Program Support Notes

Bringing It to the Boil
Basic Moist Cooking Methods and Food Storage

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For Teachers:

**Brief Summary**

In recent years the practice and art of cooking has been on the decline. This may be due to ready-to-eat meals and takeaway options becoming more readily available, but has been fuelled in part by the lack of cooking knowledge and skills displayed by the average consumer. This program provides an informative and in-depth look at the basic moist cooking methods, the final program centred on the methods of cooking food. An overview of the methods of transferring heat is given then the program concentrates on the moist methods of cooking and the main food storage systems.

The cooking methods and food storage systems mentioned in detail are:

- Boiling
- Blanching and Parboiling
- Simmering and Poaching
- Steaming
- Braising and Stewing
- Cook-chill
- Cook-freeze
- Sous vide
- Microwaves

The moist methods of cooking are taught across many year levels, ranging from junior secondary level to tertiary levels. This program covers the basics of each moist cooking method in detail, with emphasis on equipment to be used, safety guidelines, foods suitable and best practice. Students’ will find the program valuable at all stages of schooling as it is suited to be used at any secondary or tertiary stage. To add interest and give a greater perspective on the hospitality and food industry, the program shows the use of the moist cookery methods in both a commercial and domestic setting.

The food storage systems shown in the program are shown in a commercial context. The stages of each of the food storage systems are shown in detail, including the machinery and equipment that is used. The information given in this section is of a standard that only an excursion into a commercial food production and storage plant could surpass.

**Program Timeline**

00:00  Warning screen
00:30  Opening title & introduction
01:12  Heat transfer methods
02:52  Summary
03:07  Boiling
05:26  Summary
05:54  Blanching and parboiling
07:37  Summary
07:56  Simmering and poaching
09:46  Summary
10:09  Steaming
12:51  Summary
13:10  Braising and stewing
15:57  Summary
16:22  Cook chill
17:10  Summary
17:33  Cook freeze
19:27  Summary
20:05  Sous vide
21:37  Summary
21:59  Microwave
25:33  Summary
25:53  Wrap up
26:30  End credits
26:51  End
Further areas to consider

This program is content rich and therefore students’ would benefit from studying a chapter or two at a time. More than one viewing may be needed on some chapters due to the high level of information given. The chapters are ‘Heat Transfer Methods’, ‘Boiling’, ‘ Blanching and Parboiling’, ‘Simmering and Poaching’, ‘Steaming’, ‘Braising and Stewing’, ‘Cook-chill’, ‘Cook-freeze’, ‘Sous vide’ and ‘Microwaves’. A practical application of each chapter’s method of cooking could be explored while working through the program. Outlined below are recipes, taken from Cookery the Australian Way (Cameron and Russell, 6th edition, 1998) that link to each method of cooking studied in the program:

- Boiling- boiled fruitcake p 387
- Blanching and Parboiling- capsicum boats p 237
- Simmering and Poaching- poached fish in lemon sauce p 159
- Steaming- chocolate steamed pudding p 332
- Braising and Stewing- peach compote p 315
- Microwaves-apple coffee cake p 377 (linked to after viewing activity)
For Students:

Before Viewing

- Debate the following issues:
  - “Dry cooking methods are better than moist cooking methods”
  - “Knowledge and skills in cooking are essential to living”
  - “Knowledge and skills in cooking have decreased due to increases in ready to eat meals and takeaway food outlets”

- Draw up a concept map of the moist methods of cooking, including equipment used and suitable foods.

- View a current cooking demonstration show and record on a table how many moist methods of cooking are used throughout the entire show.
**While Viewing**

1. Define moist heat cooking methods.

2. Fill in the following table while watching the program:

<table>
<thead>
<tr>
<th>Cooking method</th>
<th>Foods suitable</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td></td>
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<tr>
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<td></td>
</tr>
</tbody>
</table>

**Heat transfer methods**

3. Fill in the following flow chart on conduction:

![Flow chart on conduction]

4. Fill in the following flow chart on convection:

![Flow chart on convection]

5. Explain what radiation is?

---

**Boiling**

6. Why is it important to know that water boils at 100°C at sea level?
7. Define what “boiling” is:

________________________________________________________________________

________________________________________________________________________

8. Explain the differences between the two methods of boiling.

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

9. What are the main points to remember when boiling?

________________________________________________________________________

________________________________________________________________________

Blanching and Parboiling

10. Define what blanching is:

________________________________________________________________________

________________________________________________________________________

11. What is blanching used for?

________________________________________________________________________

________________________________________________________________________

12. What are the main steps in blanching?

________________________________________________________________________

________________________________________________________________________

13. How is parboiling different to blanching?

________________________________________________________________________

________________________________________________________________________

14. What is parboiling used for?

________________________________________________________________________

________________________________________________________________________
Simmering and Poaching

15. What are the differences between boiling and simmering?

16. What is poaching? How is it different from boiling/simmering?

17. List the main steps in poaching.

Steaming

18. List the foods suitable for steaming.

19. Why are poultry and meats bland when steamed?

20. List 3 pieces of equipment used to steam foods.

21. List some safety issues when steaming foods.

Braising and Stewing

22. What is the difference between braising and stewing?

23. List some suitable foods for these processes and explain why they are suitable.
24. List the main steps in either process.

25. Define the cook-chill process.

26. Why is food safety important in the cook-chill process?

27. How long can cook-chill products be stored for?

28. Where would the cook-chill process be used?

**Cook-freeze**

29. Who uses the cook-freeze process?

30. What are the important steps in the cook-freeze process?

31. How long can cook-freeze products be stored for?

32. How are foods “converted” after the cook-freeze process?
**Bringing It to the Boil**

**Basic Moist Cooking Methods and Food Storage**

**Sous vide**

33. What does the term “sous vide” mean?

34. What are the steps in the sous vide process?

35. How long can a sous vide product be stored for?

36. What foods are suitable for this process?

37. How are sous vide foods reheated?

38. Why is this an important food storage system?

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**Microwaves**

39. Outline the process of how microwaves cook food.

40. Why is the microwave a good option for cooking vegetables?

41. Why is the position of the food in the microwave oven important?

42. List the safety steps in using a microwave oven, including caring for the oven.

43. What dishes can be used in a microwave?
After Viewing

- A newspaper has published an article stating that “sous vide is a dangerous process to store food”. Write a letter to the editor explaining the process of sous vide and your response to their statement.

- Compare a cake cooked in a microwave oven and conventional oven, making sure that both batches are kept the same (apart for the oven choice). The recipe for Apple coffee cake, page 376 in Cookery the Australian Way, 6th edition (1998) includes both a conventional and microwave oven method.

Evaluate the cakes according to:
- Ease of preparing
- Ease of use of the microwave and oven
- Overall cooking time
- Look
- Smell
- Texture
- Taste
- Height
- Weight

- Select a fruit or vegetable. Prepare and cook it using a number of the moist cooking methods. Discuss the differences between the methods of cooking and the end result.

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Before cooking</th>
<th>Method 1:</th>
<th>Method 2:</th>
<th>Method 3:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
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<tr>
<td>Colour</td>
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<td>Texture</td>
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<td>Taste</td>
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<td></td>
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<tr>
<td>Smell</td>
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Useful Related Websites

www.recipes.co.nz/cookingtips/Cooktech.html
www.foodsafety.vic.gov.au
www.vhetta.com.au

Other Relevant Programs available from VEA

Turning Up the Heat! Basic Dry Cooking Methods
It’s a Blast! Blast Chilling & Freezing in Food Production
Catering for an Event
Spick and Span
If Only I’d...Health, Safety and Security Procedures in the Hospitality and Tourism Industries
The Knives are Out: Using Kitchen Knives Correctly
Have a Nice Day: Working with Colleagues & Customers in Hospitality and Tourism

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