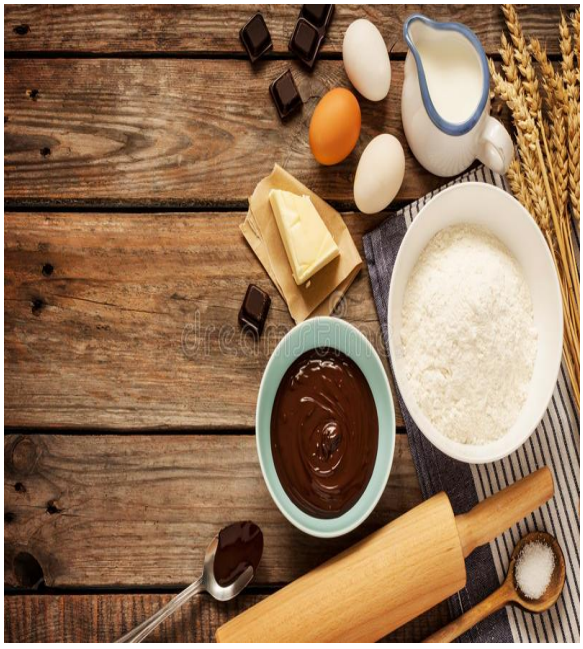
COMPETENCY BASED LEARNING MATERIAL

Sector:	Tourism (Hotel and Restaurant)
Qualification:	Bread and Pastry Production NC II
Unit of Competency:	Prepare and Produce Pastry Products
Module Title:	Preparing and Producing Pastry Products





HOW TO USE THIS LEARNER'S GUIDE

Welcome to the module: **BREAD AND PASTRY PRODUCTION NC II.** This module contains training materials and activities for you to complete.

The unit of competency ***"Prepare and Produce Pastry Product"*** contains the knowledge, skills and attitudes required for a bakers and pastry cooks (patissiers). It is one of the CORE Modules at National Certificate Level (NCII).

You are required to go through a series of learning activities in order to complete each learning outcomes of the module. In each learning outcome there are ***Information Sheets, Resource Sheets*** and ***Reference Materials*** for further reading to help you better understand the required activities. Follow these activities on your own and answer self-check at the end of each learning outcome. Get the answer key from your instructor and check your work honestly. If you have questions please don't hesitate to ask your facilitator for assistance

Recognition for Prior Learning (RPL)

You may already have some or most of the knowledge and skills covered in this learner's guide because you have:

- Been working for some time
- Already completed training in this area

If you can demonstrate to your trainer that you are competent in a particular knowledge or skills, talk to him/her about having them formally recognize so you won't have to do the same training again. If you have qualification or Certificate of Competency from previous training, show them to your trainer. If the skills you acquired are still relevant to the module, they may become the part of the evidence you can present for RPL.

At the end of this learning material is a learner's Diary. Use this diary to record important dates, jobs undertaken and to other workplace events that will assist you in further details to your trainer or assessors. A Record of Achievement is also provided for your trainer to complete once you complete this module.

This learning material was prepared to help you achieve the required competency, in **BREAD AND PASTRY PRODUCTION NC II**. This will be the source of information for you to acquire knowledge and skills in this particular trade, with minimum supervision or help from your instructor.

In doing the activities to complete the requirements of this module, please be guided by the following:

1. Talk to you trainer and agree on how you will both organize the training of this unit. Read through the learning guide carefully. It is divided into

sections which cover all the skill and knowledge you need to successfully complete in this module.

2. Work through all the information and complete the activities in each section. Read information sheets and complete the self- check. Suggested references are included to supplement the materials provided in this module.
3. Most probably your trainer will also be your supervisor or manager. He/she is there to support you and show you the correct way to do things. Ask for help.
4. Your trainer will tell you about the important things you need to consider when you are completing activities and it is important that you listen and take notes
5. You will be given plenty of opportunity to ask questions and practice on the job. Make sure you practice your new skills during regular work shifts. This way you will improve both your speed and memory and also your confidence. Talk to more experience workmates and ask for their guidance.
6. Use the self-check questions at the end of each section to test your own progress.
7. When you are ready, ask your trainer to watch you perform the activities outline in this module.
8. As you work through the activities, ask for written feedback on your progress. Your trainer keeps feedback/pre-assessment reports for this reason. When you have this learning material and feel confident that you have sufficient knowledge and skills your trainer will arrange and appointment with a registered assessor to assess you. The results of the assessment will be recorded in you competency Achievement Record.

LIST OF COMPETENCIES

No.	Unit of Competency	Module Title	Code
1.	Prepare and Produce Bakery Products	Preparing and Producing Bakery Products	TRS741379
2.	***Prepare and Produce Pastry Products***	***Preparing and Producing Pastry Products***	***TRS741380***
3.	Prepare and Present Gateaux, Tortes and Cake	Preparing and Presenting Gateaux, Tortes and Cake	TRS741342
4.	Prepare and Display Petit Fours	Preparing and Displaying Petit Fours	TRS741344
5.	Prepare Desserts	Preparing Desserts	TRS741343

LEARNING OUTCOME SUMMARY

Qualification/Level:	**BREAD AND PASTRY PRODUCTION NC II**
Unit of Competency:	PREPARE AND PRODUCE PASTRY PRODUCTS
Module Title:	Preparing and producing pastry products
Module Descriptor:	This unit deals with knowledge and skills required by bakers and pastry cooks (patissiers) to prepare and produce a range of high-quality pastry products in commercial food production environments and hospitality establishments
Nominal Duration:	24 hours

Summary of Learning Outcomes:

Upon completion of this module, the students/trainees will be able to:

LO1. Prepare pastry products

LO2. Decorate and present pastry products

LO3. Store pastry products

DETAILS OF LEARNING OUTCOME

LEARNING OUTCOME 1.1	PREPARE PASTRY PRODUCT

CONTENTS:

- Varieties and characteristics of bakery products
- Historical and cultural, aspects of bakery products
- Underlying principles in making bakery products
- Knowledge commodity on including quality indicators of ingredients for bakery products, properties of ingredients used, interaction and changes during processing to produce required characteristics
- Properties and requirements of yeast and control of yeast action
- Culinary and technical terms related to bakery products commonly used in the industry
- Expected taste, texture and crumb structure appropriate for particular bakery products.
- Ratio of ingredients required to produce a balanced formula
- The influence of correct portion control, yields, weights and sizes on the profitability of an establishment

ASSESSMENT CRITERIA:

1. Required ingredients are selected, measured and weighed according to recipe or production requirements and established standards and procedures1.
2. A variety of pastry products are prepared according to standard mixing procedures/formulation/ recipes and desired product characteristics
3. Appropriate equipment are used according to required bakery products and standard operating procedures
4. Pastry products are baked according to techniques and appropriate conditions; and enterprise requirement and standards
5. Required oven temperature are selected to bake goods in accordance with the desired characteristics, standards recipe specifications and enterprise practice

CONDITION: (Tools, equipment, s/m, references/materials

- CBLM
- LMS
- Commercial mixers and attachments
- Cutting implements
- Scales
- Measures
- Bowls

- Ovens
- Moulds, shapes and cutters
- Baking sheets and containers
- Various shapes and sizes of pans
- Personal protective Equipment (PPE)
- Ingredients (Flour, sugar, egg, milk, cream, gelatin, fruits, nuts, flavoring and essences, chocolate, leavening agents (Yeasts, baking powder, etc.)

METHODOLOGIES:

- Reading instructional materials thru online using the LMS
- Synchronous online instructions (JITSI Meet, zoom, Google meet and other available online application software
- Lecture/Discussion (Online)

ASSESSMENT METHODS:

- Online examination

LEARNING EXPERIENCES

LEARNING OUTCOME 1.1: PREPARE PASTRY PRODUCTS	
Learning Activity/Guide	**Special Instruction**
Definition of terms Basic Principles of Baking Read: Information Sheet 2.1.1 • Pastries • Short pastry • Puff pastry • Savoury short pastry 1. Select required commodities according to recipe and production requirements 2. Prepare a variety of pastries • Sweet short pastry • Short pastry • Puff pastry (English & French Method) • Choux pastry • Strudel pastry1 3. Produce a variety of pastries according to standard recipes and enterprise standard Perform Task Sheet 2.1.1 • Perform all activities required. • You must get a rating of 80 to 100%. If you get below 80% rating, go over the same activities. • If you get the required rating, proceed to the next activities	• Perform all activities required. • You must get a rating of 80 to 100%. If you get below 80% rating, go over the same activities. • If you get the required rating, proceed to the next activities After doing all the activities for this LO1. **Prepare Pastry Products**; you are ready to procced to the next LO2. **Decorate and Prepare Pastry**

INFORMATION SHEET NO. 2.1-1

Definition of Terms

Aeration	The rendering of bakery products more appetizing, palatable and digestible by the incorporation of air and/or gas, in one or more of the stages of production before baking. Air is introduced by the production of carbon dioxide gas (CO2) from yeast or baking powder. The internal expansion of air and gas and the pressure of steam during baking, all make a contribution to total aeration
Albumen	One of the many proteins. Where the term is used in the bakery, it is generally accepted to mean the white of eggs.
All-in Process	All the ingredients are mixed together without any preliminary stages
Bake Off	A term used by bakers to describe the operation of baking cakes after they have been prepared for the oven
Baking	To render bakery products suitable for human consumption and digestion by cooking in an oven at correctly controlled temperatures
Baking Powder	Any chemical or mixture of chemicals which, when moistened and heated, generates gas (usually CO2) which will aerate bread and cakes. Ideally the residual salts of reaction should be tasteless and without odour. The baking powder must comply with the Food and Drugs Act of the country in which it is used
Baking Sheet	A metal plate on which buns, cakes, pastries and biscuits are baked. Generally, they have three upturned sides and an open end. The open end will facilitate cleaning.
Basin	A round earthenware or plastic container used for making small quantities of icing
Batch	The entire mixing of bread or cakes; the contents of the oven
Batter	A soft, completed cake mixture. A very soft fermented mixture as for crumpets
Bay	A well, made in a heap of flour and other dry materials to receive the liquid ingredients preparatory to mixing
Beat	The aeration of fat, sugar, eggs and other materials by beating together. This can be done by hand or by machine
Beater	A hand-shaped implement which, when fixed to a machine, beats ingredients such as fat, sugar and eggs
Blanch	A term used to describe bringing anything to boiling point quickly. Used with vegetables prior to freezing to slow microbial activity. Also used to enable easy removal of skins such as from almond kernels

Bowl	A term used to describe bringing anything to boiling point quickly. Used with vegetables prior to freezing to slow microbial activity. Also used to enable easy removal of skins such as from almond kernels
Bun	A term used to describe bringing anything to boiling point quickly. Used with vegetables prior to freezing to slow microbial activity. Also used to enable easy removal of skins such as from almond kernels
Cake	Refers generally to a baked mixture of fat, sugar, eggs and flour, with or without milk, baking powder, A cake can be of any shape or size
Cake Hoop	A metal ring which supports a cake during baking
Cake Tins	Small or large metal shapes in which cakes are baked. They may be plain or fluted.
Centigrade	Divided into 100 degrees, as the centigrade thermometer (first constructed by Celsius, 1701-44), in which the freezing point is zero and boiling point is one hundred.
Coat	To cover a cake or biscuit with almond paste and/or icing, fondant, cream or chocolate
Constituent	A component part of the whole; one ingredient in a formula
Cream	To beat fat and sugar or fat and flour together until light and fluffy. To add cream as a decoration of filling to a baked cake. A common term used to describe all kinds of creams such as dairy cream, buttercream, marshmallow cream, custard cream, etc.
Cup cakes	Small cakes baked in crimped paper cups or cases
Curdle	When fat, sugar and eggs are beaten together carefully, an emulsion is formed. If during the beating, the eggs are added too quickly, or are too cold, or the initial creaming of the fat and sugar is not complete, then the mixture will separate and lose its smooth consistency. Some aeration is lost when a mixture curdles
Decorate	To add fruits, nuts, sugar, etc. to cakes before baking for the purpose of decorating. This is known as being oven-decorated or oven-finished. To add such decorating materials as the above, almond paste, chocolate, cream or icing after baking, generally to make a pattern or a design. The word is given special significance in describing artistic work in royal icing
Deposit	The act of putting cake batter into hoops, pans, tins, etc., either by hand or by machine. The machine used is known as a depositor.
Emulsion	An intimate mixture of two fluids that normally would not mix, such as oil and water. This is done by means of an emulsifier, a machine that will break down the oil and water to minute particles while under pressure, for example, homogenized milk. If an emulsifying agent is used then the emulsion may become permanent. Fat, sugar and eggs correctly beaten together form an emulsion, the lecithin in egg yolks being a good emulsifying agent.

Essences	Aromatic compounds used for flavoring confectionery. They can be natural or synthetic or blends of both
Fingers	Small finger-shaped rolls, biscuits, meringues, sponge cakes
Fondant	A form of icing made by boiling sugar, water, glucose or a weak acid to 115¼C(140¼F), then agitating when it is cool until it forms a mass of minute crystals. It is the reflection of light on the tiny crystals that explains the gloss on correctly prepared fondant
Glycerine	Colorless, odorless syrup with a sweet taste. It is soluble in water and alcohol. Because it is highly hygroscopic it is used in cake mixings to delay staling
Grease	To brush fat into cake tins or to smear fat over baking sheets
High Ratio Cakes	The name hi-ratio is registered in the USA. The term is used to describe cakes containing high percentages of sugar and liquids based on the weight of flour. Special flour and super glycerinated fats are used for this type of cake
Hygroscopic	The power of attracting moisture. For instance, glycerine is hygroscopic. Other examples are icing sugar and bi-carb soda
Icing	The coating and decoration of a cake with royal or plastic icing. The term is also used to describe the decoration of cakes with fondant, water icing, or fudge icing
Lecithin	A phosphorised fatty substance which has a great power as an emulsion stabiliser. Egg yolks and soya beans are both rich in lecithin
Palette Knife	A thin, flat knife with a rounded end used for spreading icing and cake batter. An offset or crank-handled palette knife has the blade at a lower level than the handle. It is used for spreading cake or sponge mixtures on to baking sheets
Pan	A broad, shallow baking tin
Pound cakes	A term used at one time to describe cakes made from 1 lb (500 gm) each of butter, sugar, eggs and flour. The term is now often used for cakes baked in a round hoopor oblong tin such as Madeira, Genoa and cherry
Pre-gelatinised Starch	Pre-gelatinised or soluble starch is produced commercially by blowing a starch suspension onto stem heated rotating rollers. Gelatinisation and drying take place and the dried material is then flaked or ground to make a powder. The process ruptures the starch granules, without completely distorting them, so that they swell in cold water to form a viscous paste
Recipe	An exact formula which will include the weights of the materials to be used for a particular type of bread or confectionery. All other details such as temperature, times, yields, etc., will also be recorded
Sandwich Tins	Round shallow metal tins in which sponge sandwiches are baked
Savory Bag	A triangular shaped bag made of cloth or a plastic material into which a tube is inserted. It is used for piping meringue, sponge fingers and

	drops, soft biscuits, choux paste, etc., onto baking sheets. It is also used to pipe cream on, or in, cakes and pastries
Scraper	A small oblong piece of plastic material, with two corners rounded for scraping downmixing bowls. The straight edge of the scraper can be used to smooth the side of a cake when coating with cream or butter cream. The straight edge can also cut in many ways so that a pattern can be made in the coating, for example, a comb scraper. A metal blade in a wooden handle that is used to scrape the surface of a bench, or for cleaning metal baking trays.
Sieve	Utensil with a wire or nylon mesh through which dry materials are passed. Sieving removes coarse particles, extraneous materials and also is a means of blending. Coarse sieves are used for the cleaning and draining of fruit. A sieve can also be used for fluids or semifluid's
Slab Cake/ Block Cake	Plain or fruited cake baked in rectangular tins or frames. The slabs generally weight about 11/2 to 31/2 kg each according to whether they are plain or fruited
Sodium Bicarbonate	The constituent of baking powder that liberates C02. The maximum is liberated when the correct amount of acid is present
Soft Flour	Flour containing weak gluten
Strong Flour	Flour containing strong stable gluten
Wash	To brush with egg, milk, water, before baking. To brush with a glaze after baking
Water Brush	A soft-haired brush for washing cakes or pastries with water or other liquids before baking, or for glazing after baking
Whip	To rapidly aerate a sponge, meringue or cream by means of a hand or machine whisk
Whisk	An implement made of wire used to whip sponges, meringues and cream by hand. A similar implement is specially made to fix to a machine
Yield	The calculated units from the total baked weight of a particular formula

INFORMATION SHEET NO. 2.1-1

PREPARE AND PRODUCE PASTRIES AND FILLINGS

Pastries

Pastry by definition is a mixture of wheat flour, fats, salt and water. Pastry comes available in several forms or types

Types of Pastry

Several distinct varieties and mostly of European origin:

- Short Pastry: Savoury and Sweet Pastry or Shortbread
- Puff of Flaky Pastry
- Choux Pastry



Varieties of Mediterranean and Middle Eastern Origin:

- Phyllo
- Brik
- Kataifi

These can all be classed in the short paste category.

Short Pastry

Short pastry doughs will have a short texture. Meaning that when they are mixed the dough can be pulled apart easily rather than stretched until it broke. Short pastry can be savoury or sweet. Savoury short pastry will contain fat up to 50% of the flour weight, salt and water. Some enriched doughs can contain eggs that replace water content. Sweet short pastry (traditionally shortbread) can be made from 2 separate formulas

- 2:1:1-2 Flour:1 Sugar:1 Fat
- 3:2:1-3 Flour:2 Sugar:1 Fat

Both of these formulas will use egg or water as a binding agent in the closing stages of mixing. Both formulas can have an aeration agent added to give a lighter eating texture. Refer to recipes in Appendices in back of manual

Puff Pastry



Classical European style pastry that is dough of flour salt and water that has had fat incorporated in layers;
this process is referred to as lamination.

Lamination is also used in sweet yeast dough production; Danish, croissant.

Ingredients

Flour should be smooth, soft, and rich in starch with low gluten content. A part of the flour can be replaced by corn flour. It should be well sieved with the flour and baking powder (if used).
If the flour protein level is too high, then the gluten which inevitably forms will reduce shortness to a greater degree than when low protein flour is used. If the protein level is too low, then flow-out is possible, as some structural properties are still required

Rice Flour

Shortbread made with rice flour, or short pastry dipped into rice flour increases crispness. Scotch Shortbread.

Sugar

As a general rule, the sugar must be fully dissolved during the mixing process. Undissolved sugar can have undesirable effects on the product. It can produce a crust with a gritty texture and it can cause the appearance of dark spots of caramelized sugar on the surface of the baked product. Dissolved sugar also has an influence on the moisture level in the dough. Another function of sugar in the dough is that it has a gluten softening effect, which prevents the over toughening of any gluten which is formed. Because sugar can only do this when in solution, the dissolving of the sugar is vital. The general rule for ensuring that sugar is fully dissolved is to relate crystal size to mixing times. For instance, most shortbread dough has a relatively short mixing cycle and do not contain a significant level of moisture. Therefore, a small crystal size sugar such as caster sugar is required. Scotch Shortbread, which has an even shorter mixing cycle, and contains no added moisture, requires the use of icing sugar, to ensure that it dissolves rapidly

Fat

The fat is the ingredient with the major influence on both flavour and consistency. Shortbread can be made with margarine or butter, or a mixture of both. With regard to consistency: Short pastry with a low fat content easily becomes doughy and tough, as it has to have more milk or water to bind the flour. After baking it may shrink and get hard quickly. Short pastry with too much fat, becomes very soft and oily, making it difficult to work with. Soft, warm and oily fats are also unsuitable

If the fat is too cold, a longer mixing time may be required. This is to prevent the possibility that inadequate dispersion of the fat will allow formation of gluten from the uncoated flour particles.

If the fat is too warm and soft, oiliness could result, allowing the escape of the fat from the dough both before and during baking. This would result in a dry and tough product.

Although Butter shortbread has the better flavour, sometimes it is advisable to replace some of the butter with margarine to extend the working time with the pastry, especially in warmer climates or in production areas with high room temperatures. This is to handle the dough more successfully and to avoid excessive flour in the pastry

Replacing fats

When replacing margarine or shortening with butter it is vital to reformulate the recipe, to produce the similar textured shortbread.

The fat content of butter differs mostly to shortenings, which have a higher fat content. It is recommended to check the fat content of a shortening prior to reformatting recipes.

Substituting Butter to Shortening:

Multiply weight of the butter by 0.8: = total shortening

Multiply weight of the butter by 0.15 = total addition of liquid (water or egg)

E.g. 1000 gm butter x 0.8 = 800 gm shortening. 1000 gm butter x 0.15 = 150 gm liquid addition

Substituting Shortening to Butter

Multiply weight of the shortening by 1.20: = total butter

Multiply weight of the shortening by 0.15 = total liquid subtracted from other liquid (water or egg)

E.g. 1000 gm Shortening x 1.2 = 1200 gm butter

E.g. 1000 gm Shortening x 0.15 = 150 gm liquid subtracted

Eggs



Egg yolks assist the blending and binding of the ingredients. If used in larger quantities they can soften the dough to piping consistency. If the egg is too cold, then a longer mixing time may be required to bring the dough to a workable consistency. Care must be taken so that the longer mixing time does not result in excessive gluten formation and development as the barrier is forced or broken down.

The stability provided by the egg white does not cause toughness or shrinkage, as opposed to gluten, which would have an adverse effect.

Baking powder



Baking powder is an optional ingredient and is used to Open the texture of the pastry.

Water

Eggs can be substituted with water but this will produce a less rich pastry.

Flavourings

Flavourings which may be used include salt, vanilla, lemon and cinnamon, the choice depends on the desired end product. Ground nuts and almond or cocoa can also be used.

NOTE:

There are a variety of short pastry types, and their consistency and handling characteristics are governed mainly by the amount of fat in the mix, the grade of sugar used, the replacement of flour with nuts or crumbs, and the way in which the ingredients are processed to incorporate the fat. Varying levels of moisture can affect consistency. Higher amounts will inevitably produce toughness, as the flour is more likely to come into contact with the moisture and form gluten.

Prevention of gluten formation during mixing and processing is a very important factor in short pastry production.

Many of the problems attributed to poor quality products are directly associated with incorrect handling and processing techniques.

Temperature of ingredients should be held at 16 to 21 °C, which will assist in the mixing process and consistency of the pastry and avoids fat lumps.

Pastry made with butter should be produced the day prior to usage.

Key points for Short pastry

- Do not over mix or over handle
- Avoid excessive flour dusting
- Addition of scrap pastry up to maximum of 10% to virgin pastry

Methods of Production

The basic method for short pastry has some variations, each designed to prevent moisture coming into direct contact with the flour, therefore producing a ―short‖ pastry.

Rub-in method

With this method, the fat is rubbed into the flour, coating the flour grains, and preventing them from taking up moisture thus preventing the formation of gluten.

The liquids, sugar, etc. are then carefully incorporated to form soft dough.

Too much mixing, or the use of too much pressure at this stage, could result in the breakdown of the fat barrier allowing moisture penetration.

Blending or creaming method

This method has variations in the way in which the fat is incorporated, but in each case the objective remains unchanged.

The fat and sugar are either creamed or blended to a paste. Then the liquids are added carefully so that they become suspended and evenly dispersed.

This dispersion enables the balance of the flour to be added without coming into direct contact with them.

Highly physically aerated formulae, such as Viennese or biscuit dough, are capable of being piped or extruded, whereas a similar ratio of ingredients, made up using the rub-in method, produces a dough which is capable of being rolled with a pin.

Other influences which dictate the final shortness of the product include the solvent or softening effect of sugar on gluten.

It must also be remembered that dissolving sugar creates liquid, and therefore sugar/moisture additions must be controlled, and in the correct sequence.

Flour batter method

This method is the only method ensuring the complete dissolving of the sugar. Cream fat and half the quantity of flour, mix all the sugar and liquid and clear through. Add remainder of flour and clear.



Puff pastry

Puff pastry is made up of hundreds of alternating layers of fat and dough. As the name implies, puff pastry will puff up in the oven to produce a light flaky crisp type of product, it does not contain any leavening agent or baking powder, but can rise up to eight times of its original size. The pastry is suitable for sweet and savoury products, as it does not contain any sugar.

Lamination aeration

Lamination aeration is the rolling and folding of pastry so that individual layers of fat and dough are formed. The fat turns into oil when the pastry enters the oven; it keeps the layers of dough separate. The water in the dough turns to steam and forces the layers of fat apart by its pressure

Ingredients:

Flour

It is necessary to use medium strength flour, which will give a gluten structure of reasonable elasticity. Flour with a high gluten protein level will produce a tough pastry, which is prone to breakdown of dough layers during rolling and folding. This factor is of extreme importance when power rollers are used, as this process tends to increase toughness.

Fat

There is little doubt that the best quality puff pastry is made using butter, due to the melt in the mouth quality, as butter has a low melting point. This, however, causes many handling problems due mainly to the low melting point of butter, and its rather unstable consistency. The use of weaker flour, resulting in dough of softer consistency may overcome this problem, but mostly tight temperature control of the butter will adjust the consistency to be the same as the flour mixture. The flavour of pastry made by this method may well justify the trouble taken. In some instances, a small percentage of flour is combined with the butter, to increase its handling capability.

Pastry fats and margarine which are made especially for puff pastry are produced from high melting point oils and fats. They have good spreading and moulding characteristics (i.e. they plasticize). The high melting point slows down its absorption into the dough layers until they have begun to set. The use of these fats enables the baker to produce pastries of attractive appearance, and good volume. The only detrimental effect is that there is often a waxy taste left in the cooked pastry (palate cling).

This is due to the fact that the body temperature in the mouth is not high enough to melt the fat in the crumb.

There are a number of different products available to the baker for puff pastry manufacture. Some of these are margarines and emulsions containing up to 20% water, whilst others are100% fat.

The quality of fat used in puff pastry can vary from method to method and is not critical provided that there is enough present to insulate the dough layers.

The amount used can vary from 50% to 100% of the flour weight. For the best results when using lower quantities, fewer turns may be given, but will result in a slightly reduced and more irregular lift.

The type of pastry is usually defined by the amount of fat used, for instance:

Full pastry: 100% of fat based upon flour weight

- Used for very light and flaky products, like Vol au vents or Bouchees

Three-quarter pastry: 75% of fat based upon flour weight

- Used mostly for all general puff pastry items, products like cream horns, turnovers or fruit bandes

Half pastry: 50% of fat based upon flour weight

- Used mostly for products where little lift and flake are required pies, pasties, palmiers or slices

Margarine

As already explained, the margarine separates the layers of puff pastry dough. Therefore, it must be a margarine that is extremely extendable, so that the layers can be reduced sufficiently in thickness to permit rapid expansion of the gluten. The margarine must also be a non-sticky type that doesn‘t penetrate the dough layers.

If the margarine penetrated the dough, the layers would be ―shortened‖ and the puffing effect restricted. Puff pastry margarine must also act as a frying medium. Because each dough layer is separated by a margarine layer, the heat of the oven causes the dough layers to fry. This helps to produce the ideal crisp, flaky texture.

During this same process, the expanded gluten becomes shortened by the margarine, andthis further improves the flavour and texture of the finished pastry.

As the flour starch gelatinises, it takes in melted fat, which stays in the crumbs, producing soft eating quality.

Salt

Salt is mainly added to enhance the flavour and taste. It works stabilising on the glutenstructure and it increases the shelf life, as it suppresses bacteria activity. If the fat is alreadysalted, further addition is usually unnecessary.

Water

Water is added to the pastry at the rate of approximately 50% the flour weight. This is variable, according to the water absorption rate of the flour. Water binds the dry ingredients together and enables the development of the gluten in the flour. It provides a source of steam during baking to help make the pastry rise.

Colour

Yellow food colouring is sometimes used to improve the colour of the pastry; some recipes are also made with eggs to enrich the pastry. Puff pastry is usually made without any colouring, as the pastry is usually egg washed prior to baking.

Lemon Juice, Vinegar or Cream of Tartar

Acids have a toughening effect on gluten and are sometimes used for this reason, it also prevents natural discolouration of the dough during storage. Temperatures and equal consistency of dough and fat; if butter is used to produce high quality puff pastry, refrigeration is necessary to keep the pastry cool and prevent the butter from softening. This is to ensure that the fat and dough layers are even. If the fat is too cold or too hard, breakage of the fat layer occurs during rolling of the pastry. This would result in a detrimental effect upon the volume of the product. If the fat is too soft, it will be squeezed out during rolling and a formation of even layers impossible. Ideal temperature for fat is 15 °C –20°C, but this also depends upon the temperature of the production area and the time taken rolling the pastry.

For successful lamination it is important that the following precautions are taken:

- Do not roll pastry out too thinly when folding as the dough may be over-extended, causing it to fracture
- Give sufficient rest periods between folds to allow the gluten to fully relax
- Use medium strength flour for dusting purposes, brush off any flour during the lamination process, prior to folding

- Keep the addition of trimmings to a minimum. Use relaxed trimmings to a maximum of10% of virgin pastry.

If using a dough-brake, reduce the block to the required thickness very gradually, as forcing through the rollers will quickly break down the structure.

Methods of making puff pastry

All production processes have one important factor in common – they depend for success on the separation of dough layers by fat layers. The same recipe is used for each method. The main processes for making puff pastry are distinguished by the means by which the fat is incorporated. These processes are:

- French and English *roll-in method*-flour/water dough are made and the fat is layered and rolled in, following a specific process. This method is producing a pastry that is fine and even, it is mostly used for products like Chaussons, vol au vents and Pithiviers
- Scotch *chop-in method* -the fat is incorporated during the dough mixing process and is dispersed roughly through the dough. This method produces a more flaky pastry, as compared to the above method. It is only suitable where scrap pastry would normally be used, especially for pies, cream puffs or fleurons.

English method

- Mix the dough ingredients until smooth
- Mould into a ball, cover and rest for 20 - 30 min (relaxes the dough
- Proteolytic Enzyme action)
- Prepare the fat to the same consistency as the dough
- Pin out the fat to a rectangle
- Pin out the dough to a rectangle 1/2 as long again as the fat and 3 - 4 cm wider, brushoff any flour
- Place the butter or pastry margarine on top of the dough, as in diagram 1

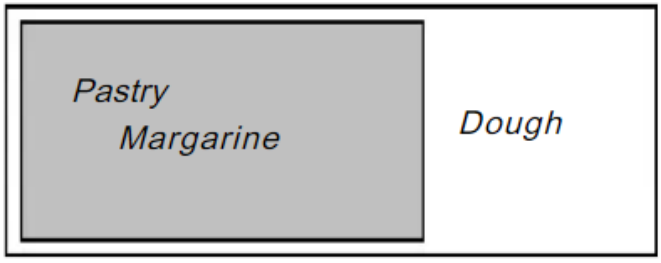


Diagram 1

Brush any flour of the dough which has no fat on it and fold it over onto the portion which is covered with the fat, as in diagram 2, then fold the dough with the fat uppermost over (diagram 3 shows the side view at this stage.

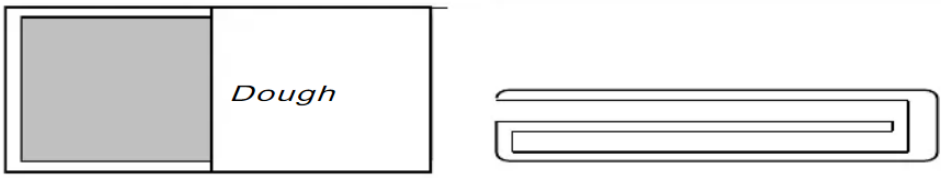
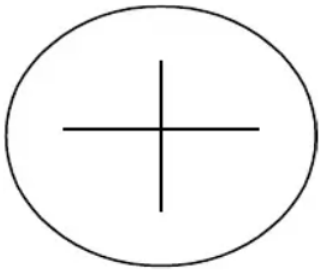


Diagram 2 Diagram 3

Pin the dough out to +/- 5mm thickness and give the required number of half turns or book folds with the appropriate rests in between turns.

French method

Mix the dough ingredients until smooth. Mould into a ball, cut a cross on top, cover and rest for 20 - 30 Min (relaxes the dough -Proteolytic Enzyme action).



Prepare the fat to the same consistency as the dough and shape it to a square. Pull down the points forming the cross and pin out the dough to form a star or square, brushoff any flour. Place the fat on top of the dough, as in diagram 2.

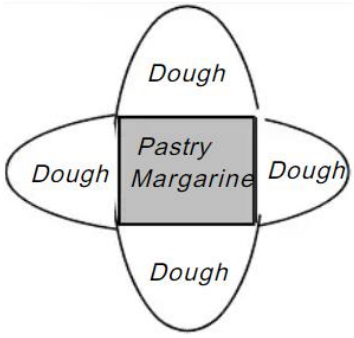


Diagram 2

Brush off any flour of the dough flaps and fold them over onto the fat making sure to envelope the fat in well.

Using a rolling pin carefully, with even pressure, roll out the dough into a rectangle.
Pin the dough out to +/- 5mm thickness and give the required number of half turns or book folds with the appropriate rest in between turns.

Scotch (Blitz) method

- Cut the pastry margarine into cubes and add to the dry ingredients
- Add the water and mix the dough until it has just cleared (it should still have lumps of fat showing) Do not develop
- Form into a rectangle or square and brush off any flour
- Pin the dough out to +/- 5mm thickness and give the required number of half turns or book folds with the appropriate rests in between turns

Alternate Method

- Cut the pastry margarine into cubes
- Mix the dough ingredients until smooth
- Add the pastry margarine cubes and mix the dough until it has just cleared (it should still have lumps of fat showing)
- Form into a rectangle or square and brush off any flour
- Pin the dough out to +/- 5mm thickness and give the required number of half turns or book folds with the appropriate rests in between turns
- Resting, rolling and cutting out of pastry.

Whatever method of rolling and folding is used, the pastry block is subjected to a large degree of stretching, which builds up tensions in the block. For this reason, it is important that with each rolling and folding operation, the pastry is rolled in the opposite direction. This will result in an even tension in the pastry with more even shrinkage in the oven, reducing the possibility of misshaped and distorted products.

The number of folds is also important for the following reasons:

- Too few folds will result in irregular and uneven lift, and the loss of fat during baking
- Too many folds will cause the layers to merge, resulting in a breakdown of lamination and shortening of the structure.

Provided that proper resting periods have been given during processing, it is not necessary to rest the cut-out pieces prior to baking.

Puff Pastry Turns

There are two types of turns given to Puff Pastry

- Half Turns (Single)
- Book folds (Double)

Note:

The production method is irrelevant to the lamination process.

The number of turns given to puff pastry is determined by the desired lift and eating quality of the final product.

Final turned puff pastry should achieve 100 to 2500 layers of fat in the dough. These layers scan be achieved by using half turns, book folds, or a combination of the two.

Half Turns

Puff pastry made with ½ turns requires 6 half turns.

The pastry is first pinned out to 5mm thick and kept as a rectangle; this is very important for even layering.

Fold 1/3 of the pastry over, as in the folding in of the fat for the English Method of incorporating the pastry margarine (diagram 1).

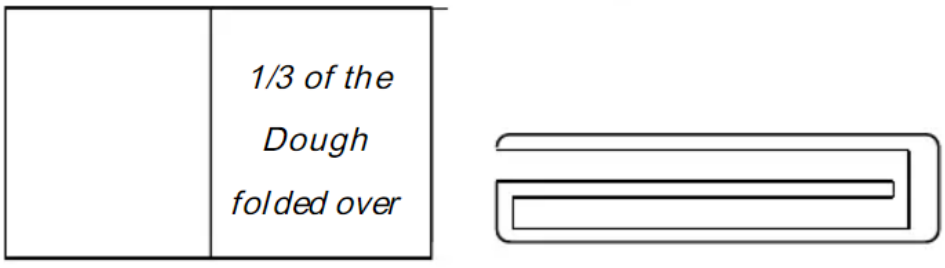


Diagram 1

Diagram 2

Repeat this again having turned the pastry around so that the two open ends are towards and away from you (the ends should look as in diagram 2.

Cover and rest in the fridge for 20 - 30 mins.

Repeat the whole procedure another two times to give six half turns, with the correct resting times after every two half turns.

Book Folds

Puff pastry made with Book folds requires 3 book folds

The pastry is first pinned out to 5mm thickness and kept as a rectangle, this is very important for even layering. The two opposite ends are folded into the centre.

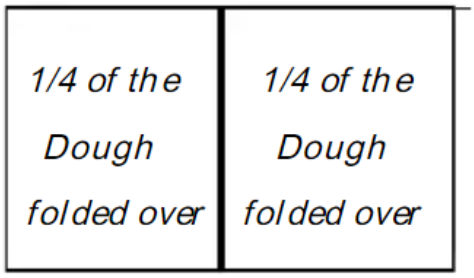


Diagram 1

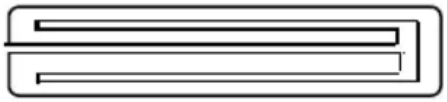


Diagram 2

Repeat this again having turned the pastry around so that the two open ends are towards and away from you.

Cover and rest in the fridge for 20 - 30 mins.

Note:

If Puff pastry is to be refrigerated over a period of time, it should receive the last turn, prior to making it into units.

Puff Pastry with a combination of half and book turns require 2 half turns and 2 book folds.

How puff pastry aerates

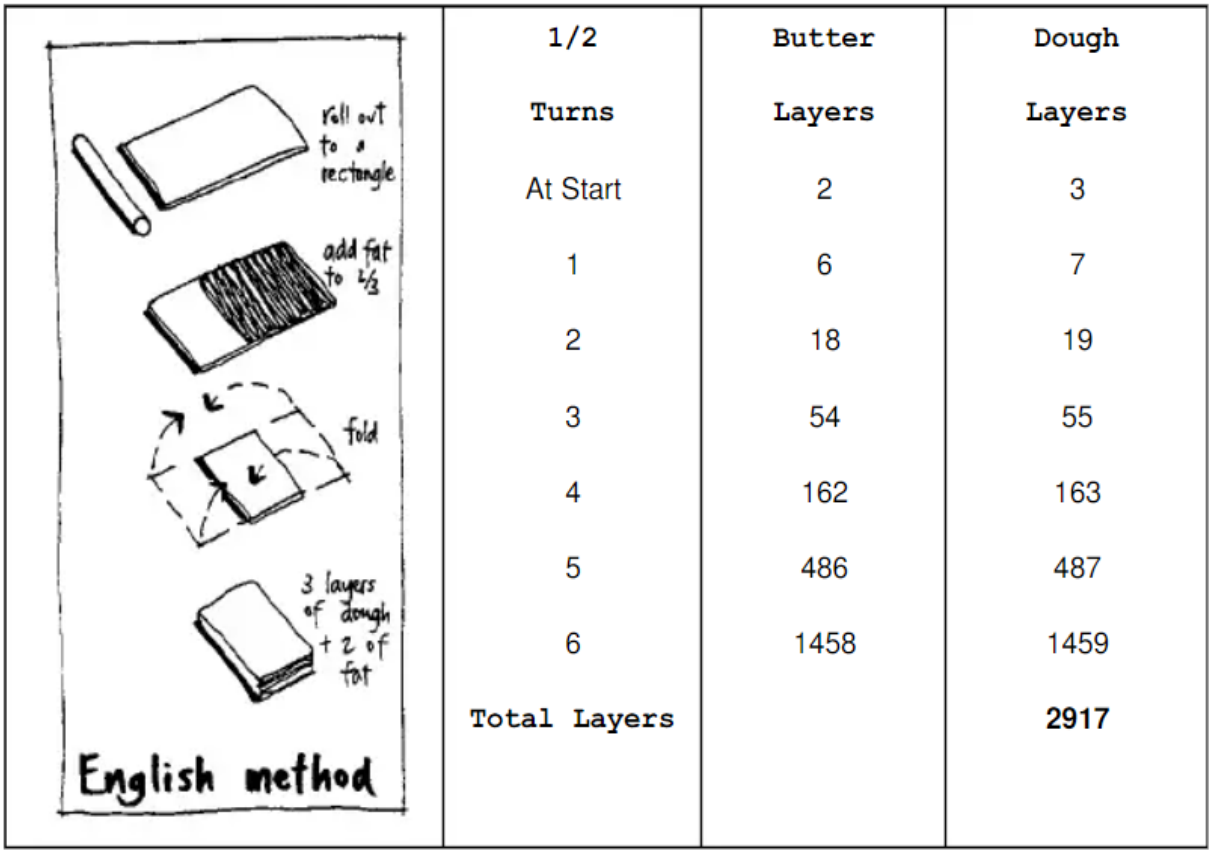
The expanding property of gluten is important in the baking of puff pastry. In the paste, before baking, there is a laminated structure consisting of thin layers of dough separated by thin layers of margarine.

In a very hot oven, these dough layers or a very large number of them "blow up" or "blister".

As each layer is separated from its neighbour by a margarine layer, the cumulative effect of the layers expanding and the pressure of steam results in the puff paste growing in size, until eventually the gluten sets and holds the pastry article in the expanded state.

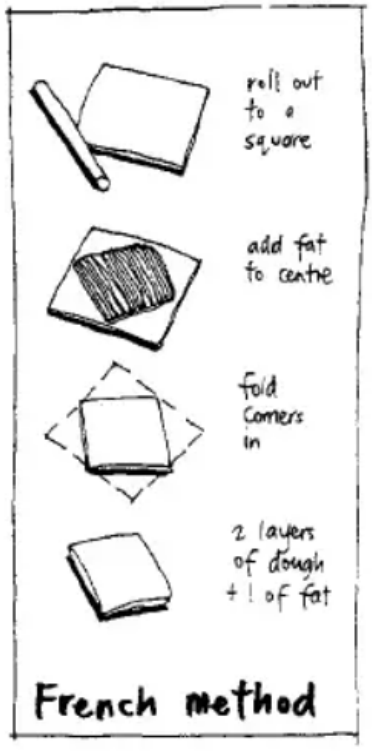
It is essential to have the dough layers very thin and the oven temperature high so that the water can be converted quickly into steam before the gluten coagulates or sets.

The English method



1/2 Turns	Butter Layers	Dough Layers
At Start	2	3
1	6	7
2	18	19
3	54	55
4	162	163
5	486	487
6	1458	1459
Total Layers		**2917**

The French Method



1/2 Turns	Butter Layers	Dough Layers
At Start	1	2
1	3	4
2	9	10
3	27	28
4	81	82
5	243	244
6	729	730
Total Layers		**1459**

Activity

Observe a demonstration of the production process for Puff Pastry.
Produce Puff Pastry using the English and French method

Puff Pastry ¾ puff

Item	Ingredients	Weight (gm)	Method
A	Plain Flour	1500	
	Salt	20	
	Water	750	
	Lemon Juice (optional)	20	
	Margarine (soft)	125	
B	Puff shortening Or Butter	1000	
	Total	3395	

If using butter to produce this dough it is advisable to make the dough and chill in cool room overnight.

This will help to keep the butter cool while the "turning process" takes place.

Especially in warm climates the dough needs to be chilled.

If this is not possible then use only "Puff Pastry shortening". This has been specially developed to have a high melting point of 45°C.

Recommended that students do both styles:

- French
- English

Both have different characteristics.

English method

- Mix "A" to a smooth dough and rest covered for 15 minutes
- Ensure that fat and dough are of the same consistency
- Shape the butter to a rectangle (30x40 cm)
- Roll the dough out to 30x 60 cm and place the fat onto it, leaving the dough 1/3 uncovered
- As shown on previous page
- Fold the remaining pastry onto the fat and fold in half again, so that there are 2 layers off at and three layers of pastry (Half turn)
- Repeat the half turn another five times, while changing the rolling direction after each turn. (Keep the open ends towards and away from you when rolling out, ensuring excessive flour is removed after each turn)
- Rest for 30 minutes after every 2 half turns
- After 6 half turns Puff Pastry is completed
- Rest for 30 minutes before use

French method

- Mix "A" to a smooth dough and rest covered for 15 minutes
- Ensure that fat and dough are of the same consistency
- Shape the butter to a square (30x30 cm)
  Roll the dough out to 45x 45 cm and place the butter diagonally in the centre of the dough
- As shown on previous page
- Fold over each corner of the dough to meet in the centre completely enveloping the fat
- Roll the dough out to 30x 60 cm. Give half turn
- Proceed as for English Method

Docking

This is placing lot of holes into the puff pastry dough with a special hand machine or using a fork.

Pastry items are docked to:

- Reduce volume, as in puff pastry
- Allow air to escape from under blind based pastry cases, e.g. flans.

Do not dock pastry cases if liquids are going to be the filling, e.g. Egg Custard, as it will leak out through the holes.

Storage of puff pastry



When pastry is made up on the day before use, it is a good policy to leave the final fold until ready to use.

The stored pastry should be covered to prevent skinning, and stored in a cool place.

The best material for this is plastic sheet, which is impervious to air and can be washed frequently, and is more hygienic than other coverings.

Puff pastry can be kept indefinitely in a deep freeze.

To defrost, it can be removed from the freezer and l eft in the bakery for at least six hours.



It may also be placed in a refrigerator overnight Where it will keep in a useable state for up to two days.

If refrigerated or frozen, the pastry will require bringing to certain temperature before rolling; depending on the fat which was used.

When it is brought back to required temperature, it should be used as soon as possible.

If the raw pastry is kept at above refrigeration temperature, production of acids formed by bacteria will cause sourness to develop and make the pastry unsuitable for use.

Choux Pastry

The word "Choux" is of French origin and its literal meaning is 'Cabbage-like.' Visually, a cream puff has a cabbage-like appearance due to the typical rough surface texture.

High quality items of good volume and fine internal walls prepared from a base panada that, when sufficiently cooled, has the addition of whole egg which is responsible for producing aeration during the baking process.

Choux pastry, also known as "Cream Puff Pastry, has a wide application range, it can be deposited as; fancy fine scroll, lattice, bulbs, fingers and a range of decorative units. It is used as a basis for confections, gateaux, ornaments, as savoury cases for fish, meat and other fillings.

Due to the bland flavour characteristic of choux paste it can be used for containing an extensive range of plain, fancy or decorative savoury and sweet fillings finished as single or multi-grouped units.

Choux paste also readily blends with a range of finishing materials, examples being: fondant, glace icing, chocolate, ganache icing sugar, slightly caramelized sugar syrup, prior to bake grated cheese, herbs and spices may be used to enhance end product qualities.

Cheese is often added into the mix for savoury products, to enhance the flavour. The production process for choux pastry is unique as in no other product, with the exception of boiled short pastry, is the flour starch gelatinised prior to baking.

Ingredients

Choux pastry is made from four simple basic ingredients - water, fat, flour and egg.

Flour

Medium strength flour is most suitable, due to the protein content. Although the flour proteins are denatured in the preparation of the panada, a reasonably high level of this coagulated protein must intermingle with the egg protein to provide the structure necessary for expansion during baking.

Fat

Butter is often recommended as the ideal fat for choux pastry; however, many choices are available.

There is a popular perception that the firm fats such as shortbread or pastry margarines produce a more stable batter, which therefore results in better products, but these fats leave a fat cling to the palette, due to their high melting points.

Therefore it is really a matter of personal choice and taste what fat to use.

Water/Whole Milk

Water/Whole Milk are both used in a particular formula to:

- Scale the flour
- Partially gelatinise flour starch
- Partially coagulate flour protein
- Act as a moistening agent
- Adjust panada consistency
- Provide moisture generation during the baking process

Ratio of these two ingredients is most important because tests on formulae with high liquid ratio in base panada resulted in thick tough dense walled products.

In contrast low ratio of formula liquid in the panada results in misshapen products.

Egg

Whilst egg pulp is suitable, fresh eggs are considered ideal due to the greater stability of the albumen, essential to the aeration process for this product. If frozen egg pulp is used, it needs to be used after thawing and at a moderate temperature, for increased stability.

Eggs are essential because they provide:

- Moistening
- Aeration adjust paste consistency
- Flavour and influence eating qualities
- Structure and determine character of product
- Unique bases for this type of trade product
- Provide moisture for steam generation during the baking process
- Base for both sweet and savoury type product

Sugar

Sugar rarely used in most formulae; purpose for use would be to assist crust colour and impart a negligible degree of product tenderness. Application would be for produce intended on sweet complement finishing.

Salt

Salt is rarely used in choux paste lines, infrequently it is contained as a formula ingredient in produce intended for savoury complement finishing.

A general disadvantage could be seen in that it has an effect of tightening protein structure.

Chemical Aerating Agents

Chemical Aerating Agents, the use of baking powder appears well established. Its importance is one of having a slight opening effect of produce structure.

Traditional method found that "Vol" was used in common practice. This type of aerator (Ammonium bicarbonate) works well in choux paste conditional that it is used in precise amounts.

A disadvantage is that slight excess can cause internal discolouration, off odour, unpleasant eating quality and distortion of goods.

Because baking powder does not require the same precise quantity and that it is more commonly found in all trade production, its use is more widespread

In certain formulae, additional ingredients may be required.

These materials are more generally used to complement and enhance flavour of the final product, e.g. Vanilla, Mace

Choux paste is versatile in setting in that it can be:

- Baked in an oven
- Deep fried
- Poached in hot water for small savoury lines

Method

The water is brought to the boil with the fat.

The flour is sieved and added to the boiling mixture, while on the heat, and is stirred in very quickly to prevent lumps forming, this is known as a panada.

The mixture needs to be heated until a smooth shiny mass is formed, which leaves the sides of the saucepan. The cooking or heating of the panada is vital to gelatinise the starch, which occurs when starch grains take up moisture; swell, burst and form a gel with the water(thicken).

To gelatinise starch; temperatures of minimum 78°C to 80°C are required

Cooked panada should be removed from the stove as soon as it reaches the desired temperature, to prevent burning.

The mixture is now cooled to below 50°C, on a table; by spreading it out to give a larger surface area so that it cools quickly or by stirring it on slow speed in the mixer for a few minutes.

The correct addition of egg is important, and should not be done too quickly, as complete incorporation at each addition is critical.

To ensure even distribution of the egg, it is necessary to repeatedly scrape down the bowl. If the batter is too slack, it will run out on the baking sheet before and during baking, the resulting products lacking volume, and often being difficult to dry out sufficiently in the oven.

On the other hand, if the batter is too firm, it will create too much resistance to steam pressure, and the low moisture content will lessen the production of steam in the product.

Both of these factors result primarily in loss of aeration in the oven.

The aim is to produce stable, but smooth dough with a “silky” texture. It should be firm enough to retain its shape when piped or deposited.

Clean trays should only be very lightly greased. It is important that the base of the product actually grips the tray.

This “holding down” allows for greater expansion of the product without forming hollows in

the base, which can distort their shape, (particularly Éclairs, where an upturned banana shape is common). Silicone paper will defeat this purpose and is not recommended.

Baking conditions vary with the product, however it is generally accepted that a moist environment is best suited to products which require maximum expansion (e.g. Cream Puffs), whilst a dry heat is best for Éclairs, Profiteroles etc., where a smooth surface is a requirement.

The baking conditions are controlled with the use of the damper, or by covering the products during baking.

It is important that the oven is not opened until the product has set or coagulated, as this may cause the product to collapse.

Choux pastry can also be fried and at a temperature of 180°C. These items are called beignets and are normally filled with sweet or savoury fillings and served hot with an accompanying sauce.

Piping Choux Pastry

Choux paste is commonly piped onto very lightly greased baking trays. Only a slight smear of fat is required to ensure good tray adhesion by the paste.

Well-greased trays cause produce to slip during piping and presents considerable difficulty in both speed of depositing and piping efficiency. Release of the paste on well-greased trays is difficult because there is a tendency for the paste to lift and not break clean.

Depositing should be practiced with a large Savoy bag with a half bag split to improve flow control, secure desired shape and develop speed of depositing. (With bulbs and rounds the bag is held vertically with the diameter of the nozzle just above the surface of the tray).



Paste is extruded with a gradual lifting of the bag until a bold, distinctive shape and required size is formed.

The desired shape should be retained with a clean sharp lift or cut-off being achieved. Tails must be avoided; also, irregular volume to either side, symmetry is most essential to quality products.

Fingers are deposited with the nozzle held in contact with the tray and at an angle of 45 to60 degrees. Uniform pressure must be applied to secure a uniform, consistent and straight appearance to the finger.

Cut off should be made with a slight release of pressure and slight reverse of direction of nozzle travel with a clean lift to secure a uniform line of paste.

Spacing of items is most important to retain individual items or a distinctive shape to other variety goods.

Regular well-placed depositing will ensure best use of baking space and achieve quality appearance to final products.

Close and irregular spacing will not give best results to items because baking will not be either uniform or consistent.

Skill must be developed to secure optimum produce results with both speed and efficiency. Attention must be given to:

- Required depositing technique
- Correct size of item
- Uniformity of items on the same tray
- Clean, sharp and distinctive shape
- Uniform and consistent spacing on trays
- Consistent lines of depositing (travel of nozzle)

Ensure that there are no air bubbles in the batter when piping; this could cause breakage sand inconsistency in the piped fingers. Remember that consistency of size is very important, particularly for even baking.

Some professionals prefer to use a star tube for piping éclairs, and whilst this will produce a decorative surface, it does not produce the smooth surface, which when iced, has the finish usually associated with the traditional éclair.

In English text books, éclairs piped in this fashion are called “Leopolds” and are sprinkled with coarse sugar prior to baking. They are then split and creamed when cold, requiring no further finishing.

Baking

Traditionally choux paste was baked in enclosed containers that allowed steam to be evaporated from the baking items and assist the baking process. This practice allowed maximum volume with an open porous thin walled finely structured product.

Improved volume and quality characteristics of choux paste goods are attained with steam utilisation during the initial baking stage.

Advantage to certain paste produce has been found by baking items with lines such as sausage rolls, puff pastry goods or yeast goods.

Excessive steam must be avoided or grossly misshapen products will result. Another practice is (where possible) oven dampers are closed for the initial baking period to allow optimum volume to be attained.

Required oven temperature will vary according to variety of choux paste produce. In general, high oven temperature is advised between 210°C and 230°C.

- Low oven temperature prevents items reaching optimum volume prior to setting and hence products have dense heavy quality with thick under baked walls
- Excessive oven temperature will also cause poor shape, lack of volume, and under baked thick dense walls.

Baking times will vary according to a number of conditions:

- Size and shape of items
- Uniformity of depositing
- Type and distribution of oven heat
- Recovery temperature of oven
- Damper control
- Capacity of the baking chamber

Storage

Choux pastry should be open inside with a dry outer shell. A small amount of water should remain inside the shell to prevent brittleness and the possibility of cracking in storage.

Baked shells can be stored in a protected cool environment for up to one week, or may be deep frozen. Freezing is best done soon after the product is baked as it is important to retain a percentage of moisture for satisfactory results. Products which are very dry will crumble and break very easily when thawed. To achieve crisp products, baked frozen maybe baked again.

Factors Controlling the Volume

When choux paste is being baked, any air that has been beaten into it will expand and the water in the paste will be converted to steam. The expanded air, as well as the steam, tries to escape from the paste but to a large extent it is prevented from doing so because both are trapped and retained within the paste by films of coagulated flour protein and uncoagulated films of egg albumen.

The egg albumen is extensible and will be inflated and distended by the internal pressures–air and steam. Thus, the pastries increase in volume, and expansion only ceases when the egg albumen films lose their extensibility and gas holding powers.

However, the moisture which is near to the surface of the paste is driven off fairly quickly, after which the temperature of this outer layer of paste can rise well above the temperature of boiling water.

During the latter part of this period and as the paste has already reached very considerable volume, the egg proteins are coagulated and set. The natural sugars from the flour will soon begin to caramelize to a rich brown colour when the moisture has been driven out of the surface layer of paste of an éclair case or puff shell.

Whatever the strength of the flour, protein will have been coagulated during the preliminary cooking of the water, fat and flour which occurs prior to the addition of eggs in making choux paste. The gluten, therefore, will have lost both extensibility and gas-holding powder.

The presence of strong films of uncoagulated egg protein in the paste at the moment that itis placed into the oven to bake is of the utmost importance for the achievement of satisfactory volume in choux pastries.

Savoury short pastry

Savoury short pastry is mainly used for quiches, pies, biscuits, savoury tartlets and cheese fours.

The difference between sweet short pastries is the sugar content, which is little or none in savoury pastry. Due to the softening effect of sugar, savoury pastry tends to have increased gluten development, which increases the possibility of shrinkage during baking.

The main ingredients of savoury short pastry are fat and flour, usually at a ratio of:

- 2 fat 3 Flour; or 1 fat 2 flour; other ingredients are eggs, salt, water or milk. Please refer to the notes in Sweet Short Pastry for ingredient functions preparation and production.

For best flavour savoury pastry is mostly or partly made with pig lard

Methods of Savoury Pastry Production

Note: The same recipe can be used for all methods.

Boiled: This method produces a very brittle short pastry; traditionally it is used in the production of Pork Pies.

Boil water with salt and lard, ensuring that the fat is melted. Pour the boiling water directly into the sifted flour and mix to a paste. Once the pastry is cool, it is ready to use.

Note:

This method is only very rarely used, as the hot method makes a better pastry.

Hot: This method produces a shorter eating quality pastry than the boiled method. Rub the flour and fat into a crumble. Boil water and salt. Pour boiling water mix over the flour and fat mixture and combine, cool and use.

Cold: All methods as for sweet pastry production can be used. The method described is the best suitable.

Rub lard and flour into a crumble, mix cold water and salt, pour onto fat and flour mixture and mix until cleared.

This method is used for Cornish Pasties, Quiches, Tartlets and Barquettes

Reasons for boiling water or water/fat mix

The reason is to gelatinise some of the starch, which enables the paste to take on more crust colour.

The heat melts the fat and as the paste cooks, the fat sets more firmly than it was originally and helps to hold the shape of the pork pie (pork pies are traditionally baked without tins or hoops).

This prevents the pies collapsing when they are first placed in the oven. It provides sufficient structure long enough for the crust to form during the early stages of baking.

The other advantage is that the gelatinised starch gives greater plastic properties to the paste enabling the pies to be raised more easily.

Strudel and Filo Pastry

Little History

Filo pastry is believed to have originated in East Asia, but in modern times the Greeks have claimed it as their own. A slight change by the Hungarians to the recipe formula and in the production, method developed the strudel pastry.

Strudel was made famous by the Austrians, who understood the production of specialty fillings and created pastries, like no others. Even in today 's time Viennese Strudels have worldwide reputation

Definition and Production Method of Pastry

The basic water-pastry is made from medium to strong flour and water, with the addition of eggs, oil and/or corn flour in some cases.

The dough is mixed to full gluten development, well rested, and then stretched out to wafer thickness, without breaking.

Many experts in Strudel making like to demonstrate that the pastry is thin enough if it is possible to read the print of a newspaper through the dough.

A piece of dough weighing 1.7 kg should cover an area of 1.5 to 1.8m.

Although filo and strudel pastry are not exactly the same, they are interchangeable. Both of the pastries have the same outcome, to produce a pastry similar to puff pastry, crisp and flaky when baked.

The difference between puff pastry and filo or strudel pastry is that the fat is brushed or sprayed onto the stretched dough in comparison to rolling and folding the fat layers.

The principle of lamination aeration is the same as for puff pastry.

In today 's time a wide range of commercially produced filo pastry is readily available.

In commercial manufacture of filo pastry the extrusion method is used, followed by a cutting devise.

This filo pastry comes in paper thin leaves, it is available fresh (refrigerated) or frozen, with excellent shelf-life to several weeks in the refrigerator.

Ingredients

Flour

Itis necessary to use medium to high strength flour, which gives a gluten structure of reasonable elasticity.

This is important, in order to be able to pull the pastry out, without breakage.

Water

Water is added to a rate of approximately 50% of the flour weight, depending on the strength of the protein content.

Water binds all the dry ingredients and enables the development of gluten.

Fat

The addition of fat is recommended, as it retains the moisture in the pastry, therefore thepastry does not dry too quickly.Fat also softens the gluten strand, which enables the pastry to be pulled out paper thin.

Eggs

The addition of eggs enhances the structure of the pastry when baked, due to the coagulation of proteins.

It provides moisture, elasticity and colour in the dough.

Other ingredients:

Lemon Juice: May be used to strengthen the gluten of the flour.

Salt: Works stabilising on the gluten structure.

Corn flour: May be used to weaken the gluten structure for softer eating qualities. Corn flour is also added to weaken the structure to ease the pulling out of the pastry

Strudel Pastry Handling Techniques

To stretch the pastry without tearing the following points should be followed:

The ideal pastry should be soft, covered with oil (prevents skinning) and lukewarm for the ease of stretching.

Use lightly floured hands and surfaces to prevent sticking.

The pastry is usually rolled out first, and then stretched by laying it over the back of the hands (circulating it in a horizontal motion).

When the paste is too large to handle it is placed onto a floured table cloth and anchored to a corner of the table to ease the stretching.

It is now again stretched carefully using the back of the hands until it is wafer thin.

The thicker ends are cut off, prior to adding the filling. The scrap pastry could be used for dumplings in soups.

Splitting or tearing is prevented by using lightly floured hands and by working the paste quickly, to avoid drying out.

All rings should be removed from the fingers to reduce the possibility of snagging the paste.

1. Select required commodities according to recipe and production requirements

Ingredients for recipes

All Pastry has base ingredients of flour and water.
Better quality pastry also has a fat added to give eating qualities. Salt can be added to give strength to gluten structure and adds to the Flavor.

Sweet pastry has an addition of sugar but this has effects on the gluten that needs to be controlled by altering recipe ratio.



All these pastries have a closed consistency and after they are baked are very heavy in the eating qualities.

Addition of aeration to the pastry achieves better eating quality so giving a more pleasant sensation from consumption.

Aeration can be achieved by the addition of chemical compound (baking powder) or by the addition of fat and different methods of incorporating these fats into the dough give a different result. The addition of fat also adds to the food value to the dough or batter.

Flour

Strong flour is needed for the production of puff pastry, choux and strudel pastry items while medium or weaker flour is required for the production of sweet short pastry, shortbread and savoury pastry items.

Sugar

Caster or finer grain sugar is preferred for pastry making due to its capacity to dissolve more easily during the baking process.

Salt

Sodium Chloride is used to give flavour and it also has a strengthening effect on the protein structure of the flours making the dough more readily able to be stretched over great distance without tearing.

Fats

Butter is the fat of choice for flavour when making pastries but alternatives are available due to the fact that butter is hard to handle in warmer climates due to its low melting point.

Margarines and shortenings that have a higher melting point can be adapted to all recipes and flavours can be added to give a more pleasant eating sensation.

Eggs

Eggs added to pastries add food value but also add to the cost. Eggs add colour but colouring agents can be used to overcome this issue. Eggs can be fresh or powdered.

Aerating agents

Baking powder is the most common. Adding baking powder will give a more open texture tothe pastry and make it easier to eat.Addition of fats into dough can have an aerating effect on the pastry such as Puff Pastry.

Flavouring Agents

Spices, essences and intensely aromatic liquids can be added to pastry to enhance the eating sensation. The compulsory standard is that it must be fit for human consumption and give no harmful side effects.

Nuts

All nuts can be used in pastries. Some can be added raw while some have their flavor enhanced by roasting nuts before use.

Milk

Milk can be used. It is can be fresh or powdered. Most commercial bakeries will use it as a dry ingredient, due to convenience of storage and handling.

Ingredients for Fillings in Pastries

Any food can be used as a filling in pastry

The base ingredient in the filling is normally cooked before it is place into the pastry.

- This is due to the fact that the pastry may cook before the filling and that can be dangerous to public health. If the filling is cooked, the moisture must be stabilized before it is placed into the pastry.

- Filling is stabilized by adding a starch-based ingredient that will absorb the moisture and hold it in suspension during the baking process.

Pastries with filling that contain high moisture content need to be cooked quickly so the filling does not boil inside the pastry. If it boils it creates too much steam and breaks the pastry open spoiling the visual effect of the finished product.

Savoury fillings

Vegetables need to be cooked before being placed into pastries due to their high-water content.

Meat needs to be small enough pieces to be cooked by the penetrating heat before the pastry is cooked.

Cheese can be used as it is, but the cooking process will have an effect on the eating quality of the cheese.

Sweet Fillings

Fruits need to be cooked before being used in fillings as the water content would spoil the pastry my making it soggy or water logged. Sugar need to be in a starch gel mix because as it is exposed to any moisture it will dissolve and add extra moisture to the filling and also make pastry soggy.

2. Prepare a variety of Pastries

Activity

Observe a demonstration of the production process for Sweet Short pastry. Produce Sweet Short pastry as directed

Sweet Short Pastry
(Flour -batter method)

Item	Ingredients	Weight (gm)	Method
A	Shortbread Margarine Cake Flour Caster Sugar	320 240 160	
B	Egg #1 Lemon, Vanilla, Salt	60	
C	Medium Flour	240	
	Total	1020	

Method:

- Mix "A" to a crumb only
- Add "B" and mix to a clear dough, creaming lightly
- Add "C" and mix until clear (do not over mix).

(Creaming Method)

Item	Ingredients	Weight (gm)	Method
A	Butter Caster Sugar	350 200	
B	Egg Lemon & Vanilla	50 to taste	
C	Medium Flour	500	
	Total	1100	

Method:

- Cream "A" together (do not over cream)
- Mix "B", adjust temperature and add slowly to "A"
- If added too quickly, mixture will curdle
- Add "C" and mix to a smooth short paste (do not over mix)
- Store dough in Refrigerator until set

Activity

Produce a range of savoury short pastry products, as directed

Short Pastry

Yield 3x 22cm fluted mould:

Item	Ingredients	Weight (gm)	Method
A	Medium Flour	.600	
	Salt	.005	
	Milk Powder	.035	
B	Butter	.150	
	Lard	.150	
C	Water	.120	
	Total	1.060	

Method:

- Sieve “A”
- Rub "B" into "A" to a crumbly consistency
- Mix in "C" to a light smooth paste (do not over mix)
- Rest for 30 min before use.

Note:

Medium flour may be replaced with soft flour and baking powder may be added to lighten the texture of the pastry.

This pastry is also used for sweet flans and pies (Apple Flan) If used for sweet pastry, Lard needs to be replaced with butter or shortening.

Activity

Observe a demonstration of the production process for Puff Pastry.

Produce Puff Pastry using the English and French method.

Puff Pastry - 3/4 puff

Item	Ingredients	Weight (gm)	Method
A	Plain Flour	1500	
	Salt	20	
	Water	750	
	Lemon Juice (optional)	20	
	Margarine (soft)	125	
B	Puff shortening Or Butter	1000	
	Totals	3395	

Method:

- Mix "A Ensure that fat and dough are of the same consistency
- Shape the butter to a rectangle (30x40 cm)
- Roll the dough out to 30x 60 cm and place the fat onto it, leaving the dough 1/3 uncovered
- Fold the remaining pastry onto the fat and fold in half again, so that there are 2 layers off at and three layers of pastry (Half turn)
- Repeat the half turn another five times, while changing the rolling direction after each turn. (Keep the open ends towards and away from you when rolling out, ensuring excessive flour is removed after each turn)
- Rest for 30 minutes after every 2 half turns
- After 6 half turns Puff Pastry is completed
- Rest for 30 minutes before use" to a smooth dough and rest covered for 15 minutes

French method

- Mix "A" to a smooth dough and rest covered for 15 minutes
- Ensure that fat and dough are of the same consistency

- Shape the butter to a square (30x30 cm)
- Roll the dough out to 45x 45 cm and place the butter diagonally in the centre of the dough, fold over each corner of the dough to meet in the centre completely envelopingthe fat
- Roll the dough out to 30x 60 cm. Give half turn
- Proceed as for English Method

Choux Pastry

Using the recipe below, produce Choux Pastry

Item	Ingredients	Weight (gm)	Method
A	Butter	200	
	Water	500	
	Salt	pinch	
	Sugar	pinch	
B	Flour, hard	350	
C	Eggs	+ / - 550	
	Total	**1510**	

Method:

- Boil "A"
- Add sifted "B" into "A" while stirring
- Cook on low heat until the fat /flour mixture loosens from the bottom of the pan. The mixture has to reach 80C, for the proteins of the flour to coagulate. Cool down the mixture
- When cool add the eggs slowly, clear mixture after each addition of egg
- Scrap bowl down occasionally
- Mixture has to have piping consistency, it should be soft, but has to be able to hold its shape
- Depending on products most choux pastry goods are
- **Baked at 220°C until golden brown in colour**
- Place onto cooling wires on removal from oven

Activity

Using the recipe below, produce Strudel Pastry as directed

Strudel Pastry 1

Item	Ingredients	Weight (gm)	Method
A	Flour, hard Oil, vegetable	300 50	
B	Eggs	# 1	
C	Water	100	
	Total	500	

Method:

- Mix “A” into a crumble, using sifted flour
- Mix "B" and "C" and add to the flour
- Mix dough until clear and well developed
- Mould round and cover with oil and plastic to prevent skinning
- Rest dough 30 minutes before use

Tin/tray preparation

Tins and trays used for baking sweet short pastries should be clean and free from foreign matter.

The nature of this pastry does not require the use of a releasing agent to prevent sticking.

Greasing of tins can lead to shrinkage during baking, being more obvious in the deeper style pans.

Rolling out or pinning out of short pastry

Shortbread should be blocked into a shape suitable for rolling, and should not be folded, layered or moulded.

Roll carefully with smooth, even pressure on the pin.

Do not hit or bash down with the pin

- Move the dough piece frequently to ensure adequate dust between it and the table surface
-
- Do not attempt to move large rolled pieces with the hands, but rather, roll tightly around the pin and move as necessary.

If the dough piece sticks to the table surface during rolling, then continued rolling will only stretch out the top surface, the under surface being held firmly in place.

When hand rolling for a tray sized piece, check progress by placing the tray over the rolled surface to ensure that suitable size has been reached.

Check

Before processing the Sweet Short pastry, further check that:

- The bench surface is level, smooth and clean
- The rolling pin is not damaged or pitted, is dry, and has no dry dough adhering to it, and the pin has the correct rolling capacity
- An adequate supply of clean flour is available, and conveniently placed
- Tray, tins etc. are prepared

Cutting Pastry

When using metal cutters to produce discs from a rolled sheet of pastry, firm pressure on the cutter or a chopping motion may be used.



A slight twist of the cutter will usually cause the disc to stick in the cutter, which allows it to be moved clear of the scrap pastry.

Cut discs should be stacked evenly and not too high to maintain shape and reduce the possibility of distortion. Large discs, such as those for plate pies should be handled carefully, and not be picked up by the edge, when cracking or breaking is possible.

Activity

Observe a demonstration of the rolling out of sweet short pastry.

Using a manual rolling pin, roll out 150 gm of pastry to an even thickness of 4mm for Shortbread Fingers. Cut the fingers 1.0cm x 5.0 cm. Place them on a clean tray and bake them at 190 °C until golden brown in colour (Straw).

The fingers are used to evaluate the different short pastries in texture, flavour and handling properties. Please use the evaluation sheet to compare.

Scrap retrieval

Scrap pastry should always be incorporated into unused dough and not used alone to produce similar products. It will have toughened considerably during rolling and reshaping. When incorporating into fresh dough, this should be done with a minimum of mixing or pressure. Only incorporate a maximum of 10% scrap into virgin pastry.

Lining into tins/foils/trays

The importance of consistency in this operation cannot be over-emphasized.

When discs of a particular shape and size are cut out, it is intended that these pieces will fit neatly into the containers without trimming.

This can be achieved by careful manipulation of the dough piece without distorting it, cracking, or leaving thumb and finger marks on the surface.

Air must not be trapped between the container and the dough, as this will expand during baking and cause distortion. It also reduces the interior volume of the pie or tart.

Fluted edges require very careful handling as they are easily damaged during the lining process

Floor time prior to baking

Resting time prior to baking is recommended, but under ideal circumstances, a lengthy floor-time would not be necessary except where an excessive amount of scrap pastry has been used.

If a prepared product has been refrigerated or frozen, then it is advisable to bring it back to room temperature before baking, as under-baking, and/or some shrinkage could occur.

Baking

Due to the sugar content, caramelization is rapid once the crust temperature reaches about148ºC. For this reason, this type of pastry is baked at a reasonably moderate temperature.

As a general guide the baking temperature for sweet short pastry is 190ºC to 215ºC, furthermore the baking temperature depends on: size and shape, density, the sugar content and product characteristic.

The baking temperature for savoury goods is 200ºC - 230ºC. Savoury pastry can be baked at higher temperatures because of the low sugar content; this also ensures that the pastry is cooked before the filling boils.

Pre-bake finishes: Sweet Short Pastry can be left plain, Egg-washed or washed and sprinkled with sugar to enhance the appearance.

Blind-or Pre-baking of shortbread

When pre-cooked fillings or cold fillings are used, it is necessary to pre-bake the pastry shells.

The main problem with this process is the shrinkage or distortion of the pastry during baking. The absence of a filling provides nothing to hold the pastry in shape.

There are various methods employed to overcome these problems. The more common areas follow:

- Bake on upturned foils or tins
- Sandwich between two foils or tins
- Dock dough pieces well and place in open tins or foils
- Line into tins or foils, cover with foil or greaseproof paper and fill cavity with split peas, rice, beans or similar product

At a later stage of baking, these second foils or fillings are removed to allow for completion of baking process.

For some shortbread products like slices it is important to pre-bake the bases, which guarantees that it will be properly cooked through, this also shortens the baking time and lessens the possibility of the filling boiling prematurely. The main problem with pre-baking is that there is a possibility of shrinkage at this time, which creates difficulties should the filling overlap the edges of the base.

For pre-baked bases, the pastry should be docked to prevent build-up of gasses under the sheet during baking, which could result in distortion of the base.

Remember

Docking of dough pieces is not satisfactory where a very liquid filling such as jelly or baked custard is used, due to seepage through the crust.

Post Bake Handling

It is important not to damage the product at this very vulnerable stage. Because of the soft nature of the product at this time, careless handling could easily damage it.

Products can be finished with caster sugar, which is sprinkled onto the hot product on removal from oven, or dusted with icing sugar when cold

Packaging and Presentation

Most short pastry articles in hotels or restaurants are presented on mirrors, plates and/or platters using doyleys and/or petit pans. For articles to take away, it is mostly wrapped in
cellophane wrap or bags, as this packaging allows the product to ―breathe‖. This also retains
the quality of the product and increases its shelf-life.

When serving shortbread tarts or pies hot, it is recommended to warm it on the serving dish, as the transfer may distort the product.

Shelf-Life

Unbaked Short pastry has an excellent shelf-life, due to the high sugar and fat content. It freezes very well, but must be protected to avoid freezer burn.

Baked short pastry articles are unsuitable for freezing

Ideally short pastry is baked freshly every day, but it can be stored for longer periods of time if protected from moisture.

3. Produce a variety of pastries according to standard recipes and enterprise standards.

Product characteristics that customers look for come from the following:

Colour of the product when it is finally removed from the oven is important to the visual appeal of the product. Colour stimulates the senses and encourages the customer to purchase.

Appearance is about form and shape. It is important that all pieces have the same appearance.

Consistency and texture is about how it feels in the mouth when the customer is consuming the product.

Moisture content adds to the shelf life and mouth feel of the product.

Mouth feel and eating properties

This is achieved by maintaining consistency of production. Nobody is allowed to move away from the given formula, shape design.

Recipes need to be followed and each recipe should state the yield from each production run, defining weights and number of units.

To achieve this each product must be moulded the same and must all look the same. Enterprise standards can be determined by:

- Expectations of customers
- Skill of the artisan pastry cook
- Quality of ingredients used
- Market penetration point established by the enterprise.

Activity

Produce a variety of Sweet Short pastry, using the one of production methods from the recipes provided.

Observe the formula variations of the recipes, the usage of the different pastries and their eating qualities.

Activity

Observe a demonstration of the production process for Sweet Short pastry. Produce Sweet Short pastry as directed

Activity

Observe a demonstration of the rolling out of sweet short pastry.

Using a manual rolling pin, roll out 150gm of sweet short pastry to an even thickness of4mm for Shortbread Fingers.

Cut the fingers 1cm x 5cm.

Place them on a clean tray and bake them at 190 °C until golden brown in colour (Strawcolour).

The fingers are used to evaluate the different short pastries in texture, flavour and handling properties. Please use the evaluation sheet to compare.

Activity

Using portion the Sweet Short Pastry you have produced.

Produce the following :

Frangipane Tartlets

Yield: 10

Item	Ingredients	Weigh (gm)t	Ratio
A	Sweet Short Pastry	.200	
B	Raspberry jam	.050	
C	Frangipane	.500	
D	Almonds, flaked	.005	
F	Apricot Jam	.050	
	Total	**.800**	

Method:

- Roll out sweet paste to 3mm thickness
- Line out tartlet or brioche mould
- Pipe raspberry jam into each base (only very little)
- Fill 2/3 with frangipane
- Sprinkle flaked almonds on top
- Bake at 180°C until golden brown
- Brush with boiled apricot jam, while tarts are still warm, or dust with icing sugar when cold

Frangipane

For 4 students

Item	Ingredients	Weigh (gm)t	Ratio
A	Butter Caster Sugar Lemons Zest Vanilla	.300 .300 1 each to taste	
B	Eggs	.300	
C	Ground Almonds Soft Flour	.300 .040	
	Total	1.250	

Method:

- Finely grate the zest of the lemon
- Cream "A" until light
- Add half the quantity of "B" gradually
- Mix "C" and add half to "A" and "B"
- Add remainder of ―B‖ gradually
- Add the remaining flour and almonds and mix until smooth

Note:

By topping the tart with poached fruit, different flavours and textures are achieved.
This formula for frangipane is also used for the base of upside-down cakes

Fruit Flan
Yield: 10 small

Item	Ingredients	Quantity (gm)	Ratio
A	Almond Short Pastry	.300	
B	Chocolate, white	.080	
C	Crème patisserie	.600	
D	Fruit any fresh and/or poached	As required (600)	
E	Flan Gel	100g	
	TOTALS	1.580	

Method:
- Roll out sweet paste to 3mm thickness
- Line out Flan Moulds
- Following resting time —blind bake‖ bases at 200°C
- When cold, brush bases with melted chocolate and 3/4 fill with crème patisserie
- Wash, peel and cut fruit
- Arrange neatly on top of the crème
- Glace with flan gel. Sample recipe follows

Note:
Toasted nuts may be used to decorate the sides of the flan. Equipment needed for this exercise:

- Rolling pin
- Pastry cutters
- Metal or aluminum foil moulds 2-3cm width
- Baking trays
- Pots hand balloon whisk
- Mixing bowls

Crème Patissiere (Vanilla Custard)

Item	Ingredients	Weigh (gm)t	Ratio
A	Milk	1.000	
	Vanilla Essence	.010	
	Caster Sugar	.100	
B	Eggs	.200	
	Caster Sugar	.100	
C	Cake flour	.050	
	Corn flour	.050	
	Total	1.460	

Method:

- Slit the vanilla bean lengthwise, scrape out the seeds and add into a saucepan with sugar 1; Bring to the boil
- Whisk egg-yolk with sugar and add sifted "C"
- Add half of the boiling milk into the flour mix whilst stirring
- Place all the flour-mix back into the remainder of the boiling milk and bring back to the boil, until it thickens
- Strain crème patisserie through a strainer, sprinkle with caster sugar and plastic wrap, to prevent a crust from forming.

Note:

In some formulae for crème patisserie the cornflour is replaced with custard powder. Custard powder is cornflour with yellow food colour and vanilla flavor.

Flan Gel Ingredients:
100 gm Flan Gel75 ml Water

Method:

- Mix together and bring to the boil
- Glace Fruit Flan with ―hot‖ mixture
- Water can be replaced with fruit juice (E.g. apricot brine from tinned apricot)

4. Use appropriate equipment to prepare and bake pastries

Equipment may include:





Baking Ovens





Measuring Scales





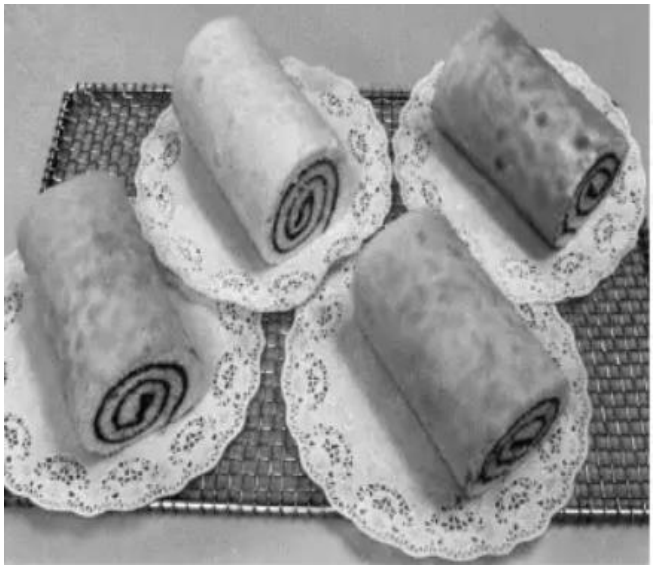


Spreading sponge batter on papered tray



Sprinkle sugar on baked sponged sheet






KitchenAid
ARTISAN



5. Use correct techniques to produce pastries to enterprise standards

When a customer purchases a product from bakery it is based on 2 reasons;
- They like the look of the product; visual stimulation
- They purchased before and want the same thing again.

If the product is not consistent then the customer will not be satisfied and will then complain.

Consistency in product manufacture is achieved by the following.

- Correct weighing of Ingredients
- Formula balance
- Bakery products are consistent when formula balance is maintained
- Scaling weights accurately
- Mixing the dough/batter the same every time
- Cutting or weighing to correct size
- Moulding to correct shape
- Baking the same every time

These are the skills and technique that will return a consistent bakery product every time. After baking the product might need to be cut again into portions.

Everything must look the same
Then when all is ready for sale then all must be sold the same way. Either:
- By portion, each
- By weight, kg or gm.

Skills required by the technician: pastry cook/cook/pâtissier includes the following:

- ***Beating*** can be vigorous combing of butter and sugar to aerate the batter before adding eggs
- ***Blending*** is slowly combining ingredients so as to not lose volume or break up ingredients. This can be done with a spoon or spatula
- ***Whisking*** is using a whisk to aerate; many types on a whisk passing through the cream introduces air into the cream and so aerates the cream
- ***Folding*** is layering over the product again and again
- ***Rolling*** is done with rolling pin or stick. Roll pastry or dough to make thinner
- ***Laminating*** is done to Puff pastry, Danish and Croissants dough. It is layering dough and fats, rolling and turning. The layered fats in dough

cause the dough to split during baking and it helps to aerate the product leading to more gentle texture and easier eating
- ***Creaming*** is blending of fat and sugar or just fats to incorporate air to lighten the texture
- ***Kneading*** is working dough to increase gluten development in bread dough

Recipe of good baking

- Weigh all ingredients. Do not measure them

What is the difference?

- Weight is measured by scaling ingredients on the same set of weighing scales
- Measuring is done with cups and is by volume. Weigh is inconsistent each time.

Example
- 1 kilo weighs 1 kilo
- 200gm weighs 200gm
- 1 cup of water measures 250ml, it weighs 250 gm

But

1 cup of flour measures 250 ml; it weighs 120gm-150gm depending on several factors.

Let's deal with the weight difference
Volume measuring by cup is good but the density of each ingredient is different so you get a different weight from each ingredient.

Water weight is same as volume; 1 kilo measures 1 litre; 1 litre weighs 1 kilo.

Dry ingredients all have a different density so therefore the weight of the same volume is different.

For example: 1 cup of weighs?

Sugar	225gm	Flour	150gm	Almonds Whole	120gm
Rice, uncooked	220gm	Honey	375gm	Almonds, ground	125gm

Standard for measure I cup volume: level to top of cup, not packed.
Consistency of results in baking comes with consistent measurements: WEIGH.

6. Bake pastries to enterprise requirements and standards

Product characteristics that customers look for come from the following:

- ***Colour of the product*** when it is finally removed from the oven is important to the visual appeal of the product. Colour stimulates the senses and encourages the customer to purchase



- ***Appearance*** is about form and shape. It is important that all pieces have the same appearance
- ***Consistency*** and texture is about how it feels in the mouth when the customer is consuming the product
- ***Moisture content*** adds to the shelf life and mouth feel of the product
- ***Mouth feel*** and eating properties

This is achieved by maintaining consistency of production. Nobody is allowed to move away from the given formula, shape design.

7. Select correct oven conditions for baking pastries

Pastries

Savoury short pastry and puff pastry need a solid heat in the high temperature range:

- 180°C – 230°C.When pastry is used on bottom of pies and quiche a higher heat is recommended to be able to penetrate the multiple layers of metal or foil and baking tray.

Shortbread or sweet pastry it is recommended that a lower heat setting is used because of the sugar used in the dough:

- 160°C- 210°C

Gentler heat will result in less shrinkage during the baking process

Task Sheet 2.2-1

Title:

WORK PROJECT

Performance Objectives:

It is a requirement of this Unit you complete Work Projects as advised by your Trainer. You must submit documentation, suitable evidence or other relevant proof of completion of the project by the agreed date.

The student will need to produce a report on three types of pastries that they will be completing:

Supplies:

Equipment:

NONE

Steps / Procedure:

1. A brief history of the style will need to be presented
2. Define the ethnic origin of the pastry
3. Does it have any significance about it? Special occasions, festival time

Assessment Method:

Use the Performance Criteria Checklist

Performance Criteria Checklist for

Task Sheet 2.1-1

Criteria	YES	NO
1. Produce a list of 3 different types of pastries that will be produced • Puff pastry • Shortbread • Savoury short pastry		
2. Complete a list of all ingredients to complete selection • Different types of flour • Different types of sugar • Milk fresh or powdered		
3. Complete list of ALL equipment needed, both large and small. • Describe the listing of large equipment • Small hand tools • Consumables required		

DETAILS OF LEARNING OUTCOME

LEARNING OUTCOME 2.1	DECORATED AND PRESENT PASTRY PRODUCTS

CONTENTS:

- Decorative techniques and rules for garnishing
- The tools in decorating
- Tips how to present finished bakery products
- Standard and procedure in pastry and yeast good

ASSESSMENT CRITERIA:

1. Presented pastries products according to specified techniques involved and proper garnishing.
2. Required and appropriate filling of pastry and yeast goods in accordance with standard recipes and/or enterprise standards and customer preferences.
3. Finished pastry items according to desired product characteristics
4. Presented pastry according to standard and procedures established

CONDITION: (Tools, equipment, s/m, references/materials

- CBLM
- LMS
- Decorative tools
- Spatula parchment paper
- Piping bag
- Pastry brush
- Turntable
- Serrated knife
- Grater

METHODOLOGIES:

- Reading instructional materials thru online using the LMS
- Synchronous online instructions (JITSI Meet, zoom, Google meet and other available online application software
- Lecture/Discussion (Online)

ASSESSMENT METHODS:

- Online examination

LEARNING EXPERIENCES

LEARNING OUTCOME 2.1: DECORATE AND PRESENT PASTRY PRODUCTS	
Learning Activity/Guide	**Special Instruction**
Read: Information Sheet 2.2.1 1. Prepare a variety of fillings coating, icing, glazes and decorations for pastries • Fruit slice filling • Pie apricot filling • Pie apple filling • Streusel / crumble topping • Fruit pies • Half puff pastry • Sausage roll filling • English Cornish pasties filling mix • Meat pie fillings • Australian apple strudel fillings • Spanakopita filling 2. Decorate pastries using coating, icing and decorations according to standards recipes and/or enterprise standards and/or customer requests. 3. Present/ display pastries to enterprise standards using appropriate service equipment. Perform Task Sheet 2.2.1	This Learning Outcome deals with the development of the Institutional Competency Evaluation Tool which trainers use in evaluating their trainees after finishing a competency of the qualification. Go through the learning activities outlined for you on the left column to gain the necessary information or knowledge before doing the tasks to practice on performing the requirements of the evaluation tool. The output of this LO is a complete Institutional Competency Evaluation Package for one Competency of **BREAD AND PASTRY PRODUCTION NCII.** Your output shall serve as one of your portfolio for your Institutional Competency Evaluation for **Preparing and Producing Bakery Products.** Feel free to show your outputs to your trainer as you accomplish them for guidance and evaluation. This Learning Outcome deals with the development of the Institutional Competency Evaluation Tool which trainers use in evaluating their trainees after finishing a competency of the qualification.

	Go through the learning activities outlined for you on the left column to gain the necessary information or knowledge before doing the tasks to practice on performing the requirements of the evaluation tool. After doing all the activities for this **LO2:** **Decorate and Present Pastry products** ; you are ready to proceed to the next **LO3: Store Pastry Products**

INFORMATION SHEET NO. 2.2-1

1. Prepare a variety of fillings coating, icing, glazes and decorations for pastries

Fillings can be savoury or sweet.
Savoury fillings for pies, samosas, curry puffs, meat based or vegetarian.
It is only limited by the imagination of the Patissier.

Requirements for fillings:

- Must be cooked
- Must have moisture content controlled

Pastry must cook before filling boils out during the baking process.

The variety of pastry possible is immense.

There are standard European style recipes that are produced around the world in leading hotels.

As these universal pastries encroach on local ethnic cuisines they will take on characteristics of the local ingredients.

As cuisines from all countries are now embraced by many countries' variations will creep into the style.

It is in the interest of the Student to study styles and recipes from other countries and try to reproduce the product as faithfully as possible to the original style



Activity

Produce a variety of fruit fillings suitable for use in a fruit slice.

Activity

Produce a variety of fruit fillings suitable for use in a fruit slices.

Item	Ingredient	Weight (gm)	Method
1	Mixed Peel Sultanas Currants Diced Apples Brown Sugar Mixed Spice Cake Margarine	.100 .600 .200 .300 .300 .020 .100	Mix together until fully combined. Spread evenly onto the shortbread base.
	Total weight	1.620	

Fruit slice filling (may be used in place of commercial fruit mince)

Pie Apricot Filling

Item	Ingredient	Weight (gm)t	Method
1	Caster Sugar Instant Starch	.250 .100	Mix together thoroughly.
2	Pie Apricot	2.200	Fold apricot through starch and sugar mix
	Total weight	2.575	

Pie Apple Filling

Item	Ingredient	Weight (gm)	Method
1	Pie Apple Cinnamon	2.200 .003	Mix apples.
2	Caster Sugar Instant Starch	.250 .050	Blend 2 together thoroughly. Vigorously fold 1 & 2 together.
	Total weight	2.503	

Remember–'The pastry should be baked before the filling boils.'

Streusel/crumble topping

Item	Ingredient	Weight (gm)	Method
1	Butter Caster Sugar	.160 .130	Mix Group 1 together and cream only slightly.
2	Plain Flour Cinnamon	.220 .003	Sieve 2 and rub into 1 until crumbly
	Total weight	.513	

Top the filling with the mixture and bake at 200 °C for 20 – 25minutes.

Activity

Basic fruit mince recipe

Item	Ingredient	Weight (gm)	Method
1	Suet, finely chopped Apples, finely chopped	.250 .250	Peel apples, process and add to suet.
2	Raisins Chopped citrus peel Sultanas Currants Lemon	.250 .125 .250 .250 .100	Chop raisins and citrus peel. Mix with the sultanas, currants, lemon juice and zest. Add to group 1
3	Sugar Mixed Spice Ground Almonds	.250 .008 .035	Stir in the sugar. Add the mixed spice and ground almonds to the above
4	Brandy	.150	Finally stir in the brandy and mix groups together thoroughly. Keep for at least 2 days before transferring to smaller storage containers. Seal well. Store in a cool, dry place until required.
	TOTAL WEIGHT	1.918	

Fruit pies

Fillings for pies

Apple, plum, blackberry, gooseberry, cherry, red currant, blackcurrant, rhubarb and dates are examples of fruit which may be used in pies.

The fruit filling should be 500g of which not more than 60g is juice. Alternatively, 250g of solid fruit and 120g of juice thickened with pre-gelatinised starch could be used.



Additional ingredients may be added to enhance the flavour of the filling. These may include fruit such as apple and rhubarb, dried fruit such as sultanas or use of spices such as ginger.

Pre-gelatinised starch

Canned apple is unsweetened, and the addition of sugar alone results in a very wet and sloppy filling which is not suitably stable as a pie or slice filling.



The excessive moisture created by the dissolving sugar slows baking of the bottom crust, induces premature boiling of the filling during baking, and shortens the shelf-life of the product.

The addition of pre-gelatinised "instant" starch will produce a filling which remains stable under a wide range of conditions and temperatures, and is more economical as it allows the addition of extra liquid to the mix.

Pre-gelatinised or soluble starch is produced commercially
By blowing a starch suspension onto steam-heated rotating

Gelatinisation and drying take place and the dried material is then flaked or ground to make a powder.

The process ruptures the starch granules, without completely distorting them, so that they swell in cold water to form a viscous paste. Because of this "instant" characteristic, great care is needed to prevent lumping as moisture and starch come together.

Ideally the starch should be dispersed into the sugar before moisture is added.

Activity

Using the apple filling for apple pie or an alternative filling, liberally top with the crumble mixture.

Bake at 200°C until the mixture is golden brown and has formed a crust.

Product evaluation

When evaluating covered sweet pies here are some features to look for:

Texture

- A crisp but not tough pastry shell
- Pastry and filling should hold their shape when cut. Apple or other fruit should not fall away from the pastry
- Crumble should be crisp on top.

Colour

- Pastry and crumble should have a golden brown finish
- Fruit mince should be dark brown in colour.

Taste

- Pastries should be sweet but not overpowering
- Fruit mince should be rich with a complex fruity, spicy flavor
- Pie fillings should reflect the major fruit used and not be overpowered by additional flavourings

Activity

Produce Australian Sausage rolls

After observing a demonstration, alter the following recipe and produce half puff pastry, scotch method from 2kg of flour. Allow to rest. Alternate folding, using rolling pin and dough brake.

Half puff pastry

Item	Ingredient	Weigh (gm)t
1	Bakers flour	1.200
	Salt	.010
	Water	.600
2	Pastry Margarine	.600
	Total weight	2.410

- Mix water, salt and flour until nearly dough stage
- Add margarine pieces to Group1 and finish mixing
- Lumps of margarine should still be showing at finish
- Rest dough 15 minutes before use
- Block up the dough and roll out so that it is three times as long as it wide, and approximately lcm thick
- Give a three-fold by half tum and immediately repeat this operation. Cover and let rest for 10-15 minutes
- Give two more three-fold by half turn, give a further rest and repeat until 6 x 3 folds have been completed

Remember

- Safety and hygiene requirements when using hand dough-brake
- Correct resting periods between folds
- Minimum use of dusting flour

Sausage Roll Filling

Item	Ingredient	Weight (gm)	Method
1	Minced meat Sausage Mince Egg Onions Pepper Beef Booster Salt Worcestershire sauce Chicken Booster	.550 .250 .100 .150 .005 .005 .010 .005 .005	Chop the onions very finely and mix all of group 1 together.
2	Bread Crumbs Water to piping consistency	.250 .250	Add breadcrumbs and mix through group 1. Pipe onto prepared strips of puff paste.
	Total Weight	1.200	

Make up procedure

- Produce 1
- Pin the finished paste out 2.5mm in thickness and cut into strips 110mm wide
- Using a large plain tube, pipe the meat filling along the top edge of the strips
- Wash the bottom edge of the strips with water and roll over to enclose the filling. Ensure that the seam is directly underneath
- Bring all the rolls close together and mark into 100mrn lengths
- Cut, egg wash and place onto prepared baking sheets
- Bake at 220°C for 15-20 minutes
- Remove from baking tray onto a cooling wire

Activity

English Cornish Pastie filling mix

Item	Ingredient	Weight (gm)	Method
1	Potatoes	.450	Peel wash and chop vegetables.
	Carrots	.250	
	Onions	.050	Mix meat and vegetables together thoroughly.
	Frozen peas	.050	
	Minced Beef, raw	.150	
2	Salt	.010	Add seasoning to group 1.
	Pepper	.005	Mix thoroughly.
	Total Weight	.965	

Make up procedures

- Roll out puff pastry to a thickness of 5mm
- Cut 12 discs at 18cm in diameter
- Wash half of each disc with water
- Divide the filling mixture between the discs
- Fold over and seal edges
- Egg wash and snip with scissors
- Place onto lightly greased baking tray- care should be taken not to have them too dose together
- Bake at 220°C for approximately 20 minutes
- Remove from baking tray onto a cooling wire.

Student needs to produce 500gm of flour into a savoury short pastry or 500gm ¾ puff pastry using English method to complete these English pasties.

Meat Pie Fillings

Yield: 35 units

Item	%	Weight (gm)	Method	Price (KG)	Price Unit
1		1.250 1.250 .010 .004 .030 .010 .010	Minced beef Water Salt Black pepper Beef Booster Chicken booster Worcestershire sauce		
2		.500 .250 to colour	Water Flour Blackjack, Parisienne Essence		
			Total Weight		

The student will need to produce

- Savoury short pastry for the pie bottom
- Puff pastry for the top (half puff)

Austrian Apple Strudel filling:

Group	Weight (gm)	Method	Price (KG)	Price Unit
1	1.000	Apples, fresh		
	.005	Cinnamon, ground		
	.125	Caster sugar		
	.080	Cake crumbs		
	.050	Almonds, flaked		
	.100	Sultanas		
	.050	Butter, Clarified		
	1.510	Total Weight		

Activity

Produce a quantity of spinach filling

Process into spinach triangles using commercially produced filo pastry, bake and finish as directed.

Yield: 16 pieces.

Required:

Filo pastry 4 sheets

Clarified butter 100gm

Spanakopita Filling

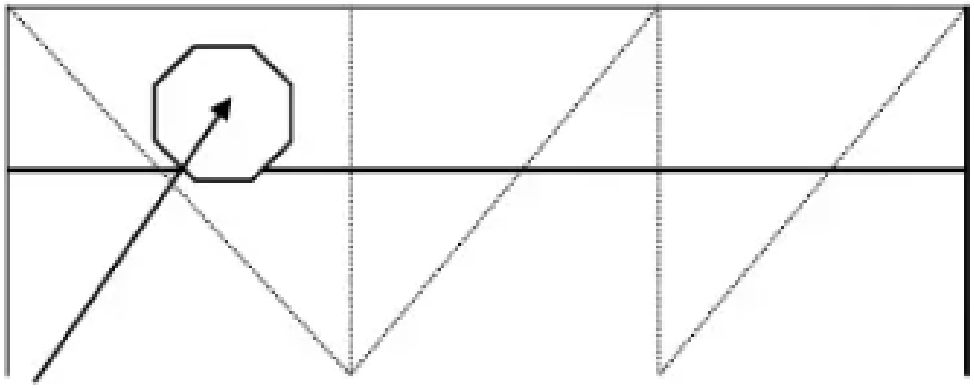
Group	Weight (gm)	Method	Price (KG)	Price Unit
1	.700	Spinach or silver beet		
	.100	Olive oil		
	1	Onion, finely diced, sautéed		
	pinch	Nutmeg, ground		
	.005	Dried parsley		
	.175	Fetta cheese, crumbled		
	.050	Cheese, parmesan, grated		
	.005	Salt		
	.002	Nutmeg		
		Total Weight		

- Wash spinach, blanch in boiling water for 30 – 60seconds
- Remove and drain, remove all water by squeezing tightly
- Place all ingredients in bowl and mix together thoroughly.

Spanakopita make up procedure

Take four sheets of filo pastry. Brush bottom three sheets with melted butter. Top sheet brush lightly with water:

- Cut pastry in half for large pastries
- Cut pastry into thirds for medium pastries
- Cut pastry into quarters for small party pastries



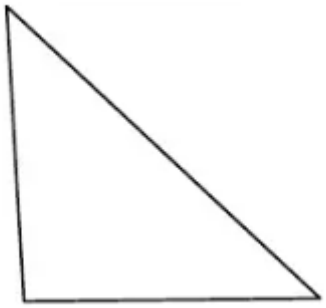
Spinach filling

- Fold pastry to form an elongated rectangle approximately 10.5cm x 23.5 cm
- Place 40-50 grams filling on both bottom right corner of sheet
- Fold corner over to form a triangle
- Repeat till all pastry is used up
- It will result in a filling which is enclosed in a laminated pastry

Final Shape

Brush over with a light coating of olive oil.

Place triangles on silicone papered trays and bake in solid 220°C for 15-20 minutes



2. Decorate pastries using coating, icing and decorations according to standard recipes and/or enterprise standards and/or customer requests

Fondant Icing

Is applied to many puff pastry items; it can be applied thick or very thinly. The end result should be that it has a shine and is touch dry when it cools to room temperature. This is achieved by correct tempering.

Glazes

Glaze is a term used to describe a covering that highlight a product to catch the eye of the consumer and entice them to consume the product.

A glaze should protect the product from things like migrating moisture from inside the product and from outside air making the product soft.

It will also add flavour and eye appeal to the product.

Gum Arabic that is used on gingerbreads and heavy honey breads like Basel leckerli will on add shine. There is no flavour added.

Decorations

Decorations can be many things:

- Roasted nuts
- Items made of another ingredient like sugar and coloured; non-pariels
- Smaller baked pastry added to product after main
- product is baked

Icing Sugars

Icing sugar sifted over baked pastries after they have been removed from the oven can be used as a glaze.

Icing sugar applied before baking will caramelise in the high baking temperature and leave an appealing shine to the cooled product.



3. Present/display pastries to enterprise standards using appropriate service equipment

Presentation of product is dependent on where and how it is to be sold.

From the bakery

Presented on tray laying flat showing filling if any; the filling will have eye appeal

- Apple Danish should have lots of apple pieces
- Apricots need to be visible
- Nut Danish: need to see the nuts

At times they may be stacked to show abundance but this can cause product on the bottom to be squashed.

Display in bakery

Most are displayed on trays that contain up to12 portions. Service is taken from the back of the tray.



Larger pieces might be presented individually on doyley and cardboard bases.

Doyleys are used extensively in presentation as is a barrier between the product and service ware.

From the restaurant show case or buffet trolley

When purchasing your morning coffee, a selection of bakery goods will be displayed for customers election.

At the café they will be behind a safety barrier.

In fine dining hotel it can be displayed on a trolley that is wheeled up to the table for the customer to choose. This is an old practice and is not used in many places in the modern age.

Service ware

These are the platters trays and plates that are used to display and serve product in cafes and dining rooms. These can also be used with doyleys between product and service ware.

Task Sheet 2.2-1

Title:

WORK PROJECT

Performance Objectives:

It is a requirement of this Unit you complete Work Projects as advised by your Trainer. You must submit documentation, suitable evidence or other relevant proof of completion of the project by the agreed date.

Supplies:

Equipment:

NONE

Steps / Procedure:

1. A brief history of the style will need to be presented
2. Define the ethnic origin of the pastry
3. Does it have any significance about it? Special occasions, festival time

Assessment Method:

Use the Performance Criteria Checklist

Performance Criteria Checklist for

Task Sheet 2.2-1

Criteria	YES	NO
1. The student will need to produce a diagram of a pastry that they will be decorating. • A brief history of the style will need to be presented • Define the ethnic origin of the pastry • Does it have any significance about it? Special occasions, festival time		
2. Describe the filling that may be used in the cake • Does the pastry have a filling • What is the role of the filling		
3. Describe the process of glazing the pastry • What type of glaze will be used? • Fondant • Ganache		
4. State how the pastry is going to be presented • Is it going to be sold whole? • Is the pastry going to be sliced and sold in pieces? • Will the customer take the pastry home? • Will the pastry be consumed on the premises?		

DETAILS OF LEARNING OUTCOME

LEARNING OUTCOME 3	STORE PASTRY PRODUCTS

CONTENTS:

- Different kinds of packaging materials to be used
- Shelf-life of pastries and other baked products based on the standard and procedure
- Standard and procedures of pastry products
- Operational Health safety (OHS)

ASSESSMENT CRITERIA:

1. pastry and other bake products
2. Determined shelf-life of pastries and other baked products
3. Stored pastry products according to established standards and procedures
4. Selected packaging are used for the appropriate preservation of product freshness and eating characteristics

CONDITION: (Tools, equipment, s/m, references/materials

- CBLM
- LMS
- Storage area
- Packaging materials
- Pastries and baked product

METHODOLOGIES:

- Reading instructional materials thru online using the LMS
- Synchronous online instructions (JITSI Meet, zoom, Google meet and other available online application software
- Lecture/Discussion (Online)

ASSESSMENT METHODS:

- Online examination

LEARNING EXPERIENCES

LEARNING OUTCOME #3: STORE PASTRY PRODUUCTS	
Learning Activity/Guide	**Special Instruction**
Read: Information Sheet 2.3.1 Store Pastries 1. Store at correct temperature and conditions of storage 2. Maintain maximum eating quality, appearance and freshness Perform Task Sheet 2.3.1	This Learning Outcome deals with the development of the Institutional Competency Evaluation Tool which trainers use in evaluating their trainees after finishing a competency of the qualification. Go through the learning activities outlined for you on the left column to gain the necessary information or knowledge before doing the tasks to practice on performing the requirements of the evaluation tool. The output of this LO is a complete Institutional Competency Evaluation Package for one Competency of **BREAD AND PASTRY PRODUCTION NCII.** Your output shall serve as one of your portfolio for your Institutional Competency Evaluation for **Preparing and Producing Bakery Products.** Feel free to show your outputs to your trainer as you accomplish them for guidance and evaluation. This Learning Outcome deals with the development of the Institutional Competency Evaluation Tool which trainers use in evaluating their trainees after finishing a competency of the qualification.

	Go through the learning activities outlined for you on the left column to gain the necessary information or knowledge before doing the tasks to practice on performing the requirements of the evaluation tool. After doing all the activities for this **LO3:** **Store Pastry Products**; you are ready to proceed to the next **Unit of Competency for Prepare and present gateaux, tortes and cakes.**

INFORMATION SHEET 2.3-1

STORE PASTRIES

1. Store at correct temperature and conditions of storage

Bakery products tend to be stable at room temperature. No special storage requirements need to be applied for daily use.

Any product that is to be served after the day of manufacture the product will need to be covered and protected from outside contamination.

- Products with cream filling will need to be kept chilled
- Cream patisserie can stand at room temperature for the day but must be discarded and not.

Most bakery products are sold or used the same day that they are produced. If they are to be stored at room temperature:

Store at Room Temperature

Festive product may be stored for a couple of days. Longer storage is best to freeze If the baked product does not contain dairy products then it can be stored at room temperature.

- protected from the environment by being covered. When food is chilled it can lose essential parts of the flavour. When storing it is always important to make sure product is labelled and it is stored away from strong odours like onion or cleaning chemicals.

Freezing
If freezing baked bakery products care must be taken not to squash them when wrapping.



This will cause them to be deformed when thawed out. When freezing be sure to label with the date of freezing and use the FIFO rule

Storing in Cool room

Product with dairy ingredients like cream and crème patisserie need to be kept chilled to stop bacterial activity rising above acceptable limits. Never store for too long in cool room: -fresh cream, same day only. Product degradation will be too great and eating quality diminishes.

2. Maintain maximum eating quality, appearance and freshness

All bakery products will stale.

Staling is the process where the optimum eating fades.

Staling can be in several forms.
- Air passes through the product and dries the product out
- Moisture from the air enters the product so it loses some of the eating quality
- Crisp product goes soft.

To maintain the eating quality of bakery items
- Use as soon as possible
- Cover to protect from environment
- Keep chilled
- Keep dry

Different methods for different product

Bread: keep in plastic bags to prevent staling. Bread should not be kept in plastic bags at room temperature too long as mould can grow with warmth and moisture.

If bread is to be stored for long periods it is best to freeze. Bread stales fastest when in the cool room for extended periods. Freezing is best.

Croissants will be considered stale the next day when they lose crispness. After baking itis best to freeze if you wish to store them for any period of time.

- Thawing is quick as they product is light
- Thaw best at room temperature

Danish pastry is best consumed on the day that it was produced.
- Can be stored and re heated at later time, but eating quality is reduced.

Muffins

- American style are best consumed on the day that they were produced
- English style is like bread

Any yeast product is best consumed on the day that it was produced.

Gingerbreads can be stored for periods if they are protected from the moisture in the air. It makes the product go soft.

Task Sheet 2.3-1

Title:

WORK PROJECT

Performance Objectives:

It is a requirement of this Unit you complete Work Projects as advised by your Trainer. You must submit documentation, suitable evidence or other relevant proof of completion of the project by the agreed date.

The student will need to present a report on the following points

Supplies:

Equipment:

NONE

Steps / Procedure:

1. A brief history of the style will need to be presented
2. Define the ethnic origin of the pastry
3. Does it have any significance about it? Special occasions, festival time

Assessment Method:

Use the Performance Criteria Checklist

Performance Criteria Checklist for Task Sheet 2.3-1		
Criteria	**YES**	**NO**
1. What temperature are you going to store your finished pastries and cake product? • You need to cite standards and explain why these standards are being implemented • Students can use photographic evidence to demonstrate how this will be implemented	☐ ☐	☐ ☐

Recommended reading

Beranbaum, Rose Levy: 2009; Rose's Heavenly Cakes; Houghton Mifflin Harcourt;

Boyle, Tish; 2006; The Cake Book; Houghton Mifflin Harcourt

Bullock-Prado, Gesine; 2013; Bake It Like You Mean It: Gorgeous Cakes from Inside Out; Stewart, Tabori and Chang

Editors of Martha Stewart Living; 2013; Martha Stewart's Cakes: Our First-Ever Book of Bundts, Loaves, Layers, Coffee Cakes; Clarkson Potter

Kasne, Karen; 2011; Extraordinary Cakes: Recipes for Bold and Sophisticated Desserts; Rizzoli

Maree, Aaron; 1995; Cakes, Tortes and Gateaux of the World: Exotic and Delightful Recipes, Icings, Toppings and Decorations; Cassell Illustrated

Mörwald, Toni; Austrian Desserts: Over 400 Cakes, Pastries, Strudels, Tortes, and Candies; Skyhorse Publishing

Rowe, Anna; 2013; TOP 30 Easy and Delicious Cake Recipes; Amazon Digital Services

Rettke, Amanda; 2014; Surprise-Inside Cakes: Amazing Cakes for Every Occasion ; William Morrow Cookbooks

Richardson, Julie; 2012; Vintage Cakes: Timeless Recipes for Cupcakes, Flips, Rolls, Layer, Angel, Bundt, Chiffon, and Icebox Cakes for Today's Sweet Tooth ; Ten Speed Press

Trainee evaluation sheet

The following statements are about the competency you have just completed.

Please tick the appropriate	**Agree**	**Don't know**	**Do Not Agree**	**Does Not Apply**
There was too much in this competency to cover without rushing	☐	☐	☐	☐
Most of the competency seemed relevant to me	☐	☐	☐	☐
The competency was at the right level for me	☐	☐	☐	☐
I got enough help from my trainer	☐	☐	☐	☐
The amount of activities was sufficient	☐	☐	☐	☐
The competency allowed me to use my own initiative	☐	☐	☐	☐
My training was well-organized	☐	☐	☐	☐
My trainer had time to answer my questions	☐	☐	☐	☐
I understood how I was going to be assessed	☐	☐	☐	☐
I was given enough time to practice	☐	☐	☐	☐
My trainer feedback was useful	☐	☐	☐	☐
Enough equipment was available and it worked well	☐	☐	☐	☐
The activities were too hard for me.	☐	☐	☐	☐

Trainee Self-Assessment Checklist

PREPARE AND PRODUCEPASTRY PRODUCTS		Yes	No
Prepare and bake cakes and filings			
1.1	Select required commodities according to recipe and production requirements.	☐	☐
1.2	Prepare variety of cakes to desire product characteristics	☐	☐
1.3	Produce a variety of cakes according to standard recipes and enterprise standards	☐	☐
1.4	Use appropriate equipment to prepare and bake cakes	☐	☐
1.5	Use correct techniques to produce cakes to enterprise standards	☐	☐
1.6	Bake cakes to enterprise requirements and standards	☐	☐
1.7	Select correct oven condition for baking cakes	☐	☐
Decorate and present/display cakes			
2.1	Prepare a variety of fillings and coating/icing, glaces and decorations for cakes	☐	☐
2.2	Decorate cakes using filings and coating/icing and decorations according to standard recipes and/or enterprise standards and/or customer requests	☐	☐
2.3	Present /display cakes to enterprise standards using appropriate service equipment	☐	☐
Prepare and produce pastries and fillings			
3.1	Select required commodities according to recipe and production requirements.	☐	☐
3.2	Prepare a variety of pastries	☐	☐
3.3	Produce a variety of pastries according to standard recipes and enterprise standards	☐	☐
3.4	Use appropriate equipment to prepare and bake pastries	☐	☐
3.5	Use correct techniques to produce pastries to enterprise standards	☐	☐
3.6	Bake pastries to enterprise requirements and standards	☐	☐

3.7	Select correct oven conditions for baking pastries	☐	☐
Decorate and present pastries			
4.1	Prepare a variety of filings coating, icing, glazes, and decorations for pastries	☐	☐
4.2	Decorate pastries using coating, icing and decorations according to standard recipes and/or enterprise standards and/or customer requests	☐	☐
4.3	Present/display pastries to enterprise standards using appropriate service equipment	☐	☐
Store cakes and pastries			
5.1	Store at correct temperature and conditions of storage	☐	☐
5.2	Maintain maximum eating quality, appearance and freshness	☐	☐
The trainee's underpinning knowledge was: Satisfactory Not Satisfactory			
Feedback to trainee:			
The trainee's underpinning knowledge was: Satisfactory Not Satisfactory			
Trainer's Signature	**Date:**		

Demonstration with Oral Questioning Checklist

Trainee Name:			
Trainer Name:			
Qualification	**Bread and Pastry Production NC II**		
Unit of Competency	Prepare and Produce Pastry Products		
Date of Assessment			
Time of Assessment			
Instruction for demonstration			
Given the necessary tools, the candidate will be able to demonstrate, *Preparing and Producing Pastry Products* following standard procedures within 15 minutes			
DEMONSTRATION	✓ to show if evidence is demonstrated		
During the demonstration of skills, did the candidate:	**Yes**	**No**	**N/A**
• Demonstrated ability to produce a range of specialist bakery products, both sweet and savory according to establishment standards and procedures	☐	☐	☐
• Demonstrated ability to produce a quantity of bakery products according to establishment standards and procedures.	☐	☐	☐
• Demonstrated ability to store and package bakery products according to establishment standards and procedures	☐	☐	☐
• Demonstrated application of hygiene and safety principles according to established standards and procedures	☐	☐	☐
The candidate's demonstration was: Satisfactory ☐ Not Satisfactory ☐			

Third Party Report

Candidate Name:			
Name of third party:		**Contact No.**	
Position:			
Relationship with the candidate	☐ employer ☐supervisor ☐colleague ☐other Please specify Please do not complete the form if you are a relative, close friend or have a conflict interest		
Dates the candidate worked with you	From:	To:	
Competency Standard:	**BREAD AND PASTRY PRODUCTION NC II**		
Unit of Competency	**Prepare and Produce Pastry Products**		

The candidate is being assessed against the competency standards for

We are seeking your support in the judgement of this candidate's competence. Please answer these questions honestly as a record of the candidate's performance while working with you. Thank you for your time.

Comments regarding candidate performance and experience

I can verify the candidate's ability to (tick the correct response)	Yes	No	Not Sure	Comment to support my responses:
• Check the availability of all resources required for training	☐	☐	☐	
• Identify alternative resources for contingency measures	☐	☐	☐	
• Identify and arrange appropriate training locations according to training needs.	☐	☐	☐	
Third party signature:				**Date:**
Send to:				