward at the end for the most correct answers.

#### **ACTIVITY:**

Do you bake at home? What have you baked? Maybe you can try baking a simple chocolate cake or sponge cake with the students.

#### Websites

(Online resources were current at time of writing; if web pages are no longer current search alternate web sites?)

Sponge cake recipe

<http://allrecipes.com.au/recipe/7355/perfect-sponge-cake.aspx>

Lamingtons

<http://www.aussie-info.com/identity/food/lamington.php>

# NOTES

