

PASTES OR MIXTURES

5.1 INTRODUCTION

The various pastes or mixtures are used as the base in the preparation of sweet and savoury items in bakery and confectionery. There are five basic pastes. Once you have learnt to make these basic pastes, you can prepare hundreds of dishes from them. The basic paste is prepared and then finished off in different ways, using different ingredients to get varied end products.

In layman's language the term pastry generally refers to decorated sponge cakes of small sizes but in confectionery the word pastry has a much broader perspective. It is synonymous with paste.

5.2 OBJECTIVES

After reading this lesson you will be able to :

- list the basic pastes;
- demonstrate the methods of making these pastes;
- derive variations or a few important products from them;
- enlist precautions to be taken while making these pastes;
- identify common faults likely to occur and suggest possible remedies.

5.3 THE BASIC PASTE

The basic five pastes are

- a) Short crust paste
- b) Flaky paste
- c) Puff paste
- d) Choux paste
- e) Danish paste

These are certain general paste, which if kept in mind and followed during preparation of most pastries, would guarantee good results. So before we learn the basic procedures that we have to follow for making different pastes let us know about certain general rules for successful pastry making.

5.4 TO MAKE A GOOD PASTE

In order to make a good pastry, there are some do's and don'ts which one must follow. Let us see what these are.

DO:

1. Work in a cool place and keep your hands cool.
2. Sift the flour and salt after measuring. Why? It incorporates air and helps to lighten the pastry.
3. Use cold water and a round bladed knife for mixing.
4. Work quickly and handle the pastry as little and as lightly as possible.
5. Use lemon juice while making puff or flaky pastry. Lemon juice strengthens the gluten in flour and gives a lighter and crisper pastry.
6. Chill the pastry for 15-30 mts. after making. Can you give a reason why? Chilling makes rolling easier and even.
7. Roll the pastry rightly and evenly with short strokes, lifting the rolling pin between each stroke.
8. Always roll away from yourself.
9. Use very little flour for rolling and use a pastry brush to remove any excess flour.
10. Use a fairly hot oven for baking pastries—the high temperature makes the starch grains burst which then absorb the fat. Unless the heat is high enough to act on the flour in this way, the melted fat runs out and leaves the pastry heavy and tough. A high temperature is also necessary to create steam within the dough which makes the pastry light.
11. Keep the work area and yourself clean in order to avoid contamination by dirt, germs, insects, rodents, etc.,
12. Insist that every person associated with food preparation or sale should maintain the highest levels of hygiene, when you set up your own bakery.

DO NOT

1. Use tap/warm water for mixing.
 2. Use too much water. Can you say why? It will make the pastry hard. The amount of water given in the recipe is approximate
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because flours vary in the amount of water which they absorb.

3. Over work the pastry.
4. Roll off the edge of the pastry while rolling. Can you say why ?
The air in the pastry will get pressed out.

5.5 LEARN THE PASTES

1) Short crust paste

The word 'short' in the bakery sense means friable or easily breakable. (The texture as that of matthi). It is the direct opposite of tough and elastic. It is a pastry made with shortening so it crumbles into small pieces when pressed. All fats are shortening agents because they reduce the extensibility of gluten according to the amount used in a given weight of flour and the method of preparation.

Short crust paste is a mixture of flour, fat, sugar, baking powder and water or milk or egg. The method for preparation of short crust has already been discussed in the previous chapter on 'Biscuits'. If you do not remember it, go back and read it once again.

2. Flaky Pastry and Puff Pastry

The goods produced from both these pastes are light and fluffy with some shortness in the pastry so that it is crisp and not tough. When making such a paste your object is to build a structure of fat and paste so that when heated in the oven it will expand and lift evenly to produce products with short eating properties.

Similarities : for both flaky pastry and puff pastry you need strong flour with good quality gluten. Salt is added for taste while lime juice is an acidic medium which strengthens the gluten. Fat is added for layers. Cold water is added to maintain the dough temperature so that the fat does not melt. The derivatives or the products you can make from both these pastes are same with slight variation in texture quality.

Differences

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|---|--|
| 1. Puff pastry contains fat and flour in the ratio of 1:1 | 1. Flaky pastry contains 3/4 of fat to every kilogram of flour. |
| 2. All fat is folded in at one rolling | 2. Fat is divided into 3 parts and it is folded in three rollings. |

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|----------------------------------|------------------------------------|
| 3. Number of layers are more | 3. Number of layers are less |
| 4. There are four empty rollings | 4. There is only one empty rolling |

TO MAKE FLAKY PASTRY

Ingredients required:

Flour	—	225 g
Margarine	—	175g (150g+25g)
Lemon Juice	—	½ lemon
Salt	—	5g
Cold Water	—	to mix

Method :

1. Sieve flour and salt together.
 2. Rub 25g margarine with finger tips on the sieved flour, as already explained in "pastry dough".
 3. Add lemon-juice to a little cold water.
 4. Make a soft dough using lemon water and prepared flour, knead it well so that the gluten is activated and the flour becomes stretchable.
 5. Make a ball of the dough and keep on table top covered with a moist duster.
 6. Let it rest for ½ hour.
 7. Divide the remaining fat into 3 equal parts of 50g each and keep in the refrigerator for cooling.
 8. Sprinkle little dry flour on the table top and the rolling pin. Roll out the dough evenly into a 20"x10" rectangle using the rolling pin.
 9. Divide the 20" side into three equal parts by marking lightly with a palette knife.
 10. Take 50 g fat in a bowl and cream lightly using a wooden spoon.
 11. Spread it properly on two adjacent parts of the rectangle. Leave ½ inch border on the outer sides so that fat does not come out while rolling.
 12. Fold the empty side first and then fold the remaining 2/3rd part over the folded part so that you get three layers.
 13. Wrap this in a polythene paper and keep in the freezer for 15-20 mts.
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1



2



3



4



5



6



14. Repeat from step no. 8 to 13 and fold in the other two parts of fat.
15. Roll again to the same size and divide the rectangle into four equal parts and mark.
16. Fold the outer two parts over the inner two parts and again give a fold from the centre so that you get four layers. This fold is known as **book fold**.
17. Cover in a polythene and store in a fridge.
18. Use as required.

TO MAKE PUFF PASTRY

Ingredients required:

Flour	—	225g
Margarine	—	225g (200+25g)
Lemon Juice	—	from ½ lemon
Salt	—	5g
Cold Water	—	to mix

Method :

1. Sieve flour and salt together.
2. Rub 25g margarine (using finger tips only) into the sieved flour.
3. Add lemon juice to a little cold water.
4. Make a soft dough using lemon water and prepared flour. Knead it well to develop gluten and make the dough elastic.
5. Make a ball and keep on the table covered with a moist duster for 30 minutes. This is called resting the dough.
6. Keep 200 g of the left over margarine in refrigerator till required.
7. Using a rolling pin and dry flour roll into a rectangle 20"×10" as explained for flaky pastry.
8. Cream all left over 200g margarine with a wooden spoon.
9. Divide the rolled rectangle into two equal halves marking lightly with palette knife.
10. Spread the creamed fat on half of the rectangle with the help of a palette knife. Leave half an inch on the outer sides, to avoid fat coming out in next rollings.
11. Fold the empty side onto the fat covered one and press the edges lightly.

12. Keep in the freezer for about 15-20 minutes to harden the fat.
13. Roll again to the same sized rectangle and divide into 4 parts.
14. Give a book fold as explained earlier in point no. 16 of flaky pastry.
15. Cover with a polythene and keep in the freezer for 20 minutes.
16. Roll again into a rectangle and divide into three parts.
17. Give any empty folding to get three layers. Keep in freezer for another 20 mts.
18. Roll again into a rectangle of 20"x10" and divide into four.
19. Give another empty book fold and keep in freezer covered with a polythene.
20. Roll again and divide into three equal parts.
21. Fold to get three layers.
22. Keep in a refrigerator covered with a polythene till required.

WHAT WENT WRONG?

The common faults which could occur in these pastries due to wrong amount or type of ingredient used or improper handling during the making may be

- 1) Too few layers in the pastries
 - a) insufficient resting and chilling in between different rollings.
 - b) Too heavy rolling which could result in breaking of fat and flour layers.
 - c) Warm fat is used during making.
 - (2) Fat running out during baking.
 - (a) Too low baking temperature.
 - (b) Poor quality flour.
 - (3) Hard and tough pastries.
 - (a) Too much water using during mixing.
 - (b) Dough is over-kneaded or over rolled with too much flour.
 - (c) Baked in too cool an oven.
 - (d) Warm fat has been used.
 - (4) Pastry unevenly risen
 - (a) The fat has not been mixed in evenly.
 - (b) Rolling or folding has been incorrect.
 - (c) Not rested long enough before use.
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In case you find any of these defects in the pastry made by you, you can easily. Correct it the next time. Do not be disheartened, pastry making is an art which needs a lot of practice. The more you practise, the more perfect will be the pastry you bake!

INTEXT QUESTIONS 5.1

1. State one major differences between flaky and puff paste.
2. Name all basic pastes.
3. Mark whether true or false.
 - a) Puff and flaky pastes always give different products.
 - b) The texture of products made from short crust paste is similar to that of Namkeen Mathi.
 - c) A cool area is required for preparation of puff paste.
 - d) The amount of fat used in flaky paste is more than that in puff paste.
 - e) Lemon juice is added for taste.

5.7 VARIATIONS OF PUFF AND FLAKY PASTE

1. Vegetable Patties

Puff/Flaky paste	—	1 Mixing
Potatoes	—	250g
Onion	—	250g
Peas	—	125g
Ginger	—	25g
Garlic	—	10g
Green chilli	—	10g
Cumin seeds	—	5g
Refined Oil	—	30ml
Salt	—	to taste
Amchur	—	5g
Egg	—	1 No.
Refined Oil	—	30 ml

To make the stuffing

1. Wash, boil and peel potatoes and mash them.
2. Chop onion, ginger, garlic and green chilli.
3. Boil shelled peas.

4. Heat oil in a karahi, add cumin seeds and cook till light brown.
5. Add chopped onion, fry lightly.
6. Add chopped ginger, garlic salt and green chilli and fry for two minutes.
7. Add mashed potatoes and peas and mix well.
8. Remove from fire and add amchur powder and cool.

For Making patties

1. Roll the flaky/puffy paste to 1/4" thickness using a rolling pin and flour. Try and shape a rectangle.
2. Trim the sides to get a perfect rectangle.
3. Mark with a palette knife to get 8 equal squares of 4" x 4" size.
4. Coat the sides of each square with a beaten egg.
5. Place some of the filling in the centre of each square.
6. Fold the square to cover the stuffing. Either fold diagonally to form a triangle or lengthwise to get a rectangle.
7. Press the sides lightly to seal.
8. Place on a greased baking tray with a 2 inch gap between each pattie.
9. Brush the top with beaten egg.
10. Bake in a preheated oven between 200 to 210°C
11. Remove from oven and cool on a cooling rack.
12. Pastries are served warm and should be stored in a hot case before selling. These can be stored only for 24 hrs at the most as the filling is likely to get spoilt. It is suggested that the paste (flaky or puffy) and the stuffing should be made and kept in the fridge. Pastries can be prepared in lesser numbers so that they do not get spoilt.

Note:- You can use different stuffings, e.g. minced meat, chicken, mushrooms, etc. instead of vegetables.

2. Mushroom Vol-au-Vent

Ingredients :

Puff/flaky paste — 1 Mixing
Fresh mushroom — 50g

Butter	— 10g
Flour	— 10g
Milk	— 100 ml
Salt	— to taste
White pepper	— 3g
custard powder	— 2g
Egg	— for wash

Method :

For filling

1. Heat butter in a thick bottomed saucepan on slow heat.
2. When melted, add flour and keep stirring with a spoon till you get a cooked aroma (as for Halwa). Approximately 3-4 minutes will be taken. The colour of the flour should remain light cream and should not get browned at all.
3. Add warm milk slowly, stirring all the time, to avoid lump formation.
4. Remove from fire after cooking for a few minutes.
5. Add salt, white pepper and mustard powder.
6. Add boiled and chopped mushrooms.

For Vol-au-vent

1. Roll as for pastries.
 2. Cut half the rectangle into rounds of 2 inch diameter, with a biscuit cutter.
 3. Cut the remaining half with a dough nut cutter so that you have a hole in the centre.
 4. Egg-wash the first complete round and then place the rounds with hole on top of them.
 5. Egg-wash the top round and bake in a greased baking tray at 200°C for 15-20 minutes.
 6. Remove, cool on a cooling rack.
 7. Fill the hole with the mushroom filling using a teaspoon.
 8. The empty vol-au-vent cases can be stored for 3 days but after filling their shelf life is reduced to 24 hrs.
 9. These are served hot and should be stored in hot cases before selling.
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3. KHARA BISCUITS

Ingredients:

Puff/flaky paste - 1 Mixing

Method:

1. Roll the paste to ¼" thickness.
2. Cut lengthwise strips of ¾" breadth and 3"-4" length
3. Twist and keep on a greased tray.
4. Bake at 200°C for 15-20 mts.
5. Cool on a cooling rack.
6. Store in an airtight container. These can be stored for 4-5 days and are served cold.

4. CHEESE STRAWS

Ingredients :

Puff/flaky paste	—	1 Mixing
Grated cheese	—	225g
Seasoning	—	to taste

Method:

1. Roll the paste to ¼" thickness.
2. Apply egg wash on top .
3. Sprinkle grated cheese and level and press slightly.
4. Cut strips of ¾" by 4".
5. Twist and place on a greased tray.
6. Bake at 200°C for 15-20 mts
7. Cool on a rack and store in an airtight container for 4-5 days.
8. Served cold.

5.8 CHOUX PASTE

(‘Choux’ is pronounced as ‘shoe’)

It is made by boiled paste method. Fat and water are boiled together and then all the flour is added at once and cooked. But eggs should be added only after the mixture has been cooled otherwise the egg proteins will coagulate. Air is entrapped in the mixture because of the heating of eggs. Gluten and albumin form a network in the pastry and

do not allow the steam formed to escape. The products made from choux paste are very light and have big hollow spaces in between.

To make the Choux paste

Ingredients :

Water	—	250 ml.
Butter	—	125g
Flour	—	150g
Eggs	—	5

Method :

1. Put butter and water in a thick bottomed degchi.
2. Heat and bring to boil.
3. Add sieved flour, all at one time, mixing vigorously with a wooden spoon.
4. Keep stirring and cook on slow fire until the mixture leaves the sides of the pan.
5. Remove from fire and allow it to cool to room temperature.
6. Put the cooled mixture into an enamel bowl and add eggs one by one mixing nicely all the time.
7. Cream with a wooden spoon, until the mixture becomes firm enough to pipe, but not too soft.
8. Use as required.
9. If the mixture is required to be stored for a few hours before baking it should be wrapped closely in grease-proof paper and kept in a refrigerator.

5.9 WHAT CAN GO WRONG?

1. The pastry is too thin:
 - a) the flour and liquid have not been cooked enough
 - b) the mixture has not been beaten sufficiently
 - c) the liquid has been allowed to cool too much before adding the flour.
2. The pastry is too thick
The liquid has been boiled for too long
3. Close and solid texture after baking :
 - a) it has not been beaten enough

- b) it has been cooked in too hot an oven.
- c) it has been cooked in too cool an oven.

5.10 VARIATIONS OF CHOUX PASTE

(1) Chocolate and eclairs

Ingredients :

Choux paste from	—	125g flour
Fresh cream	—	300g
Chocolate fondant Icing	—	30g
Sugar	—	60g
Vanilla essence	—	a few drops

Method :

1. Put the choux paste in a piping bag with ½" size plain nozzle.
2. On a greased baking tray, pipe mixture into finger shapes of 4" length.
3. Bake at 210°C for about 20-25 minutes.
4. Then open the door of the oven and bake for another 10 minutes to avoid shrinking which takes place if the pastry is removed suddenly from the oven.
5. Cool on a cooling rack.
6. Whisk cream with sugar in an enamel bowl till thick.
7. Add a few drops of essence.
8. Cut one end of the cooled eclair and fill with whipped cream using a piping bag and a thin nozzle.
9. Coat eclairs on top with chocolate fondant icing.
10. Allow Icing to set and serve cold.

Note:

1. For convenience chocolate fondant can be replaced with chocolate glaze icing.
2. Coffee eclairs can be produced by substituting coffee powder for cocoa powder.
3. The recipes for both chocolate fondant icing and chocolate glaze icings are explained in the chapter on **Icings**.

The recipe will give approximately 20-22 eclairs.

(2) Profiterole suchard*Ingredients :*

Chouxpaste	—	from 125g flour
Fresh cream	—	300g
Chocolate sauce	—	½ Mixing
Nibbed Almonds	—	30g
Vanilla essence	—	a few drops

Method :

1. Pipe the choux paste on a greased baking tray into small roundels of One Rupee coin size using a plain nozzle.
2. Bake in the same manner as eclairs.
3. Cool on a rack.
4. Punch a hole equivalent to the size of the top of small nozzle.
5. Whisk cream and sugar after adding essence till thick.
6. Fill this cream into the profiteroles.
7. Coat with chocolate sauce.
8. Decorate with nibbed almonds.

To make Chocolate Sauce*Ingredients :*

Grain Sugar	—	225g
Cocoa powder	—	30g
Water	—	180 ml

Method:

1. Put all the ingredients in a thick pan and bring it to boil.
2. Allow to simmer on a slow fire for about 40-45 minutes.
3. When the sauce thickens take it off fire and cool.
4. It should coat thickly the back of a spoon when cold.
5. Store in an airtight bottle and use as required.

3. Cream Puffs

Chouxpaste	—	from 125g flour
Cream	—	250 ml
Sugar	—	50g
Vanilla	—	a few drops
Icing sugar	—	25 gm

Method :

1. Grease the baking tray.
2. Put the choux paste in a piping bag and with a thin star nozzle, pipe resettes leaving enough space in between.
3. Bake as for eclairs.
4. Cool completely on a wire rack.
5. When cold, slit horizontally from the centre.
6. Pipe whipped sweetened cream on the base and top part.
9. Serve cold dusted with icing sugar.
10. Store in refrigerator only for a few hours.

5.11 DANISH PASTRY

This pastry is made from a yeast dough, which is enriched with layers of butter. As yeast raised doughs require special method for preparation, this pastry will be explained with other yeast goods in another lesson.

INTEXT QUESTIONS 5.2

1. Select the right answers:
 - (i) While baking vegetable patties fat runs out because
 - a) Too much fat has been added.
 - b) Fat added is not of the right type
 - c) Oven temperature is less
 2. When khara biscuits are not very short and flaky in texture
 - a) Less quantity of fat has been added
 - b) Fat used was not cold
 - c) Improper rolling has been done
 3. Eclairs shrink in size due to
 - a) Insufficient cooking of mixture
 - b) Removing too quickly from oven
 - c) Less number eggs used.
 2. What do you understand by the turn Book fold? Illustrate your answer.
 3. Why do we need to chill the puff or flaky paste between different rollings?
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ANSWERS TO INTEXT QUESTIONS

- 5.1
1. Puff pastry has fat and flour in the ration of 1:1 whereas flaky pastry has it in the ratio of 3/4:1
 2. Refer text
 3. (a) F (b)T (c) T (d)F (e)F
- 5.2
1. (i) (e) (ii) (b) (iii) (b)
 2. Refer text
 3. Refer text
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