



## **Meat & Meat Products Processing Level II**

Based on May 2011, Version 2 Occupational standards

**Module Title: - Trimming Meat to Specifications  
and further processing**

LG Code: IND MPP2 M 12 LO (1-3) LG (44-46)

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## LG #44

### LO #1- Trim meat to workplace specifications

#### Instruction sheet

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

- Trimming Meat.
- Applying OHS, hygiene and sanitation.
- Trimming Meat to customer specifications.

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:

- Trim Meat to workplace specifications.
- Trim Meat to Occupational Health and Safety (OHS), hygiene and sanitation, and workplace requirements.
- Trim Meat to customer specifications.

#### Learning Instructions:

1. Read the specific objectives of this Learning Guide.
2. Follow the instructions described below.
3. Read the information written in the “Information Sheets”. Try to understand what are being discussed. Ask your trainer for assistance if you have hard time understanding them.
4. Accomplish the “Self-checks” which are placed following all information sheets.
5. Ask from your trainer the key to correction (key answers) or you can request your trainer to correct your work. (You are to get the key answer only after you finished answering the Self-checks).
6. If you earned a satisfactory evaluation proceed to “Operation sheets
7. Perform “the Learning activity performance test” which is placed following “Operation sheets”.
8. If your performance is satisfactory proceed to the next learning guide,
9. If your performance is unsatisfactory, see your trainer for further instructions or go back to “Operation sheets”.



## Information Sheet 1- Trimming Meat

### 1.1. Introduction

Trimming is usually the last processing step before packaging or quick freezing. Trim lines often produce specialty products according to customer specification. Trimmers remove pieces of bone, fat, tendons, gristle, or blemishes in the meat as well as perform specialty cutting to produce tenders and nuggets.

The images below show a cut of beef before and after trimming.



Figure 1. Meat before and after trimmed

### Basic Techniques: How to Trim the Fat Off Meat

As always when working with meat, use a sharp knife.

- ✓ Set the cut of meat on a cutting board. Cut or pinch off a small tag of the fat toward the top.



Figure 2. Set the cut of meat on a cutting board.

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- ✓ Still holding onto the tag of fat, set your knife in between this fat and the meat. Pull the tag of fat away from the meat so that it is taut and begin cutting downward in a slicing motion. Tilt the knife slightly toward the fat as you slice. If you cut straight downward, you'll end up going into the meat.



Figure 3. Pull the tag of fat

- ✓ As you trim the fat off, keep it taut and almost parallel to the cutting board. This will help pull it away from the meat and make it easier for you to cut accurately.
- ✓ Go slowly and work in clean, smooth strokes. Don't try to remove all of the fat at once. Work in strips, starting over at the top of the meat each time. Like most things in the kitchen, practice makes perfect!



Figure 4. Trimming of external fat

Trimming of external fat shall be accomplished by smoothly removing the fat following the contour of the underlying muscle surface. Merely bevelling the edges of a cut or portion, so as to appear to achieve a desired fat trim, is not acceptable.

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Two terms used for describing fat limitations are: (1) maximum fat thickness at any one point and (2) average fat thickness. These fat thickness requirements may be applicable both to the external surface and/or seam fat within an item. Instead of selecting a specific measurement to determine the maximum and average fat thicknesses, a purchaser may specify either one of the two fat trim requirements at the left as an alternative.

### Method for determining fat thickness

The maximum fat thickness at any one point is determined by visually examining the area of a cut that has the fattest thickness and measuring the fat thickness or depth at this point.

The average fat thickness is determined by visually selecting the different areas where surface fat appears on the cut or roast and then taking measurements of the fat thickness or depth only in these areas. The average fat thickness is then determined by adding the fat thickness measurements together and dividing the total by the number of measurements. For example, in the case of three measurements of surface area of 0.2 inch (5 mm) in depth, 0.3 inch (8 mm) in depth, and 0.4 inch (10 mm) in depth, the average fat thickness or depth would be 0.3 inch (8 mm).

The above measurements of fat are made on the edges of the cut or roast by probing or scoring the overlying surface fat as necessary, in a manner that determines the actual fat thickness and reveals any natural depression or seam that could affect the measurement.

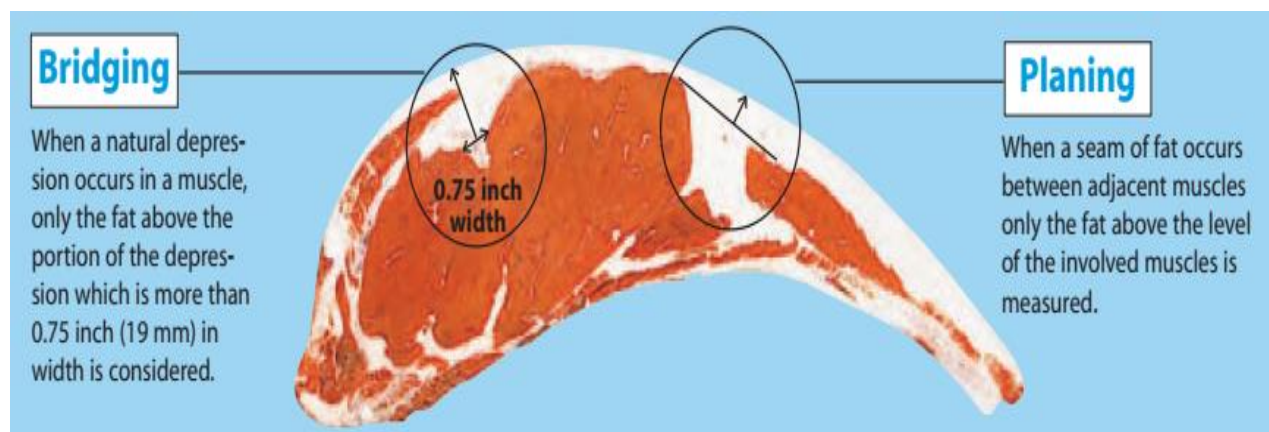
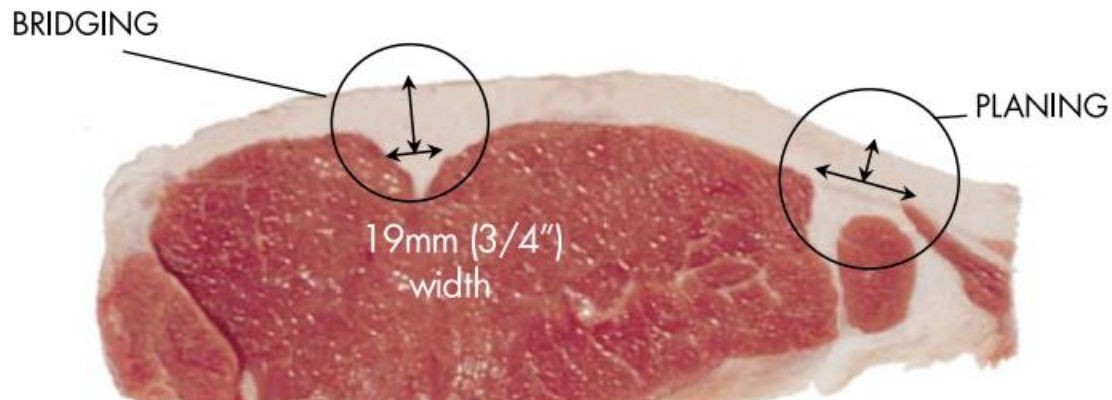


Figure 5(a.) Bridging and Planing

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**Figure 5(b)**

### **Bridging Method of Fat Measurement**

When a natural depression occurs in a muscle, only the fat above the portion of the depression that is more than 0.75 inch (19 mm) in width is considered in making the fat thickness determination See Figure 5.

### **Planing Method of Fat Measurement**

When seam of fat occurs between adjacent muscles only the fat above the level of the involved muscles is measured. See Figure 5.

**Self-Check -1****Written Test**

**Directions:** Answer all the questions listed below. Use the Answer sheet provided in the next page

**Test I: True or False**

1. The maximum fat thickness at any one point is determined by visually examining the area. (1pts).
2. Trimming of external fat shall be accomplished by smoothly removing the fat following the contour of the underlying muscle surface. (2pts).

**Test II: Short Answer Questions:**

1. Define trimming? (3pts)
2. List the parts that are trimmed from meat. (2pts).
3. List the method of determining fat thickness. (2pts)

**Note:** Satisfactory rating – 10 points

Unsatisfactory - below 10points

**Answer Sheet**

Score = \_\_\_\_\_

Rating: \_\_\_\_\_

Name: \_\_\_\_\_

Date: \_\_\_\_\_

**Short Answer Questions**





## Information Sheet 2- Applying OHS, hygiene and sanitation

### 2.1. Personal hygiene

There are many types of personal hygiene. The following list is a good starting point for someone looking to build a personal hygiene routine:

**Dental-** Dental hygiene involves more than just having white teeth. A good dental hygiene routine can help prevent issues such as gum disease and cavities. It can also prevent bad breath.

**Body-** Several million sweat glands cover the human body. When bacteria break down sweat, the process creates a smell or body odor.

Washing the body will help prevent skin irritation, as well as removing the bacteria that cause body odor. Washing the hair removes oil and keeps a person looking clean and fresh.

**Hand washing-** Regular hand washing is one of the best ways to avoid spreading communicable diseases.

The Centers for Disease Control and Prevention (CDC) recommend washing the hands at certain times:

- ✓ before, during, and after preparing food
- ✓ before eating food
- ✓ before and after looking after anyone who is vomiting or has diarrhea
- ✓ after going to the bathroom
- ✓ after changing diapers or cleaning up a child who has used the toilet
- ✓ after blowing the nose, coughing, or sneezing
- ✓ after touching garbage or dirty surfaces or objects
- ✓ after handling pets or pet-related items, such as food

**Nails-** Fingernails may harbor dirt and germs, contributing to the spread of bacteria. It is easier for dirt and germs to collect under longer nails, so keeping them short can help reduce the risk of spreading infections.

The personnel who work in the meat industry should do: -

- ✓ Maintain an appropriate standard of personal cleanliness

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- ✓ Wear protective clothing appropriate to the circumstances, and ensure that non disposable
- ✓ Protective clothing is cleaned before and during work;
- ✓ If wearing gloves during the slaughter and dressing of animals and the handling of meat, ensure that they are of an approved type for the particular activity, e.g. chain-mail stainless steel, synthetic fabric, latex, and they are used according to specifications, e.g. washing of hands before use, changing or sanitising gloves when contaminated.
- ✓ Immediately wash and sanitise hands and protective clothing when there has been contact with abnormal animal parts that are likely to harbour food-borne pathogens.
- ✓ Cover cuts and wounds with waterproof dressings.
- ✓ Store protective clothing and personal effects in locations that are separate from areas where meat may be present.

Establishments, facilities and equipment should be kept in an appropriate state of repair and condition to facilitate all sanitation procedures and prevent contamination of meat, e.g. from metal shards, flaking plaster and chemical contaminants.

- ✓ Ensure that there is no consequential contamination of meat with detergents or sanitising agents, unless allowable under conditions of use.
- ✓ Be monitored for their effectiveness, e.g. organoleptic checks and microbiological sampling of meat contact surfaces, and be redesigned if and when necessary.

Particular cleaning programmes are required for equipment used in the slaughter and dressing of carcasses e.g., knives, saws, machine cutters, evisceration machines and flushing nozzles.

**Such equipment should be:**

- ✓ Clean and sanitised before each new period of work.
- ✓ cleaned, and sanitised, by immersion in hot water or alternative methods, with appropriate frequency during and/or between periods of work.
- ✓ Immediately cleaned and sanitised when coming into contact with abnormal or diseased tissue that may harbour food-borne pathogens; and stored in

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designated areas in such a manner that it will not become contaminated. Containers and equipment should not pass from an “inedible” area to an “edible” area before being cleaned and sanitised.

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<b>Self-Check -2</b>	<b>Written Test</b>
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**Directions:** Answer all the questions listed below. Use the Answer sheet provided in the next page:

**Test I: Fill the blank space.**

1. -----is one of the best ways to avoid spreading communicable diseases. (2pts).

**Test II: Give short answer**

1. Explain personal hygiene requirement? (4pts)
2. Write down the equipment sanitation requirements. (2pts)

**Note: Satisfactory rating – 6 points**

**Unsatisfactory - below 6 points**

**Answer Sheet**

Score = \_\_\_\_\_

Rating: \_\_\_\_\_

Name: \_\_\_\_\_

Date: \_\_\_\_\_

**Short Answer Questions**

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### Information Sheet 3- Trimming Meat to customer specifications

Trimming has to meet customer specifications and expectations. This means that if you do this task you must work accurately and precisely to ensure as much meat as possible can be presented for sale.

The cutting, trimming, and boning of the items shall be accomplished with sufficient care so that each cut retains its identity and is devoid of objectionable scores in the lean. Ragged edges shall be removed close to the lean surfaces. Except for cuts that are separated through natural seams, all cut surfaces shall be made at approximate right angles with the skin surface. No more than a slight amount of lean, fat, or bone, provided the item is being prepared bone in, shall be included from an adjacent cut. No bone shall be present in a boneless item. When portioning steaks, except those that are cubed and/or knitted or otherwise described differently, the steaks shall be cut in full slices in a straight line, reasonably perpendicular to the outer surface and at an approximate right angle to the length of the cut being sliced or portioned. Individual steaks shall remain intact when suspended 0.5 inch (13 mm) from the outer edge. Portion-cut items shall be practically free of fractures, tag ends and knife scores.

#### **Peeled/Denuded**

The term “peeled” implies surface fat and muscle separation through natural seams so that the resulting cut’s seamed surface (“silver” or “blue” tissue) is exposed with remaining “flake” fat not to exceed 1.0 inch (2.5 cm) in the longest dimension and/or 0.125 inch (3 mm) in depth at any point. The term “denuded” implies all surface fat is removed so that the resulting cut’s seamed surface (“silver” or “blue tissue”) is exposed with remaining “flake” fat not exceed 1.0 inch (2.5 cm) in any dimension and/or 0.125 inch (3 mm) in depth at any point.

#### **Peeled/Denuded, Surface Membrane Removed When the surface membrane**

(“silver” or “blue” tissue) is required to be removed (skinned), the resulting cut

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surface shall expose at least 90 percent lean with remaining “flake” fat not to exceed 0.125 inch (3 mm) in depth.

Before the whole pork loin can be further processed it is necessary to trim some of the back fat. Trimming can depend on your preference of amount of fat left on your pork chops. Note\* (you can always take more off but you can't put back on!) Standard industry trim is 1/4” of fat on loin. Palm grip your knife with blade facing you. Position yourself with your elbow acting as a safety block to your stomach. Carefully “peel” the back fat off the loin to the desired amount.

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<b>Self-Check -3</b>	<b>Written Test</b>
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**Directions:** Answer all the questions listed below. Use the Answer sheet provided in the next page:

**Task I: say true or false**

1. While trimming we haven't given care to meet customer specifications and expectations.
2. Before the whole pork loin can be further processed it is necessary to trim some of the back fat.

**Task II: give short answer**

1. Define peeled? (2pts)
2. Define and explain Denuded. (3pts)

**Note: Satisfactory rating – 4 points**

**Unsatisfactory - below 5 points**

**Answer Sheet**

Score = \_\_\_\_\_

Rating: \_\_\_\_\_

Name: \_\_\_\_\_

Date: \_\_\_\_\_

**Short Answer Questions**

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## Operation sheet-1

## Trimming Meat to customer specifications

### 1.1. cut and Trim a whole beef tenderloin

#### Material needed

- ✓ 1 whole beef tenderloin
- ✓ Large cutting board
- ✓ Small paring knife
- ✓ Large chef knife
- ✓ Plastic ruler

1. To keep your cutting board stable, place it on top of a towel.



Figure 6. place tenderloin on top of a towel.

2. Using your fingers remove any large pieces of fat or connective tissue obscuring the muscle below. Once you have located the different muscle insertions, use a sharp paring knife to carefully separate (or dissect) the “chain” (Psoas Minor) away from the tenderloin (Psoas Major).



Figure 7. Remove any large pieces of fat or connective

3. Once you have separated most of the “chain” from the tenderloin, find the “wing” (Iliacus muscle). Use the knife to carefully separate the “wing” from the main portion of the tenderloin.

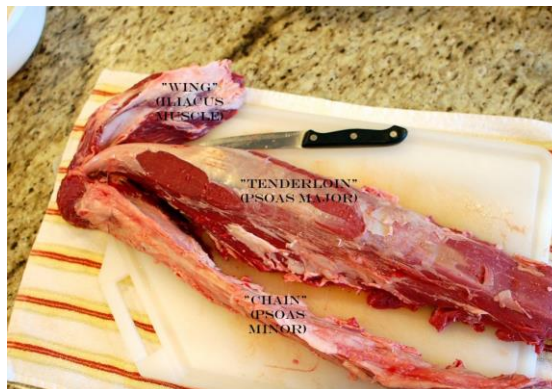


Figure 8. separate the “wing” from the main portion of the tenderloin.

4. Cut the chain and wing off of the tenderloin and set those parts aside. Now you will be working on the main part of the tenderloin.



Figure 9. Main part of the tenderloin



5. If you look closely, you will see that some of the tenderloin is covered with a “silver skin”. This is a tough connective tissue that you definitely don’t want on your steaks! To remove it, slide the tip of your knife under the silver skin – perpendicular to the direction the fibers are running. Pulling the knife upwards, slowly slice down the tenderloin (angling the knife away from the meat), pulling a small strip of silver skin up and off the tenderloin. Continue all the way around the tenderloin to remove all the excess fat and silver skin.



Figure 10. Removing the silver skin

6. Once you have removed the silver skin and extra fat, your tenderloin should look like this.



Figure 11. After removing silver skin

7. Now you will slice your tenderloin into steaks. I suggest cutting your filet mignon steaks 1 1/2 inches thick. To start, cut a small part of the pointy end (or “tip”) off. Set the tip aside (Depending on customer specification).



Figure 12. slice your tenderloin into steaks

8. Now, if you start cutting your filet mignon at this point, your first steak will be REALLY small. If you want a really small steak then go ahead and cut your first 1 1/2-inch-thick piece. If you are like me, and prefer to have most of your steaks even in size (which is important if you are serving guests – you probably want everyone to have similar sized pieces) then hold a ruler up to your tenderloin, and make a cut 3 inches from the end.

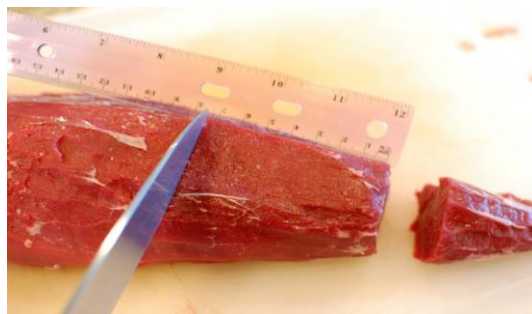


Figure 13. cutting your filet mignon by using ruler

9. Now, you are going to butterfly this piece. Position your knife in the middle, and cut 90% through the meat. Make sure you leave the bottom intact – don't cut all the way through!



Figure 14. making the cut butterfly





10. Now flip the piece open like a book. You have now made a large “butterflied” steak with the narrow part of the tenderloin.



Figure 15. Now flip the piece open like a book

11. Now your tenderloin should be large enough to cut 1 1/2-inch steaks. Use your large chef's knife to work down the tenderloin, cutting as many 1 1/2-inch-thick filet mignon steaks as possible. When you get close to the end, you may want to finish with another butterflied steak. You can see in the photo below; I was able to get about 8 nice sized filet mignon steaks from the tenderloin. You may be able to get more (or less) depending on the size of your tenderloin.



Figure 16. Making many strike

12. But wait! You can still cut more steaks! Take the “wing” (*Iliacus*) that you have set aside, peel the silver skin and fat off of it, and cut that into more steaks. With this one (on the bottom of the photo), I was able to get two more butterflied steaks.



Figure 17. Take the “wing” (*Iliacus*)

13. So, from Pismo, you can get 10 filet mignon steaks!





Figure 18. making strike from pismo

14. Cut the meat into a few large pieces and wrap tightly in plastic wrap. Put those wrapped pieces into a gallon sized ziplock bag, squeeze out the air, and freeze until needed.



Figure 19. wrap steak tightly in plastic wrap



## 1.2. Cutting and/ trimming Leg Noisette Joint of Lamb

1. Position of the leg and chump on the carcass

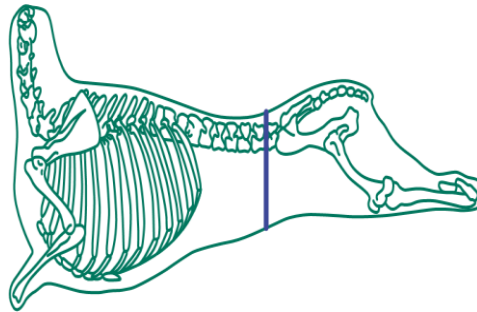


Figure 20. Position of the leg

2. Remove the leg and chump from the carcass by cutting between the last two lumbar vertebrae.



Figure 21. Remove the leg and chump



3. Remove the knuckle by cutting through the joint between the femur and tibia/fibula.



Figure 22. Remove the knuckle

4. Carefully remove and trim the tail and aitch bones.



Figure 23. remove and trim the tail and aitch bones.

5. Remove and trim the topside muscle by cutting along the seam between it and the remainder of the leg.



Figure 24. Remove and trim the topside muscle

6. Remove the femur and patella (bone) from the meat taking care not to cut into the underlying muscles.



Figure 25. Remove the femur and patella

7. Remove the rump muscles by a straight cut parallel to the anterior cut surface.



Figure 26. Remove the rump muscles



8. Separate the thick flank and silverside muscles by cutting along the natural seam between them.



Figure 27. Separate the thick flank and silverside muscles

9. Remove the remaining knuckle muscles from the silverside.



Figure 28. Remove the remaining knuckle muscles from the silverside

10. Remove /or trim fat deposit from meat



Figure 29. Remove /or trim fat deposit from meat



11. Remove and trim connective tissue to expose the lean surface.



Figure 30. Remove and trim connective tissue

12. Silverside trimmed to customer specification.



Figure 31. Silverside trimmed meat

13. Roll the silverside muscles so that the lean surface is covered by an external fat layer.



Figure 32. Roll the silverside muscles



14. Secure trimmed meat in shape with elasticated netting



Figure 33. Secure trimmed meat in shape with elasticated netting

15. Prepared noisette joint depending on customer specification.



Figure 34. Prepared noisette joint



LAP Test	Practical Demonstration
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Name: \_\_\_\_\_ Date: \_\_\_\_\_

Time started: \_\_\_\_\_ Time finished: \_\_\_\_\_

**Instructions:** Given necessary templates, tools and materials you are required to perform the following tasks within 3hour.

**Task 1.** Cut and trim Leg Noisette Joint of Lamb

**Task 2.** Trim and cut a whole beef tenderloin



## LG #45

### LO #2- Handle product hygienically

#### Instruction sheet

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

- Handling product according to OHS requirements
- Handling product to meet hygiene requirements.

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:

- Handle product according to OHS requirements
- Handle product to meet hygiene requirements.

#### Learning Instructions:

1. Read the specific objectives of this Learning Guide.
2. Follow the instructions described below.
3. Read the information written in the “Information Sheets”. Try to understand what are being discussed. Ask your trainer for assistance if you have hard time understanding them.
4. Accomplish the “Self-checks” which are placed following all information sheets.
5. Ask from your trainer the key to correction (key answers) or you can request your trainer to correct your work. (You are to get the key answer only after you finished answering the Self-checks).

## Information Sheet 1- Handling product according to OHS requirements

### OHS requirements

Butchers and slaughter house workers are exposed to various types of hazards in the course of their work, which could lead to health problems of varying severity. To reduce the risks, occur during work they should wear PPE clothes includes: Aprons, Footwear, Gloves, Hairnets, Over Coats. Apron may be plate link or preferably chain mail aprons if there is a risk of injury to the abdomen or chest, for example using knives or choppers in de-boning work or other work where the knife is pulled with the point towards the body.

Aprons should be sufficiently long enough to provide adequate protection depending on the nature of the work that usually covering the body area from mid breast bone to mid-thigh. The weight of the apron should be borne by the wearer's shoulders and not the neck, and be adjustable so it sits neatly against the body without sagging. For certain operations, a tunic covering the shoulders and upper torso may be required which reaching upwards to work on hanging meat in pre trimming or using pullers/liberators.



Figure 35. Personal protective equipments.

Wash your hands frequently when preparing any type of meat, fish, or poultry. Bacteria can quickly spread between your hands and meat. Always wash your hands



with soap and water for at least 20 seconds before and after handling meat, whether it's raw or cooked.

Because bacteria can spread easily, prepare the meat on a surface that's separate from all other cooking materials. Try to use separate cutting boards, clean all cooking utensils after they touch raw meat, and use different utensils to serve food after you've prepared it.

Proper handling and storage are two of the most vital processes undertaken by staff once meat orders arrive at their point of sale. Because foodborne illnesses have not been fully eradicated yet, and meat storage is often subject to human error, rigid procedures need to be followed to ensure that all products arriving for sale are checked, refrigerated immediately, and stored correctly. Poor meat handling and storage procedures can prove to be disastrous to a meat processing company and to customers alike.



Self-Check -1	Written Test
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**Directions:** Answer all the questions listed below. Use the Answer sheet provided in the next page:

**1. Name the following picture with their function (10pts)**



1----



2.....



3. ....



4. ....5. ....



**Note:** Satisfactory rating – 8 points

Unsatisfactory - below 5 points

### Answer Sheet

Score = \_\_\_\_\_

Rating: \_\_\_\_\_

Name: \_\_\_\_\_

Date: \_\_\_\_\_

### Short Answer Questions

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## Information Sheet 2- Handling product to meet hygiene requirements

### 2.1. Meat hygiene requirements.

Meat must be safe and suitable for human consumption and all interested parties including government, industry and consumers have a role in achieving this outcome. However, it is the responsibility of the establishment operator to produce meat that is safe and suitable in accordance with regulatory meat hygiene requirements.

Rooms and other areas in which bodies of animals are dressed or meat may be present and cut as well as trimmed should be designed and constructed so that:

- ✓ cross-contamination during operations is minimized to the greatest extent practicable.
- ✓ effective cleaning, sanitation and maintenance can be carried out during and between periods of operation.
- ✓ floors in areas where water is present slope sufficiently to grilled or otherwise protected outlets so as to ensure continual drainage.

#### **Where carcasses, parts of carcasses or other meat is placed in a holding room:**

- All requirements for hygienic control of operations must be adhered to e.g. chiller loading rates.
- Stock rotation, specifications for temperature and relative humidity.
- Carcasses and parts of carcasses, whether hung or placed in racks or trays, should be held in a manner permitting adequate circulation of air.

Fresh meat intended for trimming and cutting or de-boning should be brought into work rooms progressively as needed, and should not accumulate on work tables. If fresh meat is cut or de-boned prior to reaching temperatures that are appropriate for storage and transport, it should be immediately reduced in temperature to prescribed



levels.

**When fresh meat is cut or/de-boned and trimmed:**

- ✓ It should be transported directly from the dressing area to the cutting up or de-boning room.
- ✓ The cutting up or de-boning and trimming room should be temperature-controlled and directly linked to the dressing areas, unless the competent authority approves alternative procedures that provide an equivalent level of hygiene; and
- ✓ Trimming, cutting up, de-boning and packing should be done without delay and should meet all requirements for hygienic process control.
- ✓ Do not allow product in any kind of box or container to come into contact with any cutting or work surface or the floors.
- ✓ Ensure that all processing tables and cutting boards are already cleaned and sanitized.
- ✓ Ensure surfaces are dry with no residue of any sanitizer on them (remember that most sanitizers are toxic while wet).
- ✓ Maintain separate cutting and processing boards for different species, especially fish, chicken, and pork.
- ✓ Clean and sanitize boards immediately after use and elevate to air dry as quickly as possible.
- ✓ Have separate cutting boards for cooked meat slicing.
- ✓ Thoroughly clean and sanitize meat slicers and tenderizers between uses for different species and between cooked and raw products. These slicing tools and machines pose a very real risk for cross-contamination and are always subject to scrutiny by health inspectors.
- ✓ If possible, process different species and cooked and raw products on different days. This helps minimize risk of cross-contamination in processing areas, tools, and machines that are used for a variety of products.

**When raw meat is minced:**

- ✓ It should be obtained only from parts of animals as approved by the competent authority e.g. striated muscle and adherent fatty tissues.

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- ✓ It should not contain bone fragments or skin.
- ✓ Any grossly abnormal tissues and / or post-dressing contamination should be removed before mincing; and
- ✓ The competent authority may specify compositional criteria.

Where cutting and trimming up takes place after cooling to 4°C (39°F), the internal temperature of the carcass or parts shall not be allowed to exceed 10°C (50°F), provided that all the necessary measures are taken to ensure the control of microbiological growth and multiplication. Temperature of the storage area where non-frozen poultry carcasses, parts and other edible parts are kept shall be 4°C (39°F) or less. Poultry carcasses, parts and other edible parts shall be so stored and that they are protected against deterioration, mould growth and contamination. Likewise, poultry carcasses, poultry parts and other edible parts shall be transported at 4°C (39°F) or less. Storage of poultry carcasses, poultry parts and other edible parts at chilled state shall not exceed 72 hours.

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<b>Self-Check -2</b>	<b>Written Test</b>
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**Directions:** Answer all the questions listed below. Use the Answer sheet provided in the next page:

1. Describe meat hygiene requirement of meat. (5pts)
2. Write down the hygienic requirement during mincemeat. (3pts)
  - a.-----
  - b.-----
  - c.-----

**Note: Satisfactory rating – 7 points**

**Unsatisfactory - below 7 points**

**Answer Sheet**

Score = \_\_\_\_\_

Rating: \_\_\_\_\_

Name: \_\_\_\_\_

Date: \_\_\_\_\_

**Short Answer Questions**

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## LG #46

### LO #3- Handle knife effectively

#### Instruction sheet

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

- Identifying different types of knives.
- Handling knife safely, hygienically and effectively.

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 different types of knives.
- Handle knife safely, hygienically and effectively.

#### Learning Instructions:

3. Read the specific objectives of this Learning Guide.
4. Follow the instructions described below.
5. Read the information written in the “Information Sheets”. Try to understand what are being discussed. Ask your trainer for assistance if you have hard time understanding them.
6. Accomplish the “Self-checks” which are placed following all information sheets.
7. Ask from your trainer the key to correction (key answers) or you can request your trainer to correct your work. (You are to get the key answer only after you finished answering the Self-checks).

## Information Sheet 1- Identifying different types of knives

Butcher knives are often used to cut flesh, trim or remove bone and cartilage. They are a combination of convenience and solid structure. The handle section is designed with soft curves that make it easier for users to hold knives but not easily slip off their hands while working. The sharp blade section can flex flexibly around the piece of meat and bone to create the most satisfactory result. Butcher knives often have a stronger texture than other normal knives. They can easily penetrate thick layers of meat or bone and cartilage that other knives can hardly do.

**Boning Knife-** the thin, curved blade features a straight edge, designed to make removing meat from the bone quick and easy. Flexible versions are available and are ideal for use with fish and poultry.



**Figure 36.** Boning Knife

**Filleting Knife-** this long, slim blade is perfect for filleting and preparing fish and meat. The flexibility in the blade allows ease of movement, making delicate tasks such as removing skin quick and effortless.





Figure 37. **Filleting Knife**

**Utility Knife-** highly versatile and multi-functional, this style of knife is suitable for chopping and slicing fruit, vegetables and small cuts of meat. Usually features a small, stiff blade making them very strong.



Figure 38. Utility Knife

**Chinese Chopper-** choppers have a very similar appearance to cleavers but are usually not suitable for chopping through bones or frozen foods. Instead they should be used for general meat slicing.



Figure 39. Chinese Chopper

**Cleaver-** these knives commonly have a large, rectangular blade that's incredibly sturdy. The thick cutting edge makes this knife perfect for tough tasks such as splitting large cuts of meat and spare ribs.



Figure 40. Cleaver



**Santoku Knife-** excellent for meat, fish and vegetable preparation, this particular knife has a wide blade to scoop chopped food and a curved end to help the rocking motion when chopping.

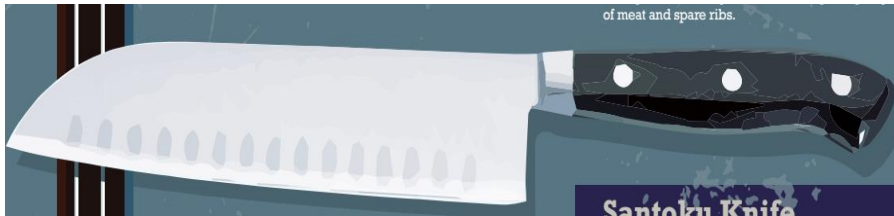


Figure 41. Santoku Knife

**Chef's Knife-** the most commonly used and popular knife, the Chef's Knife, has a strong, weighted blade. It can be used for many chopping and slicing tasks, making it a staple piece in your knife collection.



Figure 42. Chef's Knife

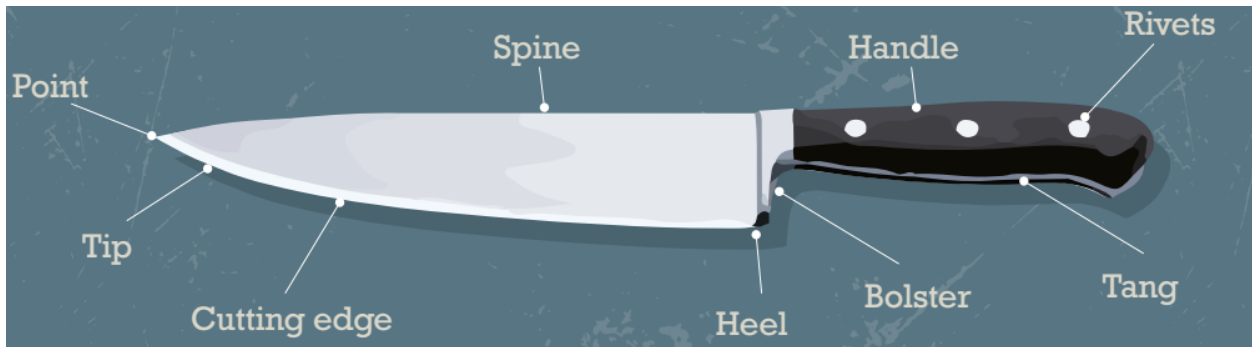
**Carving Knife-** the purpose of this knife is to slice thin cuts of meat such as poultry, roasts, hams, and other large cooked meats. Featuring a thinner blade than other knives, enabling it to carve more precise slices.



Figure 43. Carving Knife

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**Figure 44. part of knife**

Correct knife positioning and cutting are some of the first precision skills learnt in professional culinary school. They are the backbone of an impeccable dish, giving optimum flavor and aesthetics. The right hold results in the right cut which in turn, ensures evenly cooked ingredients that enhance the dish's overall flavor profile.

There is no greater example of what the finest knife skills can achieve than in Japanese cooking. World-renowned sushi and sashimi chefs produce some of the most beautiful and delectable dishes with knife skills passed down from generations of master chefs.

**There are two techniques involved in the right knife grip and both equally important:**

### **1. The cutting hand**

The cutting hand is responsible for the knife movement, and exerting the optimum pressure for each cut. This is normally the chef's predominate hand, but this is not necessarily the case with all chefs, who may change hands depending on the specific task.



## 2. The guiding hand

The guiding hand holds the food steady thus plays a vital supporting role. The guiding hand is also involved in the vast majority of accidental injuries so it is imperative you pay close attention to your hand positioning when holding your knife.



Figure 45. cutting and handling knife

**Self-Check -1****Written Test**

**Directions:** Answer all the questions listed below. Use the Answer sheet provided in the next page:

Match the following picture to the respected names.

**A.****B.**

- a) Paring Knife,
- b) Turning Knife,
- c) Boning Knife
- d) Filleting Knife
- e) Chinese Chopper
- f) Cleaver
- g) Santoku Knife

**Note:** Satisfactory rating – 5 points

**Unsatisfactory - below 5 points**

**Answer Sheet**

Score = \_\_\_\_\_

Rating: \_\_\_\_\_

Name: \_\_\_\_\_

Date: \_\_\_\_\_

**Short Answer Questions**

## Information Sheet 2- Handling knife safely, hygienically and effectively

### General safety tips for knives

- ✓ Keep them sharp – dull knives cause more injuries than sharp ones
- ✓ Always use the right knife for the particular job and food type
- ✓ Use a wooden chopping board as other forms – such as glass - dull knife blades
- ✓ Secure your cutting board with a damp tea towel underneath to avoid slippage
- ✓ Never use your palm as a stabilizing surface for cutting
- ✓ Handle knives carefully when washing
- ✓ Store knives securely after use – in a wooden block or container
- ✓ Ensure all employees are trained appropriately in knife safety, usage and sharpening.



Figure 46. placing knife at appropriate place.

**Safe knife handling starts with what you wear** Personal protective equipment (PPE) to prevent cuts and punctures starts with sturdy work shoes to protect your feet when a knife or other sharp object may fall to the ground. Aprons can protect your upper legs and torso from accidental cuts and slices while you work. Gauntlets can protect your arms. Cut-resistant butcher's gloves, typically made of mesh or Kevlar, protect your hands. Latex or nitrile gloves can be worn over and under the cut-resistant gloves to help them stay sanitary, last longer, and improve your grip while you work.



Figure 47. Cut-resistant butcher's gloves

Not all knives are created equal. Boning, butchering, sticking, and breaking knives all have different uses. This means the blades for each are different. Remember to wash and dry your hands before using a knife and then follow these tips:

1. Keep your knives properly sharpened so they can slice through meats and not slip accidentally.
2. Inspect, maintain, and replace your knives, blades, and other sharp tools as needed. Always cut away from your body.
3. Use a cutting board or other surface, never try to cut or filet an item in your hand.
4. Use a meat holder fork or prong to stabilize the meat as you cut it.
5. Carry a knife with the blade down and pointed away from you. If passing the knife to someone else, put the knife down on a clean surface and let them pick it up.
6. Don't be rushed as you cut and try to keep distractions at a minimum. If you are interrupted when using a knife, place the knife down, do not continue cutting while distracted.
7. If you drop your knife, never try to catch it while it falls. Let it drop.
8. Don't place knives or other sharp objects in your pockets, belt, or belt loops. Sheath and store your knives properly. Don't store knives and sharp tools loose in a drawer.
9. Place knives and sharp tools at the back of your work surface; don't keep them near the edge where they can be knocked off.
10. If you place knives in a sink, place them into a designated wash basin. Never reach into a soapy sink with your bare hands if you cannot see under the water. Enclosed



baskets can be used to store knives and mesh gloves can be used for washing and sterilization.

### **Essential knife maintenance**

For premium safety, understanding and perfecting the right-hand hold when cutting must work in conjunction with the right care and storage of your knives. Here are some procedures to follow in relation to this:

- ✓ Cleaning Your Knives Safely
- ✓ Rinse the knife regularly with hot water as you cook to remove food buildup.
- ✓ Do not pile knives in a sink of soapy water. Wash each one individually.
- ✓ Keep the blade pointed away from you when cleaning.
- ✓ Using a dishcloth, clean from the spine side wiping down the full length of the blade.
- ✓ Rinse and wipe dry using the same wiping method as for cleaning.
- ✓ Store safely in a wooden container or box.

Dull knives cause a great number of injuries in the kitchen. Keeping them sharp avoids the need for excessive force and accidental spillages. One way to check if a knife needs sharpening is by slicing through a sheet of paper. If it easily performs this task, it is sharp enough. There are a number of ways to clean knives but the most superior method is by using a sharpening whetstone. It gives a much sharper knife edge than other methods.



## Whetstone sharpening process

- ✓ Soak whetstone in water
- ✓ Turn it to the coarse side and hold the knife at the correct angle (for Japanese blades between 10-15 degrees, for European blades 15 to 20 degrees)
- ✓ Glide the knife up and down the stone in a smooth motion
- ✓ Cover the entire blade
- ✓ If the knife is double-beveled, repeat process on other side of the blade
- ✓ Turn the stone to the fine side and repeat the same process



Figure 48. whetstone sharpening knife

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Self-Check -2	Written Test
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**Directions:** Answer all the questions listed below. Use the Answer sheet provided in the next page:

1. Describe general safety tips to the knife (5pts).
2. Describe how to sharpening knife. (2pts).

**Note:** Satisfactory rating – 5 points

Unsatisfactory - below 5 points

**Answer Sheet**

Score = \_\_\_\_\_

Rating: \_\_\_\_\_

Name: \_\_\_\_\_

Date: \_\_\_\_\_

**Short Answer Questions**

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## Reference Materials

1. Tsuyoshi Inagaki, (2018). The Expert Chef's Guide to Knife Handling
2. Dick van Leeuwen, (2015). Quality Standard Lamb

## WEB ADDRESSES

1. [www.qsmbeeflandlamb.co.uk](http://www.qsmbeeflandlamb.co.uk)
2. [https://sielearning.tafensw.edu.au/toolboxes/KitchenOps/tools/kitchen/clard/p\\_meat.html](https://sielearning.tafensw.edu.au/toolboxes/KitchenOps/tools/kitchen/clard/p_meat.html).
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4. <https://heygrillhey.com/how-to-trim-a-brisket/>.
5. <https://www.thekitchn.com/basic-techniques-how-to-trim-t-73832>.



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