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HCM 333



**Food and Beverage
Services III
Module 2**

HCM 333 (Food and Beverage Services III)

Module 2

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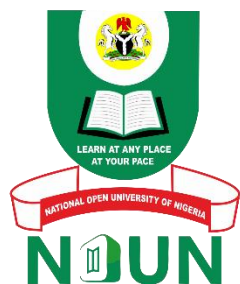
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Module 2 Food and Beverage Services III

Unit 1 Fat Flours, Commodities for Pastry Production

1.0 Introduction

In the last unit, we discussed about the use of eggs and farinaceous dishes, in addition to the grains used in cooking. Here, we will be discussing on fats, flours, and commodities for pastry production, puddings and sweets.

The first unit deals with fats, flours and commodities used in food production so that you will be able to identify fats, flours and other commodities and be able to prepare them into pastries, puddings and sweets.

2.0 Objectives

By the end of this unit, you should be able to:

- identify fats, flours and other commodities used for pastry, pudding and sweets
- prepare pastries, puddings and sweets
- identify different types of paste, dough
- select materials for production of hot and cold sweets.

3.0 Main Content

3.1 Fats and Flours

They are sources of energy, Fats are solid at room temperature in the diet.

They are used for:

- Spreading on bread e.g. butter, margarine
- Creaming for cakes e.g. butter, margarine
- Shortening for pastry e.g. lard, vegetable fat
- Frying deep and shallow e.g. lard, vegetable oil, butter, margarine
- Oiling baking tins
- Salad creams
- Ice creams.

3.1.1 Different Types of Fats

- Butter: This is made from cream which has to be separated from milk. It contains at least 82% after separation from milk. It is pasteurized, the bad odour is removed then it is held to harden, the fat globules for some hours, and then churned.
- Lard is produced from pigs; its quality depends on where it is on the body. Uses: for deep and shallow frying.

- Margarine: made from vegetable oil like sun flower, Soya oil, pastry making for creaming if softened.

3.1.2 Types of Flour

Wheat is a main cereal which is usually grounded into flour before it is used for food.

- Whole meal flour: brown flour which is 100% extraction rate.
- Wheat meal flour: brown in colour contains 85% extraction rate and 15% discarded as bran.
- White flour: white in colour contains 70% of the original grain with most of the bran, germ, fat, minerals removed.

3.1.3 Other Commodities Used for Pastry

- Sugar: sugar is made from either sugar cane which is grown in tropical countries. It is an important source of energy to the body, so also it is always used in sweet pastries like cake, bread, dough nuts etc.
- Eggs: Egg contains 3 main parts: the shell, the white and the yolk.
- Uses: Cake making, meat pie, croquets, for coating, glazing, added to sauces, garnishing, mayonnaise, batters, puddings, biscuits, salads, etc.
- Raising agents: This is used in order to make flour mixture e.g. cake bread to rise and have a light pleasant texture.

Examples

1. Baking powder consists of bicarbonate of soda, acid, sodium pyrophosphate acid calcium phosphate, starch. It is useful for plain cake mixtures, pastries, biscuits.
2. Yeast: is a microscopic living agent naturally found on the skins of some fruits and in the air.

3.1.4 Raising Agents [Contd]

Uses of yeast: It is used for bread making doughnut

- colourings: are chemicals produced from plants and animals this is
- added to icing sugar to decorate cake, biscuits etc.
- flavours and solvent: food flavours used are from herbs (root), fruits (seeds), berries (barks). These are used in pastry and baking to enrich the taste and smell of food commodities. E.g. vanilla flavour, banana flavour, pineapple, strawberry etc.

3.1.5 Types of Pastries, Butters, Dough

A. Pastries

1. Short pastry
2. Puff pastry
3. Rough puff pastry
4. Sugar pastry
5. Suet pastry
6. Hot water paste
7. Chou paste

1. Short Pastry

- 200g flour
- 50g lard
- 50g margarine
- pinch of salt
- Sieve the flour and salt
- Rub in the fat to a sandy texture
- Make a well in the centre
- Add sufficient water to make a firm paste
- Handle as little as possible

These are used for meat pie, sausage rolls etc

2 Puff Pastry

- 200g flour
- 125ml ice-cold water
- 200g butter
- Lemon salt
- Sieve the flour and salt
- Rub in 50g margarine or butter
- Make a well in the centre
- Add the water and lemon juice and knead well into a smooth dough in the shape of a ball
- Relax the dough in a cool place for 30 minutes
- Cut across half-way through the dough and pull out the corners to form a star shape
- Roll out the point of the star square leaving the centre thick
- Knead the remaining 150g of margarine or butter to the same texture as the dough
- Place the margarine on the centre four times thicker than the flaps
- Fold over the flaps
- Roll out 30 x 15cm cover with a cloth to rest for 5-10 minutes in a cool place
- Allow to rest in a cool place for 20 minutes
- Half turn the paste to the right or to the left
- Give one more double turn, allow to rest for 20 minutes

- Give two double turns and allow to rest in between each before using

Uses: meat pies, sausage rolls, jam puffs

3. Rough Puff Pastry

- 200g flour
- 125ml water
- 150g margarine salt
- Sieve the flour and salt
- Cut the fat into 10 pieces and mix them into the flour without rubbing in
- Make a well in the centre
- Add the water and mix to a fairly stiff dough
- Turn on to a floured table and roll into an oblong strips of about 30 cm
- Give one double turn as for puff pastry
- Allow to rest in a cool place covered with a cloth for 30 minutes
- Give three more double turn, resting between each
- Allow to rest before using.

4. Sugar Pastry

- 200g flour
- 50g sugar
- 125ml butter
- egg
- Pinch of salt.

Method 1

- Cream egg and sugar but do not allow to over soften
- Add the margarine and mixture a few seconds
- Gradually incorporate the sieved flour and salt
- Mix lightly until smooth
- Allow to rest in a cool place before using

Method 2

- Sieve the flour and salt
- Lightly rub in the margarine to a sandy texture
- Make a well in the centre
- Add the sugar and beaten egg
- Mix the sugar and egg until dissolved
- Gradually incorporate the flour and margarine and lightly
- Mix to a smooth Paste.

Uses: for flans, fruit tartlets etc.

5 Suet Paste

- 200g flour
- 10g baking powder
- 125ml water
- 100g chopped beef

- Pinch of salt
- Serve flour, baking powder and salt
- Mix in the suet
- Make a well
- Add the water
- Mix lightly to a fairly stiff paste
- Break the beef into pieces, sprinkle with flour and
- Chop with a chopping knife.

Uses: steamed puddings, jam rolls, steamed meat puddings.

6. Hot Water Paste

- 100g flour
- 125ml water
- 50g lard
- Serve the flour and salt into a warm basin, make a well in the centre.
- Boil the lard in the water
- Pour into the middle of the flour
- Mix quickly with a wooden spoon
- Knead with hands while warm until smooth

Uses: raised pork pies, real pies and ham pies

7. Choux Paste

- $\frac{1}{2}$ litre water
- 125g flour
- Pinch of salt
- 100g margarine
- eggs
- Pinch of sugar
- Bring the water, sugar and fat to boil in a sauce pan.
- Remove from heat
- Add sieved flour and salt and mix with a wooden spoon
- Return to a moderate heat and stir continuously until the mixture leaves the sides of the pan.
- Remove from the heat and allow to cool
- Gradually add the beaten eggs, mix very well and allow the paste to drop consistency.

3.1.6 Uses: Chocolate Éclairs, Cream Burns etc

Hot Sweets

1. Victorian sandwich
2. Genoese sponge
3. Steamed fruit puddings
4. Vanilla soufflé.

3.2 Hot Sweets

1. Victorian Sandwich

- 100g castor sugar
- 100g flour
- 100g butter
- 2 eggs
- $\frac{1}{2}$ spoon baking powder
- Cream the fat and sugar until soft and fluffy
- Gradually add the beaten eggs
- Lightly mix in the sieved flour and baking powder
- Divide into two 14cm 7 in g
- Reused sponge tins
- Bake in a hot oven 230⁰c for 15 minutes
- Turn out on a wire rack to cool
- Spread one half with jam, place the other half on top
- Dust with king sugar
- Serve on a doily on a silver flat

2. Genoese Sponge

- eggs
- 100g sugar
- 100g flour
- 50g butter
- Whisk the eggs and sugar with a balloon whisk in a bowl over a pan of hot water
- Continue until the mixture is light, creamy, double in bulk
- Remove from the heat and whisk until cold and thick.
- Fold in the melted butter very gently
- Place in a greased butter gently
- Bake in a moderately hot oven 200⁰c-230⁰c for 30 minutes

3. Steamed Fruit Pudding

- 200g flour
- 350g fruit
- 100g sugar
- 2 + able spoon water
- Grease the basin
- Line, using three quarter of the paste
- Add prepared and washed fruit and sugar. Adding 1-2 cloves in an apple pudding
- Add two table spoon of water
- Moisten the edge of the paste
- Cover the remaining quarter of the paste and seal firmly
- Steam for 1 $\frac{1}{2}$ hour
- Clean the basin and wrap a folder serviette
- And pour on it a custard sauce

4. Vanilla Soufflé

- 125ml milk
- 10g flour
- 10g butter
- 50g sugar
- eggs
- Vanilla
- Coat the inside of a soufflé dish with fresh butter as thinly as possible
- Coat the butter in the soufflé case with sugar
- Boil the milk and vanilla in a thick bottom pan
- Mix 2 egg yolks, 10g flour, 50g sugar to a smooth consistency in a basin
- Add boiling milk to the mixture, stir vigorously
- Until completely mixed
- Return the mixture to a clean thick bottomed pan and stir continuously with a wooden spoon over gentle heat until the mixture thickens then remove from heat
- Allow to cool slightly.
- Add 2 eggs, 15g butter and mix thoroughly
- Stiffly whip the 4 egg whites and carefully fold into the mixture which should be just warm
- Place mixture into the prepared mould; level it off with a palette knife
- Place on a baking sheet and cook in a moderately hot oven
- Pass through a fine strainer into a bowl
- Freeze in an ice-cream machine, gradually adding the cream

Self-Assessment Exercise

1. List the types of pastries
2. Prepare 1 pastry and 1 sweet

4.0 Conclusion

Now, you should be able to identify fats, flours and other commodities used in pastry, and sweets and also to identify the different types of pastes in pastry making.

5.0 Summary

You have studied extensively on the various types of pastries, fats, flour and other commodities used in pastry and should be able to prepare various sweets, both hot and cold.

6.0 Self-Assessment Exercise

1. Explain the different commodities used in pastry
2. What kind of pastries can be used for meat pie?

7.0 References/Further Readings

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Unit 2 Freezing Techniques, Chilled and Iced Confectioneries

1.0 Introduction

In HCM 333, you studied the different types of techniques in preserving food of which chilling and freezing is one. You will be studying it extensively by knowing the use of chilling and freezing techniques, how to make sweet, using fruit, the use and preparations of convenience products like processed fruits.

The first section of this unit treats the chilling and freezing techniques while the second one shows how to make use of sweet using fresh fruit, and followed by convenience products like processed fruits, sauce for sweets.

2.0 Objectives

By the end of this unit, you should be able to:

- identify chilling and freezing techniques
- identify various sweets from fresh and processed fruits
- describe various sauces for sweet for presentation
- demonstrate how to cook and present convenience products.

3.0 Main Content

3.1 Use of Chilling and Freezing Techniques

Chilling is a catering system based on normal preparation and cooking of food, followed by rapid chilling storage in controlled low –temperature conditions above freezing point 0- 3⁰c and subsequently reheating immediately before consumption. Almost any food can be chilled provided that the correct methods are used during preparation.

3.2 Examples of Food Suitable for Chilling

Meats

All meats, poultry, game and offal can be cooked, chilled, sliced like strip loin of beef, and rapidly cooked, chilled, sliced and packaged for storage at 70⁰c.

- **Fish:** all pre-cooked fish dishes are suitable for chilling
- **Egg Dishes:** egg dishes like omelets and scrambled eggs are chilled and used in air lines. Soups and sauces: most soups and sauces can now be successfully chilled.
- **Desserts:** large number of deserts are chilled well especially, the cold variety.
- **Purpose of Chilling Food:** the purpose of chilling food is to prolong its storage life and also prevent it from getting spoilt by bacteria and other micro-organism.

Process of Chilling: i.e. chilling technique:

1. Food should be cooked sufficiently.
2. Chilling process must begin as soon as possible after completion of the cooking, portioning processes within 30 minutes of leaving the cooker and chilled to bellows and thus storage time cannot be more than five days.
3. Food should be stored at 0 -3⁰c.
4. Chilled food should be distributed under such controlled conditions that any rise in temperature of the food during food distribution is kept to a minimum.
5. Heat immediately removed from regeneration and raise the temperature to a level of at least 70⁰c
6. Chilled heated food should be consumed as soon as possible and not more than 2 hours after reheating.
7. Discard any unconsumed, chilled, and reheated food immediately

3.2.1 Chilling Technique

1. Time and temperature are crucial
2. Food should not wait longer than 30 minutes to be chilled
3. Food should not be above 3⁰c at end of chilling time
4. Food should not be stored beyond its use by date
5. Temperature of food rising above 30c chilling transportation due to long journey in un-refrigerated transport or the refrigerated van not operating correctly.

3.2.2 Freezing

Freezing is a specialised food production and distribution system that allows caterers to take advantage of longer life through freezing at 18 to 20⁰c and stored at same temperature until is required for resale or consumption for up to 3- 6 months.

This process is similar to chilling but the recipes used have to be modified so that on reheating the food / sauces does not separate.

3.2.3 Freezing Processes

1. Food ordered with high quality
2. Food delivered cooked and prevented from spoiling before being processed.
3. Menu must be cooked to high standards, rigidity to quality control and hygiene.
4. Cooked food must be portioned before freezing
5. Frozen foods must be at 18⁰c
6. Transport, in insulated containers
7. Outdoor use should be transported in refrigerated transport.
8. There must be standard set time for the regeneration of various types of dishes.

3.2.4 Techniques for Freezing

1. Freezing should be done immediately after cooking
2. Food must be frozen at -5⁰c within 90 days
3. Allow 2cm air space between layers of containers in the freezer.
4. Food must be transported immediately after freezing to deep - freeze storage.

5. Store at - 20⁰c
6. Monitor temperature at all times
8. Store food in accepted manner on shelves, racks above the floor away from the door with enough space around to allow the cold air to circulate.
9. Wear protective clothing when entering deep – freeze store.
10. Destroy any food that has passed use by date.
11. Monitor and record food temperatures regularly to prevent contamination from in correct storage conditions
12. Maintain flavour and texture of food
13. Use older stock before new stock
14. Prevent unnecessary opening to store doors which would destabilise the temperature.

3.2.5 Using Fish and Processed Fruits

Fish Sweets

1. Fish cake
2. Fish pie
3. Fish in batter

1. Fish Cake

- 200g of fish (remove bone and skin)
- 200g potatoes mar shed
- Salt & pepper
- 1 egg
- 50g breadcrumbs
- Fat
- Combine the fish potatoes and egg and season.
- Divide into 4 mould into balls
- Pass through the coating of flour, egg and bread crumbs
- Flatten slightly, neaten with a palette knife
- Deep fry in hot fat at 185⁰c for 3 minutes.

2. Fish Pie

- 250ml béchamel
- 200g cooked fish
- 50g cooked clicked mushroom
- 1 hard boil eggs
- Chopped parsley
- 200g mashed duchess potatoes
- Boil the béchamel
- Add the fish, mushroom, egg and parsley and correct the seasoning
- Place in a pie dish
- Place or pipe potato on top and brush with egg wash or milk
- Brown in a hot oven

3. Fish in Batter

- 200g flour
- Salt
- 10g yeast
- 250ml water or milk
- 1 egg
- 200g fish
- Sieve the flour make a well and add egg and liquid
- Gradually incorporate the flour, beat to a smooth mixture
- Pass the prepared wash and well dried fish through flour
- Shake off the surplus and pass through the batter.
- Place carefully away from you to the hot oil and deep fry at 170°C
- Until it turns a golden brown remove and drain well.
- Sieve with either lemon quarters or tartare sauce

3.3 Convenience Food

Convenience food is a wide range of part prepared food which means that certain stages or steps in the process have been eliminated, this lessens labours required in their preparation. Convenience food can be categorized into fresh, dried, canned, bottled, frozen, chilled, vacuum packed and portion controlled food e.g. butter portions, jam portions convenience can also be categorized into full convenience, pre- service convenience, pre- cooking convenience pre-assembly convenience and basic convenience.

Type	Package items where food is cooked or prepared	Beverages	Packaged items where food is not cooked or fully prepared
Full convenience	Butter portions, jam portions, sliced bread, potted shrimps, gateaux salad dressing	Fruit juice	Frozen fruit
Preserve convenience	Ice cream, canned fruit, canned meat, canned soup, fruit piles.	Tea bag, liquid coffee	Frozen fruit
Pre-cooking convenience	Canned steak, dehydrated soup, sausage rolls, fish fingers, coquilles	-	Uncooked frozen pies, pastries, bread crumbs, scamp, scallops, portioned meat
Pre-assembly convenience	Canned steak, frozen pastry, fruit pie fillings, pastry produces	Ground coffee	Sponge mixes, pastry mixes, unfrozen scamp, fish fillers, and portioned meat.
Basic convenience	-	Coffee beans (to be around)	Peeled vegetable, dried fruit, ointments, minced meat, sausages.

3.3.1 Examples of Convenience Food

1. Fried ham
2. Pizza
3. Cocktail canapés
4. Crab cakes
5. Potato wedges with tomato chill salsa
6. Honey prawns
7. Deep-fried pork noodles.

1. Fried Ham and Cheese Savoury

- 4 Slices of cooked ham
- 8 Slices ciruyere cheese
- 8 Slices thin toast
- 50g Caulfield butter

Method

- Place each slice of ham between two slices of cheese then put between two slice of lightly toasted bread cut out with a round cutter.
- Gently fry on both sides in clarified butter and serve.

2. Pizza is a flat bread which originated from Italy.

- 200g flour
- pinch of salt
- 12g margarine
- 5g yeast
- 125ml water or milk
- 5g castor sugar
- 100g onions
- 2 cloves garlic
- 60ml sun flower oil
- 200g caned plum tomatoes
- 3g oregano
- 3g basil
- 10g sugar
- 10g corn flour
- 100g mozzarella cheese

Method

- Sieve the flour and salt, rub in the margarine
- Disperse the yeast in the warm alkaline water add the castor sugar to the flour.
- Mix well, knead to a smooth dough place in a basin covered with a damp cloth and allow to prove until doubled in size.
- Knock back, divide into two and roll into two 18cm. Place on a lightly greased baking sheet.
- Sweat the finely chopped onions and garlic in the oil until cooked.
- Add the roughly chopped tomatoes, tomato purées, oregano and basil and sugar and bring to boil and simmer for 5 minutes

- Dilute the corn flour in a little water, stir into the tomato mixture and bring back to the boil
- Take the discs of pizza dough and spread 125g of filling on each one.
- Sprinkle with grated mozzarella cheese or lay the slices of cheese on top
- Bake in a moderately hot oven at 180°C for 10 minutes

3. Cock Tail Canapés

- (a) Hot savoury pastry patties, botches of lobsters, chicken, crab, salmon, mushroom, etc small pizzas hamburger, brochettes.
- (b) Hot sausages with various filling, like chicken livers prawns, mushroom, tomatoes, gherkins etc wrapped in bacon and skewered and cooked under the salamander.
- (c) Game chip, gail frette potatoes, fried fish balls, celery stalks spread with cheese.

4. Crab Cakes

- 350g crab meat
- 650g uncooked prawns
- 1 tablespoon red curry paste
- 1 egg
- 2 spring onions
- 2 tablespoon chopped fresh colanders
- 2 tablespoon lemon grass
- 1 red chili
- 2 tablespoon vegetable oil
- 2 tablespoon lime juice
- 2tablespoon water
- 2 tablespoon fish sauce
- 2 tablespoon sugar
- 1 kaffir lime

Method

- Place crab in a food processor, curry paste, egg onion, colanders, lemongrass
- Chili grill until all mixed together.
- Shape into small cakes
- Heat oil in shallow pan and fry on both sides until golden brown. Drain + serve with
- Suitable sauce.

5. Potato Wedge with Tomato Chilli Salsa

- large potatoes
- 1 teaspoon coarse black pepper
- 1 teaspoon sea salt
- Tomato salsa
- 1 large beef tomatoes peeled, seeded, finely chopped
- 1 red onion
- 1 tablespoon lime juice
- 1 tablespoon of chopped fresh basil leaves

Method

- Wash the potatoes, cut into wedges
- Heat, sprinkle with salt and pepper in a suitable tray
- Bake in a hot oven until brown
- Prepare salsa: place all ingredients into a suitable bowl and mix well
- Place the cooked potatoes on a serving platter arrange around a bowl of sour cream and a bowl of the salsa.

4.0 Conclusion

So far, chilling and freezing techniques have been dealt with extensively. You should be able to know the techniques of chilling and freezing food and the different types of convenience foods.

5.0 Summary

Examples of suitable chilling and frozen foods have been given and convenience foods classified into 5 categories. Examples of such food have also been given. You are expected to know how to chill food, freeze food, and cook some convenience foods.

6.0 Self-Assessment Exercise

- 1 List the technique of chilling Food
- 2 State the 5 categories of convenience Food

7.0 References/Further Readings

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