CULINARY ART

LEVEL – I

Based on March, 2022, Curriculum Version I,



Module Title: Preparing Eggs Dishes

Module Code: CST CUA1 M09 1222

Nominal duration: 70 hours

Prepared By: Ministry of Lobar and Skill

December, 2022

Addis Ababa, Ethiopia

Table of Content

Acknowledgement 4
Introduction to the Module 5
Unit one: Ingredients for egg dishes 6
1.1. Ingredients for egg dishes preparation 7
1.1.1. Parts of an Egg 7
1.1.2. Grades and Quality of Egg 8
1.2. Date stamps or labels of egg 11
1.2.1. Quality indicators for freshness 11
1.3. Measuring , cleaning and assembling ingredients 12
1.4. Nutritional values of egg dishes 13
Self-check 1 14
Unit Two: Preparing and cooking egg dishes 15
2.1. Preparing a variety of egg dishes 16
2.1.1. Uses of Egg in Cooking 16
2.1.2. Variety of Egg Dishes 20
2.2. Ensure consistency, appearance and taste of egg dish 29
2.2.1. Consistency of Egg 29
2.2.2. Appearance of Egg 29
2.2.3. Tastes of Egg 29
Self-Check 2 30
Operation Sheet 1 Preparing and cooking egg-based dishes 31
LAP Test 42
Unit Three: Accompaniment and sauces for egg dishes 43
3.1. Ingredients for Sauces and Accompaniments 44
3.1.1 Sauce 44
3.1.2. Accompaniments 45
3.2. Tools and Equipment for sauce and accompaniment preparation 46
3.3. Preparing and cooking sauces and accompaniments 47
3.3.1. Types of sauces and accompaniments 47
Self-Check 3 50

Operation Sheet 2 Sauces and Accompaniments 51
LAP Test 55
Unit four: Holding cooked egg dishes 56
4.1. Holding equipment and tools for storing egg dishes 57
4.2. Hygiene procedures to hold ready to eat egg dishes 58
4.3.1. Labeling of Egg Dishes 59
4.3.2. Storage of Eggs 60
Self-Check 4 61
Unit Five: Portioning and presenting egg dishes 62
5.1. Selecting standard plate for portioning egg dishes 63
5.1.1. Plate Selection 63
5.2. Portioning of egg dishes 66
5.2.1. portion control 66
5.3. Serving with appropriate sauces and accompaniments 67
5.4. Cleaning and sanitizing working station accordingly 68
5.5. Segregating Wastes in the kitchen coded garbage bins 69
5.1.1. Significance of Waste Segregation 70
Self-Check 5 71
Reference 75
Participants of this Module (training material) preparation 76

Acknowledgement

Ministry of Labor and Skills wish to extend thanks and appreciation to the many representatives of TVET instructors and respective industry experts who donated their time and expertise to the development of this Teaching, Training and Learning Materials (TTLM).

Introduction to the Module

In culinary art filed; Prepare Eggs Dishes helps to prepare various eggs dishes in a commercial kitchen or catering operation

This module is designed to meet the industry requirement under the Culinary Art occupational standard, particularly for the unit of competency: Prepare Eggs Dishes.

This module covers the units:

- Ingredients for egg dishes
- Preparing and cooking egg dishes
- Accompaniment and sauces for egg dishes
- Holding cooked eggs dishes
- Portioning and presenting egg dishes

Learning Objective of the Module

- Identify and assemble ingredients for egg dishes
- Prepare and cook egg dishes
- Prepare accompaniment and sauces for egg dishes
- Hold cooked eggs dishes
- Portion and present egg dishes

Module Instruction

For effective use this modules, trainees are expected to follow the following module instruction:

1. Read the information written in each unit
2. Accomplish the Self-checks at the end of each unit
3. Perform Operation Sheets which were provided at the end of units
4. Do the “LAP test” giver at the end of each unit and
5. Read the identified reference book for Examples and exercise

Unit one: Ingredients for egg dishes

This learning guide is developed to provide you the necessary information regarding the following content coverage and topics:

- Ingredients for egg dish preparations
- Date stamps or labels of egg
- Measuring , cleaning and assembling ingredients
- Nutritional values of egg dishes

This guide will also assist you to attain the learning outcomes stated in the cover page. Specifically, upon completion of this learning guide, you will be able to:

- Identify ingredients for egg dishes preparation
- Check Date stamps or labels to ensure qualities of eggs for safe production
- Measure , clean and assemble ingredients
- Understand nutritional values of egg dishes

1.1. Ingredients for egg dishes preparation

The eggs mainly used for culinary will be the eggs of the common chicken unless otherwise stated.

An egg's shell is porous; therefore, moisture loss occurs and the egg will take on strong odours. The shell colour depends on the breed. Cracked shells should be avoided as cross contamination can occur.

Egg is one of certain foods which play a major role in cooking. It can be served as a main dish, as an accompaniment to other dishes or as an ingredient in one item. Due to its versatility, the egg is considered as primary ingredient in culinary preparation, providing moisture, structure and richness in dishes.

1.1.1. Parts of an Egg

A whole egg consists primarily of a yolk, a white, and a shell. In addition, it contains a membrane that lines the shell and forms an air cell at the large end, and two white strands called chalazae that hold the yolk centered.

- The **yolk** is high in both fat and protein, and it contains iron and several vitamins. Its color ranges from light to dark yellow, depending on the diet of the chicken.
- The **white** is primarily albumin protein, which is clear and soluble when raw but white and firm when coagulated. The white also contains sulfur. The white has two parts: a thick portion that surrounds the yolk, and a thinner, more liquid portion outside of this.
- The **shell** is not the perfect package, in spite of what you may have heard. Not only is it fragile but it is also porous, allowing odors and flavors to be absorbed by the egg.

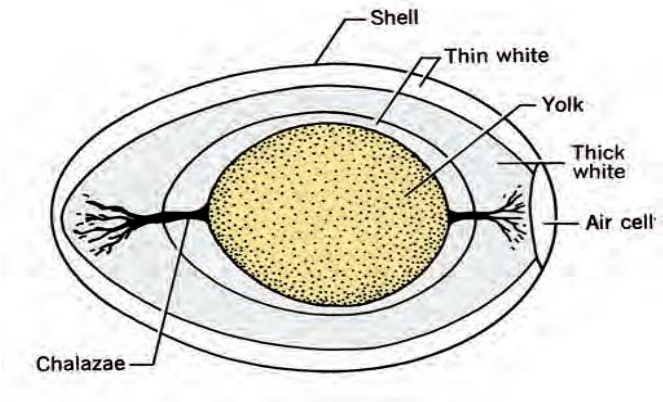


Figure 1.1 parts of an egg.

1.1.2. Grades and Quality of Egg

A. Grades of Egg

In the United States, eggs are graded for quality by the USDA. The three grades are AA, A, and B.

Grade AA eggs, when broken; have only a small amount of spread and the yolk will be in the center of the white. For frying, poaching. Grade A eggs, when broken, have a moderate amount of spread. The white is reasonably thick and stands fairly high. It is suitable for all types of use. Grade B, when broken, spread greatly, having only a small amount of thick white. The white in general, appears weak and watery. The yolk is flat and abroad

Grades and Quality **Grades** in the United States, eggs are graded for quality by the USDA. The three grades are AA, A, and B.

Grade AA eggs, when broken; have only a small amount of spread and the yolk will be in the center of the white. For frying, poaching. Grade A eggs, when broken, have a moderate amount of spread. The white is reasonably thick and stands fairly high. It is suitable for all types of use.

Grade B, when broken, spread greatly, having only a small amount of thick white. The white in general, appears weak and watery. The yolk is flat and abroad.

They are suitable for scrambling or baking as ingredients with other food. Grade B eggs should be used only when the appearance of the whole egg is not important.

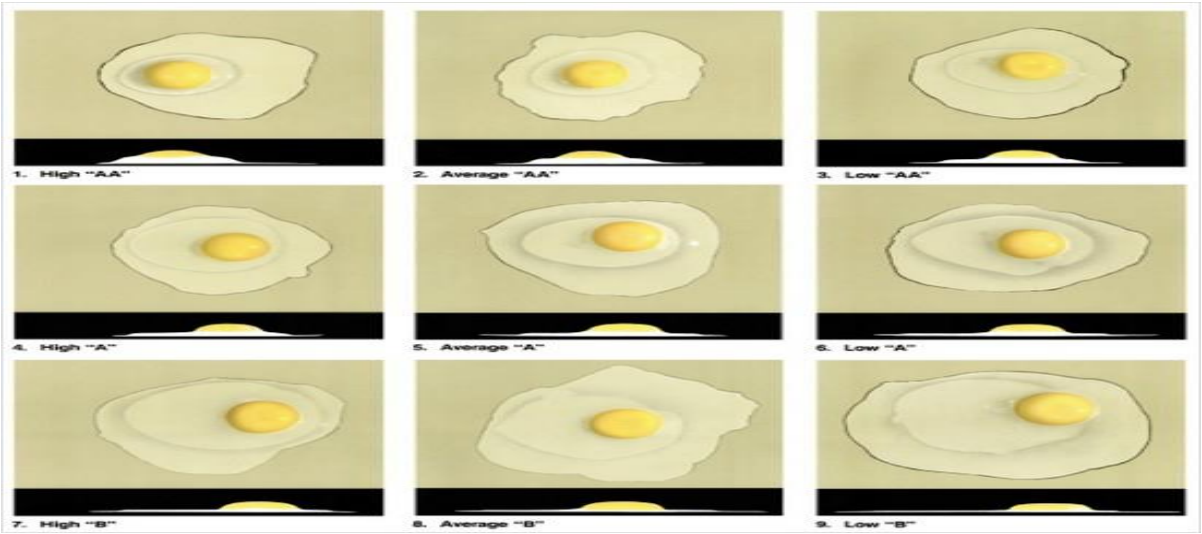


Figure 1.2. Grades of Egg

B. Market Forms of Egg

- **Fresh eggs or shell eggs** These are most often used for breakfast cookery and are the main subject of this section.
- **Frozen eggs.**
  - ✓ Whole eggs
  - ✓ Whites
  - ✓ Yolks
  - ✓ Whole eggs with extra yolks

Frozen eggs are usually made from high-quality fresh eggs and are excellent for use in scrambled eggs, omelets, French toast, and in baking. They are pasteurized and are usually purchased in 30-pound (13.6-kg) cans. These take at least two days to thaw are frigerator temperatures

- **Dried eggs.**
  - ✓ Whole eggs
  - ✓ Yolks
  - ✓ Whites

Dried eggs are used primarily for baking. They are not suggested for use in breakfast cookery.
Unlike most dehydrated products, dried eggs are not shelf-stable and must be kept refrigerated or frozen, tightly sealed

C. Eggs and Safety

- **Eggs and Egg-Based Products**

Outbreaks of salmonellosis have been traced to clean, whole, uncracked-shell eggs contaminated with Salmonella enteritidis.
Whole-shell eggs are now classified as potentially hazardous foods by the U.S. Food and Drug Administration (FDA).
The following guidelines, which treat eggs as potentially hazardous foods during storage, handling, preparation, and service, must be followed to prevent the possibility of food-borne illness:

- Store eggs at refrigerated temperatures of 45°F (7°C) or lower until time of use. Do not freeze eggs in shells.
- Cook eggs thoroughly until both the yolk and white are firm, not runny. Generally, eggs should be cooked to 145°F (63°C) or higher for at least 15 seconds.

- To hold cooked eggs for later service, cook them to 155°F (68°C) or higher for 15 seconds, then hold them at 135°F (57°C) or higher.
- Avoid pooling raw eggs for holding. Eggs may be pooled in small quantities for immediate cooking and serving.
- For lightly cooked egg items, such as custards, French toast, mousses, and meringues, use pasteurized eggs.
- Avoid raw egg menu items. Review menus, recipes, and preparation procedures using raw eggs. Pasteurized eggs may be substituted in Caesar salad, hollandaise and béarnaise sauces, eggnog, ice cream, and egg-fortified beverages.
- Pasteurized eggs require the same time and temperature handling as other potentially hazardous foods.
- Wash hands with hot, soapy water before and after handling eggs and egg products.
- Wash and sanitize utensils, equipment, and the work area after handling eggs and egg products.
- Do not reuse a container that has held a raw egg mixture.
- Use a clean, sanitized container for each batch.

D. Size of eggs

Eggs are also graded by size. Most food-service operations use large eggs, and recipes in most books are based on this size.

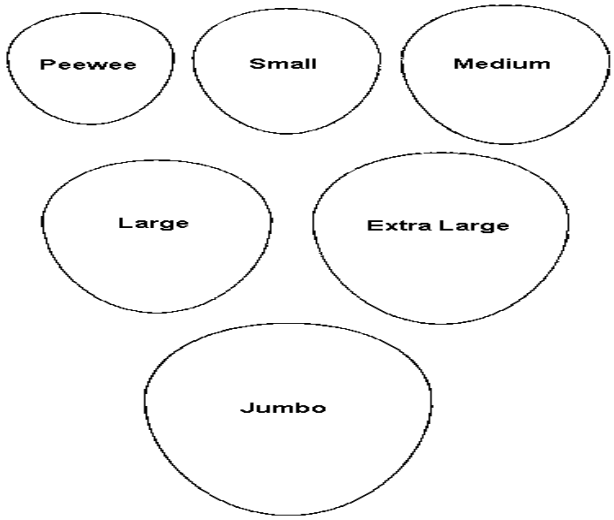


Fig 1.3 size of eggs

Seven Cents Key to Buying Eggs If there is *less than 7 cents difference* between two sizes of eggs, the best buy is the *larger size*.

The average weight of an egg is 60 gm:

- Shell 12%
- White 58%
- Yolk 29%
- Other 1%.

Eggs are high in protein and this protein coagulates when cooked:

- Brown shelled eggs have the same nutritional value as white shelled eggs.
- The color of the shell is dependent on the type of chicken that laid the egg.

1.2. Date stamps or labels of egg

1.2.1. Quality indicators for freshness

When purchasing eggs, it is important to order and only accept when they are delivered, eggs that are of good quality.

Table 1.1: Good quality chicken eggs should display the following quality points.

Shell	Clean of all chicken dirt, be good shape & no cracks.
Egg yolk	• No blood spots, firm & translucent • Should sit central in the egg white.
Egg white	Thick, gelatinous & sit high Flat and runny indicates that it is an older egg
Smell	Should not smell off when cracked; Fresh eggs will keep at room temperature for at least 7 days but in warmer climates it is not so long. They must be chilled to below 5 degrees if they are to have a good period of freshness.

Air cell	• Should be small • This is hard to see but it can be used if you are suspicious if the supplier is trying to give you old eggs. As the egg ages it loses moisture and absorbs air through the shell • If the egg floats the air is large and the egg is not fresh.

1.2.2. Label fresh prepared and cooked egg products correctly

Labelling of all foods, prepared and cooked is mandatory.

Labels should have the following information on them:

- Name of the product
- Date of manufacture
- Name of person who last worked on food (cooked the food)
- Recommended use by date

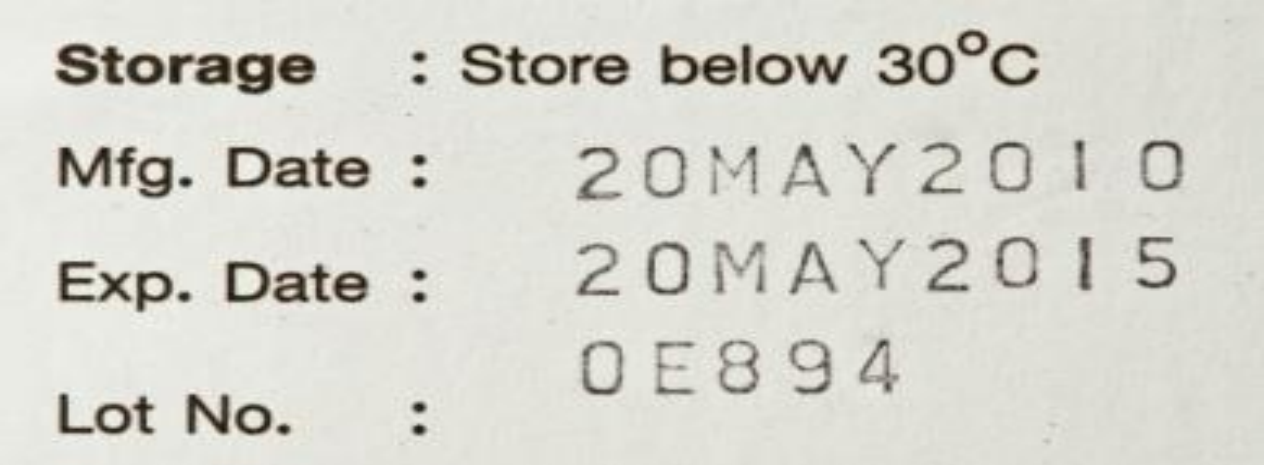


Figure 1.4. Labeling sample

1.3. Measuring , cleaning and assembling ingredients

Salmonella food poisoning has been caused by raw or undercooked eggs. As a result, cooks have been made more aware of egg-related sanitation concerns. Pasteurized egg products are used in more operations.

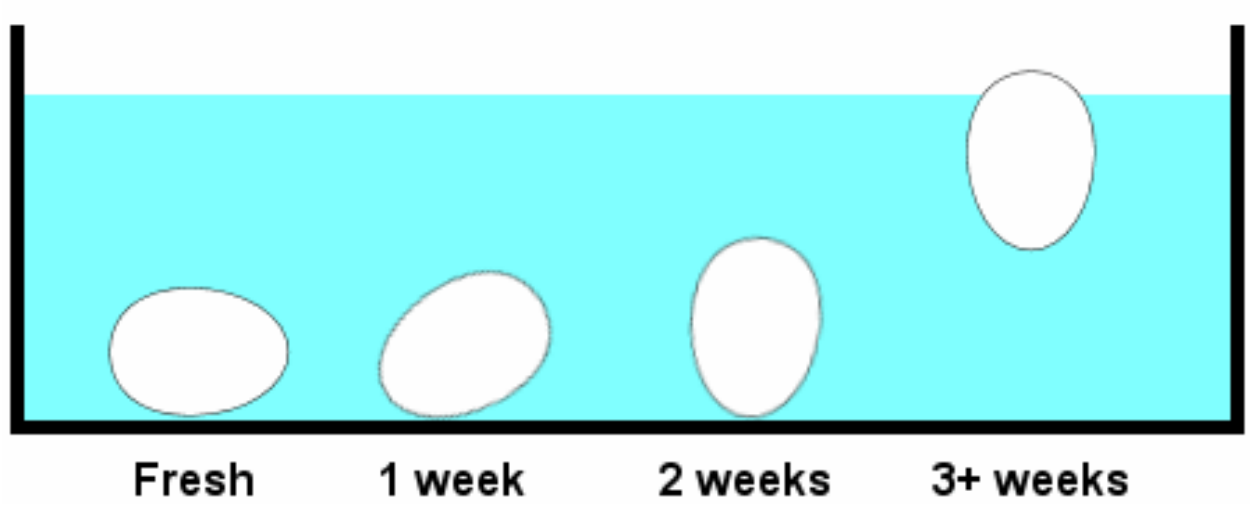


Figure 1.5. Freshness of eggs

1.4. Nutritional values of egg dishes

Eggs contain most nutrients and are low in calories (two eggs contain 180 calories). Egg protein is complete and easily digestible; therefore it is useful to balance meals. Eggs are useful as a main dish as they are a protective food and provide energy and material for growth and repair of the body.

- Relatively low in Saturated Fat
- Highest Biological Value Protein
- High in Vitamins A, D, E, most B vitamins and C
- Minerals –
    - ✓ Iodine (necessary to make the thyroid homorone)
    - ✓ Phosphorus (bone health)
    - ✓ Zinc (heals wounds, helps growth and fights infections)
    - ✓ Selenium
    - ✓ Calcium
    - ✓ Iron.
- Cholesterol – must have some to process fat.

Self-check 1	Written test

Name: _____ Date: _____

Directions: Answer all the questions listed below. Use the specified Answer sheet provided in each

Test I Short Answer Questions

1. List down the size of egg.
2. Which size of egg is use mostly in food-service operations?
3. List down the Labeling information should have on egg pack?

Test II. Write "true" if the statement is correct and "false" if the statement is incorrect

1. Egg can be served as a main dish, as an accompaniment to other dishes or as an ingredient in one item.
2. The yolk is less in both fat and protein, and it contains iron and several vitamins.
3. Grade B eggs, when broken; have only a small amount of spread and the yolk will be in the center of the white.
4. The right Store temperature of eggs at refrigerated temperatures of 45°F (7°C) or lower until time of use.
5. Whole-shell eggs are not considered as potentially hazardous foods.

Note: **Satisfactory rating - 10 points** **Unsatisfactory - below 10 points**

You can ask you teacher for the copy of the correct answers

Unit Two: Preparing and cooking egg dishes

This unit to provide you the necessary information regarding the following content coverage and topics:

- Preparing a variety of egg dishes
- Ensuring consistency, appearance and taste of egg dish

This guide will also assist you to attain the learning outcomes stated in the cover page. Specifically, upon completion of this learning guide, you will be able to:

- Prepare a variety of egg dishes according to standard recipes
- Ensure consistency, appearance and taste of egg dish

2.1.Preparing a variety of egg dishes

2.1.1. Uses of Egg in Cooking

There are different various ways of using eggs in our daily diet:

Boiled Eggs: Eggs may be cooked by placing them with the shell in boiling water to the consistency you want—soft or hard. If the egg is left in boiling water for a long time you may notice a green ring round the yolk. To avoid this discolouration, cook the egg for only five minutes after the water starts boiling and then cool.

Poached Eggs: Poaching is a method in which an egg is dropped into boiling water after removing the shell. The cooked egg is soft, white and is easy to digest. You may add a little vinegar to the water to improve the product.

Fried Eggs: Eggs may be fried in a little fat so that the yolk and white coagulate. Be careful that the temperature of fat is not too high, otherwise the white gets burnt.

Omelet's: The egg is beaten to incorporate air and then cooked in a little fat. You may add seasoning like onion, green chilies or cheese to improve the taste. The air incorporation is better if egg white is beaten first separately and the yolk is beaten later. An omelet made by beating white and yellow together is known as a plain omelet, while that made by beating the egg white separately to stiff foam is known as fluffy omelet.

Soufflés: Soufflés are light dishes due to the inclusion of air. Soufflés are of two types — hot and cold. Hot soufflés are used as a main dish while cold soufflés are used as desserts. The basis of soufflé is the preparation of a sauce with egg and other ingredients like sugar, flour, cream, fruits or vegetables. Vegetables or cheese may be used in the preparation of hot soufflés, while fruits, cream, etc. are added in cold soufflés. As the name itself suggests hot soufflés are baked, while cold soufflés are chilled.

Custards: Custard is a very popular dessert and you must have eaten this sometimes. Custards contain mainly egg, milk and sugar. They are of two types— soft and baked. Soft custards are creamy in consistency and you can prepare this by cooking milk with egg in a double boiler. Stir continuously to avoid the formation of lumps. Baked custards are allowed to set without stirring. Egg helps in thickening the mixture and aids in setting.

Proportions for soft custard are:

- ✓ 1 cup milk,

- ✓ 2 Tbsp. sugar and
- ✓ 1 egg.

Baked custard would contain:

- ✓ 1 cup milk,
- ✓ 1 Tbsp. sugar and
- ✓ 1 egg.

Puddings and Desserts: Eggs are used as a base for a number of puddings and desserts like ice-creams, custards, etc. As mentioned earlier, egg helps in thickening the mixture. Not only this, egg also gives a better flavour and colour to food.

Cutlets and Kababs: We sometimes add a little egg to foods like cutlets. Egg helps in binding the mixture so that it does not break on frying. The egg gets cooked faster on exposure to heat and thus prevents other ingredients like vegetables, meat, etc. from spreading. Another way of preventing cutlets from breaking is to coat the mixture with egg before dipping it in fat. This gives a good crust formation.

Cakes: Egg is an essential part of a cake. You must have observed that on beating egg whites they become fluffy. This is due to inclusion of air in the mixture. The presence of air makes the cake soft and spongy. Eggs also give colour and a better flavour to the cake.

Mayonnaise: Mayonnaise is a kind of sauce prepared by mixing oil and egg to form an emulsion. Mayonnaise may be used as a salad dressing or a spread for sandwiches.

Meringues: Meringues are prepared by beating egg white very stiff with sugar and then baked. Soft meringues are used in pudding, etc., while hard meringues may be eaten with fruits, ice creams, etc.

As the protein in eggs heats up, it forms a network or type of web. If heating is excessive, the network becomes tough and rubbery. It also tightens up, squeezing out water. The food may become dry or has water standing on the surface Overcooked eggs may also turn a greenish color. This is a reaction of iron in the yolk and sulfur in the whites that occurs when the cooking is excessive.

A. Coagulation & Denaturation of Protein

Coagulation (ko-ag-yuh-LAY-shun) changes a liquid protein into a soft, semisolid clot or solid mass. It occurs when polypeptides unfold during denaturation and then collide and clump together during cooking processes. Coagulation is not reversible.



Figure 2.1. Coagulation of egg protein caused by heat.

Denaturation (dee-nay-chuh-RAY-shun) is a process that causes protein to become a looser, less compact structure. It can be caused by heat, freezing, sound waves, mechanical treatment like beating, the addition of ingredients that raise or lower pH levels, or the presence of minerals such as sodium, copper, potassium, or iron. Denaturation is sometimes reversible.



Figure 2.2. Denaturing protein by mechanical method

Eggs coagulate at the following temperatures:

- Whole eggs, beaten about--------- 156°F (69°C)
- Whites ----------140°–149°F (60°–65°C)
- Yolks---------- 144°–158°F (62°–70°C)
- Custard (whole eggs plus liquid) ---175°–185°F (79°–85°C)

Note that whites coagulate or cook before yolks do. This is why it is possible to cook eggs with firm whites but soft yolks. Note also that when eggs are mixed with a liquid, they become firm at a higher temperature. However, 185°F (85°C) is still much lower than the temperature of a sauté pan or skillet over high heat. As the temperature of coagulation is reached, the eggs change from semiliquid to solid, and they become opaque. If their temperature continues to rise, they become even firmer. An overcooked egg is tough and rubbery. Low temperatures produce the best-cooked eggs. If egg-liquid mixtures such as custards and scrambled eggs are overcooked, the egg solids separate from the liquids, or curdle. This is often seen as tough, watery scrambled eggs.

B. Enriching:

- Adding richness and extra nutrition to foods. Example: rich short crust pastry

C. Leavening (Trapping air):

- The protein in the egg white stretches when beaten and traps air. Example: cake making

D. Coating:

- Foods can be brushed with egg then dipped in breadcrumbs. During cooking the egg coagulates (sets) and hols the product together. Example: fish cakes

E. Glazing:

- Before cooking foods can be brushed with beaten egg. During baking the egg glaze goes golden brown. Example: pastries, pies

F. Binding:

- The egg sets when cooked sticking other ingredients together. Example: burgers

G. Emulsification:

- Oil and water mixed together form an emulsion, but this will only last a short while then separate. The lecithin in egg yolks keeps the emulsion stable. Example: mayonnaise

H. Thickening:

- Egg white coagulates (sets) at 140°, the yolk sets at 160°, so when these temperatures are reached they begin to set and thicken the mixture. Do not allow to exceed these temperatures of the mixture will set fully and curdle (scramble). Example: custard

I. Garnish:

- Eggs can be used to add garnish (decoration) to foods either poached or boiled and sliced. Example: salad.

2.1.2. Variety of Egg Dishes

A. Hard Boiled Egg

A type of egg that is cooked in the shell until the yolk and the white are completely solid. In order to accomplish this use fresh egg that is warmed to room temperature. Warming the eggs assists to keep them from cracking. If they have been refrigerated, they can be warmed by

placing the egg in a bowl of warm water for 3 to 5 minutes. When ready, the egg or eggs are placed as a single layer in a pan of water that is approximately 1 to 2 inches deeper than the layer of eggs. The pan may be uncovered or partially covered with a lid and the water is brought to the boil. The pan is removed from the heat and covered completely for about 15 minutes to complete the cooking process. The egg is then rinsed under cold water or placed in a bowl of cold water to prevent any further cooking. When making hard boiled eggs, use caution to not overcook the egg, otherwise the shell may crack or a reaction may occur between the sulfur in the white and the iron in the yolk to create a layer of dull green around the yolk. If the shell begins to crack while being heated, add a half a tablespoon of salt for each quart of water in order to reduce the time it takes for the egg white to denature so it hardens and is less likely to seep out the crack. This type of egg is also referred to as hard cooked egg. To determine if an egg has been hard-boiled, set an egg on a counter and spin it around on its end. If the egg is uncooked, the yolk will wobble, causing the egg to stop spinning immediately. If the egg is cooked, it will spin continuously in a controlled spin.



Figure2.1. Hardboiled egg

B. Soft Boiled Egg

A soft-boiled egg is an egg that has been cooked in its shell until the whites are set to a custardy texture and the yolks are creamy, with a consistency ranging from runny (uncooked).



Figure 2.2. Soft Boiled Egg

C. Omelette

An omelet is a dish you might order for breakfast or brunch, it's kind of like a folded pancake made of beaten eggs, sometimes with the addition of vegetables, cheese, or meat. A good omelet is a little bit fluffy, but firms enough to contain its filling. An omelette (also spelled omelet) is a dish made from beaten eggs, fried with butter or oil in a frying pan (without stirring as in scrambled egg). It is quite common for the omelette to be folded around fillings such as chives, vegetables, mushrooms, meat(often ham or bacon), cheese, onions or some combination of the above. Whole eggs or egg whites are often beaten with a small amount of milk, cream, or water.



Figure 2.3. Omelette

E. Poached Egg

A poached egg is an egg that has been cooked, outside the shell, by poaching (or sometimes steaming), as opposed to simmering or boiling. This method of preparation can yield more delicately cooked eggs than cooking at higher temperatures such as with boiling water.



Figure 2.4. Poached Egg

F. Fried Egg

A fried egg, also known as sunny-side up is a cooked dish made from one or more eggs which are removed from their shells and placed into a frying pan and fried. They are traditionally eaten for breakfast in many countries but may also be served at other times of the day.

Fried eggs are an especially popular breakfast preparation. They should always be cooked to order and s served immediately. For best quality, observe each step in the following procedure.
The choice of cooking fat is a matter of taste and budget. Butter has the best flavor, but margarine or oil may be used. Use bacon fat only if that flavor is desired by the customer.

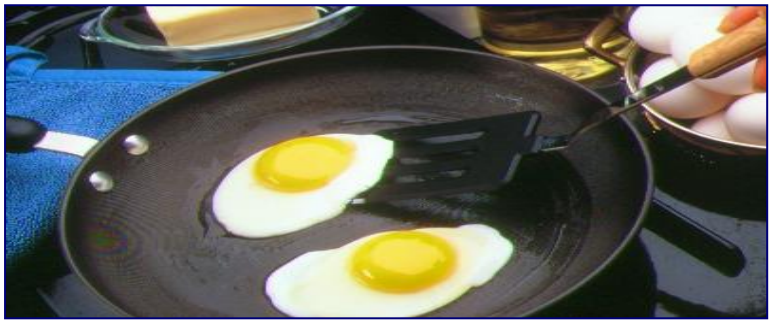


Figure 2.5. Fried Egg

G. Basted Egg

A basted egg is a cooked egg that uses steam to create a thin layer over the egg yolk. Basting is the process of adding liquids—sauces, juices, or water—to food as it cooks. In general, basting is a cooking technique used to keep meat moist; however, you can also use this method to cook eggs.



Figure 2.6 Basted Eggs

H. Scrambled Egg

Scrambled eggs are a dish made from eggs (usually chicken eggs) stirred, whipped or beaten together. while being gently heated, typically with salt, butter, oil and sometimes other ingredients.



Figure 2.7. Scrambled Egg

I. Scotched Egg

Scotch egg, a traditional British dish consisting of a shelled hard-boiled egg that is wrapped in sausage, covered in breadcrumbs, and then deep-fried or baked until crispy. It is a popular pub and picnic dish and is commonly served cold in Britain. A Scotch egg is a boiled egg wrapped in sausage meat, coated in breadcrumbs and baked or deep-fried.



Figure 2.8. Scotched Egg

J. Frittata

Frittata is an egg-based Italian dish similar to an omelette or crustless quiche or scrambled eggs, enriched with additional ingredients such as meats, cheeses, or vegetables. The word frittata is Italian and roughly translates to "fried"



Figure 2.9. Frittata

K. Eggs Benedict

Eggs Benedict is a traditional American breakfast and brunch recipe that originated in New York City. It consists of an English muffin, cut in half, toasted, and topped with Canadian bacon, poached eggs, and classic French hollandaise sauce. It's decadent, rich, and satisfying.



Figure 2.10. Eggs Benedict

L. Baked Egg

Shirred eggs, also known as baked eggs, are eggs that have been baked in a flat-bottomed dish; the name originates from the type of dish in which it was traditionally baked. Shirred eggs are considered a simple and reliable dish that can be easily varied and expanded upon. Eggs en Cocotte (also called baked eggs) is a French way of slow baking eggs in water bath with cream and cheese (sometimes ham). They are traditionally served with toast strips to dip in the yolk.



Figure 2.11 Baked Egg

M. Egg Salads

Egg salad is a dish made primarily of chopped hard-boiled or scrambled eggs, mustard, and mayonnaise, often including other ingredients such as celery.



Figure 2.12. Egg Salad

N. Egg Dips

An egg dip is a quick and easy idea for any occasion. Simply purée eggs with yogurt and mayonnaise seasoned with green onions, garlic, dill and cayenne pepper for a smooth and delicious dip that's great with pita, crackers, vegetables and more!



Figure 2.13. Egg dips

2.2. Ensure consistency, appearance and taste of egg dish

2.2.1. Consistency of Egg

When properly cooked, the white and yolk should harden, and the inside should be firm rather than rubbery. An overly hot batch of water or overcooking can give the yolks a green tinge.

2.2.2. Appearance of Egg

When broken out of the shell, good quality, fresh eggs display certain characteristics: The yolk is small and rounded and stands high in a thick, gel-like egg white which tends to stay compact rather than spread out over a wide area. As eggs age, the yolk absorbs water from the white and becomes larger and flatter.

The appearance of the egg, as influenced by severity of defects, is important for consumer appeal. Egg shells are evaluated on the basis of cleanliness, shape, texture, and soundness.



Figure 2.1. Appearance of Boiled egg

2.2.3. Tastes of Egg

Leaving aside the fact that you might have added milk, oil or seasoning, the different taste comes partly from whether the egg has been beaten. Egg white is less flavor some than the rich,

fatty yolk, so mixing them will change the sensory experience. Browning a fried egg or omelette also changes its taste.

Basil, parsley, oregano, and more can be used to enhance the flavors of your eggs. Dice and toss in as you are cooking up your eggs. Or mix in with baked eggs or even egg whites to add extra flavoring! Crushed black pepper paired with fresh herbs is always used.

Self-Check 2	**Written test**

Name…… ID…… Date…….....

Directions: Answer all the questions listed below.

Test I Short Answer Questions

Directions: Answer all the questions listed below. Use the specified Answer sheet provided in each:

Answer all the following questions and submit to your Trainer

1. Discus the use of egg in food preparation.
2. What is Coagulation in Egg dish?
3. Describe the uses of egg in preparation?

Operation Sheet 1 Preparing and cooking egg-based dishes

1.1 Scramble Eggs (Basic Recipe)

Ingredient

- 2-4 eggs
- 2 tbsp milk (optional)
- Salt & pepper
- 25 g butter

Preparation

1. Break the eggs in bowl, add milk (if using), season with salt and pepper and thoroughly mix with a whisk.
2. Melt 15 g butter in a pan; add the eggs and lightly cooked.
3. Remove from the heat correct seasoning and mix in the remaining butter.
4. A table spoon of cream may be added.
5. Serve in individual egg dishes.

Tips: If scramble eggs are cooked too quickly or for too long the protein will toughen, the egg will discolor because of the iron and sulphur separation if water from the eggs will occur. This means that they will be unpleasant to eat. The heat from the pan will continue to cook the eggs after it has been removed from the stove, therefore the pan should be removed from the heat just before the eggs are cooked.

1.2 Scrambled Eggs With Tomato

Ingredient

- 2-4 eggs
- 25 g chopped onion
- Butter or margarine
- Chopped parsley
- 200 g tomatoes

Preparation

1. Prepare, cook and serve the eggs as for basic method.
2. Prepare a cooked tomato concassee (your teacher's will show you)
3. To serve, place a spoonful of tomato in the center of each dish of egg and a little chopped parsley on the top of the tomato.

1.3 Hard-Boiled Eggs

Ingredient

- 2-3 egg/portion
- Water
- Preparation
  1. Plunge the egg into a pan of boiling water
  2. 2Re-boil and simmer for 10-15 min
  3. 3Refresh until cold under running water

Tips: If high temperature or along cooking time are used to cook eggs iron in the yolk and sulphur compounds in white are released to from an unsightly ring around the yolk stale eggs will also show a black ring round the yolk.

1.4 Scotch Egg

Ingredient

- 2 hardboiled eggs
- 150 g minced meat
- 25g flour
- 1 beaten egg
- 25 g bread crumbs
- Oil for deep fry

Preparation

1. Completely cover each egg with minced meat which is seasoned by garlic, rosemary salt and pepper.
2. Pass through flour, egg and bread crumbs (pane)
3. Shake of surplus crumbs
4. Deep fry to a golden brown in a moderately hot fat until golden brown

5. Drain well, cut in halves and serve hot or cold.

1.5 Fried Eggs

Ingredient

- 1-2 egg pen portion
- Salt and pepper
- 10 g butter/ oil

Preparation

1. Melt a little fat in a frying pan. Add the eggs, season lightly.
2. Cooke gently until lightly set. Serve on a plate or flat dish.

Tips to prepare an excellent fried egg it is essential to use high quality egg to maintain a controlled low heat and use high quality fat butter or olive oil

1.6 French Fried Egg

1 Fry two eggs in a frying-pan in fairly deep hot oil.

2 Shape the egg with a spoon so as to enclose the yolk in crisply fried white.

1.7 Omelet (Basic Recipe)

Ingredient

- 2-3 eggs/portion
- 10 g butter/oil
- Salt and pepper

Preparation

1. Break the eggs into bowl season with salt and pepper
2. Beat well with a fork or whisk until the yolks and whites are toughly combined and no streaks of white can be seen
3. Heat the omelet pan
4. Wipe thoroughly clean with a dry cloth

5. Add 10g butter
6. Heat until foaming but not brown
7. Add the eggs and cook quickly, moving the mixture continuously with a fork until lightly set.
8. Remove from the heat
9. Half fold the mixture over at right angles to the handle
10. Tap the bottom of the pan to bring up the edge of the omelet
11. Tilt the pan completely over so as to allow the omelet to fall carefully into the center of the dish or plate.
12. Neaten the shape if necessary and serve immediately

1.8 Spanish Omelet

Ingredient

- 2-3 eggs
- 50 g onion (diced)
- 50 g tomato (diced)
- 50 g diced pimento
- Salt and water
- 10 g butter

Preparation

1. Cook and serve flat.

1.9 Cheese Omelet

Ingredient

- 2-3 eggs
- 25 g grated cheese
- Salt and pepper

Preparation

1. Proceed as for basic omelets (no. 9)
2. Before folding add the cheese
3. Fold and serve as for basic omelet

1.10 Kidney Omelets

Ingredients

- 2 sheep‘s kidney
- Salt & pepper
- 125ml demi –glace
- Chopped parsley

Preparation

1. Skin the kidneys remove the gristle & cut in to 1cm dice
2. Season salt & pepper
3. Quickly fry in hot butter for 2-3 min
4. Add the hot demi-glace , correct the seasoning
5. Do not re boil or the kidneys will become tough
6. Prepare the basic omelet

Serve together sprinkle chopped parsley on the kidney

1.11 Egg Croquettes

Ingredients

- 250ml thick béchamel
- 4 hardboiled eggs
- Salt & pepper
- 1egg yolk
- 25g white bread crumbs
- Oil for deep fry

Method

1. Boil the béchamel in a thick bottomed pan
2. Add the egg cut into ½ cm dice
3. Re- boil ,season , mix in the egg yolks ,& remove from the heat
4. Pour on a greased tray & leave until clod
5. Mould into 4 or 8 even croquette shapes

6. Pass through flour, egg , bread crumb (twice if necessary)
7. Shake of the surplus crumbs & re-shape with palate knife
8. Deep fry in hot fat until golden brown , drain well

1.12 Poached Eggs

Ingredient

- 2-4 eggs
- Pinch of salt
- 1 tbsp ache to
- 1 lit Water

Method

1. Carefully break the egg one by one in to a shallow pan congaing at least 8cm gentling boiling water to which a little vinegar has been added (1lit water 1tbs vinegar
2. Simmer until lightly set , approx 2 ½ -3 min
3. Remove carefully with a perforated spoon in a bowl of cold water
4. Trim the white of egg if necessary
5. Reheat. when required ,by placing in hot salted water ½- 1min
6. Remove from the water carefully using per forted spoon
7. Drain on a cloth & use as required

Tips –high quality egg should be used for poaching because they have a large amount of white & consequently have a little tendency to spread in simmering water low quality eggs are difficult to manage because the large quantity of thin white spread in the simmering water

A well prepared poached egg has a firm tender white surrounding the slightly thickened un broken yolk the use of the little vinegar (an acid) helps to set the egg white so preventing it from spreading it also make the white more tender & white too much vinegar will discolored & give to the eggs a strong vinegar flavor white vinegar may be used

1.13 Pan Cakes

Ingredients

- 100 gm flour
- Pinch of salt
- 1egg
- ¼ ml milk

- 10 gm melted butter /margarine or oil
- Oil for frying
- 50gm sugar

Preparation

1. Sieve the flour & salt make a well at the center
2. Add the egg & milk gradually incorporating the flour from the sides whisk to smooth batter
3. Mix the melted butter
4. Heat the pan cake pan , clean thoroughly
5. Add a little oil ,heat until smoking
6. Add enough mixture to just cover the bottom of the pan thinly
7. Cook for a few seconds until brown
8. Turn & cook on the other sides. Turn on the plate
9. Sprinkle with sugar fold in half then half again

1.14 Eggs cocotte with mushroom and chervil

Ingredients

- 100 gm Mushroom, finely chopped
- 10 gmOnion, finely diced
- 10 mlClarified butter
- 50 mlCream
- Salt and pepper
- 1 tspChervil, chopped
- Egg
- 5 mlClarified butter

Method

1. Heat oven to 175°C
2. Sweat onion in butter, when soft add mushrooms and cook until soft and dry without discolouration
3. Season, add cream and cook until cream has reduced by half, finish with chopped chervil
4. Place mushroom duxelle mixture in a ramekin or soufflé dish

5. Hollow out the centre slightly and place the egg in the centre, brush with clarified butter and place the ramekin in a water bath
6. Cook in the oven for 10 – 15 minutes until the egg white has set and the yolk remains soft
7. Do not allow the egg to overcook or get crusty on top.
8. Serve hot.

1.15 Vegetable frittata

Frittata is an Italian style omelette All vegetables must be cooked. See below.

Ingredients

- 25 gmOnion
- 30 gmred capsicum
- 30 gmGreen capsicum
- 50 gmMushroom
- 30 gmZucchini
- 30 gmCarrot
- 3Eggs
- 20 mlCream
- 25 gmParmesan, grated
- to tasteSalt and pepper

Method

1 Peel and fine dice the onion

2 Fine dice the capsicums

3 Thinly slice the mushrooms

4 Grate the carrot and zucchini

5 Sauté or sweat the vegetables - if moist, drain off excess liquid

6 Beat eggs, add cream, parmesan and seasoning

7 Combine the vegetables and egg mixture

8 Heat pan with a little oil

9 Pour in mixture

10 When a crust has formed on the base, ease edges away slightly

11 Place in oven 150°C until set. Approx 10 minutes.

Note: If pan is not heated prior to adding egg mixture, the omelette will stick. This will result in tearing when being removed from the pan.

Most vegetables lend themselves to the preparation of a frittata (e.g. potatoes, broccoli, onion, spinach, etc)

Hard, soft and leafy vegetables all take different times to cook. As they cook their structure is broken down and moisture is evaporated away. When they are cooked they then only need to be captured in the egg suspension mixture.
Frittata is similar to Spanish omelette. They evolved as a way to use up left over vegetables and to add variety to egg dishes

1.16 Egg Benedict

Ingredients

- Muffin, English, cut in half
- 10gmButter, softened
- 2 slicesHam
- Eggs, poached

Hollandaise

- 20mlVinegar
- 10mlWater
- PinchWhite pepper
- Egg yolks
- 100gmButter, clarified
- Squeeze Lemon juice
- Seasoning

Method

To make hollandaise

1 Reduce vinegar and 10 ml of water by half. Cool to 50°C

2 Put egg yolks and reduction in a bowl and whisk over a double boiler to ribbon stage

3 Slowly add warm clarified butter, whisking continuously

4 Add lemon juice and season to taste

5 Keep warm.

Assemble the dish

1 Toast muffin and keep warm

2 Place the ham on a grill tray and warm gently under the salamander

3 Poach the eggs

4 Butter the muffin and place on a warm plate

5 Put a slice of ham on each muffin and a poached egg on the ham

6 Top with hollandaise sauce and serve immediately.

1.17.Basted Eggs

Ingredients:

- tsp butter
- Davidson's Safest Choice® pasteurized egg(s)
- 1 Tbsp water

Methods:

1. To steam baste an egg, first heat 2 teaspoons butter in a nonstick skillet over medium-low, until hot.
2. Then, crack a pasteurized egg into a custard cup or small bowl.
3. Now gently slide the egg into the melted butter, and cook about 30 seconds.
4. When the edges of the egg turn white, add 1 tablespoon water to the pan.

5. Then immediately cover, to capture the steam, and cook 1 1/2 to 2 minutes.
6. Now lift the lid to check the egg for doneness. It’s ready when the white is set and the yolk begins to firm

LAP Test	Practical Demonstration

Name : _____ Date : _____

Time started : _____ Time finished : _____

Instructions:

1. You are required to perform any of the following:

Request your teacher to arrange for you all necessary tools, materials and equipment. Submit your outputs to your teacher for evaluation.

Request a set of tools, materials, equipment for the tasks then perform the following tasks in front of your teacher:

Prepare:-

I. Scrambled eggs with tomato
II. Fried eggs
III. Cheese omelet
IV. Poached eggs
V. Vegetable frittata

2. Request your teacher for evaluation and feedback

Unit Three: Accompaniment and sauces for egg dishes

This learning guide is developed to provide you the necessary information regarding the following content coverage and topics:

- Assembling ingredients for sauces and accompaniments
- Selecting tools and equipment for sauce and accompaniment preparation
- Preparing and cooking sauces and accompaniments

This guide will also assist you to attain the learning outcomes stated in the cover page. Specifically, upon completion of this learning guide, you will be able to:

- Assemble ingredients for sauces and accompaniments
- Select tools and equipment for sauce and accompaniment preparation
- Prepare and cook sauces and accompaniments

\

3.1. Ingredients for Sauces and Accompaniments

Eggs are mostly served plain. Garnish is normally a chopped or piece of green herb, for example, parsley chopped and sprinkled on top or a sprig placed beside the eggs on the plate. As the eggs are mostly consumed for breakfast they will be accompanied with toast. More intricate preparations will have more complex elements. Eggs Benedict is a classical French preparation:

Ingredients for sauce and accompaniment are: Egg, Salt, Pepper, Vegetables, Oil, Table butter, Flour, Milk, Jam, Caramel, Vinegar, Icing sugar, Meat, Cheese

3.1.1 Sauce

Sauces add flavor, texture, moistness, viscosity, and eye appeal to a dish. They help pull together the various elements of a plate and make it whole. Sauces add contrasting or complimentary favors and colors to a plate thereby keeping the dish interesting and appealing throughout the dining experience.

Sauce is improving the quality of food with served. Improve the healthfulness of food with served. Improve the appeal of sauces served

- Purpose of Sauces:
    - ✓ Add flavors
    - ✓ Add moisture
    - ✓ Add visual interest
    - ✓ Enhance flavors
    - ✓ Adjust texture
- Three Basic Ingredients in Most Sauces:
    - ✓ The liquid used to prepare the sauce,
    - ✓ The thickening agent, and
    - ✓ Other flavorings and seasonings
- Liquids in Sauces the liquid base for a sauce may vary. The most popular liquids are:
    - ✓ Stock
    - ✓ Milk
    - ✓ Juice

The quality of the liquid base determines the quality of the sauce.

Stock is the liquid, it is made from graze. The most important reason for making stock from Preparing Sauces is to have a high quality product and control the ingredients, mainly the salt.

Milk as the Liquid Milk is another liquid that is often used in sauces. Whenever milk is used as a preparation ingredient, use low fat or nonfat . Substitute the same amount of non fat or low fat milk for the amount of whole milk in the recipe. Nonfat dry milk can be substituted for liquid milk in a recipe.

Juice has to be done very carefully because acid breaks down starches. Recipes containing juice usually have a little more starch in them to take care of the effect of the acid in the juice. Acid products, such as fruit juices or tomatoes, Apple juice,are added to a starch-based sauce at the end of cooking.

Thickening Agents in Sauces

Most sauces are thickened with a starchy product like flour, cornstarch, arrowroot, bread crumbs, potato starch (or instant potatoes), or rice flour. Some commercial products use other kinds of starches for thickening. The thickening agent has an effect on the appearance of the sauce. For example, a sauce or gravy thickened with flour has an opaque appearance. When cornstarch is used, the sauce or gravy has a clear look. Flour used for thickening may be raw or browned.

Accompaniments are highly flavoured seasonings of various kinds offered with certain dishes.

The object of offering accompaniments with dishes is to improve the flavour of the food or to counteract its richness or texture.

3.1.2. Accompaniments

Accompaniments are highly flavored seasonings of various kinds offered with certain dishes.

The object of present accompaniments with dishes is to improve the flavor of the food or to counteract its richness or texture.

There are dishes that come along with accompaniments. These accompaniments complement the main food and enrich its taste. It provides an aesthetic value to the main dish. The accompanying food or beverage itself can have a garnish of its own. An accompaniment can be inside the main dish or in a separate bowl.

The following are a few types of accompaniments −

- Sauces and Dips

- Dressings
- Chips and Wedges
- Salads
- Gravies
- Beverages such as soft drinks or wines
- Breads

3.2. Tools and Equipment for sauce and accompaniment preparation

It's so important that your kitchen is stocked with all the cutlery you and your family need to cook and enjoy meals at home. Here is our recommended basic kitchen utensils list:

- Chef's knives
- Forks, spoons, knives (for eating with)
- Cooking spoons
- Serving spoons and forks
- Whisks
- Spatulas
- Tongs
- Measuring cups and spoons
- Vegetable peeler

Now that you have your basic kitchen utensils in order, it's time to start going through your list of cooking tools and equipment.

1. **Cutting board:** When cutting your vegetables and ingredients before cooking, you'll want a good quality cutting board on hand. We recommend a wooden board to chop your ingredients.
2. **Grater:** Sometimes a recipe calls for a little less chopping and a little more grating. Whether it be for freshly grated parmesan, garlic, or onions, a grater is definitely up there on the list of kitchen essentials.
3. **Mixing bowls:** And what point would there be in having the tools to chop and cut your ingredients if you can't mix them? Stock your kitchen with all the mixing bowls you'll need for different recipes.

4. **Pots and pans:** Once your ingredients are mixed, you'll need plenty of pots and pans to cook them in. Make sure that you have a full range of pans and skillets for roasting or sautéing veggies, as well as pots to cook fabulous pasta dishes.
5. **Towels and potholders:** Every kitchen should have towels and potholders to help the cooking and serving process move along with ease. Not to mention, potholders can also make for cute kitchen décor.
6. **Colander:** When whipping up a pasta dish, don't forget to check that you have a colander at the ready. There's nothing worse than finishing up with your pasta only to find that your kitchen lacks a colander to drain the pasta water.
7. **Serving platter:** When it comes to dinner parties or family meals, presentation is often the finishing touch to what will surely be a wonderful meal. That's why a serving platter is so important when serving food to family or guests. Ideally, you'll want a salad dish, a pasta dish, and a large platter for any meat or fish dishes.
8. **Blender:** This kitchen tool can often be overlooked, but you'd be surprised just how essential a blender is. From morning smoothies to homemade sauces to hearty soups, don't forget to include a blender on your kitchen tools and equipment list.
9. **Tupperware:** Ensure that you have the proper post-cooking tools to make clean-up and food storage that much easier. Stock your kitchen with a range of Tupperware, from small containers to hold fresh fruit or leftover sauce to large ones that will store meat, fish, and pasta. Remember that Tupperware is key to an organized, decluttered kitchen.
10. **Aluminum foil, saran wrap:** Last, but not least, on your list of cooking tools and equipment, don't forget aluminum foil and saran wrap to preserve your leftovers.

3.3. Preparing and cooking sauces and accompaniments

3.3.1. Types of sauces and accompaniments

A. Hollandaise sauce

Hollandaise sauce is a classic creamy sauce that's perfect for breakfast or brunch! This recipe is easy and no-fail. It takes just 5 minutes in a blender. Drizzle it on top of poached eggs, eggs Benedict, vegetables or several other recipes for a delicious finishing touch.



Figure 3.1 Hollandaise Sauce

B. Tomato concasse

In simplest terms, tomato concassé are small diced tomatoes with no skin and no seeds. There's a seven-step procedure to make these most efficiently and there are plenty of recipes where using tomato concassée is better than just adding tomatoes that you've chopped quickly on a cutting board.



Figure 3.2. Tomato Concasse

C. Salsa verde

Salsa verde (litter ‘green sauce') is a type of spicy, green sauce in Mexican cuisine based on tomatillo and green chili peppers.



Figure 3.3. Salsa verde

D. Avocado Hollandaise

Luscious, rich, and lemony hollandaise gets completely re-imagined here in a light, supremely creamy puree of avocado, lemon juice, and olive oil.



Figure 3.4. Avocado hollandaise

E. Pesto sauce

Pesto (Italian: [ˈpesto]) is a sauce that traditionally consists of crushed garlic, European pine nuts, coarse salt, basil leaves, and hard cheese such as Parmigiano-Reggiano (also known as Parmesan cheese) or Pecorino Sardo (cheese made from sheep's milk), all blended with olive oil. It originated in Genoa, the capital city of Liguria, Italy.



Figure 3.5. Pesto Sauce (Green)

Self-Check 3	**Written test**

Name…… ID…… Date…….....

Directions: Answer all the questions listed below.

Test I Short Answer Questions

1. List the ingredient can be added to egg dish.
2. Which ingredient can help stabilize egg foams after they have been beaten?
3. Write Some Sauces used to Egg-based Dishes.

Operation Sheet 2 Sauces and Accompaniments

1. **Hollandaise Sauce**

Ingredients:

- 160g salted butter
- egg yolk
- 25ml white wine or tarragon vinegar
- A squeeze of lemon juice

Methods:

Melt the butter in a pan. In another pan bring some water to boil. Place a metal bowl on top of the pan of boiling water. Place the vinegar, lemon juice and egg yolk. Whisk until frothy. Gradually add the butter while continuing to whisk until all the butter is incorporated.

2. **Tomato concasse**

Ingredients:

- 200 g ripe tomatoes
- 2 onion, minced
- sprig fresh oregano or 1 sprig thyme
- 1 clove garlic, unpeeled
- salt & freshly ground black pepper

Methods:

1. Blanch tomatoes (place in boiling water 30-60 seconds)
2. Remove with a slotted spoon and plunge into ice water.
3. Peel.
4. Cut tomatoes in half, then seed and dice.
5. In a small nonstick fry pan sweat (saute-low heat) onions and garlic without browning.
6. Add tomatoes and herbs.
7. Season.
8. Cover
9. Simmer 20 minutes until soft and all liquid has evaporated.
10. Remove garlic and herbs.
11. Adjust seasoning.

12. Store in a tightly covered glass jar.
13. Let cool and refrigerate.
14. Keeps up to two weeks.
15. Enjoy

3. Tomato salsa

Ingredients:

- 20gm Onion, diced
- 100gm Tomato, chopped
- 5gm Oregano, fresh, chopped
- 5gm Chilli, adjust to taste
- Water
- Salt
- Pepper

Method:

1. Warm oil in fry pan
2. Sauté onion until soft
3. Add tomato, oregano and chilli and cook
4. Season with salt and pepper
5. Add water and continue to cook until tomato begin to soften
6. Remove from heat and reserve until required.
7. Addition of finely diced capsicum is also an option.

4. Salsa verde

Ingredients

- 1½-2 cloves garlic
- big handfuls of fresh flat-leaf parsley
- bunch of fresh basil
- 1 handful of fresh mint
- 1 small handful of capers

- 1 small handful of gherkins, in sweet vinegar
- quality anchovy fillets
- 1 tablespoon Dijon mustard
- tablespoons red wine vinegar
- tablespoons really good extra virgin olive oil

Method

1. Peel the garlic and pick the herb leaves, then finely chop on a large board with the capers, gherkins and anchovies.
2. Place in a bowl, add the mustard and vinegar, and then slowly stir in the oil until you achieve the right consistency.
3. Balance the flavours with black pepper, a bit of sea salt and maybe a little more vinegar.

5. Avocado hollandaise

Ingredients:

- medium Ripe Avocado
- 1 1/2 teaspoons Fresh Lemon Juice
- 1/2 teaspoon Fresh Lime Juice
- tablespoons Extra Virgin Olive Oil
- 2/3 cup Hot Water
- 1/4 teaspoon Salt
- 1/8 teaspoon Black Pepper
- pinch of Ground Cayenne Pepper
- Poached eggs, for serving

Methods:

1. In the bowl of a food processor or blender, puree avocado, lemon juice, lime juice, olive oil, water, salt, pepper and cayenne until smooth and light.
2. Add a little more hot water if the consistency is too thick. \Season with additional salt and pepper to taste.

6. Pesto sauce

Ingredients:

- 2 cups fresh basil leaves, packed (can sub half the basil leaves with baby spinach)
- 1/2 cup freshly grated Romano or Parmesan cheese (about 2 ounces)
- 1/2 cup extra virgin olive oil
- 1/3 cup pine nuts (can sub chopped walnuts)
- 3 cloves garlic, minced (about 1 tablespoon)
- 1/4 teaspoon salt, or more to taste
- 1/8 teaspoon freshly ground black pepper, or more to taste

Methods:

1. Place the basil leaves and pine nuts into the bowl of a food processor and pulse several times
2. Add the garlic and Parmesan or Romano cheese and pulse several times more. Scrape down the sides of the food processor with a rubber spatula.
3. Adding the olive oil slowly while the processor is running will help it emulsify and help keep the olive oil from separating. Occasionally, stop to scrape down the sides of the food processor.
4. Add salt and freshly ground black pepper to taste

LAP Test	Practical Demonstration

Name : _____ Date : _____

Time started : _____ Time finished : _____

Instructions:

1. You are required to perform any of the following:

Request your teacher to arrange for you all necessary tools, materials and equipment. Submit your outputs to your teacher for evaluation.

Request a set of tools, materials, equipment for the tasks then perform the following tasks in front of your teacher:

Prepare:-

1. Tomato salsa
2. Tomato concasse
3. Salsa verde
4. Pesto Sauce
5. Avocado hollandaise sauce

3. Request your teacher for evaluation and feedback

Unit four: Holding cooked egg dishes

This learning guide is developed to provide you the necessary information regarding the following content coverage and topics:

- Holding equipment and tools for storing egg dishes
- Hygiene procedures to hold ready to eat egg dishes
- Labeling and storing of egg dishes

This guide will also assist you to attain the learning outcomes stated in the cover page. Specifically, upon completion of this learning guide, you will be able to:

- Hold equipment and tools for storing egg dishes
- Follow proper hygiene procedures to hold ready to eat egg dishes
- Label and store to notify use by dates of egg dishes

4.1. Holding equipment and tools for storing egg dishes

To insure egg quality in small flocks, egg producers must learn to properly handle the eggs they produce.

- **Clean Environment**: Keeping the layer's environment clean and dry will help keep your eggs clean. A muddy outside run, dirty or damp litter and dirty nesting material will not only result in dirty, stained eggs, but these eggs have a high chance of being contaminated with bacteria. Clean-out the nest boxes and add deep clean bedding at least every two weeks.
- **Proper Egg Cleaning and Handling**

1. Collect eggs in an easy to clean container like plastic coated wire baskets or plastic egg flats. This will prevent stains from rusted metal and contamination from other materials which are difficult to clean and disinfect.
2. Do not stack eggs too high. If collecting in baskets do not stack eggs more than 5 layers deep. If using plastic flats do not stack more than 6 flats. If you stack eggs too deep you will increase breakage.
3. Never cool eggs rapidly before they are cleaned. The egg shell will contract and pull any dirt or bacteria on the surface deep into the pores when cooled. Try to keep the temperature relatively constant until they are washed.
4. Wash eggs as soon as you collect them. This helps limit the opportunity of contamination and loss of interior quality.
5. Wash at 90F or higher and a min of 20F greater than egg temp with an approved cleaning compound. Then rinse at slightly higher temp with approved sanitizer 50-200ppm.This will make the egg contents sweat and push the dirt away from the pores of the egg. Never let eggs sit in water. Once the temperature equalizes the egg can absorb contaminants in the water.
6. Dry and then cool eggs quickly after washing. Store eggs, large end up, at 40-45°F and at 70% relative humidity. Eggs that sit at room temperature (65°F or higher) can drop as much as one grade per day. If fertile eggs are kept at a temperature above 85°F for more than a few hours the germinal disc (embryo) can start to develop. If fertile eggs are kept above 85°F over two days the blood vessels of the embryo may become visible.

4.2. Hygiene procedures to hold ready to eat egg dishes

Egg is considered among the most nutritious and healthiest foods on the planet. Egg is an excellent source of protein, with all the essential amino acids that body needs to maintain good health. In addition, it also contains several minerals and vitamins, which are required for healthy living. Eggs are accepted by all communities without restriction to any religion, and are consumed globally by children, adults, and old people. Egg is an important component of a healthy and balanced diet due to its nutritional richness. Food safety is as important with eggs. There can be health risks if eggs are not handled, stored, and prepared safely. Some eggs may be contaminated with bacteria such as Salmonella, which can cause serious food poisoning in the susceptible population. Hence, it is highly imperative that egg should never be consumed in raw form.

Consumers should always keep eggs refrigerated until the eggs are used. Also, do not store eggs with other foods containing odors like onions, fish or applies. Eggs should not be eaten raw. Pasteurized eggs should be used in recipes that call for raw eggs which are not going to be cooked (i.e. eggnog, ice cream, etc.) Eggs should not be combined and left to stand at room temperature before cooking for more than 20 minutes. Eggs should be individually cracked and immediately cooked to a minimum of 160°F. After cooking the USDA recommends that hot food be kept above 140°F and cold foods be kept below 40°F.

Food safety: Contamination of eggs poses a high risk to food safety. Therefore, following steps are necessary from egg safety point of view. The staff should have knowledge and skills in fod safety and hygiene. Never eat raw egg.

This includes runny egg whites or egg yolks.

- Do not use the raw or soft boiled eggs in food preparation that will not be heat treated or cooked. Keep the egg shall dry to prevent penetration of microbes.
- Maintain egg quality by using good packing, storage, and transport methods.
- Do not send broken egg, soiled egg to the market for sale.
- Cracked egg should be eaten or sold locally for immediate consumption.
- Dirty eggs should be properly cleaned and sold locally for consumption within a few

days.

- Eggs must be properly dried before packing.
- It is necessary to store eggs in their original carton, and use them within 3 weeks for best quality.
- Refrigerate leftover cooked egg dishes and use within 3 to 4 days.
- Use hard cooked eggs within 1 week after cooking

4.3. Labeling and storing of egg dishes

4.3.1. Labeling of Egg Dishes

Each carton must be labeled with:

- Name and Address
- Date of Packaging
- Statement of Identity (eggs)
- Net Contents (3/16" letters)
- "Keep Refrigerated"
- "Unclassified" - unless you weigh the eggs

Follow the suggestions about collection, washing, storage, and sorting above.

For marketing it is usually best to size the eggs. Medium, large and extra large eggs sell best. Egg sizes are expressed in ounces per dozen.

- Small - 18 oz.
- Medium - 21 oz.
- Large - 24 oz.
- X-Large - 27 oz.
- Jumbo - 30 oz.

Never sell eggs in cartons with another egg producer or store name on the carton. It is illegal to do so. Only sell eggs in generic cartons or ask your customers to bring their own carton to carry the eggs.

4.3.2. Storage of Eggs

- Store eggs at refrigerated temperatures of 45°F (7°C) or lower until time of use. Do not freeze eggs in shells
- Store in a cool but not too dry place; 0-5^{0}C is ideal. The humidity of the air and the amount of carbon dioxide in the air are controlled. Eggs will keep up to nine months under these conditions.
- Because eggshells are porous the eggs will absorb any strong odors; therefore, they should not be stored near. Strong=smelling foods such as onions, fish, cheese etc.
- Pasteurized eggs are washed, sanitized and then broken into sterilized containers. After combining the yolks and whites they are strained, pasteurized, that is heated to 63^{0}C for one minute, then rapidly cooled.
- Cook eggs thoroughly until both the yolk and white are firm, not runny. Generally, eggs should be cooked to 145°F (63°C) or higher for at least 15 seconds.
- To hold cooked eggs for later service, cook them to 155°F (68°C) or higher for 15seconds, then hold them at 135°F (57°C) or higher.
- Avoid pooling raw eggs for holding. Eggs may be pooled in small quantities for immediate cooking and serving.
- For lightly cooked egg items, such as custards, French toast, mousses, and meringues, use pasteurized eggs.
- Avoid raw egg menu items. Review menus, recipes, and preparation procedures using raw eggs. Pasteurized eggs may be substituted in Caesar salad, hollandaise and béarnaise sauces, eggnog, ice cream, and egg-fortified beverages.
- Pasteurized eggs require the same time and temperature handling as other potentially hazardous foods.
- Store eggs small end down in an egg carton to keep the air cell stable.
- Date the carton so you can use or sell the oldest eggs first and rotate your extra eggs. You must sell all eggs within five days of being collected. If you are using them at home try to use the eggs before they are three weeks old.
- Store eggs at 40-45°F and 70-75% relative humidity.
- Never store eggs with materials that have an odor. Eggs will pick up the odors of

apples, fish, onions, potatoes and other food or chemicals with distinct odors.

- Never hold eggs at or above room temperature or at low humidity more than necessary. Leaving eggs in a warm, dry environment will cause interior quality to drop quickly.

Self-Check 4	**Written test**

Name…… ID…… Date…….....

Directions: Answer all the questions listed below.

Test I Short Answer Questions

1. Identify the optimum storage requirements for fresh eggs.
2. At what temperature will egg yolks set?
3. List the labeling requirements of egg.

Unit Five: Portioning and presenting egg dishes

This learning guide is developed to provide you the necessary information regarding the following content coverage and topics:

- Selecting standard plate for portioning egg dishes
- Portioning of egg dishes
- Serving with appropriate sauces and accompaniments
- Cleaning and sanitizing working station accordingly
- Segregating Wastes in the kitchen coded garbage bins

This guide will also assist you to attain the learning outcomes stated in the cover page. Specifically, upon completion of this learning guide, you will be able to:

- Select standard plate for portioning egg dishes
- Portion egg dishes according to the industry standards
- Serve with appropriate sauces and accompaniments
- Clean and sanitizing working station accordingly
- Segregate Wastes in the kitchen coded garbage bins

5.1. Selecting standard plate for portioning egg dishes

Plate presentation is the final step that showcases their creations. Often taken for granted or left as an afterthought, plate presentation should highlight the quality of the food and preparation techniques while engaging the diner's senses. A plate should engage the senses and draw the diner into it much as a painting will draw in the observer. The dish should be carefully planned to balance tastes, textures, colors, and cooking methods. Plate presentations begin with mastering the basics of proper culinary techniques, high-quality food, and plate selections that fit the style of the dish.

5.1.1. Plate Selection



Figure 5.1. plate selection

When plating Egg but service ware includes plates of varying sizes, bowls, cups, and other vessels used to hold the food. Plates and serving vessels come in a variety of colors, shapes, and sizes. They may be simple white, starkly black, or earth tone colors. Other materials may also be incorporated including metal or wood. The style of dinnerware used depends on the type of operation whether causal or formal. Plating choices also are influenced by the style of food, the chef's vision, and the overall image the operation is trying to convey.

B. Styles

Carefully consider your audience and the venue when choosing the style of service ware. For example, a fine dining restaurant might consider china or porcelain that conveys a sense of elegance. A casual restaurant may choose ceramic or stoneware that matches a more rustic

dining experience, while a quick-service operation could opt for economical plastic and melamine. An off-premise catered venue might decide that eco-friendly, disposable, and compostable service ware made of bamboo or other recycled materials is a good fit. Service ware also includes materials like glass, wood, slate, tile, and metals of cast iron or stainless steel. Some chefs choose custom-made plates as a way to distinguish their cuisine using natural materials, reclaimed wood, or architecturally unique designs that are as artistic as the food itself. Plates and service ware come in a variety of geometric shapes including classic round, as well as square, oval, or rectangular. They may be teardrop-shaped, oblong, or spoon-shaped.



Figure 5.2. Plate style

C. **Plate Size**

The size of the plate is dependent on the style of the restaurant; for example, a family-style restaurant might use larger plates, while a restaurant that features small plates for sharing would logically use small plates. Fine dining restaurants tend to use oversized plates, for example, a 12-inch/30 cm dinner plate or a 7-9 inch/18-23 cm appetizer plate. Oversized plates act as a canvas providing negative space that frames the items, provides focus, and brings out the colors and characteristics of the food. Large plates also prevent crowding and food overflowing on the rim.

The size of the plate affects the perception of quantity and portion size because the larger the plate, the smaller the portion appears to the guest. Smaller plates, bowls, or ramekins can be nested to accent or highlight components.



Figure 5.3. Plate size

D. **Colors**

The color of service ware affects the overall presentation as well as our taste perceptions and even our appetite.

White plates are a traditional color favored by chefs because it makes the vibrant colors of the food more visually appealing to the guest. White plates are like a blank canvas that chefs can design without concern for color clashes from contrasting plate colors.

Black plates provide an opposite contrast that can be used effectively with brightly colored foods. However, earth tones of brown, tan, warm gray, and greens that emulate the natural colors found in dirt, moss, trees, and rocks can be used when paired with the right food colors. Green foods, including salads and vegetables, pair well with yellow plates. Light brown foods including pasta, chicken, and potatoes pair well with black and brown plates. Red foods including tomatoes, beef, and red sauces pair well on white plates, while yellow and orange foods including eggs, corn, and curries pair well with blue colors. Solid colors tend to dominate but some restaurants use patterns as a signature style. Some chefs today commission and even help design custom serving pieces and tableware.

Colors affect not only how the food appears but also how appetizing it looks to us. Foods with high contrast, for example, a grilled steak with asparagus, sweet potato puree, and béarnaise sauce on a white plate, usually appear more appetizing than those with low contrast, for example, pasta with a white sauce on a white plate. Foods served on white plates tend to enhance sweet flavors in food, while black plates bring out more savory flavors, and serving food on a red plate has been shown to reduce the amount diners eat. Service ware should be chosen to match the food, its shapes, and colors.

E. **Tools for Plating**

There are a broad variety of tools that are used for plate presentations including squeeze bottles, spoons, thin-offset spatulas, and brushes *for* applying sauces on the plate. Tweezers and chopsticks assist in the placement of components and delicate garnishes. Slotted, flexible fish spatulas work well for delicate fish and similar items. Stacking rings *and* geometric molds help to keep the food contained and add height to the layout. Although tongs are useful for sturdy items like steaks and chops, small serving spoons should be used when plating delicate foods including vegetable.

5.2. Portioning of egg dishes

5.2.1. portion control

Controlling your portions doesn't mean you need to eat tiny amounts or measure out precisely the number of peas on your plate. But if we're eating too much, then we may need to retrain our brains to see a smaller-than-normal portion as satisfying enough. Here are some tricks to try:

A. **Use a smaller plate**

A standard-sized portion will look small on a larger plate, making you feel dissatisfied. Use a smaller plate to prevent overloading.

B. **Don't double your carbs**

If you already have some starchy carbohydrate with your meal, do you need bread, as well? You could be doubling your portion, so if you like to have some bread on the side; you'll need to cut down the amount of starchy carbohydrate on your plate accordingly.

C. **Give measuring cups**

Finding it difficult to gauge the right amount to eat? Try using measuring cups. You don't need to have special cups, though; you could use any teacups, mugs or containers that work for you. It's just a simple way of measuring the amount for you every time.

D. **Be selective with your seconds**

Finish your meal with fruit rather than chocolate cake. An apple will help to fill you up more than a couple of squares of chocolate, but both contain similar amounts of calories.

E. **Don't pick at leftovers**

Avoid the temptation to polish off children's or grandchildren's meals or to nibble leftovers

Wasting food certainly isn't ideal, but it doesn't mean you need to finish off everyone else's portions. Avoid the temptation to polish off children's or grandchildren's meals or to nibble leftovers when there's not quite enough for a whole portion.

If you find it happens regularly, then get into the habit of cooking less or have a plan to use up leftovers in another meal.

F. **20-minute rule**

Think you haven't had enough? Wait for about 20 minutes before reaching for a second helping. It can take a little while for you to feel full after you have eaten. So avoid the temptation to keep eating and see if you get that feeling.

G. **Check food labels**

Make sure you know what portion the nutrition information on the front of pack relates to. It might be different to the amount you would normally serve yourself.

H. **Ask for less**

When you're eating out, watch out for supersized portions.

- to maintaining a healthy weight.
- portion sizes are leaving consumers in the dark.

5.3. Serving with appropriate sauces and accompaniments

Salsa Verde: are delicious with baked eggs. You can actually bake the eggs in the Mexican salsa or serve it alongside; the Italian version is best as a condiment.

Tomato sauce: Known as eggs baked in tomato sauce is a popular comfort-food dish. For something a bit more substantial, bake the eggs and tomato sauce with bread cubes and bacon.

Avocado hollandaise: Not only is the real stuff selective to make, it is delicious and super simple.

Pepper puree: We served this over an omelet for breakfast

Roast peppers and garlic cloves until sweet and silky, then peel both and puree for a luscious sauce to serve over baked eggs.

Piri piri sauce: Eggs and hot sauce are meant to be. This tangy, spicy chile sauce takes the combo to the next level.

Sautéed mushrooms: Bake eggs over sautéed mushrooms, or serve them alongside as a sauce.

Pesto: There are seemingly infinite ways to make pesto, and believe it or not, all are good with baked eggs.

Kimchi: Whether homemade or store-bought in a bag or jar, the garlicky, spicy Korean pickle is an awesome sauce-like condiment to serve alongside baked eggs

5.4. Cleaning and sanitizing working station accordingly

Cleaning removes visible solids while sanitizing reduces pathogens on surfaces to safe levels.

Basic Steps to a Clean and Sanitary Kitchen

Step 1. Wash all surfaces, pots, pans and utensils with warm soapy water

Step 2. Rinse surfaces, pots, pans and utensils to remove dirt and soapy residue.

Step 3. Sanitize rinsed surfaces to kill remaining germs.

Kitchen Items to Clean After Each Cooking Shift

• Wash and sanitize all surfaces including cutting boards, the line and prep tables
• Wash your meat and cheese slicer after each use
• Put all cleaning rags in dirty laundry. Also, throw in all aprons and chefs coats, but not in the same bin as the dirty rags.
• Clean the fryers
• Brush the grill
• Empty sanitizing buckets
• Make sure your steam table is empty and wiped clean
• If you have bins in your reach-in cooler, cover them in plastic wrap
• Wash your floor mats
• Sweep and mop the kitchen floor
• Sweep the walk-in cooler Kitchen Items to Clean Monthly
• Clean freezers

• Empty and sanitize your ice machine

• Wash behind ovens, stoves, and fryers to eliminate grease build-up, which can result in a major fire hazard

• Wash walls and ceilings for grease and food stains

• Wipe down all storage areas

• Change pest traps (if applicable)

• Clean the pilot lights on gas kitchen equipment

• Clean your hoods twice a year

• Check fire suppression systems and fire extinguishers

5.5. Segregating Wastes in the kitchen coded garbage bins

Waste segregation can be defined as the process of identifying, classifying, dividing and sorting of garbage and waste products in an effort to reduce, reuse and recycle materials.

In order to segregate waste appropriately, it is important to correctly identify the type waste that is generated. For the purposes of waste segregation at source, waste is identified and classified into the following categories depending on their biological, physical and chemical properties:

Dry Waste: Refers to all items that are not considered wet/soiled items. This includes both recyclable and non-recyclable materials. Dry waste includes items such as bottles, cans, clothing, plastic, wood, glass, metals and paper.

Wet Waste: Refers to all items that are organic like food items, soiled food wrappers, hygiene products, yard waste, tissues and paper towels, as well as any other soiled item that would contaminate the recyclables.

Sanitary Waste: Refers to all liquid or solid waste originating solely from humans and human activities. (Can also include items from medical waste)

Hazardous Household Waste: Refers to all household products that contain corrosive, toxic, ignitable, or reactive ingredients, other than used oil.

E-Waste: Refers to all kinds of electronic waste.

Hazardous Waste: Refers to all items, products and by-products that contain corrosive, toxic, ignitable or reactive ingredients.

Inert Waste: Refers to waste items that are neither chemically or biologically reactive nor decompose easily.

5.1.1. Significance of Waste Segregation

Waste segregation is critical because of the fact that certain types of wastes can be hazardous and can contaminate the environment if not managed correctly. (Some of these types of waste may also have the potential to cause disease or get into water supplies or contaminate the land with different types of leachates.)

When waste is unsegregated, it may get contaminated with different types of waste being stored together. Such waste cannot be treated or managed and most of the time ends up being dumped into local dump yards or landfills. With waste segregation, management of different types of wastes becomes possible. This directly results in reduced amounts of waste being dumped at dump yards or landfills.

Waste Segregation is always step one for all types of waste management solutions that may be implemented either on individual level or community level.

Color Codes for Bins

For ease of waste segregation, the disposal bins are color coded.

Table: 5.1 waste segregation

No.	Type of Waste	Color of Bin
1	Wet Waste	Green
2	Dry Waste	Blue
3	Sanitary Waste	Red
4	E-Waste	Black or Grey
5	Hazardous Waste	Black

Self-Check 5	Written test

Name…… ID…… Date…….....

Directions: Answer all the questions listed below. (General Egg-based Questions)

Instruction: I. **Choose the correct Answer to the following questions**

4. Which one of the following labeling of egg must be includes?
   A. Name and Address
   B. Date of Packaging
   C. Statement of Identity (eggs)
   D. All
5. **The primary function of an egg when making a mayonnaise is:**
   A. Enrichment
   B. Clarification
   C. Aeration
   D. Emulsification
6. **The correct storage conditions for fresh eggs would be:**
   A. In a coolroom at less than 4^{o} Celsius in original packaging with high humidity
   B. In a dark, dry store with adequate ventilation
   C. Removed from containers, washed, placed in coolroom pointy end up
   D. In a dry store in boxes at room temperature
7. **An egg with a dark-yellow to orange-coloured yolk compared to one with a pale yolk indicates:**
   A. The breed of the layer
   B. The egg has superior nutritional values
   C. The layer may have received an enriched diet
   D. The egg has lesser nutritional values
8. **At what temperature range will an egg yolk coagulate (set)?**
   A. 40–50^{o} Celsius
   B. 65–70^{o} Celsius
   C. 80–90^{o} Celsius
   D. 100–105^{o} Celsius

9. A Spanish omelette is an example of……..

A. A rolled omelette

B. A flat omelette

C. An oval omelette

D. A soufflé omelette

10. The-cord like thread that is visible in an egg white and is responsible for stabilizing the yolk is the……

A. Vitelline membrane

B. Chalaza

C. Germinal disc

D. Albumin

11. What ingredient can be added to egg whites before beating to assist in creating volume?

A. Lemon juice

B. Egg yolk

C. Cream

D. Bicarbonate of soda

12. Which ingredient can help stabilize egg foams after they have been beaten?

A. Lemon juice

B. Baking powder

C. Corn flour

D. Sugar

13. Which type of egg can be difficult to peel once hard boiled?

A. A stale egg

B. A quail egg

C. A fresh egg

D. A duck egg

14. The number of eggs required to thicken 600 mL of liquid to a set consistency is:

A. 1
B. 3
C. 6
D. 7

II. Answer true or false for the following questions

1. A stale egg will contain thicker egg white than thin.
2. A discoloured yolk in a boiled egg indicates overcooking.
3. An egg with a brown shell is more nutritious than one with a white shell.
4. Eggs are a good source of many essential vitamins and minerals
5. Eggs require long cooking at high temperatures to ensure they are safe to eat.
6. Eggs should always be used straight from the refrigerator to ensure the best cooking results.
7. The white makes up approximately 60 per cent of the weight of an egg.
8. The air pocket in a fresh egg is smaller than that of an older egg.
9. Eggs should be stored pointy end up to protect the yolk.
10. For commercial purposes, eggs can be purchased frozen.

III. Short-answer questions

1. List the quality points of fresh eggs.
2. Identify the optimum storage requirements for fresh eggs.
3. Identify five main parts of an egg.
4. Identify five culinary uses of eggs and supply one applied example for each.
5. What percentage of the egg is made up by the yolk?
6. What percentage of the protein content of an egg is found in the yolk?
7. At what temperature will egg yolks set?
8. What needs to be avoided to prevent a green or dark coloured ring occurring around the yolk of a hardboiled egg?

Note: **Satisfactory rating - 10 points** **Unsatisfactory - below 10 points**

You can ask you teacher for the copy of the correct answers.

Reference

Waye Gisslin (2010), Professional cooking, 7th edition.

John Campbell (2011), Practical cookery, 11th edition.

Mark Bittman(1998), How to cook everything completely.

Donald D. BeU, William D. Weaver, Jr.(2002), Commercial chicken meat and egg production

Participants of this Module (training material) preparation

No	Name	Qualification (Level)	Field of Study	Organization/ Institution	Mobile number	E-mail
1	Mamit Ayalew	B	Hotel Mgt	Bishoftu P.T.C	0911723484	mamitayalew@gmail.com
2	Amsale Wube	B	Hotel Mgt	Harar P.T.C	0913632156	amsale123@gmail.com
3	**Wale Getaneh**	**B**	**Food Technology & Process Eng.**	**Bole M.College**	**0929241229**	**waleg917@gmail.com**
4	Getish Gedefaw	B	Hotel Mgt	TTI	0911911007	getishde@gmail.com
5	Efrem kitila	B	Hotel Mgt	Woliso P.T.C	0917289283	efremkitila922@gmail.com
6	Abdi Hundessa	B	Hotel Mgt	G/winget P.T.C	0917737767	abdi17hundessa2gmail.com