

# Cauvery College for Women (Autonomous)

Nationally Accredited (III Cycle) with 'A' Grade by NAAC

Annamalai Nagar, Tiruchirappalli-18.



Name of the Faculty : **B.THANUJA**

Mobile Number : 9894700414

Designation : Associate Professor

Department : Food Service Management &  
Dietetics

Programme : Bsc., Nutrition & Dietetics

Batch : 2016-2017 Onwards

Semester : VI

Course Title : **Dietetics –II**

Course Code : **16SCCND8**

Unit : III

Topics Covered : Nutritional Care For Burns

# NUTRITIONAL CARE FOR BURNS



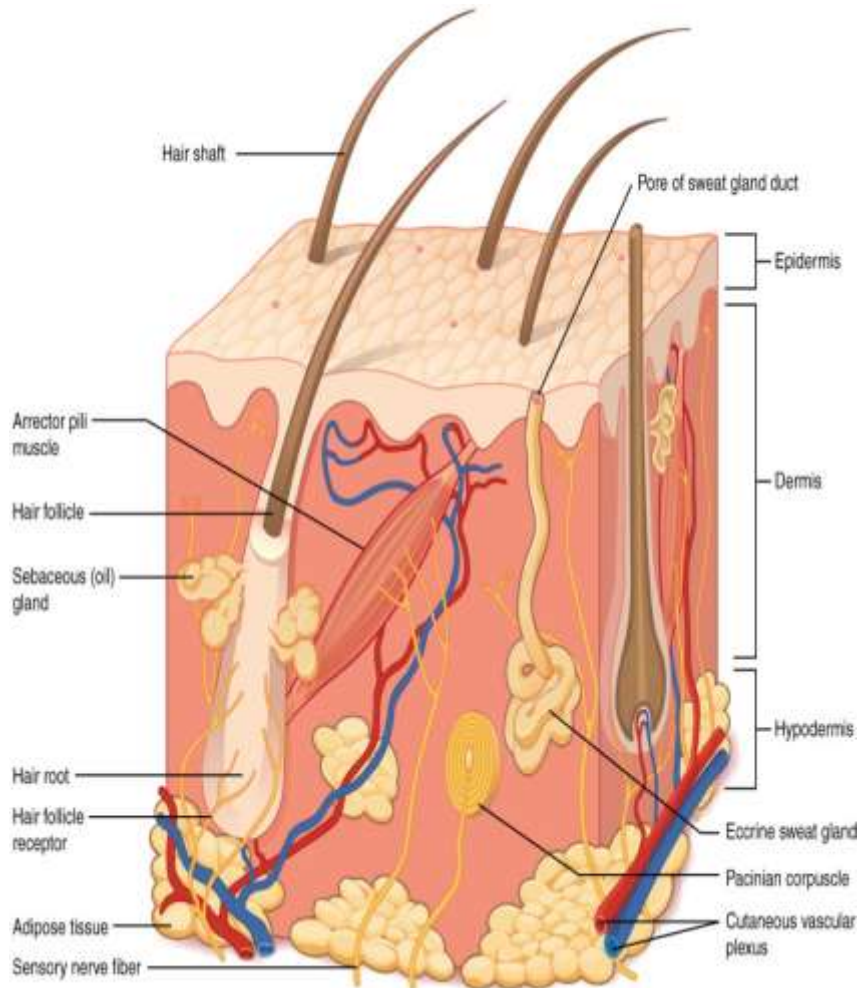
**B.THANUJA**  
**ASSOCIATE PROFESSOR & HEAD**  
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**CAUVERY COLLEGE FOR**  
**WOMEN(AUTONOMOUS)**  
**TRICHY.**

**Skin** is a vital organ that covers the entire outside of the body, forming a protective barrier against pathogens and injuries from the environment.

The skin is the body's largest organ, covering the entire outside of the body, it is about 2 mm thick and weighs approximately six pounds.

It shields the body against heat, light, injury, and infection. The skin also helps regulate body temperature, gathers sensory information from the environment, stores water, fat, and Vitamin D, and plays a role in the immune system protecting us from disease.

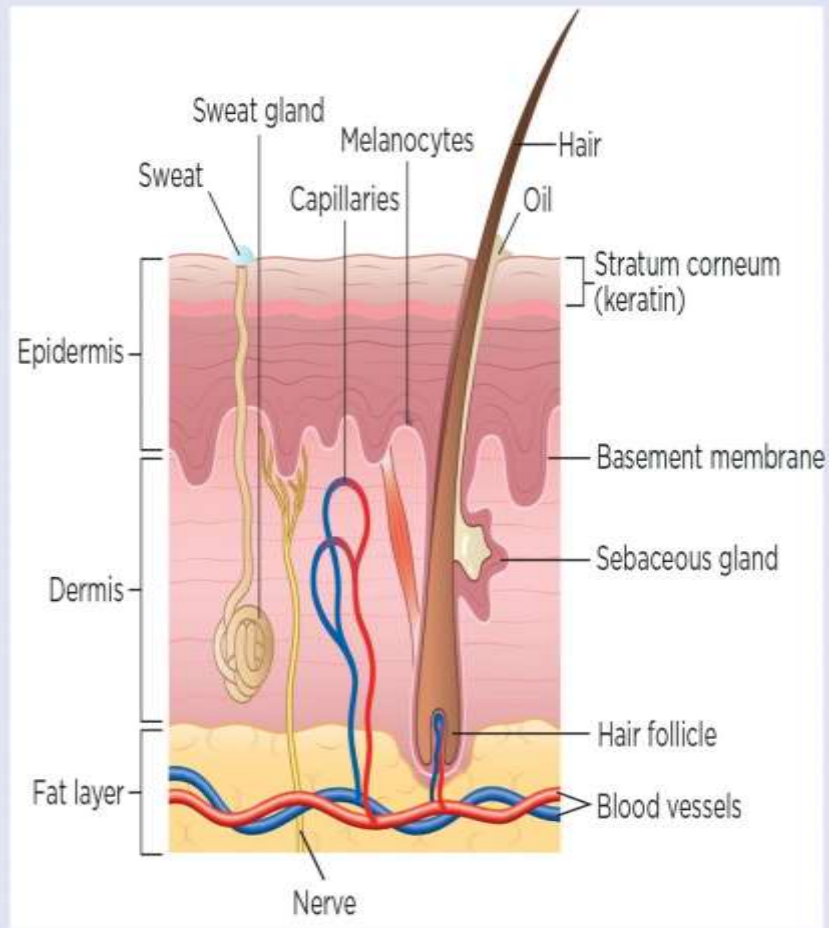
# The skin has three layers



- **Epidermis**
- **Dermis**
- **Fat layer**  
**(also called the subcutaneous layer)**

# SKIN - LAYERS

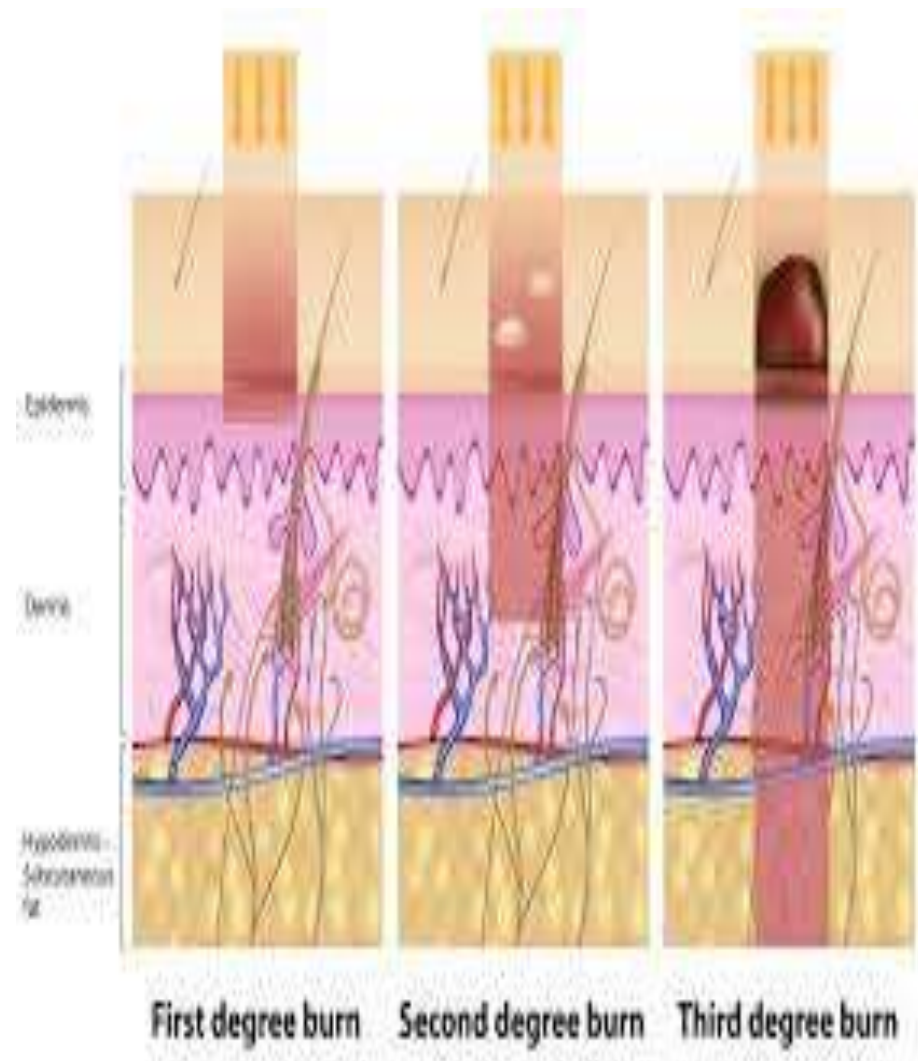
Fig 1. Cross-section through the skin



- **The outer layer of skin is called the epidermis, it is a tough protective layer that contains the melanin producing melanocytes.**
- **The second layer (located under the epidermis) is called the dermis, it contains nerve endings, sweat glands, oil glands, and hair follicles.**
- **Under these two skin layers is a fatty layer of subcutaneous tissue known as the subcutis or hypodermis.**

## TYPES OF BURNS

- **First-degree** burns are considered mild compared to other burns. They result in pain and reddening of the epidermis (outer layer of the skin).
- **Second-degree** burns affect the epidermis and the dermis (lower layer of skin). They cause pain, redness, swelling, and blistering.
- **Third-degree** burns go through the dermis and affect deeper tissues. They result in white or blackened, charred skin that might be numb.

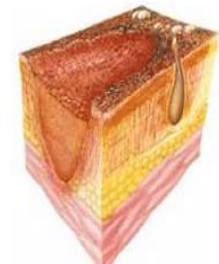
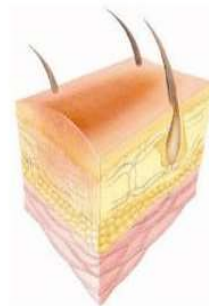


# TYPES OF BURNS



## Depth of Burn

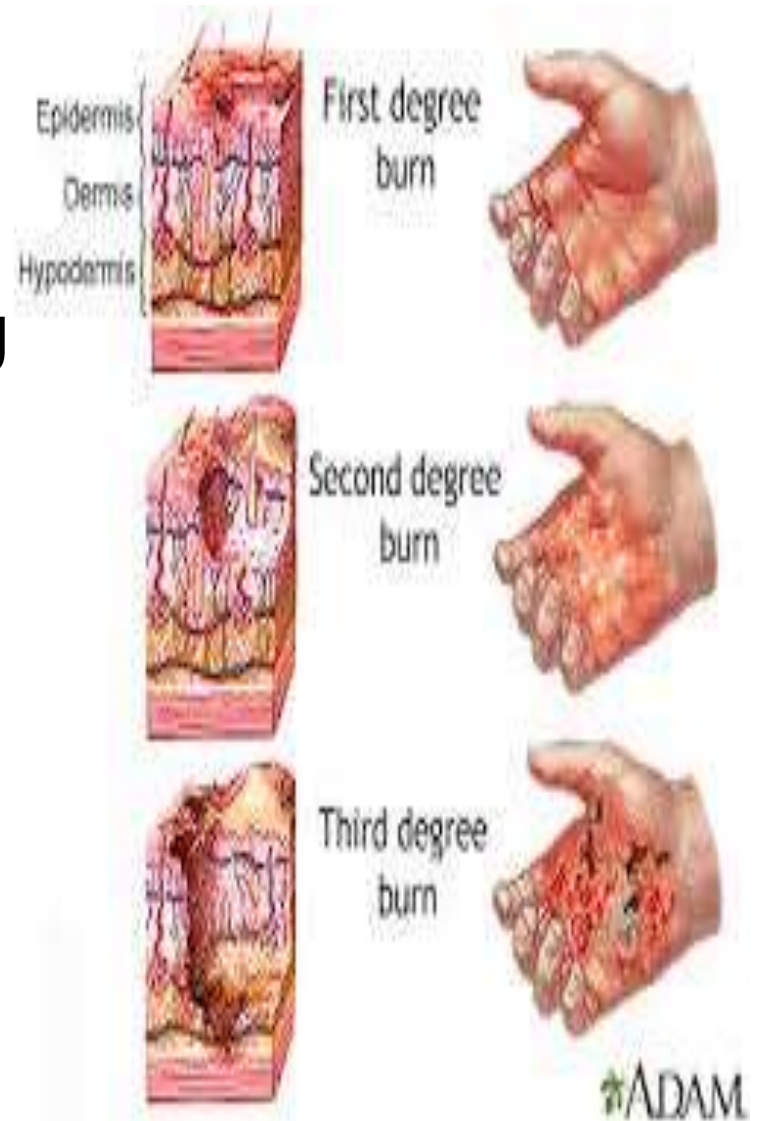
- Superficial (involving epidermis)
- Partial thickness (involving epidermis and dermis)
- Full thickness (destruction of epidermis and dermis and any or all underlying structures [fat, muscle, bones and nerves])





# BURNS HAVE A VARIETY OF CAUSES INCLUDING

- Scalding from hot, boiling liquids
- Chemical burns
- Electrical burns
- Fires, including flames from matches, candles, and lighters



## SYMPTOMS

- **First degree or superficial burns** involves the upper skin layer. They produce redness (erythema) and pain (tenderness). Blisters are absent. They are typically caused by exposure of the unprotected skin to solar radiation (sun burn) or to brief contact with hot substances, liquids or flash flames (scalds). First-degree burns heal within a week with no permanent changes in skin color, texture, or thickness.
- **Second degree or partial thickness burns** affect deeper skin layers. Symptoms are more severe and usually include blisters. Deep second-degree burns take more than three weeks to close and are likely to form hypertrophic scars.
- **Third degree or full thickness burns** involve all skin layers, there may be no pain in the initial stages. Due to extensive destruction of the skin layers third-degree burn wounds cannot regenerate themselves without grafting.

# GOALS OF NUTRITIONAL MANAGEMENT

- To promote optimal wound healing and rapid recovery from burn injuries.
- To minimize risk of complications, including infections during the treatment period.
- To attain and maintain normal nutritional status.
- To minimize metabolic disturbances during the treatment process.

## NUTRITIONAL MANAGEMENT

- Enteral feeding should be commenced early.
- Aggressive nutritional support is often required.
- Protein requirements are substantially increased.
- Fluid intake to be increased
- An increased requirement exists for nutrients associated with healing and immune function.
- Provision of nutrients known to be associated with healing and immune function, particularly vitamins A, C, E, some B vitamins and zinc, is especially important



THANK YOU