UMT MOOC

Massive Open Online Course

MINISTRY OF EDUCATION MALAYSIA

UMT

UMT MOOC Massive Open Online Course

Pastry and Bakery



TOPIC 5:

PIE CRUST & FAULTS IN PASTRIES



Presented by:

DR. WAN HAFIZ WAN ZAINAL SHUKRI
School of Food Science and Technology
Universiti Malaysia Terengganu

Email : wanafiz@umt.edu.my

LEARNING OUTCOMES

MINISTRY OF EDUCATION MALAYSIA

UMT

UMT MOOC Massive Open Online Course

1. Explain the characteristics of a mealy pie dough and key ingredients
2. Describe how to assemble, form and bake pies
3. Discuss various pie fillings
4. Discuss common faults in pastry



LEARNING OUTLINES

MINISTRY OF EDUCATION MALAYSIA

UMT

UMT MOOC Massive Open Online Course

1. Characteristics of a mealy pie dough and key ingredients including flour, fat, liquid and salt
2. Proper methods of assembling, forming and baking pies
3. Various pie fillings are fruit fillings, custard fillings, cream fillings and meringue fillings



INTRODUCTION

MINISTRY OF EDUCATION MALAYSIA

UMT

UMT MOOC
Massive Open Online Course



VIDEO PIES DI BAKERY

1 CHARACTERISTICS OF MEALY PIE DOUGH

MINISTRY OF EDUCATION MALAYSIA

UMT

UMT MOOC Massive Open Online Course

CORNMEAL TEXTURE OF FLOUR & BUTTER PIC

DOUGH PIC

PIE CRUST PIC

KEY INGREDIENTS

MINISTRY OF EDUCATION MALAYSIA

UMT

UMT MOOC Massive Open Online Course

FLOUR

FAT



WATER

SALT

2 ASSEMBLING MEALY PIE DOUGH

STEPS IN MIXING MEALY PIE DOUGH

- **Step 1**
- **Step 2**
- **Step 3**
- **Step 4**





ROLLING

MINISTRY OF EDUCATION MALAYSIA

UMT

UMT MOOC
Massive Open Online Course

VIDEO OF ROLLING OUT DOUGH

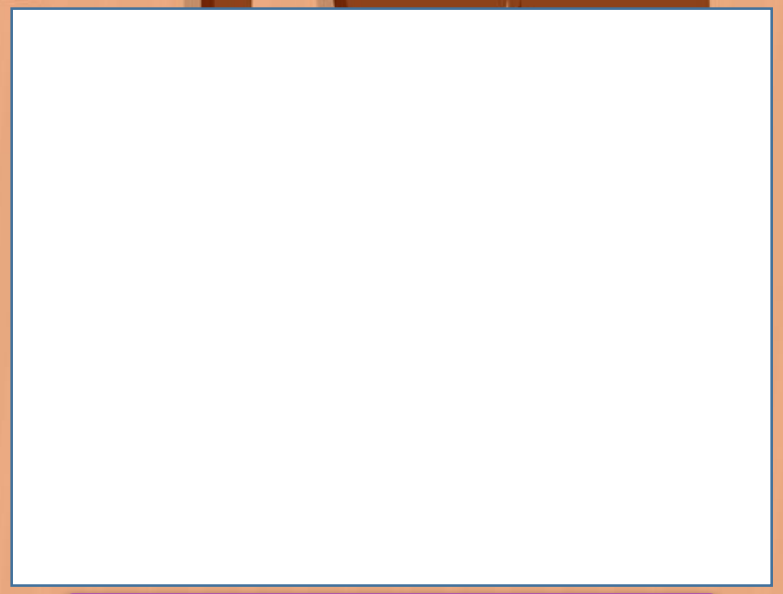


ROLLING

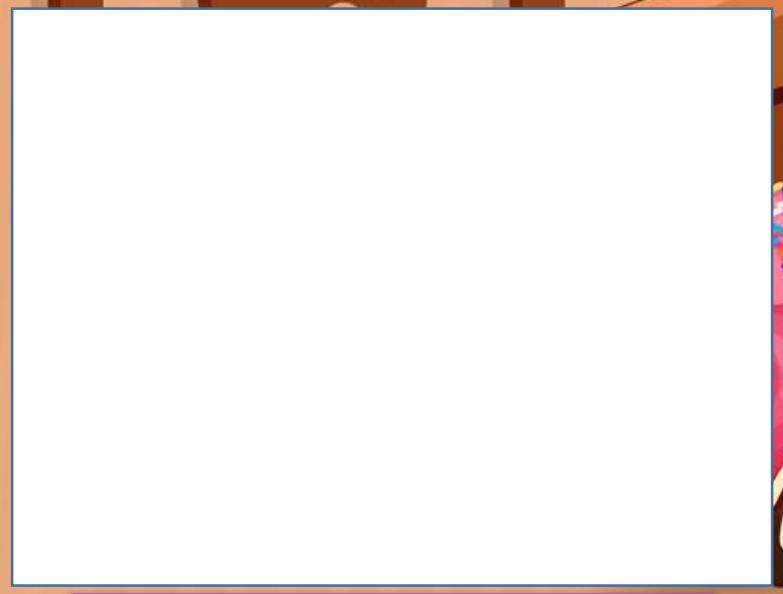
MINISTRY OF EDUCATION MALAYSIA

UMT

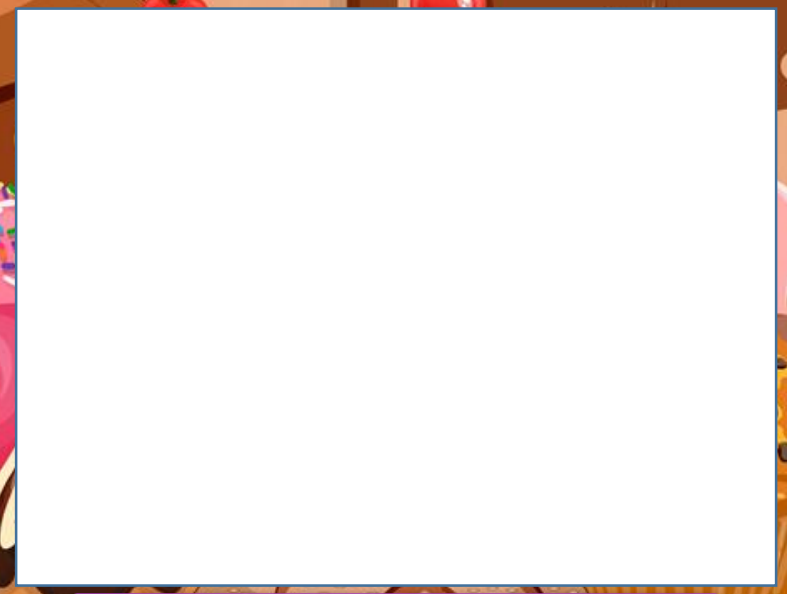
UMT MOOC Massive Open Online Course



ROLLING PIN



DUSTING FLOUR



MARBLE SLAB OR WORK TABLE

FORMING AND BAKING MEALY PIE DOUGH

MINISTRY OF EDUCATION MALAYSIA

UMT

UMT MOOC Massive Open Online Course



UNROLL THE DOUGH

PLACE DOUGH ON PIE MOULD

PLAITING

POKING CRUST WITH FORK

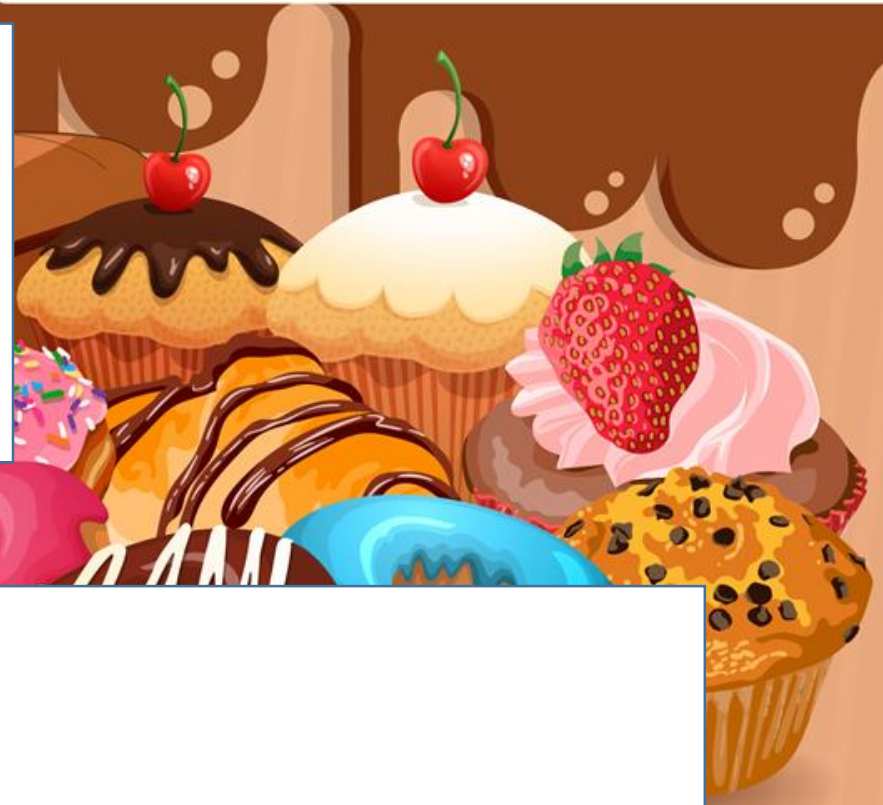
BLIND BAKING

3 FILLINGS

MINISTRY OF EDUCATION MALAYSIA

UMT

UMT MOOC Massive Open Online Course



APPLE FILLINGS

CUSTARD FILLING

CREAM FILLING

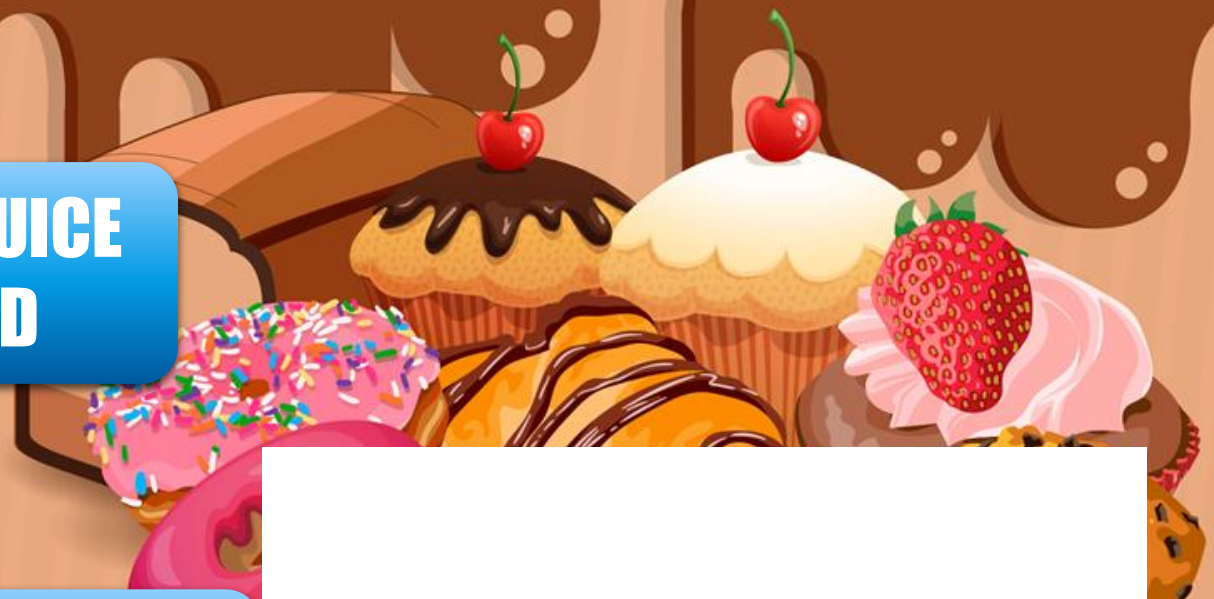
MERINGUE FILLING

FRUIT FILLINGS

MINISTRY OF EDUCATION MALAYSIA

UMT

UMT MOOC Massive Open Online Course



COOKED JUICE METHOD

COOKED FRUIT METHOD

CUSTARD FILLINGS

MINISTRY OF EDUCATION MALAYSIA

UMT

UMT MOOC
Massive Open Online Course



VIDEO CUSTARD MAKING

CREAM FILLINGS

MINISTRY OF EDUCATION MALAYSIA

UMT

UMT MOOC
Massive Open Online Course



VIDEO CREAM FILLING MAKING

MERINGUE FILLINGS

MINISTRY OF EDUCATION MALAYSIA

UMT

UMT MOOC Massive Open Online Course

VIDEO MERINGUE MAKING AND PIPING ON PIE CRUST



COMMON FAULTS IN PASTRY MAKING

MINISTRY OF EDUCATION MALAYSIA

UMT

UMT MOOC Massive Open Online Course

- Use of unchilled or room-temperature fat
- Use of high protein flour
- Using too much water
- Overmixing the dough
- Over rolling the dough
- Insufficient resting of dough
- Soggy bottom crust



COMMON FAULTS IN PASTRY MAKING:
Warm or unchilled fat

MINISTRY OF EDUCATION MALAYSIA

UMT

UMT MOOC Massive Open Online Course

1. Difficult to handle

2. Inhibit forming of layers for puff pastry



BUTTER MELTING

COMMON FAULTS IN PASTRY MAKING:
Using high protein flour

MINISTRY OF EDUCATION MALAYSIA

UMT

UMT MOOC Massive Open Online Course

Higher percentage of gluten and encourage gluten development

→ **Tough pastry**

→ **Less flaky and less layers**

LOW VOLUME PUFF PASTRY

COMMON FAULTS IN PASTRY MAKING:
Using too much water

MINISTRY OF EDUCATION MALAYSIA
UMT
UMT MOOC Massive Open Online Course

Using Too much water

- A: icy cold water prevent the fat from warming up and melting into the dough
- B: Encourage too much gluten development
- C: Results in tough pastries and lack tenderness



COMMON FAULTS IN PASTRY MAKING:
Overmixing the dough

MINISTRY OF EDUCATION MALAYSIA

UMT

UMT MOOC Massive Open Online Course

Encourage gluten to develop

Pie shell to shrink back during baking

Develop tough crust and lack shortness



VIDEO OF OVERMIXING BASE DOUGH

COMMON FAULTS IN PASTRY MAKING:
Over rolling the base dough

MINISTRY OF EDUCATION MALAYSIA

UMT

UMT MOOC Massive Open Online Course

- Excess gluten formation from over rolling
- Pie crust may shrink in the oven
- Tough and hard pastries



VIDEO OF OVER ROLLING DOUGH

COMMON FAULTS IN PASTRY MAKING:
Insufficient resting of dough

MINISTRY OF EDUCATION MALAYSIA

UMT

UMT MOOC Massive Open Online Course

Resting the dough relaxes the gluten strands, allowing the dough to be more easily rolled out and shaped with less shrinkage

the more you stretch the dough, the more it resists and shrink back

Resting also allows fat in dough to firm up, preventing from melting



VIDEO OF RESTING & CHILLING DOUGH

COMMON FAULTS IN PASTRY MAKING:
Soggy bottom crust

MINISTRY OF EDUCATION MALAYSIA

UMT

UMT MOOC Massive Open Online Course

1

To prevent soggy bottom crust, use thickener to fully thicken the filling before adding into the pie shell

2

Blind baking - pre-baked the crust at high temperature for 3 minutes, also known as

BLIND BAKING

ADD FILLING IN PIE CRUST

COVER PIE WITH DOUGH

CONCLUSION

- Characteristics of a mealy pie dough and key ingredients
- How to assemble, form and bake pies
- Pie fillings
- Common fault



VIDEO LOCAL BAKERY