



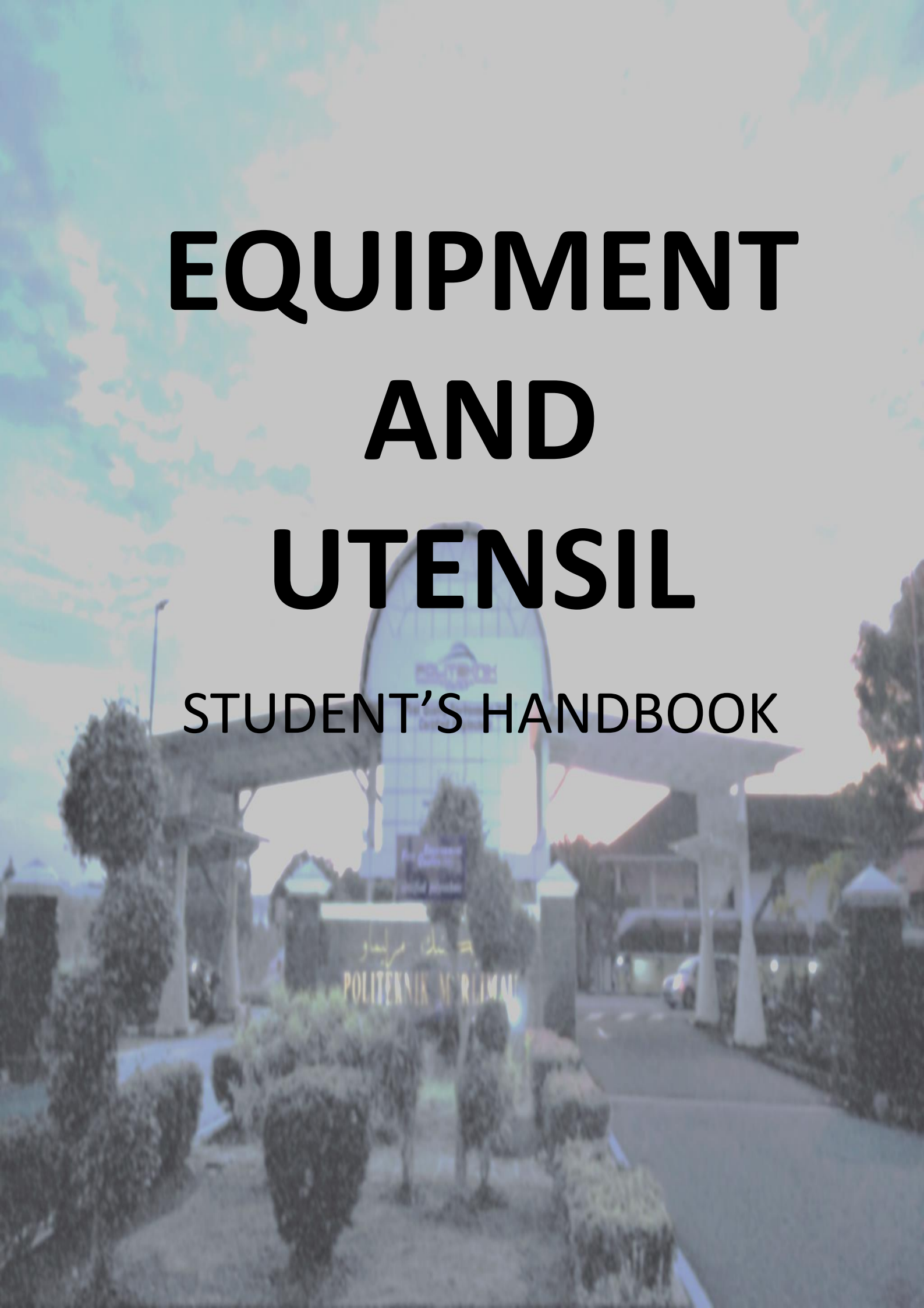
STUDENT'S HANDBOOK VOL 1

EQUIPMENT AND UTENSIL

Nor wahida
Norlida
Shahrizal

EQUIPMENT AND UTENSIL

STUDENT'S HANDBOOK





EQUIPMENT AND UTENSIL

STUDENT'S HANDBOOK VOL 1

©ePembelajaran Politeknik Merlimau

Writer

Nor Wahida Binti Yahaya

Norlida Binti Osman

Shahrizal Bin Ahmad Selo

Published in 2021

All rights reserved. No part of this publication may be reproduced, distributed, or transmitted in any form or by any means, including photocopying, recording, or other electronic or mechanic methods, without the prior written permission of the writer, except in the case of brief quotations embodied in reviews and certain other non-commercial uses.

Perpustakaan Negara Malaysia

eISBN 978-967-2762-05-8

Published by:

Politeknik Merlimau, Melaka

KB1031 Pej Pos Merlimau,

77300 Merlimau Melaka



DECLARATION

Managing Editor

Ts Dr. Maria binti Mohammad

Rosheela binti Muhammad Thangaveloo

Nisrina binti Abd Ghafar

Azrina binti Mohmad Sabiri

Zuraida bt Yaacob

Raihan binti Ghazali

Editor

En. Zahir Bin Zainol

Designer

Mohd Yusof Bin Yaakob

Nor Wahida Binti Yahya

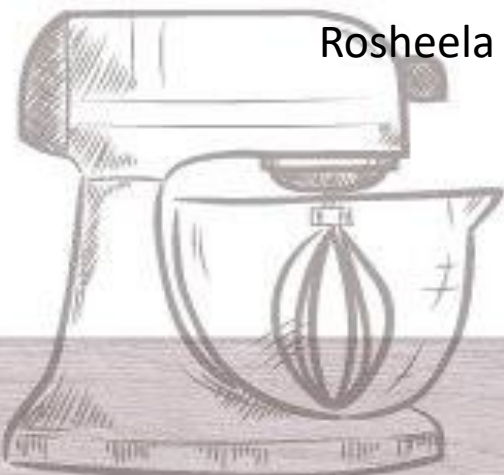
Norlida Binti Osman

Proofreading & Language Editing:

Nor Fazila binti Shamsuddin

Maisarah binti Abdul Latif

Rosheela binti Muhammad Thangaveloo



DECLARATION

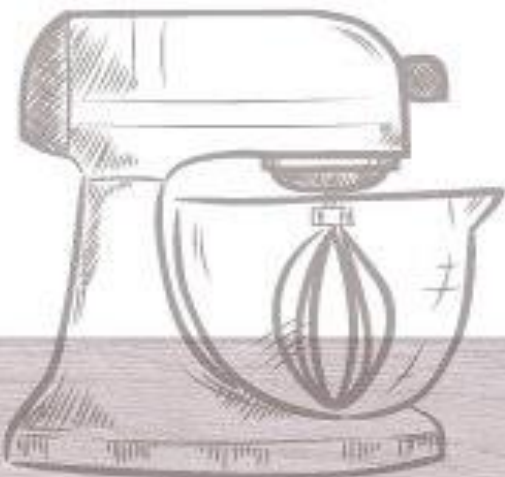


ACKNOWLEDGEMENT

The completion of this e-book EQUIPMENT AND UTENSIL: Student's Handbook Vol 1 could not have been possible without the participation and assistance of so many people whose names may not all be mention. Their contributions are sincerely and gratefully acknowledged.

To all family, friends and others who in one way or other way shared their support, either morally, financially and physically, thank you.

We thank you



ACKNOWLEDGEMENT



PREFACE

Equipment and Utensil Student's Handbook Vol 1 e-book is a handy way provide students with an simples note and easy style to a basic knowledge of Baking focuses on learning the how's and whys of baking.

Core baking and pastry principles are explained as the background for learning proper techniques. Once mastered, these techniques can be used to prepare a wide array of baked goods, pastries and confections. The baking and pastry arts are shown in a cultural and historical context as well, so that students understand how different techniques and flavor profiles developed especially for hospitality student.

The e-book deals with topics in detail and has the following reader-friendly features. Learning objective briefly explain what to expect when going through in the text. A simple question will be given at the end of the chapter to enhance the understanding and knowledge of student. This e-book will be help and beneficial for the students and the readers.





TABLE OF CONTENTS

ACKNOWLEDGEMENT

PREFACE

INTRODUCTION TO BAKERY AND PASTRY 1-2

EQUIPMENT & UTENSILS 3-37

ASSESSMENT 38-41

REFERENCE 42



INTRODUCTION TO BAKERY AND PASTRY

Baking is a cooking method in which food is exposed directly to a heated stone or heated directly to a controlled temperature. Baking is not limited to cakes, breads, and cookies, in fact, you can also bake a variety of sweet and savory foods, such as cakes, cookies, pies, and snacks. Baked foods often have aromatic foods.

The popularity of bakery and patisserie has never been higher, but what does it take to become a pastry chef? Passion, creativity, and motivation are the three essential key characteristics for pursuing any career in the culinary arts.

This is especially true for bakery and pastry students. Baking cakes and desserts is both a science and an art. The precision, technical skills and knowledge required to design and execute the latest dishes and to innovate in the kitchen.



NOTE

In this chapter we find out about the essential simple organizational skill that are necessary to get started before baking actually begin. Once these skill are learned the scholar will become

- Organizational skill needed:
- Correctly reading recipe
- Identify equipment and tool
- Put the necessary ingredient near working area
- Set up the apparatus in working area
- Measured the ingredients precisely
- Apply good sanitation



NOTE



EQUIPMENT & UTENSIL

Equipment & Utensil

The correct kitchen equipment and utensil play an important role before start the baking. If you have the right kitchen tools, it can make your job easier and faster. It also makes the person stay focus on preparing food and achieve the target.

Explanation of Equipment & Utensil	Example of picture
Wire Whisk - Is a kitchen utensil that can be used to make softer ingredients and add air to the mixture in a process called stirring or whipping. Used to whip egg whites into foam and increase the double volume of eggs white - to make a meringue	
Spatula Is a hand tool used for lifting, turning or spreading. The spatula has a long enough handle to keep the wearer's hand away from objects being lifted or extended, and away from hot surfaces.	



NOTE

Cake pans

- The cake pan is a plate specially designed for baking cakes in the oven.
- Can be metal, enameled metal, silica gel, heat-resistant glass, ceramic or clay



Spring form Pans

- A spring shape pan is a kind of bakeware that capabilities aspects that may be eliminated from the bottom.
- Spring shape refers to the development style of this pan. The base and the edges are separate portions which can be held together while the bottom is aligned with a groove that rings the lowest of the partitions.
- The pan is then secured by a latch at the outside of the wall. This tightens the 'belt' that will become the partitions of the pan and secures the bottom into the groove at the bottom of the partitions.



NOTE

EQUIPMENT AND UTENSIL

STUDENT'S HANDBOOK VOL 1



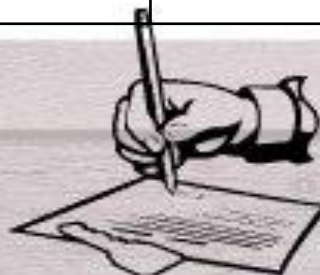
Baking paper @ Parchment paper

- Material paper, heating paper, liners, or pastry kitchen discharge paper is a cellulose-based paper that has been treated or coated to make it non-stick.
- It is utilized in preparing as an expendable non-stick surface. It shouldn't be confounded with paper or waxed paper, which is paper that has been coated in wax.



Mixing bowls

- A blending bowl could be a bowl utilized for blending of ingredients.



NOTE

EQUIPMENT AND UTENSIL

STUDENT'S HANDBOOK VOL 1

Kitchen scale

- A kitchen gadget utilized to degree the weight of ingredient
- A digital scale is the most-accurate way to measure.



Measuring cups and spoons

- A measuring spoon may be a spoon utilized to degree an sum of an fixing, either fluid or dry, when cooking.
- Measuring spoons may be made of plastic, metal, and other materials.
- They are accessible in numerous sizes, counting the teaspoon and tablespoon.



NOTE



Pastry brushes

- A cake brush, moreover known as a seasoning brush, maybe a cooking utensil utilized to spread. butter, oil, or coat on food
- Traditional baked good brushes are made with normal bristles or a plastic or nylon fiber comparative to a paintbrush, whereas present-day kitchen brushes may have silicone bristles.
- In heating bread and cakes, a cake brush is utilized to spread a coat of egg wash on the hull or surface of the food.



NOTE

Fine sieve

- The fine work strainer, moreover known as the filter or as a strainer, may be a gadget for isolating needed components from undesirable fabric or for characterizing the particle size dispersion of a test, regularly employing a woven screen such as work or net or metal.



Zester

- A zester (moreover, citrus zester or lemon zester) could be a kitchen utensil for getting skin from lemons and other citrus natural products.
- A kitchen zester is around four inches long, with a handle and a bent metal conclusion, the beat of which is punctured with a push of circular gaps with honed rims.



NOTE



Piping bag

- A baked good sack (or channeling pack within the Commonwealth) is a frequent cone- or triangular-shaped pack made from cloth, paper, plastic, or the intestinal lining of a sheep, that's pressed by hand to pipe semi-solid nourishments by squeezing them through a contract opening at one conclusion frequently fitted with a molded spout, for numerous purposes counting in specific cake enrichment and icing



NOTE

Pastry nozzles

- Decorating tips are the nozzles on the end of a pastry bag that the icing or filling is constrained through to apply it to cakes, treats, or pastries.



Cooling rack

- The cooling rack lifts your food from a solid surface, so the air circulates and the bottom does not become wet by absorbing residual steam.
- This is an important step for texture perfection.



NOTE

Rolling pin

- Could be a round and hollow food preparation instrument utilized to shape and straighten dough.
- There are two sorts of rolling pins: rollers and bars.
- The roller sort comprises of a thick barrel with little handles at each conclusion; the rod-type rolling pin is more often than not a lean decreased rod



Cookie cutters

- A cookie cutter is a tool to cut out cookie/biscuit dough in a particular shape.



NOTE

Probe Thermometer

- A probe thermometer could be a thermometer that incorporates a pointy metal stem that can be embedded into food.
- Used to check inner food temperatures after you cook, re-heat, cool, defrost, and keep foods hot or cold.



Sugar Thermometer

- A candy thermometer, too known as a sugar thermometer, or jam thermometer could be a cooking thermometer used to degree the temperature and thus the organize of a cooking sugar solution.



NOTE

Infrared Thermometer

- An infrared thermometer is a thermometer which infers temperature from a portion of the thermal radiation sometimes called black-body radiation emitted by the object being measured.



Angled /offset spatulas

- The offset spatula has a long and narrow flexible metal blade with a rounded end and a plastic or wooden handle to hold.
- The long blade can easily put the cake batter evenly into the corners of the baking pan, and loosen the cake from the side of the baking pan after baking.



NOTE

Knife

- Knives are the most important tool in a chef's toolkit. They can be used for almost any food preparation task, from cutting onions and cutting beef to opening oysters and slicing bread.
- However, there are different types of kitchen knives designed for various purposes.



Spoon

- Is a tool that have of a small flat bowl (also called a head), oval or round, at the end of a handle.
- It is a type of cutlery (sometimes called silverware in the United States), especially as part of a place setting, and is used mainly for carrying food to the mouth.



NOTE

Scissors

- A pair of scissors consists of two metal blades pivoted so that the ground edges slide against each other when the handles (bows) are closed opposite the pivot.



Wooden spoon

- Wooden spoons are generally preferred for their versatility in cooking.
- A wooden spoon is a tools that is normally used in the preparation of food.
- Some cooks prefer wooden spoons when preparing risotto because they do not transfer heat as much as metal spoons.
- Unlike metal spoons, they can also be used securely without scratching non-stick pans.



NOTE

Non-Stick Silicone Baking Mat

- Is a non-stick baking surface made of food-grade silicone of the best quality.
- This surface is accessible in a variety of shapes and sizes to fit a variety of baking pans.
- Unlike parchment paper, a silicone mat has the advantage of being reusable.



Pastry Cutter

- To form a dough, a pastry cutter, also known as a pastry blender or dough mixer, is used to combine solid fats like butter, shortening, or lard with flour.
- Cake batter, cookies, and other baked foods are the most typical uses for it.



NOTE

Muffin/Cupcake Tin

- A muffin or cupcake tray is a baking mould for muffins or cupcakes.



Cookie Sheet

- A baking sheet, or baking tray is a flat, rectangular metal pan used in an oven.
- It is often used for baking rolls, pastries, and flat products such as cakes, cookies, Swiss rolls, and pizzas.
- These pans, like all baking pans, can be made of a variety of materials, but are mainly aluminum or stainless steel.



NOTE

EQUIPMENT AND UTENSIL

STUDENT'S HANDBOOK VOL 1

Bundt Cake Pans

- A Bundt cake is a doughnut-shaped cake made in a Bundt pan.
- The shape is based on the Gugelhupf, a traditional European cake, but Bundt cakes aren't usually identified with a specific recipe.



Tube pan

- A deep baking dish with a hollow tube in the middle that ensures equal baking.
- Cakes such as angel food cakes and sponge cakes are baked in a tube pan, commonly known as an angel food cake pan.
- The ingredients are placed in the pan, which is then inverted after baking, allowing the solid cake to fall onto a plate or counter, ready to serve.



NOTE

EQUIPMENT AND UTENSIL

STUDENT'S HANDBOOK VOL 1

Loaf Pan

- A loaf pan, also known as a bread pan, is a culinary device that resembles a container for baking loaf
- Its purpose is to form bread
- The loaf, or thin rectangle, is the most common shape of bread pan, as it is the most practical shape for consistent slicing.



Tart Pan.

- A shallow pan with smooth or fluted sides that is round or oblong.
- Some pans have removable bottoms that allow the contents to be removed simply and cleanly while maintaining the shape of the pan's fluted edges.



NOTE

EQUIPMENT AND UTENSIL

STUDENT'S HANDBOOK VOL 1

Cake Leveler

- The cake leveler is a simple and quick technique to make even, consistent cake layers.



Tong

- Tongs are a tool for grabbing and lifting objects rather than holding them in one's hands.
- Tongs are available in a range of shapes and sizes, each suited to a particular activity.
- Although some are essentially large pincers or nippers, the vast majority of them fall into one of these groups.



NOTE

Digital Timer

- Digital timers monitor time to trigger an action, to start timing once triggered by an action, or both.
- Some products are programmable, while others can be set to a specific internal time and function.



Pie Server

- A cake and pie server, also known as a pie scoop, pie knife, crepe spade, pie lifter, pie spatula, pie knife, or pie slice, is a cutting and serving tool for pies and cakes.



NOTE

Slotted Spoon

- A big cooking utensil with slots or holes at the bottom that allow moist foods or things to be pulled out of liquids as the surplus liquid drains through the slots and holes in the spoon's base.
- With a long handle, you can keep your hands away from hot oils, water, and culinary components.



Cake Turntable

- A turntable, often known as a revolving cake stand, is a rotating platform attached to a base.
- Cakes are placed for decoration on the upper platform, which is flat.



NOTE

Cake Scraper /Edge Decorating

- Pastry chefs use the cake scraper to give cakes sharp and flawless edges while decorating them.



Soufflé Dish/ Ramekins

- A ramekin is traditionally defined as a compact, rectilinear cup or bowl made of chinaware or glass that is used for baking and dishes.
- It's usually a single-serving dish that may be used from start to finish, from prep to bake to serve.
- Ramekins are micro soufflé mould that are small, heat-resistant baking mould.



NOTE

Dough Scraper

- This tool is used to manage fresh dough by scraping it from a rolled-out surface and slicing it. It's also known as a spatula.
- A dough scraper is a tool that bakers use to manage dough and clean surfaces that have been treated with dough.



Cake Tester

- A kitchen tool is used to examine the doneness of cakes after they have been baked.
- Such a thin-shafted utensil, such as a pick, narrow knife, or classic cake testing utensil, would usually suffice.



NOTE

EQUIPMENT AND UTENSIL

STUDENT'S HANDBOOK VOL 1

Gel Food Coloring

- Any dye, pigment, or chemical that gives color when added to food or drink is known as a food coloring or color additive.
- Liquids, powders, gels, and pastes are just some of the ways they can be used.



Serrated Knife

- A saw-like notch or sharp teeth on one side of the blade surface allow it to cut neatly through food without breaking delicate or sensitive textures like bread or pie crusts.



NOTE

Cake Stand

- A cake stand is a structural, stool-like object on which cakes and other pastries are decorated and served.
- Cake stands usually consist of a single plate connected to a base, or various plates housed in a tower-like object.
- Cake stands are a form of tableware. They come in dissimilar materials like wood, ceramic, metal, etc.



Ice-Cream Scoopers

- As ice cream is scooped from the container and placed into a cone, a bowl, or onto a dessert, a kitchen tool is used to mould it into a slightly rounded or well-formed ball shape.



NOTE



Hand mixer

- A manual or electric kitchen appliance consisting of a set of beaters attached to a gear-driven mechanism that causes the blades of the beaters to rotate.
- Are used for beating, whipping, and combining ingredients, which requires a smoothly functioning set of blades that rotate smoothly and evenly during the mixing process.



Stand mixer

- A stand mixer is definitely a bigger investment for the home kitchen.
- It takes up significantly more space, is heavier, but has the power to handle heavy doughs, bread doughs, and baking projects with ease.
- It usually delivers faster results with less mess.



NOTE

Mixer attachment

Paddle

- A flat beater is another name for a paddle.
- This is a versatile tool that works well with heavier ingredients including cake batter, frostings, cookies, mashed potatoes, and meatloaf.

Wire whip

- Is similar to a handheld whisk
- The whip mixes air into eggs, egg whites, whipping cream, candy, angel food cake, and mayonnaise by whisking them together.
- Should not be used with dough or heavier combinations.

Dough hook

- Is used to knead yeast doughs such as bread, coffee cakes, pizza dough, cinnamon buns, and even pasta. It resembles a giant "C" or a spiral.



WIRE WHIP

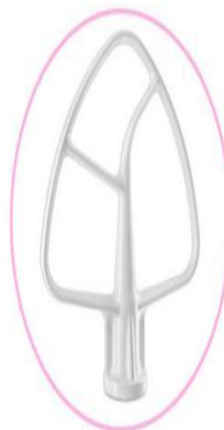
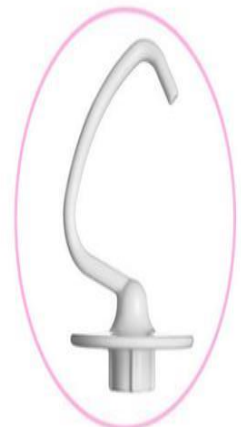
mixtures that need
air incorporated

- eggs/egg whites
- heavy cream
- sponge or angel food cake
- frostings

DOUGH HOOK

mixtures that need mixing and
kneading yeast doughs

- breads
- coffee cakes
- rolls or buns



FLAT BEATER

mixtures that are
normal or heavy

- cakes
- cookies
- pie or pastry dough
- quick breads
- candies



NOTE

Deck Oven

- Deck Oven so named since they have a deck that's ordinarily made of stone or ceramic where the nourishment things are put.
- Most deck broilers can have numerous decks, permitting you to heat more things without taking up as well much floor space.



Deck Ovens

Rack Oven

- This consists of a two to three-meter-high chamber heated by electric elements or gas burners.
- The rack is made up of a steel framework with casters on the bottom that supports a vertical array of shelves.



Rack Ovens



NOTE

Conveyor Oven

- Transport stoves cook prepared merchandise that are set on transport belts, which move them through the heating chamber.
- The broiler at that point makes planes of hot discuss of comparative escalated and blows this discuss to the nourishment.
- The constrain of the warmed discuss permits it to effortlessly break the obstruction of cold discuss around the raw nourishment, hence driving to speedier cooking.
- And since the speed of the belt remains steady all through the preparing prepare, all things come out of the chamber so also cooked as each other item.



Conveyor Ovens



NOTE

Oven

- An oven is a device that is used to expose materials to a hot environment.
- Ovens have a hollow chamber and a way of heating the chamber in a measured manner.



Proofer bread

- A warming chamber for baking that uses warm temperatures and regulated humidity to enhance yeast fermentation of the dough.
- A proofing box, proofing oven, or proofing cabinet are various terms for the same thing. Warm temperatures cause the yeast to become more active, resulting in more carbon dioxide generation and a faster rise.
- Before baking, the dough is usually allowed to rise in the proofer, although it can also be used for the first rise, also known as bulk fermentation.



NOTE

Chocolate Melting Pot

- This machine melts a big amount of chocolate at once, making it suitable for large families or commercial settings like bakeries.



Frying Pan

- A frying pan is a pan with a flat bottom that is used to fry, sauté, and brown food.
- It typically measures 8 to 12 inches (20 to 30 cm) in diameter, has low sides that curve outward, a long handle, and no cover.



Steamer

- A steamer is kitchen equipment that uses steam heat to cook or prepare various dishes by enclosing the food in a closed vessel that prevents steam from escaping.



NOTE

Stock Pot

- A large, deep pot is used to cook noodles, pasta, maize, vegetables, and seafood, as well as to prepare stock, soup, stew, and chili.
- Stainless steel is commonly used.



Double Boiler

- A double boiler is a cooktop item that is used to apply mild heat. It comes in handy when making delicate dishes like hollandaise sauce, melting chocolate, and producing custards like Creme Anglaise.



Sauce Pan

- Just like a saucepan, a saucier has a handle and a lid. Everything that a saucepan can cook can be cooked in a saucier.
- It can do everything a saucepan can do: cook pasta, reduce sauces, boil potatoes, stew, and braise.



NOTE

Microwave

- Is a common kitchen appliance that uses microwave radiation to heat and cook food.
- It may be used to reheat food, cook, proof yeast, roast garlic, sterilize kitchen items, and de-crystalize honey, among other things.



Dough Sheeter

- A big piece of equipment that is flattened the dough into sheets using rollers is known as a dough sheeter.
- Gluten can form, making the dough more difficult to work with.



NOTE

Blender

- Blenders are used in both household and industrial kitchens for a variety of tasks, including grinding semi-solid foods into smooth purées, such as fresh fruits and vegetables.
- To make milkshakes, combine ice cream, milk, and sweet sauces in a blender.



Cooling Racks

- Cooling racks are one of the most crucial pieces of equipment in a commercial kitchen.
- It has the ability to save space in the holding area.



NOTE

Chopper Blender

- A food chopper typically has a single blade for chopping, puréeing, and mixing smaller batches, though some models come with a whisk attachment.

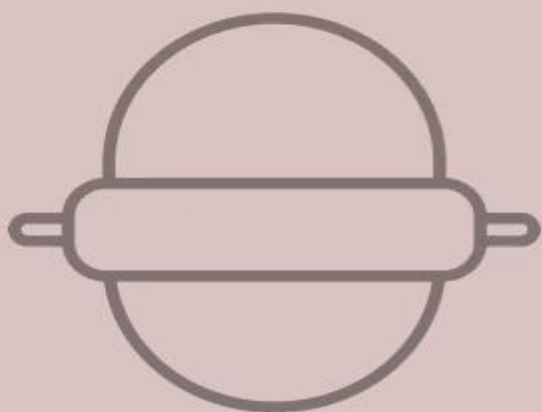


Hand Blender

- When it comes to pureeing food, a hand blender is invaluable.
- Make purees out of cooked veggies for sauces, curries, and chutneys, as well as baby food, soup, and other applications.



NOTE



ASSESSMENT

1. Which baking devices help in the removal of lumps in dry ingredients?
 - A. knife
 - B. Sifter
 - C. Spoon
 - D. Rubber Scraper

2. Which one of the tools that is used to cut dough when making pastries
 - A. pastry wheel
 - B. pastry brush
 - C. pastry blender
 - D. pastry tip

3. This tools used to scrape sticky ingredients from the side of the bowls _____
 - A. spoon
 - B. rubber scraper
 - C. knife
 - D. Sifter

4. _____ used for stirring flour mixtures
 - A. pastry brush
 - B. spatula
 - C. wooden spoon
 - D. rolling pin



5. Which baking equipment used to bake cake?

- A. oven
- B. toaster
- C. broiler
- D. Stove

6. What baking tool that helps you to level the icing in cake coating?

- A. spatula
- B. rolling pin
- C. pastry brush
- D. wooden spoon

7. The tools that used to flatten or roll the dough mixtures?

- A. spatula
- B. wooden spoon
- C. rolling pin
- D. pastry brush

8. Tools that used to measure small quantities of ingredients_____?

- A. measuring spoon
- B. measuring cup
- C. timer
- D. weighing scale



9. Which does not belongs to the group of baking utensils?

- A. electric mixer
- B. utility tray
- C. pastry blender
- D. tape measure

10. _____ it's a separation of course particles like lumps from an ingredients

- A. beating
- B. sifting
- C. creaming
- D. Stirring

11. Cooking method in an oven that is heated to desired temperature is called?

- A. baking
- B. steaming
- C. simmering
- D. Scalding

12. _____ are the containers where to bake the batter and dough.

- A. mixing bowl
- B. electric blender
- C. baking pan
- D. egg beater





Gisslen, W. (2011). Professional Cooking for Canadian Chefs (7 ed.). Hoboken, NJ: John Wiley and Sons.

Gisslen, W. (2012). Professional Baking (6th ed). Hoboken, NJ: John Wiley and Sons.

Kent, N.L. Source for Base Recipes: The Williams-Sonoma Collections, The French Culinary Institute Education Material, Baking with Julia, Bernard Clayton's Book of Breads, Misc. Food Magazines, Food Sites:Aarushi Jain



THE WRITER 'S BIOGRAPHY



Nor Wahida Yahaya

NORWAHIDA BINTI YAHYA has been a lecturer for 6 years at Politeknik Merlimau Melaka and 2 years at Kolej Negeri Taman Bukit Chedang, Negeri Sembilan. She holds a Bachelor's Degree in Culinary Art Management from Universiti Teknologi Mara.



Norlida Osman

NORLIDA BINTI OSMAN has been teaching for more than 10 years at Tourism & Hospitality Department, Politeknik Merlimau, she holds a Bachelor's Degree in Foodservice Management and Diploma in Chef Training from Universiti Teknologi Mara (UITM).



Shahrizal Ahmad Selo

SHAHRIZAL BIN AHMAD SELO has been a lecturer for 11 years at Tourism & Hospitality Department, Politeknik Sultan Idris Shah, and now teaching at Politeknik Merlimau Melaka. He holds a Bachelor's Degree in Foodservice Management and Diploma in Chef Training from Universiti Teknologi Mara (UITM).

EQUIPMENT AND UTENSIL

STUDENT'S HANDBOOK VOL 1

Equipment and Utensil, Students Handbook (Vol.1) is a target for expert baking books. This books presents the equipment and utensil that use in baking and has written with today's culinary students and professional in mind. The specific equipment and utensil that a baker uses to make the baking process easier are defined in this books.

e ISBN 978-967-2762-05-8



9 78 967 2762 05 8