



**Certificate in Manicure and Pedicure**

# MANICURE AND PEDICURE



**Distance Learning Materials**

# Acknowledgements

## Course Team

Writers: One Mazhani  
Laura Sibanda  
Jan Deurwaarder

Peer Reviewer: Joanna Collymore

Instructional Design Editor: Alison Mead Richardson

Layout & Graphics: Anthony Okuku



Published by Francistown College of Technical &  
Vocational Education  
Private Bag F104  
Francistown  
Botswana



Francistown College of Technical &  
Vocational Education 2015

Any part of this document may be reproduced without permission but with attribution to Francistown College of Technical & Vocational Education and the writer.

CC-BY-SA (share alike with attribution)

<http://creativecommons.org/licences/by-sa/4.0>

# Table of Contents

<b>Module Introduction.....</b>	<b>5</b>
Manicure and Pedicure.....	5
Icons used in this Module .....	7
 <b>Unit 1: The Structure of the Hand and Nail .....</b>	 <b>8</b>
Section 1: Structure of the lower arm and hand.....	9
Section 2: Structure of the nail.....	15
Section 3: Nail growth and nail shapes.....	18
Summary Unit 1: The structure of the hand .....	21
Answers to Activities .....	22
 <b>Unit 2: Disorders of the skin and nail .....</b>	 <b>25</b>
Section 1: Healthy skin and nails .....	26
Section 2: Disorders of the skin and nails .....	28
Summary Unit 2: Disorders of the skin and nail .....	32
Answers to Activities .....	33
 <b>Unit 3: Diseases of the Skin and Nail .....</b>	 <b>34</b>
Section 1: Disease causing micro-organisms .....	35
Section 2: Skin and nail diseases .....	37
Summary Unit 3: Diseases of the skin and nail .....	40
Answers to Activity.....	41
 <b>Unit 4: Hygiene and Sanitation.....</b>	 <b>42</b>
Section 1: Decontamination.....	43
Summary Unit 4: Hygiene and Sanitation .....	49
Answers to Activity.....	50
 <b>Unit 5: Client Consultation .....</b>	 <b>51</b>
Section 1: What is effective communication? .....	52
Section 2: Client consultation .....	55
Summary Unit 5: Client consultation.....	59
Answers to Activity.....	60

<b>Unit 6: Applying a Manicure Treatment.....</b>	<b>61</b>
Section 1: Manicure/Pedicure - the Tools .....	62
Section 2: Manicure/pedicure - the Products .....	69
Section 3: Manicure - the treatment.....	72
Section 4: Special Treatments .....	77
Section 5: Massage of lower arm and hand.....	79
Summary Unit 6: Applying a Manicure Treatment .....	86
Answers to Activity.....	89
 <b>Unit 7: Structure of the Foot.....</b>	 <b>91</b>
Section 1: Structure of the foot .....	92
Section 2: Structure of the lower leg .....	95
Summary Unit 7: Bones and muscles of the foot.....	101
Answers to Activity.....	102
 <b>Unit 8: Applying a pedicure treatment.....</b>	 <b>104</b>
Section 1: Pedicure - The treatment .....	105
Section 2: Massage of lower leg and foot .....	106
Summary Unit 8: Applying a Pedicure Treatment.....	110
Glossary .....	112

# Module Introduction

## Manicure and Pedicure

### manicure

treatment to improve the appearance and condition of the skin and nails of the hands

### pedicure

treatment to improve the appearance and condition of the skin and nails of the feet



You are about to begin an exciting journey as you develop knowledge, skills in the application of **manicure** (MAN-ik-ure) and **pedicure** (PED-ik-ure). This module is one of many which make up a course- Certificate in Beauty Therapy.

Manicure and pedicure is one of the fastest growing services in beauty therapy. Both men and women regularly go to salons to have treatments to their hands and feet.

This module is about the care of the hands, nails and feet. What do you think is involved in a manicure? Can you think of 3 things you might do in a manicure? Write your ideas here.

A manicure involves cutting, shaping and often painting the nails, conditioning of the cuticles and softening the skin. In this module you will learn how to provide hand and nail services to clients.



*manicure treatment*



*pedicure treatment*

Pedicure is a similar treatment of the feet and the toenails. Clients often neglect to care for their feet. In Unit 8 you will learn how to provide services to clients and give them professional advice in caring for their feet and their toenails.

## Your Professional Image

Your professional image as a manicurist/ pedicurist is very important. What 5 things do you think you could do to present a professional image?



Your professional image includes having well groomed hands, feet, hair and skin. Your uniform must also be neat and clean: this includes accessories such as your shoes. Your posture is also important so you must practise sitting and standing upright. The way you communicate with clients is also a part of your professional image. You should practise smiling as you welcome clients.

You should inquire how you could help them and agree with them on the treatment they would like. If there are reasons, in your professional opinion, that prevent you doing the manicure or pedicure, you must inform them in a courteous manner. You will learn about these reasons in Units 2 and 3. Most importantly, you must be organised at every stage of the treatment.

## Learning Outcomes

There are learning outcomes at the beginning of every unit. The learning outcomes tell you what you should know and be able to do by the time you have finished the Unit. They will help you measure how well you are doing with your studies. Here is an example.

By the end of this module, you should be able to:

- Describe the structure of the hand and foot
- Establish client's requirements taking into account critical factors
- Carry out manicure and pedicure treatments and
- Provide advice on nail aftercare

When you complete a unit you should go back to these learning outcomes and ask yourself whether indeed you can now do the things listed. It is a good check that you have studied the unit well.

## Icons used in this Module

Throughout the module you will find small pictures – or icons – in the margins which help you to find your way through the material.



When you see the pen icon, you know that there is a question for you to think about and answer. You should write your answer in the space provided. You will find the answer in the text immediately after the question.



The magnifying glass indicates a longer activity for you to complete. This is a self-marked activity and you will find the answers to these at the end of each Unit.

After each activity, we give you feedback to help you understand the importance of the activity. We use this icon to indicate feedback.

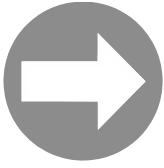


You must make sure that you have completed your study of the appropriate Units in time to successfully complete assessments. Remember - If you do not understand, ask for help! It is your responsibility to ensure you have understood everything well.

## How long will it take to complete the module?

This module is worth 6 credits. A credit is equal to 10 hours. This means it should take you about 60 hours to complete. Remember, this is a practical module. You must practise frequently to build competence with a variety of clients, with different nail conditions and nail shapes. We recommend doing a minimum of 10 treatments on hands and feet before attempting your final assessment. It will be useful for you to keep a log of the treatments you do as evidence of your progress.

Keep this Motto in Mind: “Practice Makes Perfect”  
Good luck!



## Unit 1:

# The Structure of the Hand and Nail

Treatment to the nails goes back a very long way in human history. In Babylonia (now called Iraq) more than 4000 years ago manicure and pedicure tools made of gold were used. Old manuscripts describe that nail polish was used in China, Egypt and in the Roman Empire. It was used by people who had high social status.

Today many people visit beauty salons for a manicure and pedicure. They want their hands, feet and nails to be treated to give them a well groomed appearance. It is the same as taking care of other parts of your body for example your hair, teeth or ears.

For you to provide professional manicure and pedicure services to clients you have to understand the structure of the hands, feet and nails. In this Unit you will learn about the structure of the lower arm, hand and nail.

### What is in this Unit?

The Unit on the hand and nail is divided into 3 sections.

- Section 1: The structure of the lower arm and hand
- Section 2: The structure of the nail
- Section 3: Nail growth and nail shapes

### Learning Outcome

By the time you have completed this Unit, you should be able to:

- describe the structure of the hand and foot
- identify the bones of the lower arm and hand
- describe the muscular structure of the lower arm
- describe the structure of the nail
- identify different nail shapes

You should take note of these learning outcomes, as they will help you to assess your own progress as you work through the unit.

### Study Time

To cover the content of this unit will take you about 3-4 hours. Do not worry if it takes you more time or less as we do not all learn at the same pace.



## Section 1: Structure of the lower arm and hand

You now know that manicure and pedicure treatments are carried out on the hands, feet and nails of your clients. A good understanding of their structure will help you to give the best service to your clients and help you to be able to answer their questions. In this section we will look at the hands. The hand is composed of many different bones, muscles, and ligaments that allow for a large amount of movement for holding and grasping objects. These bones, muscles and ligaments allow you to use a wide range of tools and implements, e.g. eating with a fork.

### The hand and fingers

**digits**  
another name for  
finger

The fingers of the hand are called **digits**. There are four fingers on the hand located at the outermost edge of the palm. These four digits can be folded over the palm which allows you to grasp and hold objects. Each finger, starting with the one closest to the thumb, has a commonly used name to distinguish it from the others:

We are sure that you know the names given to the fingers. Write them down here.



Did you write :

- index finger, pointer finger, or forefinger
- middle finger
- ring finger
- little finger or pinky

Look at Figure 1 to remind yourself what the different parts of the hand are called. You will use these terms to discuss the treatments you give to your clients.

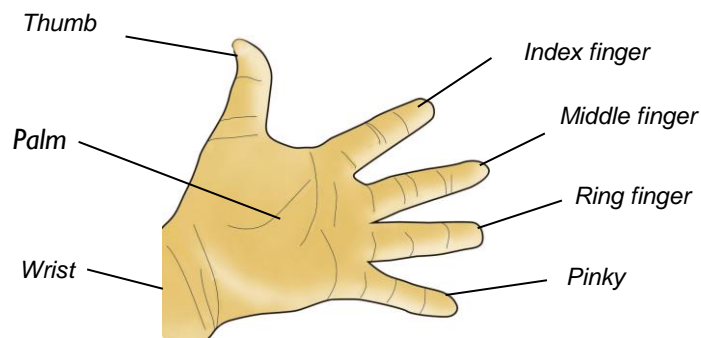


Figure1: The parts of the hand

## The bones of the hand

The bone and muscle structure of the hand is complex. Look very closely at your hand and wrist. Can you identify where the bones are? Use one of your hands and try to feel the bones in the other hand. How many can you feel in your fingers, your palm and your wrist? Write it down here.



I can feel:

\_\_\_\_\_ bones in each finger  
 \_\_\_\_\_ bones in the palm of my hand  
 \_\_\_\_\_ bones in my wrist

### phalanges

bones in the fingers

### metacarpals

bones of the palm of the hand

### carpals

bones of the wrist

### ulna

The larger bone of the forearm

### radius

the smaller bone of the lower arm situated on the or the thumb side.

### How many could you feel?

In your fingers you have 14 bones – 3 in each finger except in your thumb where there are only 2. The bones in your fingers or digits are called **phalanges** (say: fa-lan-jeez).

In the palm of your hand you should have counted 5 bones, they are called the **metacarpals** or palm bones. There is one going from your wrist to each of your fingers.

You have 8 small bones here; they are called the **carpals** or wrist bones. They can glide over one another to allow movement.

The 8 wrist bones are arranged in 2 rows of 4. These bones fit into a shallow socket formed by the bones of the forearm, the **ulna** and the **radius**. Look at Figure 2 to identify the bones in your wrist and hand. Altogether this gives you 27 bones in your hand.

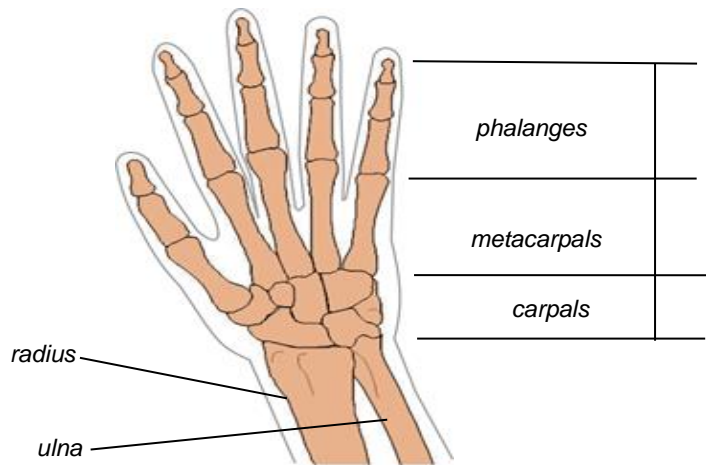


Figure 2: The bone structure of the hand

## The muscles of the hand and forearm

The movements of the human hand and fingers are controlled by muscles and tendons in the forearm.

As a manicurist/ pedicurist, you will provide massage to the hands and feet. This means that you must know about the muscles found in those areas.

### extensors

muscles which straighten a limb

**Extensors** (say: ecks-TEN-saws): These are muscles that straighten the wrist, hand and fingers to form a straight line. The extensor muscles straighten the wrist, hand and fingers. You find them at the upper side (dorsal side) of the forearm.

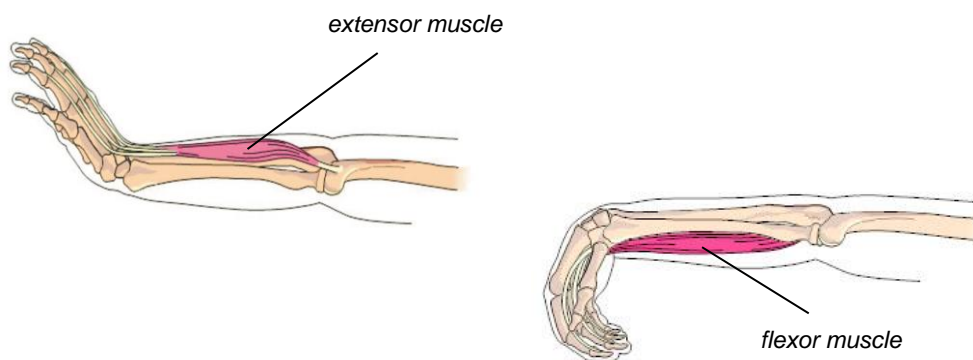


Figure 3: Extensor and flexor muscles of the forearm

### flexors

muscles which bend a limb

**Flexors** (say: FLEK-saws). These are the muscles of the wrist, involved in bending the wrist. The flexors are for bending the wrist, hand and fingers. You find these muscles at the underside (palm side) of the forearm and are attached by tendons to the bones they can move.

**pronators**

muscles in the forearm that enable you to turn your palm down downwards

**supinators**

muscles in the forearm that enable you to turn your arm and hand so the palm faces forward or upwards

**Pronators** (say: proh-NAY-turs)

Some of the muscles in the forearm make it possible for you to turn your hand so that palm faces downwards. These muscles are called pronators.

**Supinators** (say: soo-PIN-ay-turs).

The supinator muscle in the forearm makes it possible for you to turn the forearm and hand so that the palm faces forward or upwards.

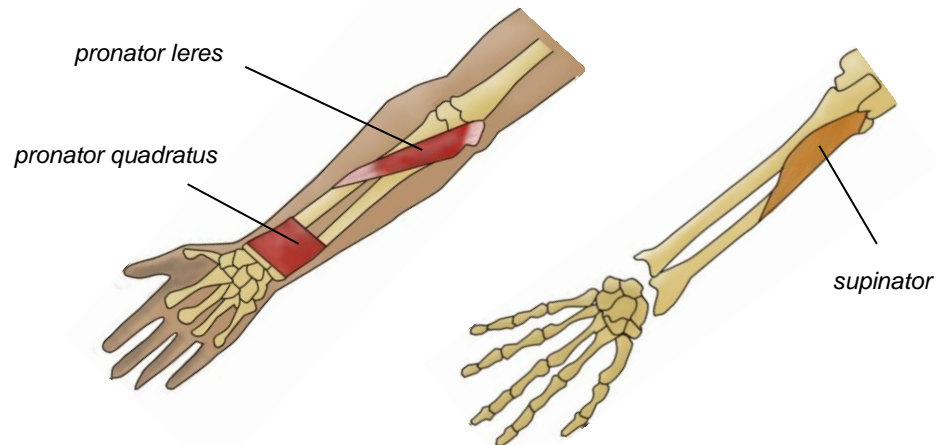


Figure 4: Pronator and supinator muscles of the forearm

## The Muscles of the Hand

The muscles of the hand provide you with the flexibility and strength to open and close the hand and fingers. It is important for you to know and be able to identify some of the muscles as they are important when massaging the hand.

There are three types of hand muscles that provide us with flexibility to open and close the hand. These are:

- **abductors:** the muscles that separate the fingers
- **adductors:** muscles that draw the fingers together
- **opponent muscles:** these are found in the palm of your hand and allow the tip of the thumb to touch the tip of the other fingers

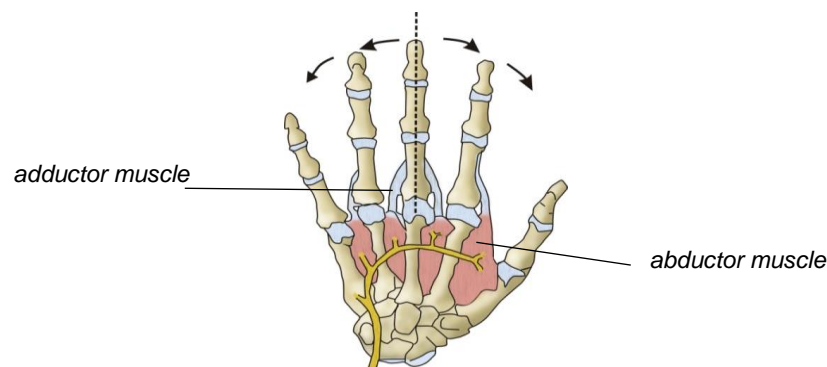


Figure 5: Abductor and Adductor muscles of the hand

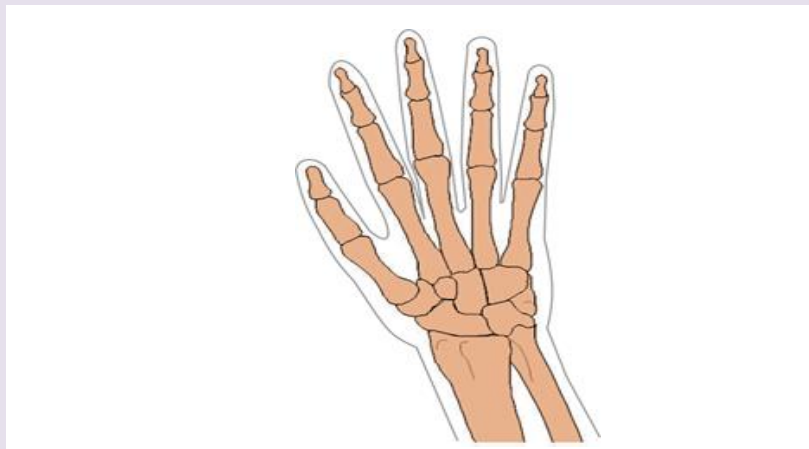
If you are sure you have understood the information in this section then you are ready to test yourself with Activity 1.



## Activity 1

### The bones and muscles of the hand and arm

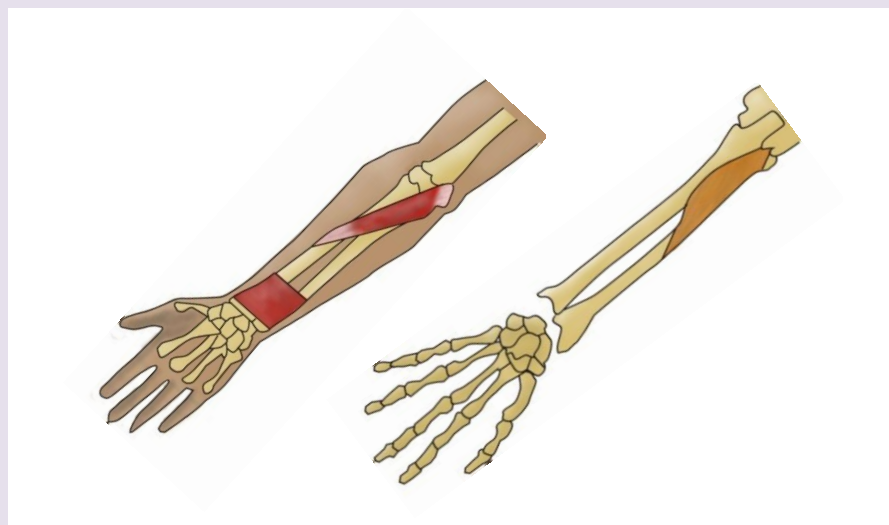
1. In the diagram below name the bones of the hand and arm by labelling them with the letters A to E.



A: phalanges; B: metacarpals; C: carpals; D: ulna; E: radius

2. Label the muscles of the forearm.

(a) pronator, (b) supinator.



### The bones and muscles of the hand and arm

3. Match the muscles of the hand and forearm in Column A with their correct function in Column B by inserting the number of the muscle next to its function. The first one has been done for you.

Column A Muscle	Column B Muscle Function
1. Adductor muscles	_7_ Help to separate the fingers
2. Pronator muscles	___ Allows the tip of the thumb to touch the tip of the other fingers
3. Opponent muscles	___ Draw the fingers together
4. Supinator muscles	___ Straighten the wrist, hand and fingers to form a straight line
5. Flexor muscles	___ Help to bend the wrist, hand and fingers
6. Extensors muscles	___ Enable you to turn your palm downwards
7. Abductor muscle	___ Enable you to turn the forearm and hand so that the palm faces forward or upwards



### Feedback

*This activity will help you check your recall of the names of the bones and muscles of the hand. Check your answers against ours at the end of the Unit. Check also that you spelled the names correctly. If you did not get all the answers correct then you should practice again and try to memorise all the difficult words and names, including their spelling.*

## Section 2: Structure of the nail

**appendage**  
an attachment



The main structure that you will work with when applying a manicure is the nail. It is a transparent plate that protects the tips of fingers, toes and the nail bed. It is an **appendage** of the skin. It is important to know the different parts of the nail. Can you think of 3 reasons why it is important for you to know the different parts of the nail?

**onyx**  
the technical term  
for the nail

Knowledge of the nail structure will enable you to identify the condition of the nail. You will need to identify whether a nail is healthy or unhealthy. You will also need to know which parts of the nail are responsible for growth, protection, nail shape and size. This knowledge would enable you to prevent damage to the nail during manicure application. The technical name for the nail is **Onyx (On-iks)**. You will see this term frequently as it is used as a prefix to names given to nail disorders.

The nail consists of 8 main parts.

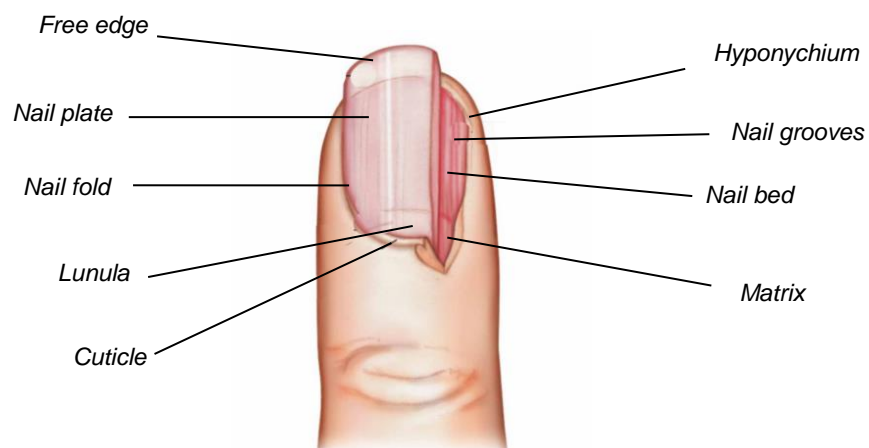


Figure 6: Structure of the nail

**keratin**  
a protein which is  
the chief  
component of the  
hair and nails

**Nail plate:**

The nail plate consists of **keratin** and semi- translucent cells packed closely together. It is the visible portion of nail that rests on the nail bed. It extends from the root to the free edge. The nail plate can become dry, brittle and separate into two layers. This condition is caused by wear and tear as well as harsh chemicals.

### Free edge

The free edge is the end portion of the nail plate that reaches over the tip of the finger or toe. This is the part of the nail that is filed giving it a desired shape.

### Nail groove

Nail groove are slits or tracks at either side of the nail upon which the nail moves as it grows.

### cuticle

the overlapping  
skin surrounding  
the nails

### Cuticle

The **cuticle** is the overlapping skin at the base of nail. Cuticles become dry from excessive exposure to water and chemicals and also because of the natural aging process. A manicurist/ pedicurist pays particular attention to cuticles ensuring that they are well conditioned. They prevent infection of the matrix.

### Nail wall

The nail wall is made up of folds of skin overlapping the sides of the nail, providing protection for the nail.

### Nail bed

The nail bed is the portion of skin upon which the nail plate rests. It contains blood vessels that provide nourishment for growth. It also contains nerves.

### matrix

the part of the nail  
which produces  
cells for nail  
growth

### Matrix

New cells are formed in the matrix and they move forward, hardening on the nail bed until they make up the free edge. It contains nerves, lymph, and the blood vessels that nourish the nail; it produces cells that generate and harden the nail. Damage to cells in the matrix will affect the growth of nails.

### lunula

the part of the nail  
that appears like a  
half moon

### Lunula

The **lunula** is seen as a half-moon located at base of nail. It is caused by reflection of light.

If you are sure you have understood the information in this section then you are ready to test yourself with Activity 2.





## Activity 2: The structure of the nail

1. In the diagram below label the diagram by placing the terms next to the appropriate part of the nail: free edge, matrix, cuticle, lunula, nail groove, nail plate, nail wall and nail bed.



2. Match the description given with the appropriate part of the nail by writing the correct number next to the part of the nail.

matrix	1. folds of skin overlapping sides of nail
nail bed	2. tracks at the sides of the nail upon which the nail moves and grows
cuticle	3. the skin upon which nail body rests
free edge	4. the end of the nail plate that reaches over the tip of the finger
lunula	5. the visible portion of nail that rests on the nail bed
nail wall	6. contains nerves, lymph, and the blood vessels that nourish the nail and causes it to grow
nail groove	7. over lapping skin at the base of the nail
nail plate	8. the half-moon located at base of nail



## Feedback

*The structure of the nail is important to know as it helps you to identify the condition of the nail. Check your answers against ours at the end of the Unit. Did you do well? Do not worry if you got some wrong; just go back to the section and study again.*

## Section 3 : Nail growth and nail shapes

### Nail growth

Nails need a healthy environment to grow. Research shows that ill health and stress have negative effects on nail growth. Can you think of factors that could affect nail growth?



#### **infection**

invasion of body  
tissue by disease  
causing organisms

Check your answers with ours. Nail growth is affected by the following factors: diet, health, medication, climatic seasons, occupation, **infection** and incorrect filing, e.g. ingrown nails. How do your answers compare?

Did you know that it takes 4 to 6 months for a fingernail to grow from the matrix to the free edge? Nails grow faster when there is an increase in blood supply. The opposite happens when there is a decrease in blood supply. If there is illness, e.g. measles, nail growth will be stunted. When there is increased blood supply, for example, during pregnancy, nails grow faster.

Over consumption of fats, salt, sugar and alcohol affect your health and your nails. So it is important to advise your client to eat a balanced diet to maintain healthy nails. Did you know that nails grow faster in summer than in winter and that fingernails grow faster than toenails? Why do you think this is so? Could it be because blood circulation is more efficient in summer than in winter? Could it be that blood reaches the fingernails faster than the toenails? These are questions you could research to get the answers.

Nails that are excessively exposed to water and harsh chemicals become dry and brittle. Dryness could lead to nails breaking, peeling and/ or chipping. It could also lead to infection. So it is important to regularly moisturize and condition nails. A good way of protecting hands and nails from drying elements is the use of gloves for activities which involve water and chemicals.

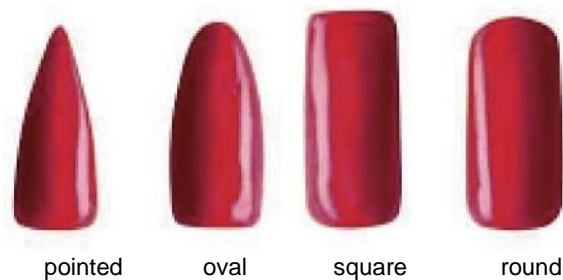
It is very important that you file your client's nails correctly in order to prevent damage. Always file nails from outside to centre and avoid filing into the corners of the nail. This will weaken the nail and cause ingrown nails especially on the toes.

## Nail shapes

Have you noticed that there are different shapes of nails? How many different nail shapes can you identify?



Nails naturally vary in shape, but are usually classified into four general shapes: square, round, oval and pointed.



*Figure: 7 Nail shapes*

One of the first activities when doing a manicure is to identify the natural shape of your client's nail. The rule is: the shape of the nail should conform to the finger tips for a more natural effect. Of the four shapes, the oval -shaped nail, rounded at the base and slightly pointed at the top, is suitable for most hands. Some clients' nails could be naturally squared-shape. This shape is very popular with a younger clientele and suited for a French manicure. However, unless kept short, this shape is not advisable for clients who work with their hands as it is prone to breakage and injury.

In Unit 6 you will learn filing techniques to achieve a desired nail shape. You will also learn polishing techniques that are appropriate for each nail shape.

If you are sure you have understood the information in this section then you are ready to test yourself with Activity 3.



### Activity 3: Nail growth

1. List six factors that negatively affect healthy nail growth.
2. What advice would you give to a client who is exposed to water and harsh chemicals?
3. What are 3 essentials needed for healthy nail growth?
4. List the main four nail shapes.
5. Which nail shape is suited to most hands?



### Feedback

*This activity helped you to check your understanding of healthy nail growth and different nail shapes. Check your answers against ours at the end of the Unit. Did you do well? Do not worry if you got some wrong; just go back to the section and study again.*

## Summary Unit 1: The structure of the hand

### Bones and muscles of the hand.

In this Unit you learned about the bones and muscles of the hand and lower arm. The bones of the hands can be divided into 5 sections comprising: phalanges; metacarpals, carpals, the ulna and radius.

Your hand has 27 bones joined together by ligaments. The bones are grouped as follows:

- 14 **phalanges** or finger bones
- 5 **metacarpal** or palm bones
- 8 **carpal** or wrist bones

At the wrist the hand is joined to the **ulna** and **radius** of the forearm.

The movement of your hand is mainly controlled by muscles and tendons situated in the forearm. Some muscles straighten the bones of the wrist; palm and fingers (**extensors**) while others are involved in the bending of wrist and fingers (**flexors**).

Inside your wrist and hand there are smaller muscles and tendons controlling the finger movements of your fingers. They can be classified as **flexors** (bending movements), **extensors** (straightening movements). Muscles that separate your fingers are **abductors**. Those that bring our fingers together are **adductors**. **Opponent** muscles are found in the palm, and allow the tip of the thumb to touch the tip of the other fingers. The muscles of the lower arm that enable us to turn our hands upwards, are **supinator** muscles and those that turn our hands downward, facing the ground, are **pronator** muscles. The extensor muscles straighten the wrist while flexor muscles are for bending the wrist, hand and fingers.

You also learned about the 8 main parts of the nail: **nail plate, nail groove, cuticle, nail wall, nail bed, matrix** and **lunula**. You are aware that nail growth is affected by **diet, health, medication, climatic seasons, occupation, infection** and **incorrect filing**.

These could interrupt or accelerate the normal growth cycle which is 4 to 6 months. It is important not to expose hands to excessive water or chemicals as they dry the nails and surrounding skin. This excessive dryness could lead to infection. The hands and nails could be kept in a good condition if we wear gloves when exposed to water and harsh chemicals and by applying moisturiser to hands and nails regularly.

You learned that the technical name for the nail is **Onyx (On-iks)**. You will see this term frequently as it is used as a prefix to names given to nail disorders.

Nail shapes were also discussed. Nails grow into different shapes. There are four basic nail shapes: **round**, **oval**, **square** and **pointed**. The oval nail shape is suited to most hands. Square nail shapes are popular; however, unless kept short, this shape is not advisable for clients who work with their hands as it is prone to breakage and injury.

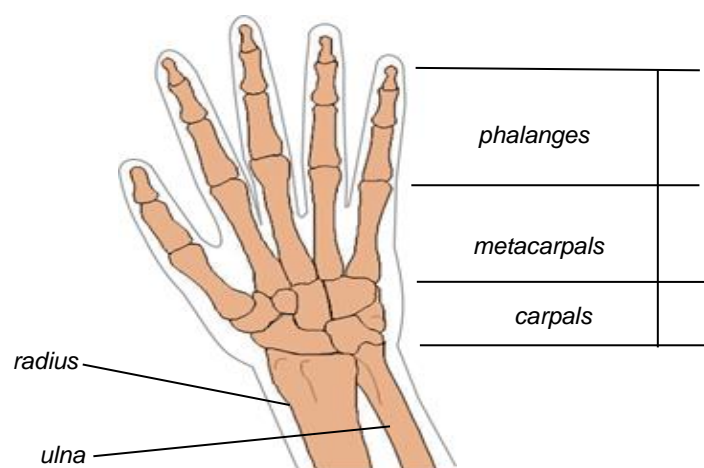
As a manicurist/ pedicurist you will need to advise your clients on how to maintain healthy nails and which nail shape is best suited to their fingers. Remember a healthy diet is essential to the condition of the nails. Also remember that incorrect filing damages nails. This means that you must file nails using correct technique. Your confidence as a manicurist/ pedicurist will increase when you consistently apply your knowledge, from this Unit, to the application of manicure and pedicure. You should practise using the correct terminology when describing aspects of nail care.

You have completed your work in Unit 1. Please check the learning outcomes and make sure that you have achieved them all. If you are confident that you have, then you are ready to move to the next unit where you will learn about disorders of the skin and nail.

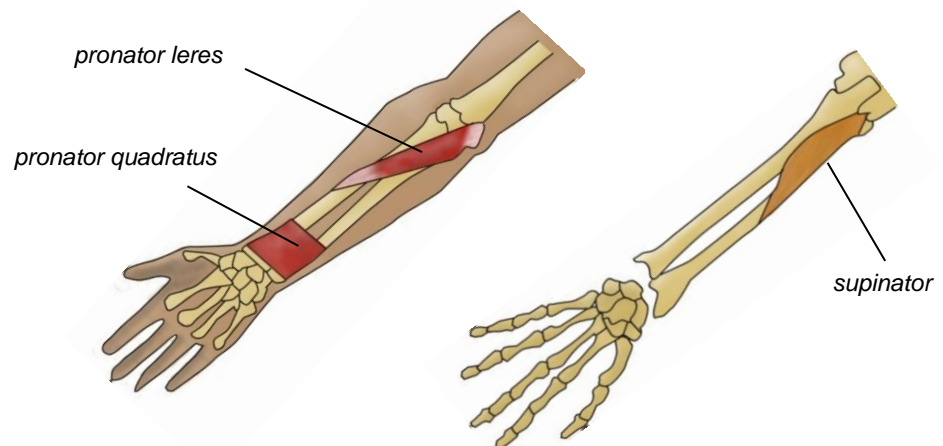
## Answers to Activities

### Activity 1

#### 1. Bones of the hand



2. Muscles of the forearm

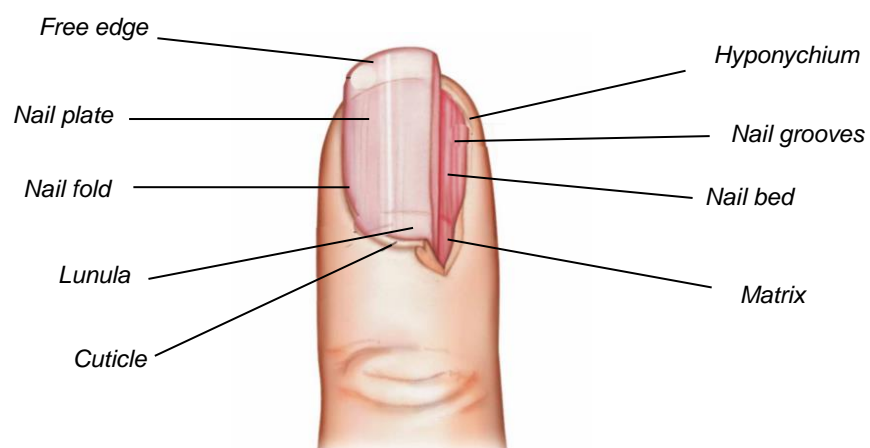


3. Match the muscles of the hand and forearm in Column A with their correct function in Column B by inserting the number of the muscle next to its function.

Column A: Muscle	Column B: Muscle Function
1. Adductor muscles	<u>7</u> Help to separate the fingers
2. Pronator muscles	<u>3</u> Allows the tip of the thumb to touch the tip of the other fingers
3. Opponent muscles	<u>1</u> Draw the fingers together
4. Supinator muscles	<u>6</u> Straighten the wrist, hand and fingers to form a straight line
5. Flexor muscles	<u>5</u> Help to bend the wrist, hand and fingers
6. Extensors muscles	<u>2</u> Enable you to turn your palm downwards
7. Abductor muscle	<u>4</u> Enable you to turn the forearm and hand so that the palm faces forward or upwards

Activity 2

1. Diagram of the nail



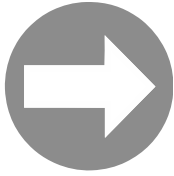
2. Match parts of the nail with the description.

a. matrix (6)	the part of the nail that contains nerves, lymph, and blood vessels that nourish the nail and causes it to grow
b. nail bed (3)	the skin upon which nail body rests
c. cuticle (7)	overlapping skin at the base of the nail
d. free edge (4)	the end of the nail plate that reaches over the tip of the finger
e. lunula (8)	the half-moon located at base of nail
f. nail wall (1)	folds of skin overlapping sides of nail
g. nail groove (2)	tracks at the sides of the nail upon which the nail moves and grows
h. nail plate (5)	the visible portion of nail that rests on the nail bed

### Activity 3

1. Six factors that negatively affect nail growth are:
2. Diet, health, medication, climatic seasons, occupation, infection and incorrect filing of nails.
3. Clients who are exposed to water and harsh chemicals should be advised to wear gloves and moisturise hands and nails regularly.
4. Essentials needed for healthy nail growth are:
3. Healthy diet, good blood circulation, correct filing of nails and protection from: injury, infection and harsh chemicals.
5. Four main nail shapes are:
4. Oval, square, pointed, and round.
6. The oval nail shape is suited to most hands.





## Unit 2:

### Disorders of the skin and nail

#### **inflamed**

a condition characterised by redness, pain, swelling and heat

#### **contra-indicated**

a condition that prevents treatment to be done



#### Skin disorders

In your work as a manicurist/ pedicurist you will come into contact with skin and nail disorders. You must be able to recognise common skin and nail conditions and know what you can and cannot do with them.

It is important to identify **inflamed** skin. This disorder, infectious or not, is **contra-indicated** to manicure/ pedicure treatments. As the therapist you must be able to advise on measures to prevent more serious consequences, for example, advise client to seek medical attention where necessary.

Do you remember ever coming across an inflamed skin? List three characteristics about it.

Check your response with ours. Did you say the characteristics of an inflamed skin are redness, pain, swelling and increased temperature (heat)? In this Unit you will discover common skin disorders that may be found on the hands and feet, though some are non-infectious, may prevent the application of a manicure or pedicure because of their inflammatory condition.

#### What is in this Unit?

This Unit on disorders of the skin and nail is divided into 2 sections.

Section 1: Healthy skin and nails

Section 2: Skin and nail disorders

#### Learning Outcomes

By the time you have completed this Unit, you should be able to:

- describe the characteristics of a healthy skin and nail
- identify disorders of the skin
- describe common nail disorders
- identify conditions that require special attention
- identify conditions that require medical referral and a doctor's approval for manicure treatment

You should take note of these learning outcomes, as they will help you to assess your own progress as you work through the unit.

## Study Time

To cover the content of this Unit will take you about 4-5 hours. Do not worry if it takes you more time or less as we do not all learn at the same pace.

The table below will assist you to determine which skin and nail conditions will allow you to carry out manicure/ pedicure treatments.

*Table 1: Indicators for manicure/pedicure*

No.	Indicators for manicuring/pedicuring
●	without restrictions
●	with special care, for example, split or brittle nails
●	with doctor's approval and needing special care
●	are contra-indicated

As you go through the material you will find the above indicators written next to each condition as a guide to remind if you can do a manicure/ pedicure, when care is needed, when a doctor's approval is needed and when treatment is contra- indicated.

**Important Note:** *Never remove cuticles except where there is excess growth.*

## Section 1: Healthy skin and nails

How would you describe a healthy skin? List 3 characteristics of a healthy skin.



A healthy skin is slightly moist, soft, and pliable (elastic); it is free from disease and disorder and has a glow. To remain healthy the skin must maintain an acid balance.

### **acid mantle**

a pH of 5.5-5.6 that protects the skin

This acid condition is called an **acid mantle** which prevents the growth of disease causing bacteria on the skin. The acid mantle is made up of a mixture of sweat and sebum (oil) from the skin.

The acid mantle of a healthy skin is said to have a pH of 5.5-5.6. Acidity and alkalinity are measured by a number called the pH (potential Hydrogen). Products used in manicuring/ pedicuring are categorised as alkaline or acid.

**alkalinity**

a pH above 7 that negatively affects the skin

Manicurists/ pedicurists must be aware of the acidity and **alkalinity** of the products they use during and after manicuring. Alkaline products disturb the acid mantle of the skin causing it to become sensitive and irritated and exposed to bacteria. A product is considered to have an acid balance when it has a pH of 0-7; a product is alkaline when it has a pH of 7-14. Soap is alkaline having a pH of 9. Therefore, manicurist/ pedicurists should avoid over exposure of client's hands and nails to soap or any other alkaline product. .

A healthy nail, which is an outgrowth of the skin, should be firm, flexible and appear slightly pink in colour. It has a smooth surface and is slightly curved. The average nail growth is .3125 cm per month.

In the previous Unit we talked about healthy nail growth. Do you remember how long it takes for a healthy nail to grow from the matrix to the free edge? It takes 4 to 6 months for a fingernail to grow from the matrix to the free edge.

If you are sure you have understood the information in this section then you are ready to test yourself with Activity 4.



### Activity 4: Healthy skin and nails

1. List 3 characteristics of a healthy skin
  - a.
  - b.
  - c..
2. A healthy skin has an alkaline pH of 7-14. **True or False**
3. When the acid mantle of the skin is disturbed the skin becomes sensitive. **True or False**
4. A product with an acid balance has a pH of 0-7. **True or False**
5. The acid mantle protects the skin. **True or False**
6. A healthy nail is inflexible. **True or False**
7. It is good to soak hands for a long time in soapy water.  
**True or False**
8. A manicure maybe given to clients with skin disorders, which are not infectious, only if there are no blisters and the skin is unbroken.  
**True or False**
9. The technical name for the nail is -----.
10. Healthy nails are slightly pink in colour and are slightly curved.  
**True or False**



## Feedback

*This activity helped you to check your understanding of the importance of maintaining the acid mantle and pH to keep skin and nails in a healthy condition. Check your answers against ours at the end of the Unit.*

## Section 2: Disorders of the skin and nails

### Disorders of the skin

The following disorders of the skin are not infectious and may not contraindicate a manicure. However, if there are blisters or the skin is weeping, do not proceed with manicure. Clients must be advised to seek medical attention. A doctor's approval will be required before proceeding with manicure.

#### dermatitis

an inflammatory  
skin disorder

#### Dermatitis

**Dermatitis** (dur-mah- **TEYE**-tis) is an inflammatory skin disorder caused by intolerance of the skin to certain substances. The skin appears red and becomes swollen with possible appearance of blisters. ●

#### Eczema

**Eczema** (EK-see-mah) is also caused by the skin's reaction to an irritant. Skin appears reddened and swollen with blisters in severe cases. Manicure could be given if there are no blisters. ●

#### Psoriasis

**Psoriasis** (soh-**REYE**-ah-sis) is seen as patches of itchy, red, flaky skin. The cause is unknown. Infection may occur if the skin becomes broken and bacteria enter the skin. It can spread to the nail. ●

### Disorders of the nails

In this module the term disorders of the nail refers to any irregular condition of the nail which is not infectious. There are many irregularities of the nail but we will only identify the most commonly seen ones. Do you remember the technical name for nail?



**onyx**

technical term for the nail

**Onyx** (On-iks) is the technical term for the nail. Did you get it right? Remembering this term will help you to recall the names of some of the nail irregularities. Don't worry if you don't remember them at first.

Below are descriptions of some of the nail diseases and disorders discussed in this unit. They will help you to identify skin and nail irregularities that you may come across in the salon.

**leuconychia**

white spots on the nail

Have you ever seen nails with white spots? This is a common nail irregularity. The term for white spots on the nail is **leuconychia** (loo-koh-**NIK**-ee-ah). As the nail continues to grow they will disappear. ●



**onychosis**

overgrown nail

**Onychosis** (on-ih-**KOK**-sis) or hypertrophy is an overgrown nail, usually in thickness not in length. If infection is present, manicure is contra-indicated. If there is no infection, proceed with manicure: gently buff the nail with pumice powder. ●



**corrugations**

wavy ridges on the nail

**Corrugations** are wavy ridges caused by uneven growth of nails. These are usually a sign of illness or injury. Carefully buff nails with pumice powder. ●



**furrows**

depressions in the nail

**Furrows** are depressions in the nails. They run either across or lengthwise on the nail. These are a result of injury or illness to the cells near to the matrix. Great care must be taken during a manicure. Avoid use of metal pusher. Instead, use an orange wood stick wrapped in cotton wool. ●



**onychatrophia**

wasting away of  
the nail

**Onychatrophia** (on-ih-kah-**TROH**-fee-ah) is a condition where the nail wastes away. The nail loses luster, becomes smaller, and sometimes sheds entirely. The cause is usually ill health or injury. The nail should be lightly filed with the fine side of the emery board. The client should be advised to avoid exposure to strong soaps. ●



**pterygium**

forward growth of  
cuticle

**Pterygium** (te-**RIJ**-e-um) is a forward growth of the cuticle that adheres to the nail. This condition could be caused by poor circulation. The growth could be removed using cuticle nippers. An oil manicure is recommended. ●



**onychophagy**

bitten nails

**Onychophagy** (on-ih-**KOH**-fa-jee) is the term used for bitten nails. This may be caused by a nervous habit. Regular oil manicures will soften cuticles and assist in breaking the habit. ●



**onychorrhaxis**

split or brittle nails

**Onychorrhaxis** (on-ih-koh-**REK**-sis) refers to split or brittle nails. This condition may have several causes. These include: injury, careless filing, ill health, excessive use of alkaline products or a vitamin deficiency. An oil manicure is recommended. ●



**onychocryptosis**

ingrown nails

**Onychocryptosis** (on-ik-o-KRIP-tosis) refers to ingrown nails. The condition is common on feet because of pressure on the toenails from poor fitting shoes and incorrect filing/ cutting of toenails. Refer to a doctor. Always cut toenails straight across.



**Blue nails** are usually caused by poor blood circulation or a related heart condition. Nail appears blue because of trapped blood under the nail. ●

**Eggshell** nails are thin, white and unusually flexible. In severe cases the nail plate separates from the nail bed and curves at the free edge. This condition could be caused by chronic illness. Oil manicure is recommended. ●

**Bruised nails** have dark, purplish spots due to injury. Avoid applying pressure during manicure. ●

If you are sure you have understood the information in this section then you are ready to test yourself with Activity 5.



### Activity 5: Disorders of skin and nails

1. In the table below match the following terms with their descriptions by placing a number next to the description.

Terms	Descriptions
1.leuconychia	(a) nail appears blue because of trapped blood under the nail.
2. onychaxis	(b) ridges on the nails.
3. corrugations	(c) depressions in the nails.
4. furrows	(d) nails with white spots.
5. onychatrophia	(e) overgrown, thick nail.
6. pterygium	(f) nails with dark, purplish spots due to injury. Avoid pressure during manicure.
7. onychophagy	(g) wasting away of the nail.
8.onychorrhaxis	(h) forward growth of cuticle.
9. blue nails	(i) nails that are thin, white and unusually flexible.
10. eggshell nails	(j) split or brittle nails.
11. bruised nails	(k) the term used for bitten nails.



### Feedback

*Many new terms were used in this section. This activity helped you to check your understanding of different nail disorders. Check your answers against ours at the end of the Unit.*



## Summary Unit 2: Disorders of the skin and nail

The characteristics of healthy skin and different disorders of the skin and nails were discussed in this Unit. You learned that a healthy skin is slightly **moist, soft, and pliable (elastic)**. It has an acid mantle or reaction; it is free from disease and disorder.

You also learned that the acid mantle of a healthy skin is said to have a **pH of 5.5-5.6**, which must be maintained through consistently adhering to safe and hygienic practices. Acidity and alkalinity are measured by a number called the pH (potential Hydrogen). The **acid mantle** protects the skin from disease. Products used in manicuring are categorised as **alkaline** or **acid**.

To protect the skin and nails avoid exposing them to excessive water and harsh chemicals. These elements dry the skin and nails. Prolonged dryness may cause the skin and nails to break and become infected. To protect the skin and nails from the effects of drying elements, gloves should be worn and moisturiser applied to the skin and nails regularly.

You also learned about disorders of the skin that were non-infectious but required a doctor's approval before you can proceed with a manicure. These are: **Dermatitis, Eczema** and **Psoriasis**

We discussed nail disorders which require special attention when applying manicure. The technical term for the nail, **ONYX**, is placed as a prefix to many of the terms used to describe nail irregularities. Review this information.

The most important outcome of this Section is your ability to identify irregular conditions of the skin and nail and to know when to refer clients for medical attention; when you can proceed with an unrestricted manicure; which conditions require special care and when conditions are contra-indicated to manicure.



## Answers to Activities

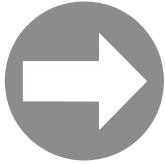
### Activity 4

1. Three characteristics of a healthy skin are: it **is soft, moist and pliable and it has an acid mantle with a pH of 5.5.**
2. A healthy skin has an alkaline pH of 7-14. **False**
3. When the acid mantle of the skin is disturbed the skin becomes sensitive. **True**
4. A product with an acid balance has a pH of 0-7. **True**
5. The acid mantle protects the skin. **True**
6. A healthy nail is inflexible. **False**
7. Hands should be soaked for a long time in soapy water. **False**
8. A manicure maybe given to clients with skin disorders, which are not infectious, only if there are no blisters and the skin is unbroken. **True**
9. The technical name for the nail is **Onyx.**
10. Healthy nails are slightly pink in colour and are slightly curved. **True**

### Activity 5

Match terms with descriptions. Place a number next to the description.

Terms	Descriptions
1.leuconychia	nail appears blue because of trapped blood under the nail. <b>(9)</b>
2. onychaxis	ridges on the nails. <b>(3)</b>
3. corrugations	depressions in the nails. <b>(4)</b>
4. furrows	nails with white spots. <b>(1)</b>
5. onychatrophia	overgrown, thick nail. <b>(2)</b>
6. pterygium	nails with dark, purplish spots due to injury: avoid pressure during manicure. <b>(11)</b>
7. onychophagy	wasting away of the nail. <b>(5)</b>
8.onychorrhaxis	forward growth of cuticle. <b>(6)</b>
9. blue nails	nails that are thin, white and unusually flexible. <b>(10)</b>
10. eggshell nails	split or brittle nails. <b>(8)</b>
11. bruised nails	the term used for bitten nails. <b>(7)</b>



## Unit 3:

# Diseases of the Skin and Nail

In the previous Unit we learned about **disorders** of the skin and nail. In this Unit we will learn about **diseases** of the skin and nail. What do you think is the difference between disorders and diseases?



### **contagious**

a disease that passes from one person to the next

When the term skin disorder is used, in this context, we refer to conditions that may or may not be infectious and which may or may not allow manicure. When we refer to diseases of skin and nail, we refer to conditions that are infectious and/ or **contagious and which** are **contra-indicated** to manicure. That means you cannot do the treatment.

These conditions are absolutely contra-indicated for manicure and pedicure which means that you must not do a nail treatment. It is important for you, as a manicurist/ pedicurist, to recognise infectious and contagious conditions, since they must be attended to by a doctor.

## What is in this Unit?

This Unit on disorders of the skin and nail is divided into 2 sections.

Section 1: Disease causing microorganisms

Section 2: Skin and nails diseases

## Learning Outcomes

By the time you have completed this Unit, you should be able to:

- describe briefly three types of infection
- state diseases caused by three types of infection

## Study Time

To cover the content of this Unit will take you about 2-3 hours. Do not worry if it takes you more time (or less!) as we do not all learn at the same pace.

## Section 1: Disease causing micro-organisms

### onychosis

technical term for nail disease

Just as there is a technical name for the nail, onyx, there is a technical name for nail disease. **Onychosis** (on-ih-**KOH**-sis) is the technical term for nail disease.

### Causes of infection

### contamination

the presence of disease causing bacteria

Infection of skin and nail can occur in two different ways – by direct or indirect **contamination**.

Direct contamination is when infection passes straight from one person to another. Can you think of some examples of how this can happen? Write in this space.



Direct contamination means coming into contact with someone who is ill and who is, sneezing and coughing. You can also get the disease by touching the infected skin.

Indirect contamination is caused when the infection passes from one person to another through unclean objects. Can you think of some examples of how this may happen?



Used towels, soiled linen and dirty tools are things found in the salon that can cause indirect contamination if not kept clean.

### micro-organism

a minute form of life

We all carry **micro-organisms** in our bodies, on our skin and nails. Most of these micro-organisms are harmless. Those that are harmful to us are called **pathogens** like bacteria, viruses and fungi. Let us look at what each of these terms mean and how they are different.

### pathogens

disease causing organisms

### Fungi

### fungi

parasites on the human body that cause disease

**Fungi** (plural for fungus) are plant forms which are made up of a mass of tiny threads and are parasites on the human body. Fungal diseases of the skin feed off the waste products of the skin and grow well in warm, damp places, for example between the toes.

**bacteria**

organisms that  
may or may not  
cause disease

**Bacteria**

There are hundreds of different types of **bacteria**. They are present almost everywhere around us, in the air, in soil, in water and on most surfaces including the surface of the skin. Most bacteria are harmless or non-disease producing. You learned earlier that some bacteria cause disease and are called pathogens.

**virus**

organisms living in  
the body causing  
disease

**Viruses**

**Viruses** are different from bacteria as they penetrate into the cells of the body to survive while bacteria can live on their own. Viruses are considered to be parasites as they need living tissue to survive. Viruses invade healthy cells and grow inside the cell. Then the cell wall breaks down and the infection spreads. They survive only in living cells and so cannot live for very long outside the human body. Viral disease cannot be treated with antibiotics. Do you know any examples of a virus? Write down your ideas here.



**verrucae**

warts on the feet

We are sure you have written down HIV – human immune-deficiency virus – which is the virus which causes AIDS. But viruses cause other diseases, an example, is **Verrucae**, the technical term for warts on the feet. It is caused by a virus and is infectious.

## Section 2: Skin and nail diseases

Skin and nail diseases sometimes go un-noticed until they flare into an infection. Recognising the symptoms at an early stage could avoid discomfort and the condition spreading locally and to others. In this section we will learn about skin and nail diseases, their cause, what they look like and where they are likely to occur.

### Fungal infections

#### **tinea**

the term used for ringworm

**Tinea** is the term used for ringworm. It is a fungal infection that affects the nails, feet and hands. Ringworm is highly contagious. For that reason manicurist/ pedicurists must refer a client showing symptoms of ringworm to the doctor. 🚫



#### **tinea unguim**

ringworm of the nail

**Tinea unguim** (Tin-ee-ah Un-gwee-um) is ringworm (tinea) of the nail. It is also known as Onychomycosis (on-ih-koh-meye-**Koh**-sis), causing the nail to become yellow/ grey. It becomes weak and separates from the nail bed. 🚫



#### **tinea pedis**

ringworm of the foot

**Tinea pedis** is ringworm of the foot (athlete's foot). They may spread to the sole and between the toes and nail fold infecting the nail. It causes red blisters on the feet which burst and then the skin goes dry and scaly. 🚫 Ringworm of the hand is a common, highly contagious disease. The principal symptoms are red lesions occurring in patches or rings. There may be itching. 🚫



#### **paronychia**

infectious condition of nail tissues

### Bacterial Infections

**Paronychia** (par-oh-**NIK**-ee-ah), is an infectious and inflammatory condition of the tissues surrounding the nails. 🚫



### onychia

inflammatory  
condition of the  
matrix

**Onychia** (on-**NIK**-ee-ah) is an inflammatory condition of the matrix. It is a bacterial infection which could be caused by improperly sanitised nail implements. 🚫



### verrucae

small skin growths  
or wart

## Viral Infections

**Verrucae** are small skin growths or warts. They are contagious and are found on the hands, fingers, knees and/ or sole of feet. 🚫

Hand warts are contracted from contact with persons, for example shaking hands. Warts are also contracted from infected towels and surfaces.



Table 2 will help you to remember the different types of infection commonly seen in a salon; what it looks like; the area affected; and how it is caused.

Table 2: Types of infection

Infection	looks like	area of body	cause
athlete's foot 🚫	red blisters that burst and go dry and scaly	feet	fungi
ringworm 🚫	red patches which spread outwards, then heal from the centre leaving a ring	hands, nails	fungi
planter warts 🚫	small, raised, scaly bumps	feet	virus
common warts 🚫	small, raised, scaly bumps	hands, knees	virus
onychia 🚫	skin is red and inflamed	matrix of nail	bacteria
Paronychia 🚫	skin is red and inflamed,	surrounding tissues of the nail	bacteria

If you are sure you have understood the information in these 2 sections then you are ready to test yourself with Activity 6.



### Activity 6: Diseases of skin and nail

1. Name three types of infection and give an example of each.
  - a.
  - b.
  - c.
2.
  - a. Paronychia is an infectious and inflammatory condition of the tissues surrounding the \_\_\_\_\_.
  - b. Onychia is an inflammatory condition of the \_\_\_\_\_.
3. Viruses live outside the body. **True or False**
4. All bacteria are harmless and do not cause disease. **True or False**
5. Disease causing bacteria are called pathogens. **True or False**
6. Give 2 examples of infections caused by fungi.
  - a.
  - b.
7. The technical term for plantar warts is verrucae. **True or False**
8. Tinea is the technical term for athlete's foot. **True or False**
9. Ringworm affects the skin and nail. **True or False**
10. You should not do a manicure, even when you are wearing gloves, on skin and nails that are infected. **True or False**



### Feedback

*There was quite a lot to learn in this Unit but we think you should be able to answer these questions if you have studied carefully. It is very important that you understand the causes of different infections and know where on the body they might be found and how to recognise them. Check the answers at the end of the Unit.*

## Summary Unit 3: Diseases of the skin and nail

In this Unit you learned about different types of infection that you must be aware of. You also learned about diseases that are caused by these infections. Unlike skin and nail disorders discussed in the previous chapter, infectious/ contagious conditions are strictly contra-indicated to manicure.

You know that infection occurs in two different ways:

Direct contamination can be caused by touching the skin, sneezing, breathing and coughing.

Indirect contamination is caused when the infection passes from one person to another through unclean objects such as dirty towels and contaminated instruments.

You learned that bacteria are all around us: some are disease causing and others are harmless. Those that are harmful to us are called pathogens which are types of bacteria, viruses and fungi.

**Fungal** diseases feed off the waste products of the skin and grow well in warm, damp places, for example between the toes. Examples of fungal diseases are: **ringworm** and **athlete's foot**.

**Bacterial** infections cause inflammation of the skin tissue. An example is an infectious and inflammatory condition of the tissues surrounding the nails. You learned that unclean implements could be the cause of bacterial infection.

**Viral Infections** are different from bacterial infections as they penetrate into the cells of the body to survive. Viral disease cannot be treated with antibiotics. Examples are **verrucae/warts** that grow on the feet. They are contagious and usually contracted from walking barefooted in changing rooms.

**Hand warts** are contracted from contact with persons, for example shaking hands. Warts are also contracted from infected towels and surfaces.

Refer to Section 2 to recall the names of diseases of the skin and nails.

In order for you to be conversant with this information, you will need to continually refer to your learning material as well as carry out your own research. At the end of the module you will find references that you could go to for more information. Practice using the correct terminology and learning the correct spelling and pronunciation of unfamiliar words

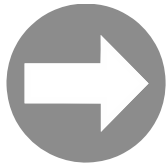


## Answers to Activity 6

1. Three types of infection and examples of them are:

**Fungal infections: ringworm; athlete's foot**

2. **Bacterial infection: onychia** (inflammation of the nail matrix) and **paronychia** (inflammation of the of tissues surrounding the nail)
3. **Virus:** verrucae/ warts
  - a. **Paronychia** is an infectious and inflammatory condition of the tissues surrounding the nail.
  - b. **Onychia** is an inflammatory condition of the matrix.
4. Viruses live outside the body. **False**
5. All bacteria are harmless and do not cause disease. **False**
6. Disease causing bacteria are called pathogens. **True**
7. Give 2 examples of infections caused by fungi. **Ringworm and athletes' foot.**
8. The technical term for plantar warts is verrucae. **True**
9. Tinea is the technical term for athlete's foot. **False**
10. Ringworm affects the skin and nail. **True**
11. You should not do a manicure, even when you are wearing gloves, on skin and nails that are infected. **True**



## Unit 4:

# Hygiene and Sanitation

### **decontamination**

the removal of all disease causing micro-organisms

It is essential that beauty therapists take great care to prevent cross infection. There are many ways to ensure that you and your work environment are clean and germ free. The general word we use for this is **decontamination**. For you to provide professional manicure and pedicure services to clients you have to understand how to prevent infection and cross infection.

### What is in this Unit?

There is one Section for this Unit. The learning covers:

- Decontamination:
- Sanitation
- Disinfection
- Sterilisation and
- Waste disposal

### Learning Outcomes

By the time you have completed this Unit, you should be able to:

- describe the different levels of decontamination
- describe methods of decontamination associated with different items in the salon
- discuss different waste disposal procedures

You should take note of these learning outcomes, as they will help you to assess your own progress as you work through the unit.

### Study Time

To cover the content of this Unit will take you about 1-2 hours. Do not worry if it takes you more time or less as we do not all learn at the same pace.

## Section 1: Decontamination

Decontamination is the removal of all disease causing pathogens. Write down ways that you know are used to prevent the spread of disease.



There are three main ways to decontaminate or clean things in the salon: sanitising, disinfecting and sterilising.

Let's find out more about each method.

### sanitising

a process that significantly reduces bacteria

### Sanitation

**Sanitising** is the lowest level of decontamination or cleaning. It is done by wiping, washing, sweeping or dusting to reduce the amount of germs and bacteria on tools and surfaces. Before disinfection or sterilisation, it is essential to first sanitise tools, surfaces and equipment by the appropriate method.

### pathogens

micro-organisms that can cause disease

Sanitised tools and surfaces will still have **pathogens** or other organisms on them. Washing your hands is a form of sanitising. You may think that if you wash your hands with soap and hot water that they are clean. Indeed they are 'clean' but they will probably still have micro-organisms on them either from the tap or the towel that you dried them on. To remove such organisms you would have to go to the next level of decontamination. Having said that, hand-washing is one of the most important actions which anyone can take to prevent getting infected themselves and from causing infection in others. But beware!

You should avoid the use of bar soaps in the salon as bacteria can even grow on these! It is safer to use the liquid soap which comes in a pump-action bottle.

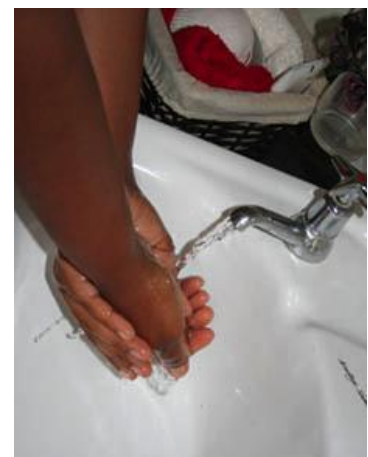


Figure 8: Washing hands

### antiseptic

a solution used on the skin to prevent wounds from becoming septic

When we sanitise our skin we use an antiseptic. An **antiseptic** is a chemical that inhibits the growth of bacteria. It is a mild form of sanitiser which is used to cleanse the skin before carryout out manicure/ pedicure. It can also be used on the skin to prevent wounds from becoming septic, for example, if you cut a client's cuticle during manicure/ pedicure. They come in the form of crystals,

liquids, stick and powders, for example, boric acid (2-5%), hydrogen peroxide (3-5%) and commercial liquid sanitising soap.

**disinfection**

chemical form of  
cleaning which  
kills most germs



## Disinfection

**Disinfection** is the next level of decontamination. This is a chemical process that will kill most of the germs if correctly carried out but will not necessarily kill them all. A good quality disinfectant will be effective and fast acting against most pathogenic bacteria. It is the most used form of decontamination in the salon. Carry out research to learn more about disinfectants.

List the names of disinfectants that you use at home or in the salon.

The most commonly used disinfectants are: sodium hypochlorite (household bleach); alcohol; quaternary ammonium compounds (QUATS), for example, Savlon; pseudomonacidel; phenols and cresols, for example, Dettol and commercially prepared products. Don't worry about the long terms, try to remember the commercial names.

## Using disinfectants

Disinfectants are chemicals which destroy most (not all) bacteria and some viruses. Surfaces, trolleys and equipment should always be wiped over with a disinfectant solution; this reduces the growth of germs and bacteria present. Any item which is used on a client should be disinfected after use or thrown away (if it is disposable). Items which cannot be disinfected – such as orange sticks – should be thrown away. You will learn more about the orange wood stick when we talk about tools used for manicuring and pedicuring.

## Disinfecting tools and equipment

Most tools and equipment you use in the salon can be disinfected. An effective disinfectant should have the following characteristics:

- Convenient to prepare
- Quick acting
- Preferably odourless
- Non-corrosive
- Economical (not too costly)
- Non-irritating to the skin.

Table 3 will help you to understand how different items are disinfected.

Table 3: Methods of decontamination

Tool	Method	Special Points
Nail brushes	Remove debris, wash with hot water and a disinfecting liquid soap	pre-clean by washing
nippers, scissors, small tools	place in disinfectant jar (can be sterilised in autoclave)	Remove debris before placing them in solution, make sure they are completely covered in disinfectant solution and left in for the time stated on the disinfectant
Towels	machine wash at high temperature, a disinfectant or household bleach could be added to the wash	use once – on one client only – then wash
electrical equipment	wipe or spray with approved disinfectant spray	NEVER get electrical equipment wet.
work surfaces	wipe with a clean cloth and disinfectant	before and after every client

## Sterilisation

### sterilization

a cleaning method that kills all germs and bacteria

**Sterilisation** is the highest level of decontamination. It completely destroys all the living organisms on an object (both harmless ones and pathogens). Sterilisation is used for tools and equipment. The tools are placed in a container at very high temperature in order to kill all germs and bacteria. If you do not sterilise thoroughly, some bacteria will remain. When you visit the doctor or dentist, it is comforting to know that he or she will only use tools on you which have been sterilised. It is the same for your clients in the salon.

### porous

the ability to absorb liquids or gases

### What can be sterilised?

Only hard, non-**porous** items can be sterilised. In the salon, this means metal tools like metal nippers, scissors and tweezers can be sterilised but tools like nail brushes, cuticle pushers, and files which are made of plastic or wood, can only be disinfected.

### Methods of sterilisation

Bacteria and all other micro-organisms are killed by heat. Therefore, placing tools and equipment in a container which heats them at very high temperatures is the best way to sterilise. High temperature sterilisation can be wet or dry.

**Wet** – an **autoclave** machine heats water to 121 - 134°C under high pressure. It is the most common form of sterilisation in the salon and it is also the most effective method of sterilisation.



**Dry** – the **glass bead steriliser** is a small electrically-heated unit which contains glass beads. The beads are heated and the heat is transferred to objects placed inside the unit. It is only really suitable for small objects like nippers and scissors.



Figure 9: Types of sterilisers

#### ultra-violet

a form of radiation used for sterilisation

Another dry form of sterilization is a special cabinet which contains a lamp which gives off **ultra-violet light**. The rays of light destroy micro-organisms. Not all micro-organisms are destroyed so the ultra-violet cabinet is best used for storing equipment which has previously been sterilised by the autoclave or disinfected by chemical method.

#### disinfectant solution

used to keep tools clean while in use

To keep previously sterilised tools clean when you are giving a treatment you can put them in a jar of **disinfectant solution** (wet steriliser). Liquid chemical agents are also available which have to be diluted before use for sterilisation. You must be very careful when using these chemicals as they can harm your skin if it is touched by the undiluted chemical.

#### disposal

to do away with something

### Waste disposal

It is important that waste matter is **disposed** of correctly in the salon. Separate all waste. Some items, such as blades must be disposed of in special containers for sharp items. Empty chemical containers should be wrapped in plastic before putting them in the dustbin to ensure there are no leakages. All waste bins should have a self-closing lid.



Figure 9: Types of waste disposal



Are you aware of the concept of “green and sustainable environment?” Write down what you think this means.

The main aspect of a green and sustainable environment is the concept of the 3 R's: **reduce, reuse and re-cycle**. You can do these by reducing products used in the salon, for example, measure correct quantities of product; separate waste, such as plastics from glass and biodegradable material (100% cotton wool); by using natural products (olive oil and almond oil as cuticle conditioners); and reducing the use of chemicals. Empty bottles and cans could be re-used for storage of manicure implements. Separating waste is an efficient way of identifying material that could be recycled, for example plastic bags.

Did you know that Beauty Therapy is one of those careers that is categorised under “green jobs?” You can be a part of this exciting movement aimed at making our environment healthy and sustainable. Keep in mind the 3 R's: **Reduce, Reuse, Recycle.**



*Figure 10: International symbol for recycling.*

If you are sure you have understood the information in this section then you are ready to test yourself with Activity 7.



### Activity 7: Methods of decontamination

1. Complete the table to show how items in the salon should be cleaned and indicate which items can be sterilised. If the item can be decontaminated, say how. We have given 1 example to guide you.

Tool/surface/ linen/hands	Method of cleaning/disposing of waste	Method of decontamination: sanitise; disinfect; sterilise
metal nail clippers and scissors	place in disinfectant jar, autoclave (heat)	Disinfect, sterilise
uniforms		
nail brushes		
sinks and basins		
electrical equipment		
work surfaces		
towels		
orange sticks, plastic tools		
emery boards and foot files		
sharps		
hands		



### Feedback

*We hope you were able to say how each tool should be decontaminated. It is very important that you understand the different levels of decontamination and how they are used to prevent infection and cross infection. Check for the answers to the activity at the end of the Unit.*



## Summary Unit 4: Hygiene and Sanitation

The information that you learned in this Unit is relevant to all activities you will be involved in when doing a manicure/ pedicure. You learned the importance of washing your hands as a way of removing bacteria. You also learned that there are three main ways to decontaminate or clean objects in the salon:

### Sanitation

This is the **lowest level of decontamination** or cleaning. This method does not remove all bacteria.

You also learned about **antiseptics**. These are mild solutions used on the skin to prevent wounds from becoming infected. Examples of antiseptics are hydrogen peroxide and Isopropyl alcohol (50-60%).

### Disinfection

This is **the second level of decontamination**. Disinfectants are chemicals which destroy most (not all) bacteria and some viruses.

### Sterilisation

This is the **highest level of decontamination**. It completely destroys all the living organisms on an object (both harmless ones and pathogens).

**Ultraviolet cabinet and the autoclave are** methods of sterilisation. The cabinet is better suited to store previously sterilised objects.

This Unit also covered **waste disposal**. You learned the importance of separating waste and recycling.

### Reduce, Reuse, Recycle.

Remember the international symbol for Recycling.

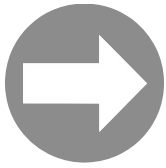


*International symbol for recycling*

You belong to one of the “green careers,” Beauty Therapy. You should be proud to know that you are contributing to keeping our environment safe and sustainable through maintaining safe hygienic and sanitation practices.

## Answers to Activity 7

Tool/surface/linen/hands	Method of cleaning/disposing of waste	Method of decontamination: sanitise; disinfect; sterilise
metal nail clippers and scissors	place in disinfectant jar, autoclave (heat)	Disinfect, sterilise
uniforms	Wash in hot soapy water and a disinfectant solution	Disinfect
nail brushes	Wash in hot soapy water and disinfectant solution	Disinfect
sinks and basins	Wash with hot soapy water and use a disinfectant solution	Disinfect
electrical equipment	Wipe with disinfecting solution. Avoid immersion in water.	Disinfect
work surfaces	Wipe with disinfecting solution	Disinfect
towels	Wash in hot soapy water and a disinfecting solution	Disinfect
orange sticks, plastic tools	Disuse of these after use	Dispose of after use
emery boards and foot files	Wipe with disinfecting solution	Disinfect
sharps	Dispose of after use	Dispose of after use
hands	Wipe hands with sanitising wipes. Wash hands with hygienic soap	Sanitise



## Unit 5:

# Client Consultation

Welcome to this Unit where we are going to discuss how to talk with the client before, during and after the treatment. It is important to make your clients enjoy visits to the beauty clinic, they pay for the treatments, and therefore you have to make them feel comfortable, relaxed and appreciated.



You communicate with your body or your eyes, showing or expressing your feeling. Do you know the term used for this type of communication?

This is what we call **non-verbal communication**. How you look and behave in front of a client is very important.

**Verbal communication** is when you talk directly to another person face to face or over the phone. It is what you say to others and how you say it.

### What is in this Unit

In this Unit there are 2 sections

- Section 1: What is effective communication?
- Section 2: Client consultation

### Learning Outcomes

By the end of this Unit you will be able to:

- describe modes of communication
- identify the dos and don'ts in communication with clients
- consult with client to establish their needs
- record client information accurately into a client record card

You should take note of these learning outcomes, as they will help you to assess your own progress as you work through the unit.

### Study Time

It will probably take you 1-2 hours to complete this Unit. Remember this Unit will be repeated during the practical sessions on manicure and pedicure treatment, therefore you will have a chance to understand it better then.

## Section 1: What is effective communication?

Write down below why it is important to communicate effectively with clients.



You are probably right! You might have mentioned establishing rapport with them, finding out their needs and state of health. It is very important that you understand the client's needs first before you attempt to do a treatment and you can only get this information by asking your client a lot of questions and trying to answer all the questions they might have asked you. This is called **effective communication**. The client should understand the reason behind the questions asked and feel comfortable when answering them. As you speak to the client you should speak clearly so that she or he will understand. You will learn to listen to the client as he or she talks and be able to ask questions carefully.

Ask "open" questions which will encourage the client to give more than a one word response of 'yes' or 'no'

**Open questioning techniques** may begin with how, what, when or where. For example 'How would you like nails to be done?' 'What nail care products do you use currently?'

If, after the consultation, you are unsure of the client's suitability for treatment, tactfully explain to the client why this is and ask her to seek medical help before treatment is given. The expectations of some clients may be unrealistic. If this is the case tactfully explain why and aim to agree to a realistic treatment programme.

At times a client may ask you information outside your responsibilities, politely inform her that you are not qualified or unable to deal with her request but you will get someone to assist him/ her, and indicate how long it will take if it will not be immediately.

Let us briefly look at the key elements of communication

- paying attention or giving the speaker undivided attention
- eye contact-look at people when you communicate with them
- asking questions
- listening-listen twice as much as you speak
- responding-knowing when to respond and what to say

## Why is effective communication important ?

Effective communication:

- enables you to select the correct procedure to meet client's needs
- brings success to your business
- reduces chances of tension
- closes the gaps of assumptions
- encourages good interpersonal relations
- enables individuals or groups to perform effectively

## Modes of communication

Let us compare the two modes of communication.

- 1. Verbal Communication:** Use of words spoken or written to express ideas and feelings
- 2. Non-Verbal Communication:** Communication without words e.g.
  - body language/ body posture
  - gestures (hand)
  - eye contact
  - facial expression

### Body Language

- Without saying a word your body can reveal what you are feeling or thinking
- Your ability to read your client's body language is important

We will now look at the examples of body language  
What might the following non-verbal cues mean?

*Table 4: Non-verbal cues*

client's reaction	What it means
<ul style="list-style-type: none"><li>• smile</li><li>• eye contact</li><li>• a nod</li><li>• a frown</li><li>• folded arms</li><li>• constant looking at the watch</li><li>• constant looking around</li></ul>	<ul style="list-style-type: none"><li>• satisfaction</li><li>• willing to communicate</li><li>• agreement and understanding</li><li>• unhappy and irritable</li><li>• secured, disinterest, defensive</li><li>• in a hurry, impatient</li><li>• in a hurry</li></ul>

## Dos and Don'ts in communication with your client

There are certain things that you should do and should not do when handling clients. List 3 things you should and should not do.



When speaking, always speak clearly and precisely, and avoid using slang. It is important to be good listener, this will help you identify the client's treatment requirements and understand her/ his personality. You can then guide the conversation appropriately.

Let us look at the table below:

*Table 5: Do's and Don'ts of effective communication*

DO	DON'T
<ul style="list-style-type: none"> <li>• show interest</li> <li>• be understanding of the other person</li> <li>• listen for cause of the problem</li> <li>• encourage the speaker to believe that he/ she can solve problems</li> <li>• know when to remain silent</li> </ul>	<ul style="list-style-type: none"> <li>• argue</li> <li>• interpret</li> <li>• finish sentences</li> <li>• pass judgement too quickly</li> <li>• give advice unless the speaker ask for it</li> <li>• jump to conclusions</li> <li>• let the speaker's emotions influence our own feelings</li> </ul>

As you might have realised communication encompasses all aspects of life. Poor communication can lead to arguments, stress, and conflict and can be time- wasting, all these affect good service delivery. Communication is a critical factor in the Beauty Industry. We want our clients to be happy and satisfied with our services so that they can come back, for even more services.

## Section 2: Client consultation

### consultation

a discussion or talk to find out important information



A thorough **consultation** with a client is necessary before carrying out a manicure and pedicure treatment. Why do you think this is done?

This is done in order to assess the condition of the client's skin, nails and cuticles. An effective analysis will help you to choose appropriate tools and products. Consultation is done in a private room. Recording and keeping your analysis on the client's record card will help you compare the progression of the treatment.

The information you have collected from the client is confidential and should be stored in a secure area following the client treatment. You have to protect the client's privacy and confidentiality according to the Data Protection Act 1998. This is especially true in relation to recording their biographical data such as contact details, age and medical history.

### Assessment

Your assessment during consultation include the:

- Cuticle-are they dry, tight or cracked, or are they soft and supple
- Nails – are they strong or weak, brittle or flaking? Are they discoloured or stained? What shape are they, square, round, oval? Are they long or short? Are they bitten?
- Hand-is the skin dry, rough or chapped, or is it soft and smooth? Is the colour even?
- Are there signs of inflammation or infection?

### assessment

an examination of something in order to judge or evaluate

After completing the **assessment** of client's hands, nails and skin it is advisable to work out a treatment plan with your client and agree on the expected outcome, for example if the client's cuticle, nails and skin are dry you may advice him/ her to come for treatment every week for paraffin treatments or hot oil treatments, or if they are in good condition they can only come once a month in order to maintain them.

Your treatment plan should cover the following:

1. Explaining:
  - what is involved in the manicure and pedicure treatment
  - how long it will take
  - expected treatment benefits and outcomes
  - relevant home care advice requirements

2. Welcoming any questions to ensure client's understanding
3. Advising the client following your assessment of the client's nail, cuticle and skin condition on the most suitable and frequency of the treatment

## **Post Treatment**

When you have completed the treatment you should inquire from your client if he/ she is satisfied. You should record: the outcome of the treatment, what future treatments you recommended the products you used and those recommended for home care.

A client card is provided for you in Activity 8, page 65. It is an example. Carry out research to find other styles of record cards. After doing this you could design your own record card based on the best you've seen during your research.

## **Using Technology in your business**

Client records are confidential. They may be filled in manually or electronically, in computers. They may also be stored physically in a cabinet or electronically in a database. If you are using a database, it is a good idea to have a backup system in case data is lost. You may also want to use your mobile phone to store clients' telephone numbers and your email address book so that you can readily communicate with clients.

A successful business will depend on your communicating with your clients; informing them about specials, reminding them about their appointments, informing them if you have an emergency and need to rebook. Your clients will appreciate this type of communication in addition to knowing that they always receive a professionally done manicure and pedicure.

If you are sure you have understood the information in this section then you are ready to test yourself with Activity 8.





## Activity 8: Client consultation

Circle the correct answer

1. You know you are communicating effectively when you:
  - (a) make direct eye contact
  - (b) ask open questions
  - (c) listen attentively
  - (d) show interest in what your client has to say
  - (e) all of the above
2. What information should be recorded on the client record card?
3. The consultation is carried out to determine:
  - (a) the condition of the nail and skin
  - (b) contra indications
  - (c) nail shape
  - (d) appropriate treatment
  - (e) all of the above
4. The treatment plan is not necessary: you will decide what to do when you are doing the treatment. ***True or False***
5. Consultation should be carried out privately. ***True or False***

**Activity 8 cont'd**

Client record card:

You should begin practising what you have learnt. Your first client could be a friend. Fill in items 1 to 8. Items 9 and 10 could only be filled after you've completed Unit 6.

1. Client's name:	
Date:	
Contact details:	
2. Skin condition:	
3. Nail condition	
4. Cuticle condition	
5. Medical History	
6. Nail shape:	Pointed <input type="checkbox"/> Square <input type="checkbox"/> Oval <input type="checkbox"/> Round <input type="checkbox"/>
7. Contra-indications	NO <input type="checkbox"/> YES <input type="checkbox"/> If yes, describe.
8. Products being used	
9. Manicure Plan	
10. Client advice	

**Feedback**

*We hope you did well. Effective communication is essential when you are serving clients. Don't forget to check your answers against ours at the end of the Unit.*

## Summary Unit 5: Client consultation

In this Unit you learned about the key elements of communication and its effects on your relationship with others. The key elements discussed were:

- paying attention to what others are saying
- making eye contact: look at people when you communicate with them
- asking questions
- listening: listen twice as much as you speak
- responding: knowing when to respond and what to say

When you apply these principles you would discover that they:

- bring success to your business
- reduce chances of tension
- close the gaps of assumptions
- encourage good interpersonal relations
- enable individuals or groups to perform effectively

You also learned about two modes of communication. **Verbal communication** is the use of words, written or verbal to express your ideas. **Non-Verbal communication** refers to body language and includes gestures, facial expression, and body posture.

It is helpful to remember basic rules, **Do's and Don'ts** of communication. Attentive listening, and knowing when and when not to speak are the main rules that you would find to be very helpful in every area of life. You will do well to avoid arguments, making judgements and jumping to conclusions when someone is speaking.

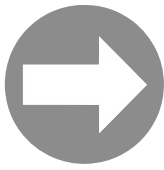
The discussion also covered procedure for client consultation and recording details after the treatment. Consultation is done in order to assess the condition of the client's skin, nails, and cuticles as well as to identify any contra-indications.

Before carrying out the consultation you must record client's details such as name, address, contact details and any medical conditions that may affect the health of the skin and nail. This information must be treated as confidential.

You also learned the importance of making a treatment plan. This activity will enable you to explain to your client how you will go about the manicure, why you have made the choices you've made, what products will be used and when they should return for follow up treatments.

## Answers to Activity 8

1. You know you are communicating effectively when you:
  - (a) make direct eye contact
  - (b) ask open questions
  - (c) listen attentively
  - (d) show interest in what your client has to say
  - (e) all of the above**
2. Information that should be recorded on the client record card include biographical details: name; address; telephone numbers; age; medical conditions; conditions of hand, skin and nails; contra indications; nail shape; lifestyle and treatment plan.
3. Consultation is carried out to determine
  - (a) the condition of the nail and skin
  - (b) contra indications
  - (c) nail shape
  - (d) appropriate treatment
  - (e) all of the above**
4. The treatment plan is not necessary: you will decide what to do when you are doing the treatment. **False**
5. Consultation should be carried out privately. **True**



## Unit 6

# Applying a Manicure Treatment

Welcome to this Unit in which you will learn how to carry out a manicure. You will be learning how to actually provide a service. This is the time to put into practice all that you've learnt in the previous Units. There is also quite a lot of new information in this Unit. Can you think of what is involved in actually doing a manicure? Write down your ideas here.



Firstly you must project a professional image. You can do this by ensuring your posture is upright and you are communicating effectively. You must be organised. That means you work following a sequence.

You must check for contra-indications to establish if you can or cannot proceed with a manicure. Revise Units 2 and 3 which discussed conditions that need a doctor's approval and those that contraindicate treatment. Before beginning the treatment you would also need to establish the condition of the nail and the natural shape of the nail. Do you remember how many basic nail shapes there are? Refer to Unit 1 to refresh your memory. In this unit you will learn how to attend to cuticles and to shape and paint nails to create a desired look.

### What is in this Unit

In this Unit there are 5 sections

- Section 1: Manicure/ pedicure: the tools
- Section 2: Manicure/ pedicure: the products
- Section 3: Manicure: the treatment
- Section 4: Special Treatments
- Section 5: Massage of lower arm and hand

### Learning Outcomes

By the end of this Unit you will be able to:

- explain the use of manicuring and pedicuring tools
- describe products and their use in manicure and pedicure
- carry out a basic manicure with massage
- carryout a paraffin wax treatment
- repair a damaged nail

You should take note of these learning outcomes, as they will help you to assess your own progress as you work through the unit.

## Study Time

It will probably take you 15-20 hours to complete this Unit. Besides knowing the tools and products used in manicure you will carry out manicure treatments. To become competent you must practice. Remember the motto, “Practice makes perfect”!

## Section 1: Manicure/Pedicure: The Tools

Welcome to this section where we are going to look at the tools that you will need to perform the treatments.

List tools, that you think are needed for manicure and pedicure treatment.



Check your answers with those listed below. You will notice that some tools are used for both treatments while others are used strictly for manicure or for pedicure. Before you use any of these tools, make sure that they are thoroughly disinfected and/ or sterilised. Some tools must be used with extreme caution so as to avoid cutting the skin, removing too much of the cuticle and thinning the nail plate.

## Manicuring and pedicuring tools

### Nail files

Nail files are made from different types of material and come in different grit levels. The grit level states the coarseness or fineness of the file. Never use a coarse file on thin, weak nails. The rule is: start with a finer grit if uncertain about the condition of the nail.

Note that the lower the number the coarser the grit.

**80 grit:** This is very coarse and should never be used on natural nails. Some might use this on artificial nails but even then it's still a little too rough.

**100 grit:** This is still a coarse file but 100 grit can safely be used on artificial nails only.

**180 grit:** This is the lowest grit that should be used on natural nails but if your nails are damaged or prone to damage, you might want to use a finer grit.

**240 grit:** This is a softer grit and a file with this grit is often used for buffing the nails to a smooth finish or buffing away stains.

**500 grit:** A file with this grit is a very soft one that would usually only be used to polish the nail.

So now that you understand grit levels, let's discuss the different types of files that are available.

#### Double-sided emery board

Is ideal as it is not too bulky and has a fine and coarse side. Grits are stated.



#### Emery board

A disposable file. The grit is not stated. It is not for professional use.

#### Crystal file

Is ideal for fragile nails. It has the highest grit number making it very fine. It may be too fine for strong, thick nails. It is more expensive but lasts a long time.



#### Metal file

This type of file must be avoided. It is very hard on nails and causes damage to nails if not used properly.



### Other Tools

#### Cuticle knife

Has a straight cutting edge; is sharp and must be used with care. It is used to remove cuticles or built-up dead skin on the nail plate.



#### Cuticle nipper

Used to trim or cut excess cuticles at the base of the nail, they are also used to remove hang nails.



### Cuticle pusher

Used to loosen and push back cuticles around the nail.



### Toenail clipper

A large clipper used to reduce the length of toe nails and reduce filing time.



### Nail clippers

Used to shorten nails, clipping nails will reduce the filing time. A large clipper is used for clipping toenails.



### Orange wood stick

This is a disposable stick used to loosen the cuticle around the base of the nail or to clean under the free edge. You can use a cuticle pusher as an alternative.



### Nail brush

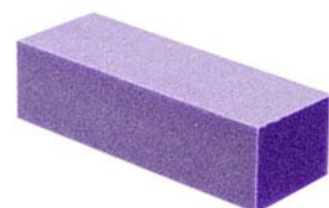
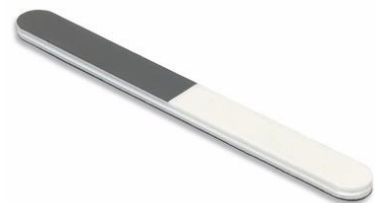
Used to clean under and around the nails, with the aid of warm water and soap.



### Nail buffer

There are 3 types of buffers:

- a) **Chamois buffer** – is covered with chamois or leather: used with a buffing paste or powder to polish the nails to a high sheen.
- b) **Block buffer** – is a four-sided block which has all rough sides. It is used directly on the nail plate to smooth corrugated lines or to reduce thickness of the nail plate.





- c) **3-4 sided buffer** – it is in block form like the block buffer. The coarse sides of the buffer are used to eliminate ridges and smooth the nail surface ready for the application of the nail polish. The finer sides are used to polish the nails and create a natural-looking shine.



#### **Tweezers**

Used to pick up silk when repairing the nail.



#### **Finger bowl**

A bowl used with warm soapy water and antiseptic to soak nails during a manicure treatment.



#### **Credo /corn blade**

A blade to remove callus or hard skin under the feet. The use of this tool is illegal in some countries. Avoid using it. It is better to use a foot file to reduce tough thickened skin.



#### **Foot file**

This is used to remove build up of dead cells on the soles of feet. It could be used after sanitising the feet and before soaking and then again after the foot rasp to smooth roughness.



#### **Foot rasp**

Used to remove any built-up of hard skin. It comes in many different grits and shapes.



### Footbath/spa

Bath filled with warm water, antiseptic and a soaking solution to soak the feet during a pedicure treatment. Sometimes essential oils are added, for example tea-tree, peppermint, eucalyptus and menthol which have a cooling and invigorating effect.



### Toe separators

These are used to separate toes while painting.



### Manicure/pedicure mittens

They are usually used following the application of hand/ massage cream. The hands are dipped in paraffin wax and wrapped with a cling film or plastic placed inside a plastic pocket and place then into mittens for about . Electrical mittens or heated gloves are also used for the same purpose during paraffin wax treatment.



### Nail dryer

An electric apparatus used to dry nail polish faster.



### Pedicure slippers

These are worn by a client after painting nails, to avoid messing up the nail colour that has been just applied with their closed shoes.



### Paper towels

Used to line the area on which you set up products.



### **Cotton towels**

Used to rest client's hands during manicure and for drying hands.



### **Sanitiser for tools**

A container with a disinfecting solution used to place tools during the manicure.



### **Lamp**

Good lighting is essential to enable manicurist/ pedicurists to identify minute details that will indicate the condition of the nail and cuticle and to carry out precise work on cuticles and nails.



If you are sure you have understood the information in this section then you are ready to test yourself with Activity 9.



### Activity 9: Knowledge of tools

1. Match the items with their descriptions and requirement for special care. We have complete 1 as an example for you.

Item	Description
1. Cuticle knife	to gentle push back cuticles
2. Cuticle pusher	to remove any build-up of hard skin on soles of feet
3. Nail buffer	used to loosen the cuticle around the base of the nail or to clean under the free edge
4. Cuticle nipper	used with a blade to remove callus or hard skin under the feet.
5. Nail files	used to push back cuticles
6. Credo blade	used to smooth roughness of the feet
7. Orange wood stick	used to remove excess cuticle or built up dead skin on the nail plate.
8. Foot file	used to sanitise tools during treatment
9. Hoof stick	used to trim or cut excess cuticles and hang nails
10. Foot rasp	polish the nails to a high sheen
11. Tool sanitiser	a built-in foot spa
12. Pedi spa	Files made of different material and grits used to file and shape nails



### Feedback

*The activity will help you to find out whether you can recall the use of tools. Check your answers against ours at the end of the Unit. The best way of learning is to have the actual tool right in front of you.*

## Section 2: Manicure/pedicure -The Products

### Nail varnish remover

#### acetone

a chemical used to remove nail varnish

#### Acetone

Acetone is used to remove nail polish. It has a drying effect on nails and skin. It must not be used on acrylic nails.

*Non acetone is used on acrylic nails*

#### Antiseptic

Prevents the multiplication of micro-organism, used for sanitising hands before treatment, as well as soaking client's hands and feet during the treatment.

#### Basecoat

Colourless liquid applied on the nail before coloured nail polish, to prevent staining of the nail plate and also it allows the nail polish to readily adhere to the nail surface. Some base coats have nail strengtheners.

#### Buffing paste

Used to smooth out ridges on the nail plate and helps to remove surface stains, creating a high lustre, which is sometimes preferred to coloured nail polish.

#### Cuticle cream

Used to make the cuticles pliable so that they can be pushed back without causing damage or discomfort. Cuticle oil is also used as an alternative.

#### Cuticle oil

Special oil used to soften and lubricate cuticle around the fingernails and toe nails. Cuticle cream can be used as an alternative

#### Cuticle remover

A solution mixed with an alkaline, glycerine and water, is used to soften and remove dead cuticles from around the nail. It also works by breaking down the cuticle so that it can be scraped away gently from the nail plate with a cuticle knife.

#### exfoliant

a grainy substance used to remove dead skin

#### Cuticle exfoliant

A gentle grainy substance used after a cuticle trimmer to help sweep away dull, dead cells to leave your nails and cuticles soft, smooth and tidied up.

### **Hand creams**

A cream used to soften the skin on the hands and cuticles. It provides a 'slip' for massage; this means that the therapist's hands glide smoothly over the skin without causing friction and discomfort. Hand creams have an oil base and where as hand lotions are water based.

### **Exfoliant**

A product used to remove dead skin cells, cleanse the skin; conditions soften and refresh the skin. It is applied with a deep circular massage movement and used on both hands and feet to improve blood circulation. It is also called a scrub.

### **Foot cream**

A rich cream used to massage the feet leaving them soft and supple. Essential oils can be added to take away tiredness and puffiness of the feet.

### **Foot powder**

Powder used to sprinkle on client's feet to absorb moisture and before wearing closed shoes.

### **Hygienic liquid soap**

Used with warm water to soak hands and feet in preparation for pushing back cuticles.

### **Nail hardener/strengthener**

There are many different types available, used for strengthening damaged and brittle nails, condition and protect against, breaking, splitting and peeling.

### **Nail polish/varnish**

A nail colour or paint used on the nail plate to beautify and protect nails, assorted colours are available to choose from.

### **Nail polish remover**

Used to remove nail polish and to remove oil from the nail plate before applying nail polish.

### **Nail polish thinner**

Used to thin nail polish that has thickened.

### **Nail white pencil**

Used to whiten free edge which has become discoloured, you can use this to create a 'French' manicure, a nail bleach can be used also to whiten stained nails.

### **Top coat**

A liquid colourless sealer applied over polish to protect the polish, prevents chipping and impart a high gloss.

### Nail polish dryers

There are different types of nail polish dryers that can be used to speed up the drying process, for example quick-dry sprays, a liquid dropped directly to the nail polish, top drying coats and ultra violet lamps.

If you are sure you have understood the information in this section then you are ready to test yourself with Activity 10.



### Activity 10: Product knowledge

Circle either True or False to indicate the correct answer.

1. Acetone remover could be used on natural nails and artificial nails. **True or False**
2. Either cuticle oil or cuticle cream may be used to soften the cuticle. **True or False**
3. Cuticle remover breaks down cuticle so they could easily be removed. **True or False**
4. Exfoliator refers to a grainy substance that removes dead skin cells. **True or False**
5. Hand creams are rich substances used to moisturise the skin and apply massage. **True or False**
6. Any soap may be used to soak hands and feet. **True or False**
7. Some base coats are also nail strengtheners. **True or False**
8. There's no need to use cotton towels during a manicure, paper towels are sufficient. **True or False**
9. Nail polish dryers are used after soaking the hands. True or false
10. Damaged nails are repaired with silk, linen or acrylic fibre and an adhesive. **True or False**
11. There's no way to thin nail polish; if it hardens, it must be thrown away. **True or False**
12. Nail white pencil is use for whitening the free edge. **True or False**
13. Buffing paste is used to remove cuticles. **True or False**
14. Buffing paste is used with a buffer to give nails a shine. **True or False**



### Feedback

*The activity will help you to find out whether you can recall products used in manicure and pedicure and their uses. Check your answers against ours at the end of the Unit.*

## Section 3: Manicure - the treatment

The popularity of manicure and the growth of the industry are indicators that there must be many benefits of manicure. What would you say are the benefits of manicure?



Regular manicuring keep hands and nails well conditioned and moisturized. This will strengthen nails and prevent dryness which could lead to breakage and possibly, infection. Cuticles that are regularly cared for encourage nail growth and discourage hang nails. Massage of hands increases blood circulation which enhances nail growth. Massage also increases mobility and flexibility of muscles and joints as well as induces relaxation.

A basic manicure should take approximately 30 minutes. However, you may take longer in the beginning until you develop your skills, so do not worry. You should carry out at least 10 manicures before attempting your final assessment. You should also keep a log of the treatments carried out. This would assist you to reflect on your progress and could be used as evidence for your assessment. Remember, practice makes perfect!

### Preparing the manicure table

Follow the rules of sanitation. Ensure all implements have been sterilized or disinfected. Your workstation must also be wiped with a hospital grade disinfectant and be orderly. Ensure that you cultivate a disciplined systematic approach to manicure and pedicure. What is important is that there is a place for every tool or implement. Below is an example of a manicure set up.



Figure 11: Manicure setup



Table 5: Manicure set up

Item	Placement on table	Item	Placement
1. towel wrapped arm rest	Centre	6. finger bowl and brush	Slightly to the left of client
2. nail files (different grits)	on the right next to arm rest	7. disinfecting tray	left of manicurist/ pedicurist
3. cuticle implements	next to the files on the right	8. creams, lotions, cuticle remover/ oil, nail varnish	in a tray to the left of manicurist/ pedicurist
4. sanitiser	Next to cuticle implements	9. plastic bag for waste	stuck with adhesive tape to either side of the table
5. cotton wool container	Next to the sanitizer	10. nail whitener, pumice stone buffer, etc.	in the drawer



### Activity 11: Manicure setup

Using the numbers in Table 5, illustrate with a drawing how you would set up your manicure table. Be sure to include all the implements listed in Table 5.



#### Feedback

*The activity will help you to find out whether you can recall how to set up for a manicure. Check your answers against ours at the end of the Unit. Did you do well? Do not worry if you placed some items incorrectly. Continue to practise placing items systematically every time you prepare for a manicure. Have a mental picture of the way a professional setup should look.*

## The Treatment

### Procedure for a plain manicure

It is good practice for clients to settle payment for their manicure/ pedicure before the treatment or before polish application. This will prevent nail polish being smudged.

1. Having prepared the manicure table, seat your client.
  2. Wash your hands.
  3. Sanitise client's hands.
  4. Examine client's hands to determine:
    - condition of hands and nails
    - if there are conditions that contra-indicate manicure
    - natural shape of the finger tips and nails.
  5. Remove nail varnish-begin with the little finger on the left hand:
    - wrap cotton pad between the second, middle and index fingers
    - moisten cotton pad with nail varnish remover
    - hold each finger individually and firmly press the moistened cotton wool unto the nail plate
    - remove nail varnish from the base of the nail to the tip by firmly pulling the cotton pad off the nail; this will avoid smearing old polish into the cuticle.
  6. Shape nails
    1. agree with client the desired shape
    2. select the file with the most appropriate grit
    3. begin with the little finger on the left hand and moving towards the thumb
    4. hold the client's finger between your thumb and your first two fingers of your left hand
    5. hold the file in your right hand; tilt the file slightly so that filing is mainly on the underside of the free edge between 30 to 45.
    6. file from outside to centre; going from right to left and left to right; use two short strokes and one long stroke on either side of the nail; gently taper the sides to remove a sharp edge only file nails that are 0.3cm and longer

***Avoid using a sawing motion and filing deep into the sides of the nail; they will appear longer and grow stronger if permitted to grow out at the sides.***
  7. Soften cuticle
    - apply cuticle cream to the left hand and immerse in a warm solution of hygienic soap and water.
  8. File the nails on the right hand. Remove left hand from the water
  9. Loosen the cuticle. Dry the left hand. Apply cuticle remover. Begin loosening the cuticle using rotary movements with an orange wood stick wrapped in cotton wool.
    - use the spoon end of the cuticle pusher to pushback cuticles or orange wood stick
    - keep cuticles moist while doing this step
-

10. Remove excess cuticle
  - gently remove dead cuticle using small rotary movements
  - use cuticle nipper to trim excess cuticle, uneven cuticle, or hangnails: remove cuticle as a single segment
11. Apply cuticle cream to right hand and immerse into the finger bowl. Continue manicure of left hand
12. Clean under free edge. Use a cotton-tipped orange woodstick moistened with soapy water to clean under the free edge. The movement is from centre to toward the side
13. Remove right hand and repeat steps 9 to 12.
14. Brush Nails. Immerse both hands in water and use the nail brush to remove loose cuticle.
15. Remove hands from water. Dry hands
16. Bevel nails. Use the fine side of the file to give the nails a smooth beveled edge.

*Client's jewellery should be removed, kept within sight of client and replaced immediately at the end of the service.*

### Procedure for Polish Application

Polish must be applied lightly and quickly, using long sweeping strokes from nail base to the free edge. Polish should not be thick. Add polish solvent to thin polish.

1. Hold client's finger firmly between your thumb and index finger.
2. Apply base coat to the little finger of the left hand and move toward the thumb. Allow to polish to dry
3. Apply coloured polish. Dip brush into the polish, removing excess by pressing it gently on the sides of the bottle.
4. Apply polish in three strokes; middle, side, side, making sure not to flood cuticles.
5. Remove excess polish with an orange wood stick dipped in polish remover.
6. Apply top coat. Allow to dry and/ or spray nails with a quick-dry spray to speed up the drying process.

### Correct application for different shape nails

1. **Oval nail shape.** The nail is usually completely polished. Another technique would be to leave a half moon at the base.
2. **Pointed or slender tapered nail shape.** This nail is slightly longer. It is not suited to short nails. The nail can be completely polished or a half moon left at the base.
3. **Square nail shape.** The square nail should extend slightly over the finger tip. The entire nail may be polished or the sides maybe left unpolished with a half moon at the base.
4. **Clubbed nail shape.** This nail shape is slightly tailored and extends slightly over the finger tip. A thin margin is unpolished on either side of the nail.

*To create the appearance of length: leave a thin margin unpolished on either side of the nail.*

## **Application for French manicure**

A French manicure gives an illusion of a longer nail. Nails are filed square. The length is just over the finger tip.

1. Apply base coat
2. Apply a nude colour using technique for square nail shape.
3. Paint a thin line across the tip of the nail with white polish.
4. Apply top coat.

Below are pictures showing the procedure for manicuring.



*Assess client's hands*



*Remove nail varnish*



*File nails*



*Lightly buff nails*



*Apply cuticle cream*



*Soak hands*



*Apply cuticle remover*



*Remove excess cuticle*



*Brush nails to remove loose cuticle*



*Push back cuticles*



*Apply cuticle conditioner*



*Apply base coat*



*Apply nail varnish*



*Completed manicure*

## Finishing the service

You should tidy up your workstation while polish is drying: assist client to put on jewellery when the polish is completely dry. Ideally, you should advise client to replace jewellery and to finalise payment before polish application: this will avoid polish being smudged, requiring you to redo polish application.

1. Recommend future service
2. Complete client record card (items 9 & 10)
3. Offer to make a booking
4. Accompany client to reception
5. Sanitise and store all tools and equipment
6. Set up for next client.

## Section 4: Special Treatments

### Oil manicure

***Products and equipment needed: vegetable oil (olive oil); hot oil heater.***

Oil manicures are effective in restoring ridged brittle nails and dry cuticles. It improves the skin leaving it soft and pliable. Apply this treatment after filing nails (step 6). The hot oil treatment will replace soaking hands in soapy water. Cuticle remover, cuticle cream or oil is not needed.

#### Procedure

1. Heat olive oil to a comfortable temperature
2. Place client's fingers into heated oil for about 10 minutes
3. Massage hands and wrists with oil: remove excess cuticle
4. Remove oil from hands with a damp, warm towel
5. Wipe each nail thoroughly with polish remover to remove all traces of oil
6. Apply polish.

## Manicure for men

***Products and implements needed: buffing paste, buffer and products used for manicure***

A man's manicure is usually conservative. Nails are filed either round or square and kept short. Dry polish is applied to nails instead of wet nail polish.

### ***Procedure for men's manicure***

1. Follow steps 1-16 excluding step 5.
2. Buff nails. Apply a small amount of paste polish over buffer.
3. Buff nails from base to free edge, lifting buffer after each stroke
4. Wash and dry hands to remove residue from nails
5. Apply hand cream to keep hands soft and moist.

## Procedure for nail repair

A split or tear in the nail plate or free edge can be temporarily repaired. The nail mending technique that you will learn in this section could be used with mending material such as paper, silk or linen.

1. Lightly file the split or chipped part of the nail with the fine side of the file. This will help the mending material adhere to the nail.
2. Tear a piece of mending material, large enough to cover the damaged portion of the nail and to tuck under the free edge. If using tissue the edges must be feathered.
3. Saturate mending material with adhesive.
4. Place material over the damaged portion of the nail using a tweezer.
5. Tuck the overlap under the free edge using an orange wood stick.
6. Use the orange wood stick, dipped in polish remover, to smooth the material.
7. If there is a deep tear, reinforce with a second patch.
8. If using silk or linen, lightly file the entire nail with a fine file.
9. Dry patch thoroughly and apply base coat.

## Removing Nail Wraps

***Products and implements needed: approved solvent, orange wood stick, cuticle pusher***

1. Remove polish.
2. Place client's fingers in an approved solvent specified by manufacturer.
3. Gently remove the loosened wrap using an orangewood stick or metal pusher.
4. Place fingers in warm oil.



## Paraffin treatment

***Products and equipment needed: paraffin bath; paraffin wax; toweling mittens, foil or plastic***

Paraffin treatment is applied after the hand massage, which you will learn in the next section.

The benefits of a paraffin treatment are: relaxation; improved blood supply to the area being treated; improved skin texture and colour; increased absorption of cream or oils; and soothing of arthritic pain.

### Procedure for paraffin treatment

1. Heat paraffin wax
2. Test temperature
3. Cover area to be treated with a layer of cream and massage into the skin
4. Immerse client's hand into the wax, then quickly remove it
5. Repeat this action five times resulting in thin layers of paraffin coating the hand
6. Place the client's hand on a sheet of foil or plastic and wrap the hand and lower arm.
7. Place hands into towelling mittens to keep warm. Leave for approximately 10 minutes.
8. Remove mittens and wrap. To remove the wrap, press the hand firmly and pull the wrap off the hand. The wax should come off the hand in one piece inside the wrap.
9. Remove any excess massage medium using a towel.

## Section 5: Massage of lower arm and hand

Hand massage is carried out after cuticle work and before nail polish application. Hand massage has the following effects:

- moisturises the skin
- increases blood circulation
- keeps a range of movement in the joints
- eases discomfort from arthritis
- induces relaxation
- removes dead cells (desquamation)

### **desquamation**

removal of dead skin cells

### **effleurage**

a slow, sweeping massage movement which induces relaxation

### Procedure for hand and arm massage

1. Apply **effleurage** to the hand and forearm using long, sweeping strokes from the hand to the elbow; anterior and posterior sides. Repeat five times.
2. Apply frictions to the back of the hand and forearm using both thumbs. Repeat two times.

3. Knead the palms of the hand as in step 2. Repeat two times.
4. Rotate fingers while giving support to the joints. Move from little finger to thumb. Rotate clockwise and then anti clockwise. Repeat four times on each finger.
5. Rotate the wrist by placing your fingers between the client's fingers while supporting client's wrist with your other hand. Rotate the wrist, first clockwise then anticlockwise. Repeat two times.
6. Apply effleurage as in step one. Repeat five times.

## Classical massage movements

Table 6: Classical massage movements

Classification of massage movement	Description of movement
Effleurage	A slow, stroking movement that induces relaxation. It is applied to begin and complete a massage. It is also applied during massage between more vigorous movements.
Petrissage	Petrissage is a compression movement or kneading movement, which exerts pressure on the muscle. It is applied to contracted muscles to relax them. Petrissage also breaks down fatty deposits and tones muscles.
Tapotement	A percussion type movement usually applied as a series of brief, brisk movements. It stimulates blood and lymph flow.
Frictions	Frictions are small circular movements of the thumb or finger pads, which are used to push muscles against the bone, thereby breaking up nodules or adhesions present in the tissues. The movements are directed at the underlying tissues and as such the circles made do not move over the surface of the skin but create their movement beneath the skin.



*Effleurage to forearm*



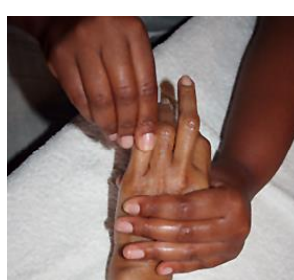
*Thumb kneading to back of the lower arm*



*Thumb kneading to the palm*



*Thumb kneading to hand*



*Finger rotation*



*Wrist rotation*



### **Contra-indications to Massage**

Massage should be avoided in the following circumstances:

- over very hairy areas
- over recent wounds and scars
- over bacterial inflammation
- over internal inflammation, such as an arthritic 'flare-up'
- over varicose veins.



### **Activity 12: Checklist of application of manicure**

Use this checklist below as a guide to help you evaluate your performance in manicure application. Did you?

TASK	Client 1		Client 2		Client 3		Client 4		Client 5	
	yes	no	yes	no	yes	no	yes	no	yes	no
• Communicate effectively with client to establish requirements										
• Consult effectively taking account of critical factors										
• Agree with client on expected outcome										
• Record client information accurately										
• Prepare for nail care treatment										
• Select appropriate tools and products										
• Inspect nails										
• Apply antiseptic										
• Remove varnish										
• File and bevel nails										
• Apply cuticle cream to cuticles										
• Soak area in warm soapy water										
• Perform work on cuticles										
• Brush nails with warm soapy water and dry hand thoroughly										
• Apply hand massage sequentially & rhythmically										
• Remove all traces of oil										
• Apply base coat, nail varnish and top coat										
• Complete service in a time acceptable to client and industry										
• Provide correct advice and information on further treatments										
• Explain correctly after care procedures										
• Record client information accurately on client's record card										
• Recommend further treatments										
• Observed safe and hygienic practices throughout to: <ul style="list-style-type: none"> <li>○ self</li> <li>○ others</li> <li>○ tools</li> <li>○ equipment</li> </ul>										



### Activity 13: Observation checklist for nail repair

Did you?

TASK	Client 1		Client 2		Comments
	Y	N	Y	N	
• Select appropriate tools and products					
• Tear tissue/ silk into small piece to cover spilt and free edge					
• Saturate the tissue with nail glue					
• Place tissue onto nail using tweezers					
• Adjust tissue/ silk into position with an orange wood stick					
• Apply more glue to the flap and tuck under free edge using orange wood stick					
• Apply ridge filling base coat to the nail					
• Apply base coat, nail varnish and top coat					
• Complete treatment in a time acceptable to client and industry					
• Explain correctly after care procedures					
• Record client information accurately on client's record card					
• Observed safe and hygienic practices throughout <ul style="list-style-type: none"> <li>○ self</li> <li>○ others</li> <li>○ tools</li> <li>○ equipment</li> </ul>					



### Activity 14: Observation checklist for paraffin wax treatment

Did you?

TASK	Client 1		Client 2		Comments
	Y	N	Y	N	
• Prepare for paraffin treatment					
• Select appropriate tools and products					
• Check the temperature to ensure it is comfortable					
• Carefully place left hand in paraffin bath					
• Ensure that the area was completely immersed					
• Leave hand for the required time					
• Carefully remove hand from bath					
• Wrap area treated in plastic and put on mitten					
• Remove mitten and plastic wrap carefully ensuring all the wax has been removed from hands					
• Complete treatment in a time acceptable to client and industry					
• Recommend suitable home care products and information on further treatments					
• Record client information accurately on client's record card					
• Observed safe and hygienic practices throughout to: <ul style="list-style-type: none"> <li>○ self</li> <li>○ others</li> <li>○ tools</li> <li>○ equipment</li> </ul>					



## Activity 15: Massage movements

Circle the correct answer.

1. Effleurage is a massage movement applied in a :
  - (a) heavy tapping manner
  - (b) light pinching manner rhythmic manner
  - (c) with the thumbs
  - (d) light, slow and
2. Friction in massage requires the use of :
  - (a) vibratory movements
  - (b) slapping movements
  - (c) deep rubbing
  - (d) light stroking movements
3. Petrissage brings about a:
  - (a) soothing effect
  - (b) invigorating effect
  - (c) relaxing effect
  - (d) healing effect
4. Tapotement can be described as :
  - (a) vibratory
  - (b) friction
  - (c) pinching
  - (d) percussion
5. Massage generally has a relaxing, toning effect on the muscles.  
**True or False**
6. List 5 contra-indications to massage.
  - a.
  - b.
  - c.
  - d.
  - e.

## Summary Unit 6: Applying a Manicure Treatment

In this Unit you learned about the procedure, tools and products for carrying out a manicure.

In Section 1 there was a discussion on tools used in manicure. The importance of sterilisation and careful use of tools were emphasised. The **nail file** is the main tool used when carrying out a manicure therefore it is important for you to know the different **grit level of files**. The grit level states the **coarseness or fineness** of the file: the lower the number the coarser the grit. The rule is: start with a finer grit if uncertain about the condition of the nail.

Section 2 covered products that you will use for manicure. The table below gives an overview of the products we discussed and their uses.

*Table 7: Manicure/pedicure products*

Products	Their Use
Acetone	Acetone is used to remove nail polish
Antiseptic	used for sanitising hands before treatment, as well as soaking client's hands and feet during the treatment.
Base coat	Colourless liquid applied on the nail before coloured nail polish
Buffing paste	Used to smooth out ridges on the nail plate and helps to remove surface stains, creating a high lustre
Cuticle cream	Used to make the cuticles pliable
Cuticle oil	Special oil used to soften and lubricate cuticle around the fingernails
Cuticle remover	used to soften and remove dead cuticles from around the nails
Cuticle exfoliator	A gentle grainy fluid used after a cuticle trimmer to help sweep away dull, dead cells on the cuticles and nails
Hand cream	used to soften the skin on the hands and cuticles
Exfoliator	used to remove dead skin cells, cleanse the skin; conditions soften and refresh the skin on the hands
Hygienic soap	Used with warm water to soak hands
Nail hardener	used for strengthening damaged and brittle nails, condition and protect against, breaking , splitting and peeling
Nail polish	A nail colour or paint used on the nail plate to beautify and protect nails,
Nail polish remover	Used to remove nail polish and to remove oil from the nail plate before applying nail polish.

Nail polish thinner	Used to thin nail polish that has thickened
Nail white pencil	Whitens the free edge
Top coat	applied over polish to protect the polish, prevents chipping and impart a high gloss
Nail polish dryer	used to speed up the drying process of nail polish

In Section 3 you learned about setting up for a manicure and how to carry out a manicure. You also learned about the benefits of a manicure which you must know so that you could explain them to your clients.

We said that a basic manicure should take 30 minutes. Setting up your manicure table in an orderly manner and carrying out the process sequentially will enable you to achieve this time.

In this section you also learned about the procedure for carrying out a manicure. Sixteen steps were described. Table 8 summarises the sequence of a manicure treatment.

*Table 8: Sequence of a manicure*

1. preparing the table	9. removing excess cuticle
2. washing your hands	10. applying cuticle cream
3. sanitising client's hands	11. cleaning the free edge
4. examining client's hands	12. brushing away excess cuticle
5. removing nail varnish	13. bevelling nails
6. filing/ Shaping nails	14. applying base coat
7. softening the cuticle	15. applying nail varnish
8. loosening the cuticle	16. applying top coat

It is important for you to finish the service by assisting clients to replace their jewelry after nail varnish has dried. You should also:

1. Recommend future service
2. Complete client record card (items 9 & 10)
3. Offer to make a booking
4. Accompany client to reception
5. Sterilise, disinfect and store all tools and equipment
6. Set up for next client.

In Section 4 we learned about carrying out special treatments. These included: massage to the hands and lower arms; manicure for men; nail repair; and paraffin treatments. It is important for you to develop the **knowledge, skills and attitude** to carry out manicure treatments efficiently. When you are able to apply all three consistently, you would have achieved **competence**.

### **Classical massage movements**

Do you remember what you learned about classical massage? We learned about the four classical movements:

Effleurage- a slow, stroking movement

Petrissage- a compression or kneading movement

Tapotement a percussion movement, and

Frictions-small circular movement applied with thumbs.

You also learned that you should not massage over:

- over very hairy areas
- over recent wounds and scars
- over bacterial inflammation
- over internal inflammation, such as an arthritic ‘flare-up’
- over varicose veins.

Read your material consistently and intentionally. Also carry out your own research to learn more on your chosen field. While the principles of nail care do not change, techniques change regularly because of technology. To maintain your professionalism and to remain competitive you must keep abreast with new technology, regulations, tools, and products. You must also beware of changing clients’ needs and be able to cater for clients from diverse ethnic and cultural backgrounds.



## Answers to Activity

### Activity 9

Match the items with their descriptions and requirement for special care

Item	Description
1. Cuticle knife	used to gently push back cuticles 2, 9
2. Cuticle pusher	to remove any build-up of hard skin on soles of feet. 10
3. Nail buffer	used to loosen the cuticle around the base of the nail or to clean under the free edge. 7
4. Cuticle nipper	used with a blade to remove callus or hard skin under the feet. 6
5. Nail files	used to push back cuticles. 2
6. Credo blade	used to smooth roughness of the feet. 8
7. Orange wood stick	used to remove excess cuticle or built up dead skin on the nail plate. 1
8. Foot file	used to sanitise tools during treatment. 11
9. Hoof stick	used to trim or cut excess cuticles and hang nails. 4
10. Foot rasp	polish the nails to a high sheen. 3
11. Tool sanitiser	a built-in foot spa. 12
12. Pedi spa	Files made of different material and grits used to file and shape nails. 5

### Activity 10 Product Knowledge

Circle either True or False to indicate the correct answer.

1. Acetone remover could be used on natural nails and artificial nails. **False**
2. Either cuticle oil or cuticle cream may be used to soften the cuticle. **True**
3. Cuticle remover breaks down cuticle so they could be easily be removed. **True**
4. Exfoliator refers to a grainy substance that removes dead skin cells. **True**
5. Hand creams are rich substances used to moisturise the skin and apply
6. massage. **True**
7. Any soap may be used to soak hands and feet. **True**
8. Some base coats are also nail strengtheners. **True**
9. There's no need to use cotton towels during a manicure, paper towels are sufficient. **False**
10. Nail polish dryers are used after soaking the hands. **False**
11. Damaged nails are repaired with silk, linen or acrylic fibre and an adhesive. **True**

12. There's no way to thin nail polish; if it hardens, it must be thrown away.

**False**

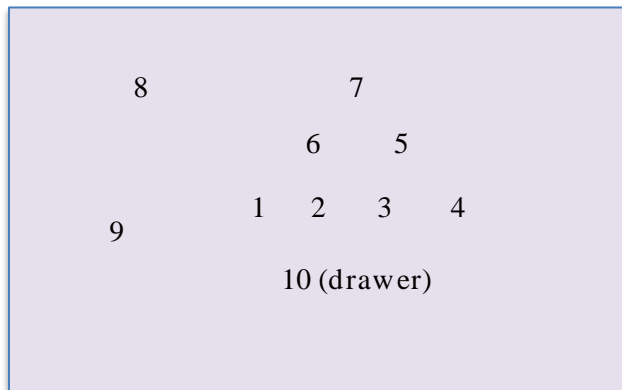
13. Nail white pencil is use for whitening the free edge. **True**

14. Buffing paste is used to remove cuticles. **False**

15. Buffing paste is used with a buffer to give nails a shine. **True**

16. An antiseptic is used to sterilise hands. **False**

### Activity 11: Manicure Setup



### Activities 12-14

These are checklists designed to assist you to monitor your competence.

### Activity 15

1. Effleurage is a massage movement applied in a :

**(d) light, slow and rhythmic**

2. Friction in massage requires the use of :

**(c) deep rubbing movements**

3. Petrissage brings about a:

**(b) invigorating effect**

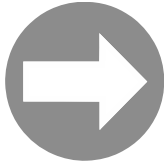
4. Tapotement can be described as :

**(d) percussion**

5. Massage generally has a relaxing, toning effect on the muscles. **True**

6. Five contraindications to massage. Do not massage over:

- very hairy areas
- recent wounds and scars
- bacterial inflammation
- internal inflammation, such as an arthritic 'flare-up'
- varicose veins.



## Unit 7

# Structure of the Foot

In this unit you will about the structure of the feet. Your feet are designed so that they can carry your weight and allow you to walk, jump, dance or run. In order to care for the feet it is helpful to understand its basic structure.

### What is in this Unit?

There is one Section for this Unit. The learning covers:

- Structure of the foot
- Structure of the lower leg

### Learning Outcomes

By the time you have completed this Unit, you should be able to:

- Identify the bones of the foot
- Identify the superficial muscles of the lower leg

You should take note of these learning outcomes,as they will help you to assess your own progress as you work through the unit.

### Study Time

To cover the content of this Unit will take you about 1-2 hours. Do not worry if it takes you more time or less as we do not all learn at the same pace.

## Section 1: Structure of the foot

The foot, like the hand, is a very complex mechanism in order to carry out two main functions. What do you think these functions are? Write down your ideas here.



In your unit on the Human Body, the two functions of your feet are to carry your weight and to allow you to move: walk, jump, dance and run.

These functions require a high degree of stability. The foot must also be flexible, so it can adapt to uneven surfaces and go up and down hills. To carry out these functions your foot is a complex structure of bones, joints, ligaments, muscles and tendons. The many bones, joints, and ligaments of the foot give it flexibility and form arches to support your weight.

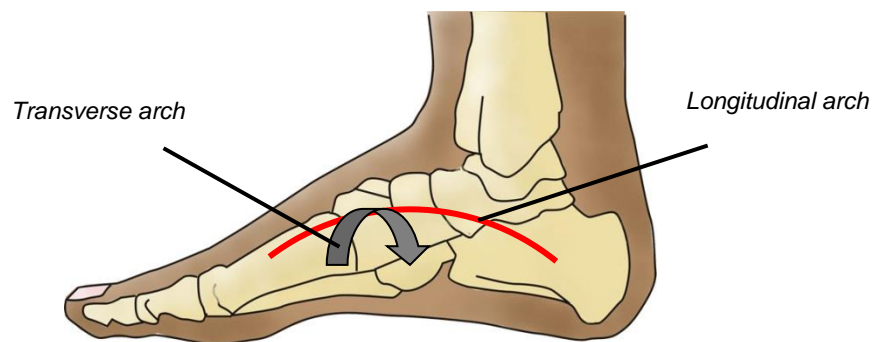


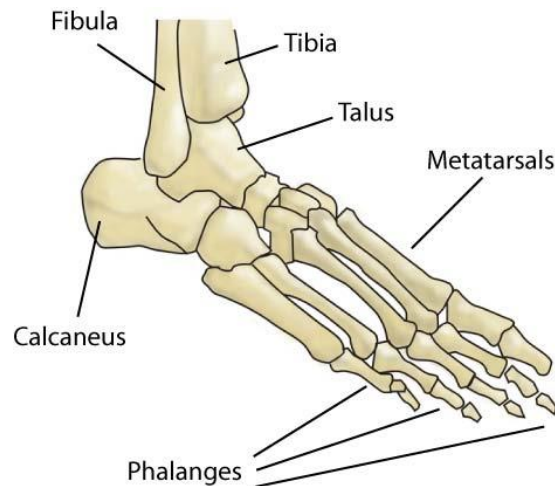
Figure 12 : The Arch of the foot

There are many bones in the foot – do you know how many? Take a guess and write your answer here.



To be able to carry out effective pedicure treatments, you need to understand how the bony structure of the foot is formed. The total number of bones is 26 in each foot! Let us identify them.

Look at Figure 13 and identify the bones as we describe them.



*Figure 13: The bones of the foot and lower leg*

The ankle is made up of 7 tarsal bones. The bones are arranged so that one of them, the talus, can move freely where it joins the tibia and fibula. The remaining tarsal bones are bound firmly together, forming a mass supporting the talus. Calcaneus and talus are part of the tarsal bones

**calcaneus**

heel bone

The largest of the ankle bones, the **calcaneus** (say:kal-kan-ee-as) or heel bone is located below the talus where it projects backward to form the base of the heel. The calcaneus helps support the weight of the body and provides an attachment for muscles that move the foot.

5 long metatarsal bones form the ball of the foot. The tarsals and metatarsals are arranged and bound by ligaments to form the arches of the foot.

The phalanges of the toes are similar to those of the fingers and join to the metatarsals. There are a total of 14 phalanges in your toes.

## The muscles of the foot

The movement of the human foot and toes is very similar to what you learned about the muscles of the hand. The movements are controlled by muscles and tendons. If a muscle contracts it pulls the tendon and makes the bone move. In the wrist, the hand and fingers are moved mainly by the muscles and tendons in the forearm. In the foot, the ankle, foot and toes are moved by the muscles and tendons in the lower leg. Look at Figure X to see the tendons of the lower leg and foot.



Figure 19: The tendons of the lower leg and foot

Now look at Figure 20 to follow the description of the muscles of the foot.

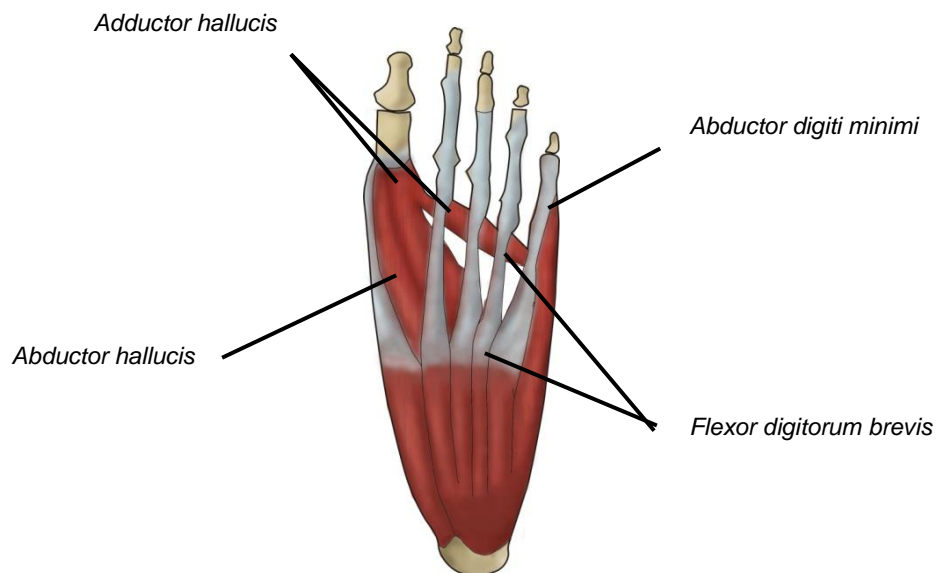


Figure 20: The muscles of the foot

The adductor hallucis originates from the four metatarsals to the big toe. It draws the big toe to the smaller toes.

The abductor hallucis originates from the calcaneus to the big toe. It separates the big toe from the small toes.

Abductor digiti minimi originates from the calcaneus to the digit of the smallest toe. It separates the smallest toe and bends it.

Flexor digitorum brevis originates from calcaneus tendon to the phalanges of four small toes. It bends the four small toes.

The extensors – which allow the foot to point forward, are found on the top of the foot.

The flexors – which allow the foot to be flat so you can stand on it - are in the sole of the foot.

## Section 2: Structure of the Lower Leg

### The muscles of the lower leg and foot

The **Tibialis anterior** is a long muscle located at the front of the lower leg. It is attached to the top of the tibia bone in the lower leg, passes over the tibia and attaches to the bone of the ankle and foot. Contraction of the Tibialis anterior causes the foot to bend downward and turns it inwards.

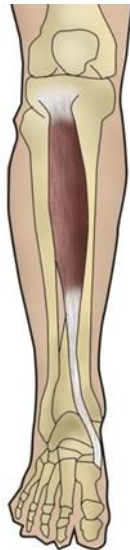


Figure 14: Tibialis anterior



Figure 15: Peroneus

The Peroneus connects the fibula bone to the side of the foot. It allows the foot to bend downward and turn inward.

The extensor digitorum longus is situated along the side of the leg just behind the Tibialis anterior. It arises from the tibia and shaft of the fibula. Its tendon divides into 4 parts as it passes over the front of the ankle and attaches to the 4 outer toes (phalanges).

**gastrocnemius**

the large muscle  
that makes up the  
calf

The **Gastrocnemius** is located at the back of the leg and forms part of the calf. It arises from the femur bone and joins the strong calcaneal tendon known as the Achilles tendon which stretches down to the heel and attaches to the calcaneus. This muscle bends the foot down and helps in pushing the body forward when a person walks or runs. It also bends the leg and knee, raises the foot upwards, turns it outwards and extends toes.



Figure12: The extensor digitorum longus



Figure 13: The gastrocnemius

The Soleus is a thick flat muscle located beneath the Gastrocnemius and together these two muscles form the calf of the leg. The Soleus arises from the tibia and fibula, and extends to the heel by the way of the calcaneal tendon. It acts with Gastrocnemius to point the foot downwards.



Figure14: The soleus



Figure 15: The flexor digitorum longus



**soleus**

a thick muscle  
beneath the  
gastrocnemius

The flexor digitorum longus extends from the surface of tibia to the foot. Its tendon passes along the surface of the foot. It divides into four parts that attach the bones of the four small toes. It bends the foot and toes downwards and turns the foot inwards.

The Tibialis posterior is the deepest of the muscles on the back of the leg. It connects tibia and fibula to the ankle bones. It helps to turn the foot inwards and downwards.



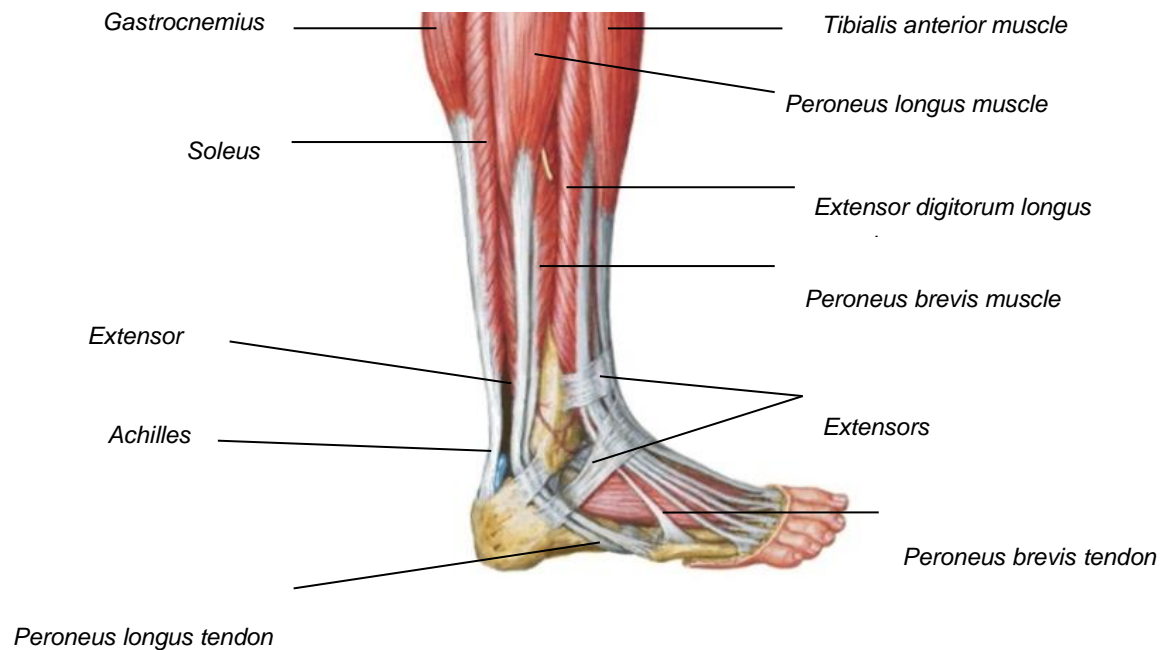
*Figure16: The tibialis posterior*



*Figure 17: The peroneus longus*

The Peroneus longus is a long muscle located on the side of the leg. It connects tibia and fibula to the foot by means of a tendon. It turns the foot outward and inward helps the foot to bend downwards and helps support the arch of the foot.

All together, the muscles of the lower leg and foot look like this:



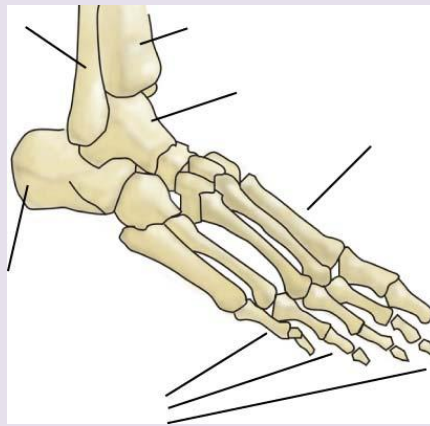
*Figure18: Muscles of the lower leg*

Now you are ready to test your knowledge on the bones and muscles of the foot. Quickly review the unit before completing Activity 16.



### Activity 16: The bones and muscles of the lower leg and feet

1. Name the bones of the lower leg and foot by labelling them A to E.



A:  
B:  
C:

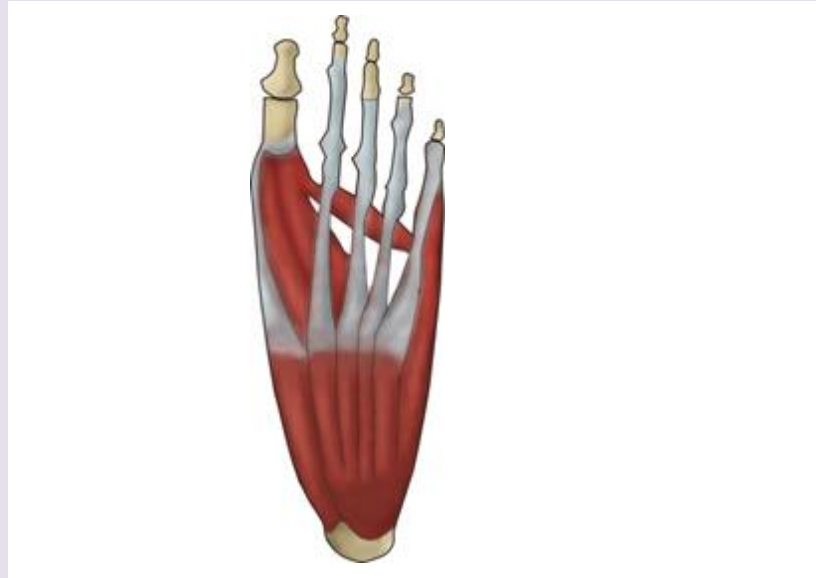
D:  
E:

2. Label the superficial muscles of the lower leg and foot.



**Activity 16 cont'd:**

3. Label the muscles of the foot in the diagram below:  
(a) Adductor, (b) Abductor, (c) Flexor



4. Which of the following is not a bone of the foot?  
a) Calcaneus  
b) Talus  
c) Tibia  
d) Achilles tendon
5. Which of the following muscles allow the foot to point forward?  
a) The adductor  
b) The abductor  
c) The extensor  
d) The flexor

## Summary Unit 7: Bones and muscles of the foot

Your foot has 26 bones joined together by strong ligament tissue. The bones are grouped as follows: There are a total of 14 phalanges in your toes.

- 14 **phalanges** or toe bones
- 5 **metatarsals**

The ankle is made up of 7 tarsal bones. The bones are arranged so that one of them, the talus, can move freely where it joins the tibia and fibula. The remaining tarsal bones are bound firmly together, forming a mass supporting the talus. Calcaneus and talus are part of the tarsal bones

The largest of the ankle bones, the **calcaneous** or heel bone is located below the talus where it projects backward to form the base of the heel. The calcaneus helps support the weight of the body and provides an attachment for muscles that move the foot

5 long metatarsal bones form the ball of the foot. The tarsals and metatarsals are arranged and bound by ligaments to form the arches of the foot. At the ankle the foot is joined to the **tibia** and **fibula** of the lower leg.

The superficial muscles of the lower leg are **tibialis anterior**, which runs down the shin bone, **peroneus longus**, which runs down the outside of the leg, the **soleus** and **gastrocnemius** which are at the back of the leg.

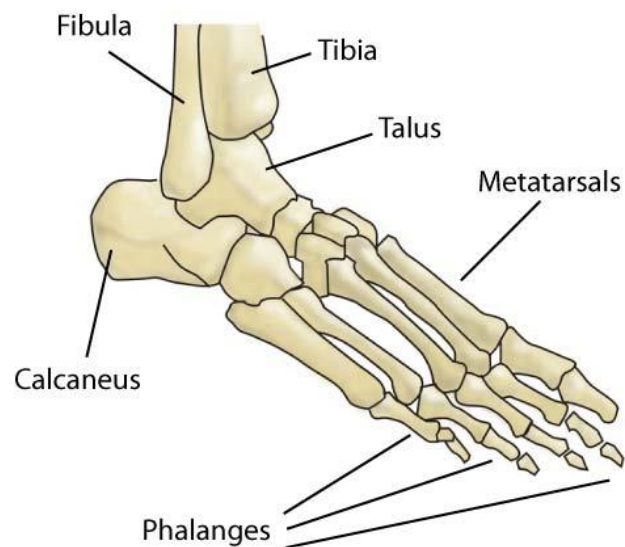
The movement of your feet is mainly controlled by extrinsic muscles and tendons situated in the lower leg. Some muscles are involved in straitening of the bones (**extensors**) will others are involved in the bending movements (**flexors**). The most important tendon that controls your walking, running, jumping is the **Achilles tendon** joining the calf muscles to the ankle.

To carry your weight and help you to balance when walking on all kinds of surfaces your foot bones and joints are supported by ligaments, muscles and tendons which are structured in the form of arches.

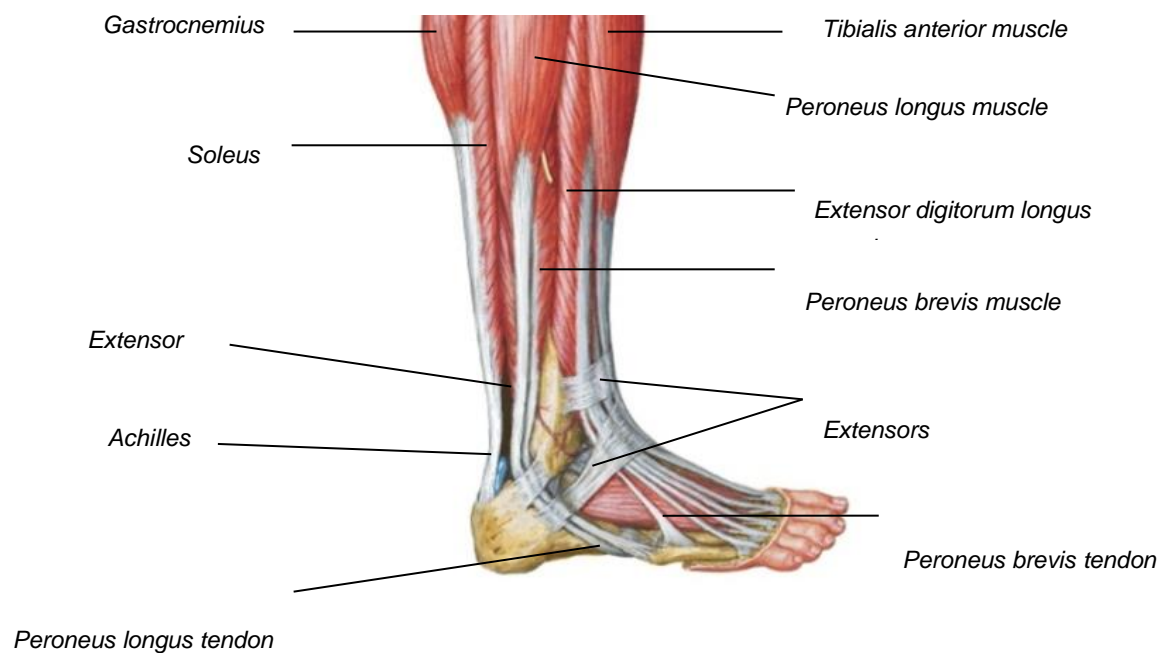
## Answers to Activity 16

### Activity 2 : The bones and muscles of the foot

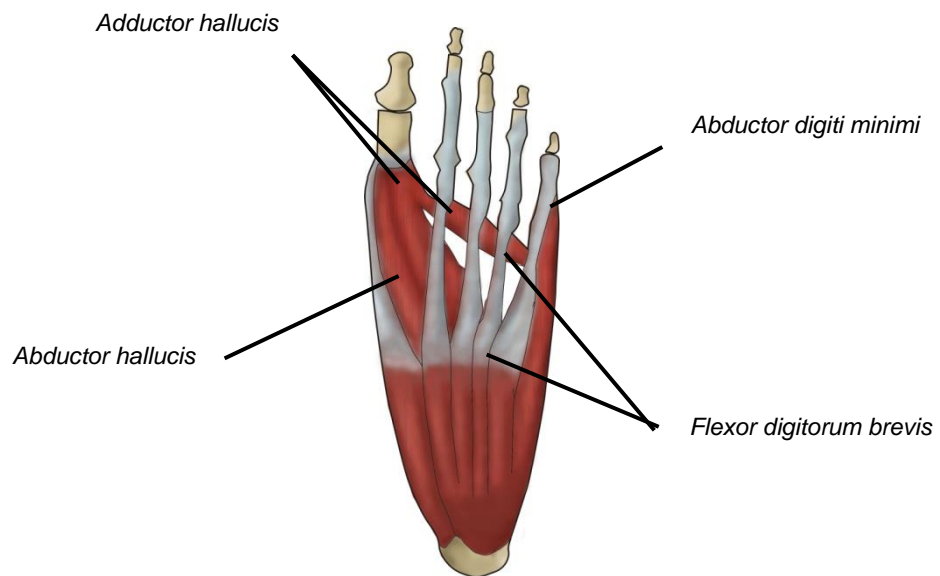
1. In the diagram name the bones labelled A to E



2. The diagram of the muscles in the lower leg.

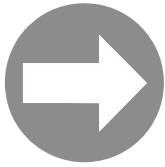


3. Muscles of the foot.



4. Achilles tendon

5. Extensor



## Unit 8

# Applying a pedicure treatment

Pedicure improves the appearance of the feet and toenails. It also improves blood circulation and has a relaxing effect. The service is similar to manicure.

### What is in this Unit?

There two Sections for this Unit. The learning covers:

Section 1: Pedicure: the treatment

Section 2: Massage of lower leg and foot

### Learning Outcomes

By the time you have completed this Unit, you should be able to:

- carry out a basic pedicure
- carry out massage of lower leg and foot

You should take note of these learning outcomes, as they will help you to assess your own progress as you work through the unit.

### Study Time

To cover the content of this Unit will take you about 15-20 hours. Do not worry if it takes you more time or less as we do not all learn at the same pace.



## Section 1: Pedicure - The treatment

***Products and tools needed: all tools used for manicure are required as well as: pedi spa; foot file; toenail clipper, foot rasp; pedicure slipper; foot cream; foot powder, paper and cotton towels. Contra-indications are same as for manicure.***

### Procedure

Ensure all implements have been disinfected and/ or sterilised and that you are wearing protective clothing including gloves.

1. Set up your workstation. You would need a trolley with 2 or 3 tiers. Arrange the top tray as you did for manicure. On the 2<sup>nd</sup> tray, place pedicuring implements, such as foot rasp, foot file, toe nail clippers, pedi slippers, and foot powder. On the 3<sup>rd</sup> level place plastic wrap, foil (for paraffin treatment), mittens and towels. Turn on the switch for the spa so that it warms up before the start of the treatment.



*Figure xxx: Set up for pedicure treatment.*

2. Seat your client. You will need to sit lower than your client.
3. Place paper towel on either side of pedi spa. Clients place their feet on the paper towel.
4. Place towel over your lap, with two pieces of paper towel over the towel for during clients' feet
5. Sanitise feet
6. Cut and file toenails. Toenails must be cut straight across. Avoid cutting or filing deep into corners of the nail.
7. Remove dead skin cells from sole of feet using a foot file. Filing feet before soaking helps to remove dead cells more effectively.
8. Soak feet. Refer to steps 7,9-12 for manicure treatment.
9. Repeat step four, use a foot rasp, after soaking.
10. Apply exfoliant to remove dead skin cells and reduce filing time.

11. Refer to steps 14-16 for manicure treatment.
12. Apply nail polish. Use toe separators before applying polish.



*Sanitize feet*



*Remove nail varnish*



*File toenails*



*Apply cuticle cream*



*Remove excess cuticle*



*Remove hard skin build up*



*Apply base coat*



*Apply nail varnish*



*Completed pedicure*

## **Section 2: Massage of lower leg and foot**

1. Step 1. Effleurage to foot and lower leg.  
With both hands effleurage from toes to the knee, applying pressure on the upward stroke and lightly sliding down the leg and foot to the original position. . Repeat 4 times.
2. Alternate stroking to top of foot.  
Support the foot with one hand, stroke from ankle to toes with the other. Change hands and repeat the movement. Repeat 4 times.

3. Petrissage to foot.  
Apply petrissage to the soles of the feet using your thumbs. Start at the heel and work towards the toes. Your fingers should be resting on the top of the foot while the thumbs are working. Repeat 4 times.
5. Spread the metatarsals.  
Enclose the foot with fingers on top, and thumbs on the soles of the feet. Press firmly into the balls of the feet while stretching the top of the foot outwards with your fingers. Move back and forth briskly. Slide your hands to the heel to complete the movement. Repeat 4 times.
4. Knead sole of the feet.  
Support the heel with one hand and use the heel of the other to knead the sole of the foot. Works in circular movements from heel to toe. Repeat 4 times.
5. Effleurage around the ankle.  
With your fingers pointing towards the ankle and your thumbs crossed on the instep, apply pressure up to the ankle and separate your hands as you move downwards and around the base of the ankle. Repeat 6 times.
6. Knead and stroke Achilles tendon.  
As you support the foot and leg, use your thumbs to rotate either side of the Achilles tendon. Effleurage back to the toes. Repeat 6 times.
7. Effleurage lower leg.  
Repeat step 1
8. Kneading the tibialis anterior muscle.  
Support the calf (gastrocnemius) muscle with your hands. Using your thumbs rotate alternately over the tibialis muscle. Pressure is applied upwards and outwards. Return with effleurage. Repeat 6 times
9. Kneading the gastrocnemius muscle  
Bend the client's leg and place foot on your lap. Support the leg with your left hand and work with your right. Apply circular movements with the palm of your hand on the lateral side of the muscle. Return with effleurage. Repeat 3 times.
10. Palmar kneading of the gastrocnemius muscle  
Place both hands on the muscle. Working hand over hand, knead the muscle pushing the blood flow towards the knee. Effleurage back to the ankle. Repeat 6 times.
11. Tapotement to the calf  
With the leg bent, hold your hands in an open fist. Flick the muscle in a brisk movement using your fingers. Do this for roughly 20-30 seconds.
12. Snatching the toes  
Using the tips of your fingers and thumbs briskly snatch the toes using alternating movements. Do this for 10-20 seconds.
13. Tapotement to the toes  
With your hands open and fingers spread apart briskly slap and tap the toes, rotating hand over hand.
14. Complete the massage with effleurage as described in step 1.

A paraffin treatment could be applied after massage following the same procedure for the hands. Remove excess cream and/ or oil if the client is not having a paraffin treatment.



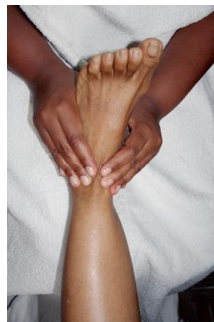
*Effleurage to leg*



*Kneading toes to heal*



*Thumb frictions to plantar surface*



*Kneading ankles*



*Kneading Achilles tendon*



*Topotement to the calf muscle*



*Rotating toes*



*Snatching toes*



*Tapotement to toes*



## Activity 17: Checklist of application of pedicure

Use this checklist as a guide to help you evaluate your performance in carrying out pedicure. Did you?

TASK	Client 1		Client 2		Client 3		Client 4		Client 5	
	yes	no	yes	no	yes	no	yes	no	yes	no
Communicate effectively with client to establish requirements										
Consult effectively taking account of critical factors										
Agree with client on expected outcome										
Record client information accurately										
Prepare for nail care treatment										
Select appropriate tools and products										
Inspect nails										
Apply antiseptic										
Remove varnish										
File and bevel nails										
File away dead cells from soles of feet										
Apply cuticle cream to cuticles										
Soak feet in warm, hygienic soapy water										
Remove feet from water and use a foot rasp and file to remove dead cells										
Remove excess cuticles										
Brush nails with warm soapy water and dry feet thoroughly										
Apply massage sequentially & rhythmically										
Remove all traces of oil										
Apply base coat, nail varnish and top coat										
Complete service in a time acceptable to client and industry										
Provide correct advice and information on further treatments										
Explain after care procedures										
Record client information accurately on client's record card										
Observe safe and hygienic practices										





## Feedback

*The activity will help you to find out whether you can carry out a pedicure efficiently applying the knowledge, skills and good attitude to your work.*

## Summary Unit 8: Applying a Pedicure Treatment

In Section 1 you learned about the procedure for carrying out a pedicure. The principles are similar to manicure: project a professional image, communicate effectively, agree with client on the desired finish, and assess the client's skin and nails to determine if there are any contra indications to treatment. It is important to set up your work station in an orderly manner and to carry out the pedicure sequentially.

The table below gives an overview of the sequence of a pedicure treatment.

*Table 9: Pedicure sequence*

1. setup work station	8. Apply cuticle cream
2. seat your client	9. Soak feet
3. Place one of client's feet on paper towel next to the pedi spa	10. Remove feet from water, dry them and use foot rasp and then foot file to smoothen skin
4. Place the other foot on the paper towel on your lap	11. Apply cuticle remover and remove excess cuticle
5. Sanitise foot	12. Apply exfoliant to feet and rinse off
6. Cut and file toenails	13. Bevel nails
7. Remove dead skin cells from soles of feet using a foot file	14. Apply polish

In Section 2 we learned about the procedure for foot and leg massage. You would have noticed that the same 4 classical massage movements were applied as in the massage of the hands, effleurage, petrissage, tapotment and frictions. You must remember to apply heavier pressure when doing a foot and leg massage. The reason for this is that the calf muscles are deeper and more bulky than those in the arm. Massaging the soles of the feet also requires more pressure than the palms of the hand.

Remember to apply more pressure as you move towards the heart and a lighter pressure on the return movement. Unlike hand and arm massage you will use more tapping and pounding movements. This massage is also more

vigorous as the intention is to push the blood back to the heart from the legs, soften hardened muscles and generally stimulate blood and lymph circulation.

A basic pedicure takes 30-45 minutes. However if you are giving a special treatment, such as a paraffin treatment, you should complete the pedicure within 60 minutes.

Check with the observation checklist, Activity 17, to determine your level of competence. Remember our motto, “Practice Makes Perfect.”



### Exemplar Log Book

Table 10 : Log book

Client	Treatment details	Reflection	Date
Moses Roberts	Manicure Used 180 grit file; soaked; cuticle work; no polish; massage	Treatment was 1 hour instead of 30 minutes. Forgot to establish client's requirements. Client was satisfied with the outcome. He made a future appointment.	12/ 9/ 2013

*Use your log book routinely to keep track of your progress and as evidence of the number of treatments completed.*

## Glossary

### a

Abductors	muscles that separate fingers and toes
Acetone	a chemical used to remove nail varnish
Acid mantle	an acid barrier of the skin that prevents infection and loss of moisture
Adductors	muscles that draw fingers and toes together
Alkalinity	a condition that encourages the breakdown of cells and infection. It has a pH of 7 -14
Antiseptic	a solution used to prevent wounds from becoming septic
Appendage	an attachment
Assessment	to examine in order to judge or evaluate

### b

Bacteria	micro organisms that may or may not cause disease
Blue nails	nails that appear blue because of trapped blood under the nail
Bruised nails	nail with dark, purplish spots due to injury

### c

Calcaneus	heel bone
Carpals	bones of the wrist
Consultation	a discussion to find out important information
Contagious	a disease that passes from one person to another
Contamination	the presence of diseased causing micro organism
Contra-indication	a condition that prevents treatment
Corrugations	wavy ridges on the nail
Cuticle	the overlapping skin around the base of the nail

### d

Decontamination	the removal of disease causing organisms
Desquamation	removal of dead skin cells
Digits	the bones of thanother name for fingers
Disinfection	a chemical form of cleaning which kills most germs
Disposal	throwing away

### e

Effleurage	a slow, sweeping massage movement
Eggshell	nails that are thin, white and unusually flexible
Eponychium	the extension of the cuticle at the base of nail plate, under which the nail plate emerges from the matrix
Exfoliant	a grainy substance used to remove dead skin cells
Extensors	muscles that strighten the wrist and foot



## **f**

Flexors	muscles that bend the wrist and foot
Frictions	small circular movements applied with the thumbs or finger pads
Fungi	parasites on the body that cause disease
Furrows	depressions in the nail

## **g**

Gastrocnemius	the large muscle of the calf
---------------	------------------------------

## **h**

Hyponychium	the part of the epidermis under the free edge of the nail
-------------	-----------------------------------------------------------

## **i**

Infection	invasion of the body tissue by disease causing micro organisms
Inflamed	a condition characterised by redness, pain, swelling and heat
Inflammatory	a condition that shows signs of swelling, redness, heat and blisters. It is not infectious

## **k**

Keratin	a protein that is the chief component of the skin and nails
---------	-------------------------------------------------------------

## **l**

Leuconychia	whitespos on the nail
Lunula	the part of the nail that appears like a half moon

## **m**

Manicure	the care of the hands
Matirx	the part of the nail that produces cells that generate nail growth
Metacarpals	bones of the palm of the hand

## **o**

Onychatrophia	wasting away of the nail
Onychaxis	overgrown nail
Onychia	inflammation of the matirx
Onychophagy	bitten nails
Onychorrhaxis	split or brittle nails
Onychosis	the technical term for nail disease
Onyx	technical term for the nail
Opposable	working opposite to another

## P

Paronychia	an infectious condition of the tissues surrounding the nail
Pathogens	disease causing micro organisms
Pedicure	the care of feet
Perionychium	the collective name given to the nail walls and cuticle area
Petrissage	a massage movement which uses compression and kneading
Phalanges	bones of the fingers
Porous	the ability to absorb liquids and gases
Pronators	muscles that turn the hand to face downwards
Pterygium	abnormal forward growth of the cuticle

## R

Radius	the smaller bone of the forearm
--------	---------------------------------

## S

Sanitise	the lowest level of decontamination
Soleus	a thick muscle located beneath the gastrocnemius
Sterilisation	the highest form of decontamination that kills all germs
Supinators	muscles that turn the hand upwards

## T

Tapotement	a percussion movement
Tinea pedis	the medical term for ringworm of the feet
Tinea unguium	the medical term for ringworm of the nail
Tinea	the medical term for ringworm

## U

Ulna	the larger bone of the forearm
Ultraviolet	radiation produced from light rays

## V

Verrucae	warts on the feet
Virus	organisms living in the body that cause disease

## References

- Thomson Learning, 2000. Milady's standard cosmetology. Milady Publishing Company. Albany. Available at [http:// www.milady.com](http://www.milady.com)
- Gallant, A. 1993. Principles and techniques for the beauty therapist. 3<sup>rd</sup>.Edition. Stanley Thornes, London.
- Nordmann, Lorraine. 1999. Beauty therapy-the foundations. 2<sup>nd</sup>. Edition. MACMILLAN PRESS LTD. London.