Skin Health (4 hours)
Continuing Education Course - Cosmetic Art

Presented by
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Properties of the Skin

Learning Objectives:
• List the layers of the skin
• Explain skin functions
• Describe skin conditions and disorders
• Identify factors that effect skin health
• Define terms relating to disorders.

Introduction: The following information reviews properties of the skin, it's structure and function.

Our level of health is often seen in the appearance of the skin. Environmental elements, hormonal imbalances, and stress can also change the skin's appearance.

Understanding the structure and function of skin can help in helping in maintaining it's good health. Skin is our body's protective covering.

Our skin is varied with types and colorings from person to person. The skin, in a healthy state is very resilient and self-healing. It renews itself in the outer layer every 30 days.

It is the largest organ of the body and is just a few millimeters thick.

It's layers has many functions and activities primarily as a protective covering for our muscles, tendons, bones and organs.

It keeps our internal workings intact, acts as a barrier to bacteria and foreign bodies and secretes natural waste through sweat. Together the sweat and the sebum combine on the skin's surface to form the barrier-like acid mantle.

A vital regulator of temperature, skin acts as our cooling system. We flush when we're hot because blood vessels near the skin's surface dilate to allow more warm blood to circulate closer to the air to cool. When we're cold and need to conserve warmth, the blood vessels contract, so that a pale appearance is produced.

Sense of touch is due to nerve endings in the dermis. They are the reactors of heat, cold touch, pressure and pain.

The skin is not abundantly absorbent as only small amounts of water or oil-soluble substances can penetrate. Ultra-violet radiation can penetrate for the good as in the case of producing vital Vitamin D and for the bad, as with unsafe sun exposure.
Skin layers: Epidermis, Dermis, Subcutaneous Fat

The skin is made up of three distinct layers.

The top layer of skin is called the epidermis.

The word epidermis, and the name of the other main skin layer, the dermis, both come from the name used by the ancient Greeks for the skin, derma.

From this we also get the word dermatologist, meaning a doctor who specialize in skin problems.

The epidermis is translucent.

It allows light to pass partially through it similar to frosted glass.

At the bottom of the epidermis is a very thin membrane, called the basement membrane, which attaches the epidermis to the layer below.

The second layer lies deeper and is called the dermis. It contains blood vessels, nerves, hair roots and sweat glands.

Below the dermis lies a layer of fat, the subcutaneous fat. The depth of this layer differs from one person to another. It contains larger blood vessels and nerves, and is made up of clumps of fat-filled cells called adipose cells.

The subcutaneous fat lies on the muscles and bones and the whole skin structure is attached by connective tissues. The attachment is loose, so the skin can move fairly freely. If the subcutaneous tissues fill up with too much fat the skin cannot move as easily and this is what creates cellulite.

The skin has layers running from the outer epidermis, the dermis and the sub layers of connective tissue. Starting with the skin's outer layer, it is five layered with it's main characteristics being thin in feel, but proactive despite lacking in blood vessels or nerves.

Deep within, new skin cells are continuously formed to replace the constant shedding of surface cells.

The outermost layer is made up of a flexible protein keratin. It is constantly being shed and replaced by the new cells. New skin cells are nourished by the dermis and if nutrient starved, will be poorly formed. However, if they have been fed from the start, the skin will be smooth, and hydrated.

It is important to remove make-up daily so that skin cells can flake off without oil and cosmetics clogging the process. At the same time, the skin's pH between 4.5 and 6 needs to be preserved and not stripped with harsh, dehydrating products.

The thickest, innermost section of the skin is the dual layered dermis, home to several vital structures.

A mesh of twin proteins, collagen and elastin fibers give skin its contours and elasticity. As we age these deteriorate.
The sebaceous glands, nerve endings, hair follicles and essential blood vessels all co-exist.

**Sebum secreted from the sebaceous glands lubricates the skin and is slightly acidic in content.** It is also somewhat anti-bacterial.

**Hormonal activity controls the amount of oil that the glands produce.**

Should oil from the pores be overly plentiful, greasy skin and potential eruptions could result. If oil is low the skin will be dry and possibly scaly.

**The third layer of skin is a connective tissue dividing the dermis from the muscular layer.**

In pale people, these vessels can be seen through the epidermis, particularly if the veins widen otherwise known as broken veins.

**If the blood carries plenty of oxygen it will be pink or rosy color.** If the blood is running sluggishly and has lost most of its oxygen the skin will look bluer.

These blood vessels respond to temperature changes. They open up in hot weather, bringing lots of red blood cells - and hence a pink flush to the skin, and close down in the cold; this is why cold skin often looks blue.

In most areas of the body the epidermis is only 35-50 micrometers thick. A micrometer is one-millionth of a meter, one-thousandth of a millimeter. On the palms and the soles it is usually much thicker, up to several millimeters.

### Functions of the skin

<table>
<thead>
<tr>
<th>Function</th>
<th>Description</th>
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<tbody>
<tr>
<td>Absorption</td>
<td>Substances can enter the body through the skin.</td>
</tr>
<tr>
<td>Excretion</td>
<td>Sweat glands within the skin puts out perspiration.</td>
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<tr>
<td>Heat regulation</td>
<td>Skin maintains our 98.6 °F body temperature.</td>
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<tr>
<td>Protection</td>
<td>Skin protects us from bacteria and viruses.</td>
</tr>
<tr>
<td>Secretion</td>
<td>Sebum is created by the sebaceous glands within the skin.</td>
</tr>
<tr>
<td>Sensation</td>
<td>Feeling cold, heat, pain and pressure.</td>
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</table>

Although we think of the skin as a single organ, the epidermis and dermis have, to some extent, separate functions.

The function of water conservation is however dependent on both; the role of the stratum corneum in this field is absolutely vital, as it acts as a semipermeable barrier and allows us to survive in a hostile environment.
The epidermis has three principal functions:
• protecting the body from the environment, particularly the sun
• preventing excessive water loss from the body
• protecting the body from infection.

Epidermis is made up of:
• stratum corneum (horny layer)
• keratinocytes (squamous cells)
• basal layer

Dermis: The dermis contains:
• blood vessels
• lymph vessels
• hair follicles
• sweat glands
• collagen bundles
• fibroblasts
• nerves

Subcutis: The subcutis is the deepest layer of skin. The subcutis consists of a network of collagen and fat cells. It helps conserve the body’s heat and protects the body from injury.

- **Hypertrophies (excessive growth)**

<table>
<thead>
<tr>
<th>Mole</th>
<th>A small spot on the skin that can be flat or raised. It is sometimes genetically inherited and its colors can range from tan to brown or bluish black.</th>
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</thead>
<tbody>
<tr>
<td>Polyp</td>
<td>A growth on the body that sometimes extends from the surface of the skin and others within the skin.</td>
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<tr>
<td>Skin Tag</td>
<td>A bead-like fibrous tissue that protrudes from the surface of the skin and is sometimes a dark color</td>
</tr>
<tr>
<td>Verruca</td>
<td>A wart, a viral infection of the epidermis and non cancerous.</td>
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Moles
According to recent research, certain moles are at higher risk for changing into cancerous growths, including malignant melanoma, a form of skin cancer.

Moles that are present at birth and atypical moles have a greater chance of becoming malignant.

Warts
Warts are non-cancerous skin growths caused by the papillomavirus.

Warts are more common in children than adults, although they can develop at any age.

Warts can spread to other parts of the body and to other persons.

There are many different types of warts, due to many different papillomavirus types, more than 100.

Warts are not painful, except when located on the feet. Most warts go away, without treatment, over an extended period of time.

<table>
<thead>
<tr>
<th>Types of Warts</th>
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</thead>
<tbody>
<tr>
<td>common warts</td>
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<tr>
<td>flat warts</td>
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<tr>
<td>filiform warts</td>
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</tbody>
</table>

Skin cancers
Skin cancer is more common in fair-skinned people - especially those with blond or red hair, who have light-colored eyes. Skin cancer is rare in children.

Types of Skin Cancers

<table>
<thead>
<tr>
<th>Types of Skin Cancers</th>
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</thead>
<tbody>
<tr>
<td>Basal Cell Carcinoma</td>
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<tr>
<td>Malignant Melanoma</td>
</tr>
<tr>
<td>Squamous Cell Carcinoma</td>
</tr>
<tr>
<td>Tumor</td>
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</tbody>
</table>
The following terms and definitions are common in the practice of professional Esthetics. One or more of these conditions can be seen on a regular basis in a busy salon.

### Disorders of the Sebaceous Glands

<table>
<thead>
<tr>
<th>Term</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>Acne Rosacea</td>
<td>The chronic inflammatory congestion of the cheeks and nose</td>
</tr>
<tr>
<td>Acne Simplex</td>
<td>The chronic inflammatory disorder that usually related to hormonal changes and overactive sebaceous glands</td>
</tr>
<tr>
<td>Acne Vulgaris</td>
<td>Acne pimples</td>
</tr>
<tr>
<td>Comedones</td>
<td>Blackheads, keratinized cells and hardened sebum</td>
</tr>
<tr>
<td>Cysts</td>
<td>Round, body fluid filled sac within the dermis caused by a ruptured follicle</td>
</tr>
<tr>
<td>Furuncle</td>
<td>A boil, which is a subcutaneous abscess that fills with pus</td>
</tr>
<tr>
<td>Milia</td>
<td>Whiteheads, which is an accumulation of dead, keratinized cells and sebaceous matter trapped beneath the skin's surface</td>
</tr>
<tr>
<td>Pimples</td>
<td>A follicle filled with oil, dead cells, bacteria and pus</td>
</tr>
</tbody>
</table>

Acne scars are often the end result of sebaceous gland disorders.

### Types of Acne Scars

<table>
<thead>
<tr>
<th>Scar Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acne Pit Scar</td>
<td>Sunken appearance, caused by pimples or cysts</td>
</tr>
<tr>
<td>Raised Scar</td>
<td>Lump of raised tissue on the surface of the skin, caused where cysts have clumped together</td>
</tr>
<tr>
<td>Ice Pick Scar</td>
<td>Large, open pore appearance, as if scarred with an ice pick, caused by deep pimples or cysts</td>
</tr>
</tbody>
</table>

Acne is a disorder involving the hair follicles and sebaceous glands. The glands become clogged, leading to pimples and cysts. Acne is very common - nearly 17 million people in the US are affected by this condition.

The sebaceous glands produce sebum that normally travels via hair follicles to the skin surface. However, skin cells can plug the follicles, blocking the sebum coming from the sebaceous glands.

When follicles become plugged, bacteria begins to grow inside the follicles, causing inflammation.

Eventually, the plugged follicle bursts, spilling oil, skin cells, and bacteria onto the skin surface. In turn, the skin becomes irritated and pimples or lesions begin to develop. Acne can be superficial or deep.
Acne can occur anywhere on the body. However, acne most often appears in areas where there is a high concentration of sebaceous glands, including the following:

• face  
• chest  
• upper back  
• shoulders  
• neck

The following are the most common signs of acne.
• blackheads  
• whiteheads  
• pus-filled lesions that may be painful  
• nodules (solid, raised bumps)

In this study, we have reviewed specific properties and elements of the skin to include the study of skin layers, skin conditions and terms used by the professional Esthetician.

▶ Esthetics: the Facial

Lesson Objectives:
• Identify environmental impact on the skin  
• Define sunburn  
• Describe cell regeneration of aging skin  
• Explain aging skin  
• List the benefits of a facial  
• Identify materials and equipment required for the basic facial  
• Describe procedures of a facial  
• List and define product ingredients

Introduction: The following information reviews important aspects of the skin including the impact of environmental elements, and the benefits of a professional facial.
The professional facial is universally recognized as the most relaxing service available to us today.

We enjoy the benefits to our skin as well as the esthetic sense of well being as the restful yet stimulating experience unfolds.

To get the best results from facials the client should come on a regular basis to maintain healthy skin and reverse environmental damage.

**Environmental Impact on the Skin**

The sun produces enormous amounts of heat and light, some of which reaches the earth. Without this heat and light there would be no life.

Unfortunately the **sun also produces less beneficial rays, which are completely invisible to us, called ultraviolet radiation.**

Part of this radiation is **reflected by the stratum corneum** at the skin surface, part is absorbed by the melanin in the epidermal cells, and some is scattered within the skin.

All three processes contribute to the vital function of protecting the nuclei of the cells in the epidermis and the collagen of the dermis.

This **scattered radiation creates a lot of high-energy particles, which are called free radicals.** Free radicals are very reactive, and attack the constituents of the skin: this is why over a long time ultraviolet radiation produces so much damage.

Sunlight reflected from snow can damage our skin because it contains a substantial proportion of ultraviolet radiation.

**Esthetics: Sunburn and the Skin**

The following are the most common signs of a sunburn. However, each individual may experience these differently. They may include:

- redness
- swelling of the skin
- pain
- blisters
- dry, itching, and peeling skin days after the burn
**Water and the skin**
Throughout our lives our bodies naturally lose water by constant gentle evaporation through our skins trans-epidermal water loss, although we are unaware of the process.

Preventing excessive water loss is exceptionally important. In the normal epidermis the water content gets less the closer it gets to the surface.

*Water makes up to 70-75% of the weight of the basal layer,* but only 10-15% of the stratum corneum. The stratum corneum is a particularly important barrier to the control of moisture loss.

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**Esthetics: Cell Regeneration of the Skin**
With increasing age, the skin's cell renewal process becomes less efficient.

- Tissue *repair* and cell *regeneration* slow down.
- The amount of natural moisture present in the skin is reduced.

Because collagen production is less, the skin becomes thinner and loses its flexibility.

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**Esthetics: Aging Skin**

The most obvious sign of aging is a *decrease* in the overall thickness of the epidermis as a whole, with a reduction in the number of cell layers.

Metabolism in the skin slows down. So does the rate at which epidermal cells are produced, which may interfere with wound healing.

The time necessary to repair the stratum corneum barrier increases considerably with age: the replacement of *skin* cells takes about twice as long for people over 75 as for those around 30.

Although the sebaceous glands themselves do not change much with increasing *age,* sebum production declines in many older people, especially after the age of 70.

Most older people have *dry* skin and therefore have a special need to avoid the over-use of harsh soaps and detergents, in order to prevent problems associated with dryness.

Aged skin retains its fundamental ability to control water loss, but may partially lose this ability if the stratum corneum barrier becomes damaged by physical or chemical agents. Many substances will penetrate aged skin more easily than young skin.
The Appearance of Aging Skin
As we grow older, the skin loses its firmness and **elasticity**. Patches of discoloration and areas of dilated blood vessels appear. On exposed areas of aged skin, such as the **face**, the skin patterns of discoloration can often increase.

**Reasons for the changing appearance:**

* blood circulation in the skin slows down
* glandular activity slows down
* changes take place in the skin tissues
* sebaceous glands diminish in activity
* collagen production decreases

The professional esthetician knows the techniques and products that must be applied in order to get the visible results that the client is looking for such as better skin tone, texture and overall appearance.

There are 2 categories of facials:
**Preservative:** maintaining good health and **Corrective:** correcting skin conditions.

For a preservative facial, we focus on maintaining the good condition of our client using cleansing methods, increasing circulation, relaxing the nerves and activating the skin glands through manipulations.

For a corrective facial, we focus on correcting one or more facial conditions such as oiliness, dryness, blackheads, age lines and minor acne.

The benefits of a facial include:

- Cleansing the skin
- Increasing circulation
- Activating glandular activity
- Relaxing the nerves
- Maintaining muscle tone
- Strengthening weak muscle tissue
- Improving the skin's condition
- Helping prevent the formation of wrinkles and age lines
- Softening and improving skin texture and complexion
- Adding to the client's confidence

The facial experience begins by helping the client to relax by speaking in a calming quiet manner.
A professional esthetician will explain the benefits of the products and services and will answer any questions that the client may have.

In order for the client to relax, she must feel that she is in a calming environment. The biggest key to a successful calming environment is quietness.

The ability to work quietly and efficiently brings confidence to the client that she will have a high quality experience.

The professional esthetician will keep all work areas neat and clean and above all, sanitary. Disorganization can not be a part of the professional esthetician's environment.

Work habits must be above average setting high standards in all elements of client service.

**Being sanitary with products by only using clean, disposable spatulas is the only way to guarantee that no products will be contaminated.**

The product must not be contaminated inside the container by a used implement as well as the product must not be contaminated that is being used on the client.

Prearrange all implements that you will need prior to the arrival of your client. **Follow systematic procedures.**

**Warm your hands before touching the client if your hands are cold and keep your nails smooth and free from anomalies that might scratch or injure your client.**

The professional esthetician will naturally develop their own list of favorite products and equipment as they achieve better results with what they use.

But there are basics on the list of items that are standards in the industry and that we can not do without.

The most useful items are as follows:
1) Absorbent cotton
2) Antiseptic lotion
3) Astringent
4) Clean sheet or other covering
5) Cleansing cream or lotion
6) Cleansing tissues
7) Cotton pads
8) Cotton swabs and pledgets
9) Facial steamer
10) Freshing lotion – mild astringent
11) Gauze for the mask
12) Head band or head covering
13) High frequency machine
14) Infrared lamp
15) Lubricating oil
16) Magnifying lamp
17) Makeup tray
18) Mask
19) Moisturizer and protective lotion
20) Safety and bobby pins
21) Salon gown
22) Spatulas
23) Sponges
24) Tissue strips
25) Towels

**The Prepared Esthetician**

Gathering and organizing elements from the list above should never become a daunting task.

To the professional esthetician, it is a pleasure to provide high quality services to our worthy clients in order to develop the reputation that we all aspire to.

The appreciation of the client is unmeasurable when they tell all of their friends what a great experience it was to be served in such an outstanding way.

For the client, it is easy to detect disorganization and unpreparedness. This impression leads to an end result in which the client may never return.

The client may never show signs of dissatisfaction and you still may get your anticipated tip, but she may never call and make an appointment again if she is dissatisfied.

Repeat business is where you can see your diligence and consistency in the area of preparedness, organization, and sanitation pay off.

1. **Prepare the client**

   a) Please always greet the client with sincere tones and at least one compliment. This puts the client at ease in the warmth of your personal environment.

   b) Even though the client may have been to your establishment many times, remind her to remove all jewelry and store it in a safe place. Welcome her to keep her handbag nearby during the facial. This is a number one choice in the client's feeling of well being and security. And
we know how many ladies “go nowhere” without their purses far behind.

c) And again, even though your client has been to your salon and could walk with blind folds on, still walk with her and show her to the dressing room and offer assistance if needed.

d) Place a clean towel across the back of the facial chair to prevent contact from the clients bare body parts. Not only is it unpleasant to feel cold vinyl against your bare shoulders, it has a definite impression of uncleanliness and it is an unclean practice.

e) Seat the client and assist if needed, then place the towel across the clients chest. Cover the client with the sheet and fold the top edge of the towel over the sheet. Remove the client's shoes and tuck the sheet around their feet. If they have removed their shoes because your salon provides booties in the dressing room, simply tuck the sheet around their booted feet.

f) Fasten a headband lined with tissue, or a towel, or other head covering around the client's head to protect the hair. Turban designs are very popular and elasticized hair coverings are good as well. The fact that they are cloth or paper makes an acceptable alternative to towels.

Procedures for wrapping the clients head:
1. Fold the towel lengthwise from one of the top corners to the opposite lower corner, and place it over the headrest with the fold facing down. Place the towel on the headrest before the client enters the facial area. When the client is in a reclined position, the back of the head should nest on the towel, so that one side of the towel can be brought up to the center of the forehead to cover the hairline

2. With the other hand, bring the other side of the towel over the center and cross it over.

3. Use a regular bobby pin to hold the towel in place. Check to be sure that all stands of hair are tucked under the towel, earlobes are not bent, and the towel is no wrapped too tightly.

g) Remove lingerie straps from the client's shoulders. If client is given a strapless gown to wear, tuck the shoulder lingerie straps into the top of the gown.

h) Adjust the headrest, then lower the facial chair to a reclining position. Wash your hands

2. Analyze the client's skin

a) Remove makeup to determine:
1. If the skin is dry, normal or oily
2. If fine lines or creases exist
3. If blackheads or acne are present
4. If broken capillaries are visible
5. If the skin texture is smooth or rough
6. If the skin's color is eventually
b) This will determine:
   1. What products you will use
   2. The areas of the face that need special attention
   3. The amount of pressure for manipulations
   4. If lubricating oil or cream is needed around the eyes
   5. Equipment or apparatus to use

3. **Apply cleansing cream**

   a) a tsp of cleansing cream or lotion should be used. Use your spatula to remove this from the container. Lend the cream or lotion with your fingers to soften it. Remove makeup with a moist cotton pad or soft tissue. Be gentle working around the eyes and mouth.

   b) Start at the neck using both hands in a sweeping movements to spread the cleanser upward to the chin, jaws, cheeks and base of the nose to the temples, then along the side and the bridge of the nose. Use a circular motion with fingertips. Use upward sweeping movements between the brows and across the forehead to the temples
   c) Take more cleanser and use long stokes to smooth down the neck chest and upper back

   d) begin at the middle of the forehead and using fingertips and circular motion circle the eyes to the temples and back to the middle of the forehead

   e) Then slide fingers down the nose to the upper lip to the temples and then the forehead – lightly down to the chin – then up the jawline to the temples and forehead

4. **Remove the cleansing cream**

   a) Use tissues, warm moist towels, moist cotton pads, or facial sponges to remove the cleanser. Begin at the forehead and follow the contours of the face. After removal of the cleanser from the face then, proceed to the neck chest and back.

5. **Steam the face**

   a) use warm moist towels or a facial steamer to open the pores. *Steam opens pores* to cleanse blackheads, makeup and other debris and helps to soften superficial lines and increases blood circulation

6. **Apply manipulation cream**

   a) select for the skin type and use the same procedure as with the cleanser
   b) add lubrication oil or cream around the eyes and on the neck

7. **Give facial manipulations**

   a) Cover the clients eyes with cotton pads moistened with water
   b) Manipulate the face using proper procedures

8. **Expose the face to infrared light during or after facial manipulations**

   a) Cover the clients eyes with cotton pads moistened with a mild astringent
   b) Place the lamp at a comfortable distance from the face
   c) Expose the face to infrared rays for 3 to 5 minutes
9. **Remove manipulation cream**
   a) use tissues, moist towels, moist cleansing pads, or sponges.

10. **Apply astringent or mild skin freshening lotion**
    a) Sponge the face with cotton pledgets moistened with the lotion

11. **Apply mask formulated for the client's skin condition.** Leave on 7 to 10 minutes.

12. **Remove the mask with wet cotton pledgets or towels**

13. **Wipe the face with pledgets saturated with a mild astringent**

14. **Apply a moisturizer or protective lotion**

15. **Completion**
    a) discard used disposable supplies
    b) close product containers tightly, clean them and put them away
    c) place used towels, coverlets, and head covers in appropriate containers
    d) tidy up
    e) wash and sanitize your hands

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**Professional Skin Care Products**

Skin care products are designed specifically to improve the appearance and health of the skin.

Knowledge of these products and their ingredients are key in successful esthetic service application and results.

**Basic cleansers**
The skin needs a less harsh choice for cleansing than regular soap. Soap can create dryness and can leave a film on skin, so the better alternatives are face washes, cleansing lotions and cleansing creams.

**The face wash is a detergent based cleanser but is neutral in its pH level.** It foams like soap but is much gentler on the skin. It leaves the face with a tight feeling after rinsing but for those with **oily skin** it is often a good choice because it can get rid of oil.

**The cleansing lotion is water based and is great for normal to combination skin.**

**The cleansing cream is oil based and is a first choice for makeup removal.** It is also great for cleansing dry or aged skin. It must be applied and removed with sponges or clothes in order to completely remove residue.

**Toners (tonic lotions)**

**Toners are astringents that are used after cleansing the skin and before moisturizers are applied.** They can be applied with cotton pads or sprayed on. **Toners vary in strengths containing different levels of alcohol.**
**Categories of Toners:**

**Fresheners** have the lowest level of alcohol content, between 0% and 4% and are recommended for dry or aged skin.

**Toners** have a medium level of alcohol content, between 4% to 15% and are recommended for normal or combination skin. They tend to give the skin a tight feel.

**Astringents** have the highest alcohol content, between 15% to 35% and are recommended for very oily skin including acne conditions. It's easy to over dry the skin when using this level too often.

**Masks and Packs:**

For hundreds of years beauty applications have included masks. They have always included ingredients such as herbs, vitamins and oils.

Many have used seaweed and clay in their formulations due to the high content of nutrients. Skin conditions can be improved by using masks.

*Setting masks* contain ingredients that harden on the face.

*Non-setting masks* stay moist and do not harden.

Masks tighten skin, draw out impurities, hydrate, nourish, and soothe the skin.

As *clay masks* dry and harden, they draw out impurities. It stimulates circulation and contracts the pores of the skin.

These clay formulations contain silica, kaolin, and bentonite.

Commercially made *packs* remain moist and creamy and often contain aloe or seaweed which have healing properties.

*Paraffin* wax masks are used to promote penetration of ingredients by it's warming action. It increases blood circulation and has a softening effect on the skin.

**Paraffin wax application procedure**

1. melt the paraffin – set the warming unit temperature to just above body temperature
2. once melted, test the wax on your own wrist to insure a comfortable temperature has been achieved
3. apply one coat of paraffin to the skin of the face and neck
4. Place pre-cut gauze over the first coat of wax
5. apply wax ¼ inch thick
6. cover the client's eyes with pads
7. the wax will harden after 15 to 20 minutes – use a wooden spatula to work the mask loose
8. lift the mask in one piece

Modelage masks
**Modelage masks are a self-heating application.** When ingredients are mixed together and applied to the client a chemical reaction occurs that self-heats up to 105°F. It takes 20 minutes to heat and then cool down on the client's face.

Moisturizers
After cleansing the skin, apply moisturizer in order to protect and nourish. All skin no matter what the type needs to be moisturized.

The formula of moisturizer is chosen according to the condition and type of the skin. Moisturizers contain ingredients that help the skin retain it's moisture.

**Product Ingredients**
The following ingredients are found in skin care products.

- **Alcohol**: SD alcohol aka ethanol
- **Algae**: derived from minerals
- **Allantoin**: man-made chemical from uric acid – has healing qualities
- **Aloe**: from the aloe leaf – has hydrating, healing, antimicrobial and anti-inflammatory properties
- **Alum**: man-made compound – from aluminum, potassium or ammonium sulfate – stops bleeding
- **Azulene**: from the chamomile plant – anti-inflammatory properties
- **Benzyl peroxide**: drying properties
- **Calendula**: plant extract with anti-inflammatory properties
- **Carrot**: used to color and contains vitamin in it's oil
- **Chamomile**: plant extract with soothing properties
- **Collagen**: from cow placentas – a protein
- **Essential oils**: herb oils
- **Glycerine**: from oils or fats, used as a softener
- **Hyaluronic acid**: water binding properties
- **Jojoba**: lubricant, moisturizer
- **Lanolin**: sheep's wool derivative, emollient
- **Liposomes**: transporting delivery system of hollow spheres that carry nutrients to the skin
- **Mineral oil**: petroleum based, emollient
- **Parabens**: preservative
- **Silicone**: emollient that leaves a film
- **Sodium bicarbonate**: baking soda, use as a pH adjuster
- **Squalane**: derived from olives, nourishes
- **Sulfur**: reduces oil gland activity
- **Titanium dioxide**: blocks UV rays
- **Urea**: helps other substances penetrate into the skin
- **Witch Hazel**: ingredient in toner, astringent qualities, derived from bark
- **Zinc Oxide**: healing agent from zinc ore

The cosmetic industry has a large selection of professional products for the Esthetician to choose from.

The professional Esthetician will make her choices from these products in order to best serve the clients' needs.

The combination of knowing the functions of the skin and recognizing skin conditions are irreplaceable in choosing the products used. Results are strongly based on these factors.