

# THE SKIN 2

## *Skin Appendages*

# Skin Appendages

1. Hair Follicles and hair
2. Sweat Glands (Eccrine or merocrine sweat glands Apocrine sweat glands)
3. Sebaceous glands
4. Nails

# Hair and hair Follicles

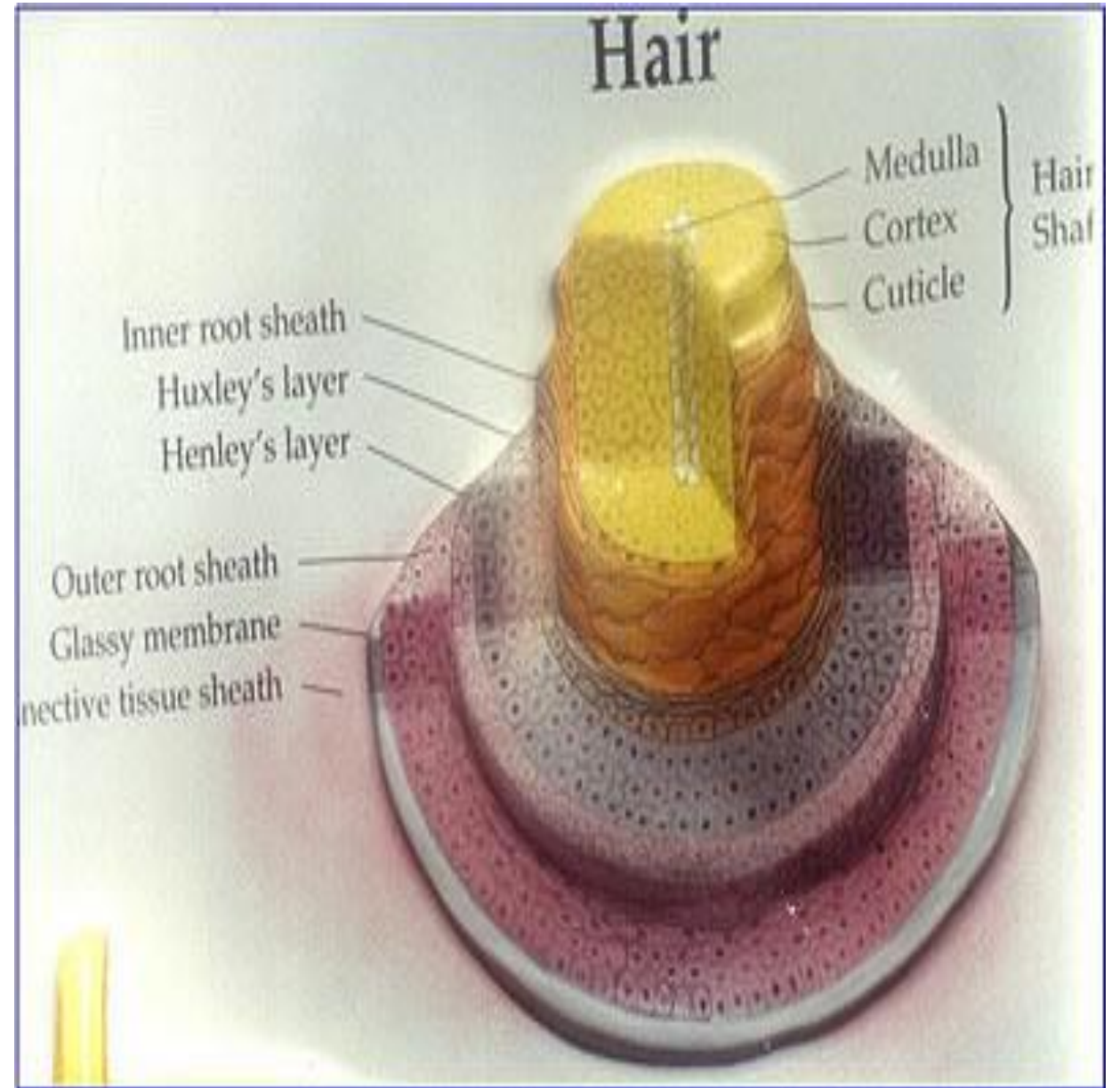
Hair -Produced by hair follicle which are made of hard keratinized epithelial cells

Melanocytes provide pigment for hair color.

# Hair Anatomy

## Hair anatomy

- Central medulla
- Cortex surrounds medulla
- Cuticle on outside of cortex
- Most heavily keratinized



# Associated hair structures

## Hair follicle

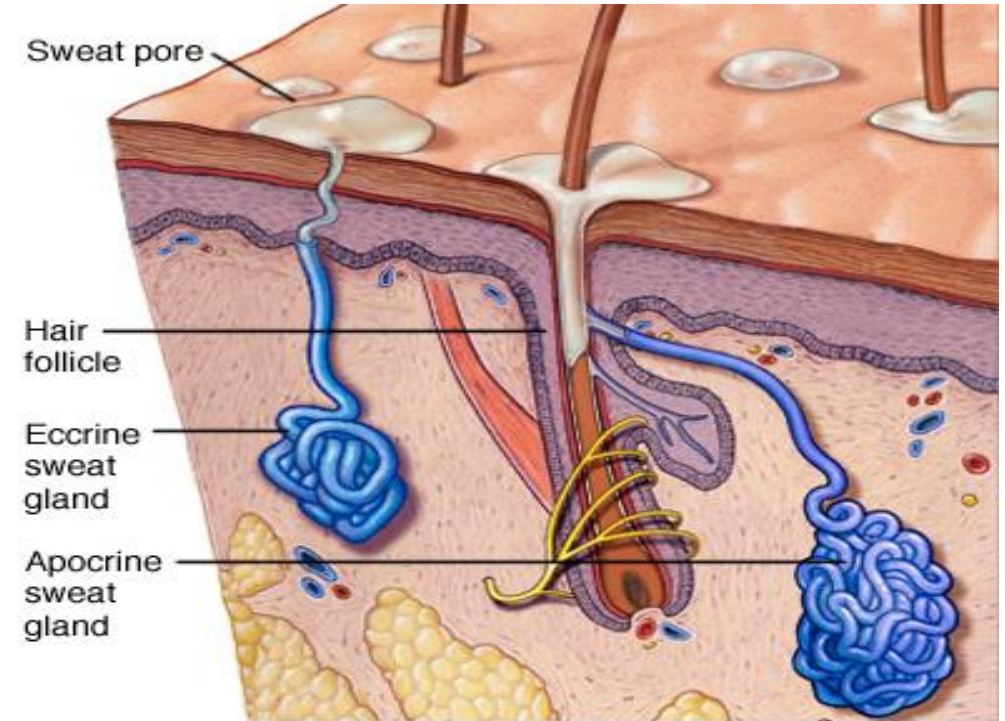
Dermal and epidermal sheath surround hair root

## Arrector pili muscle

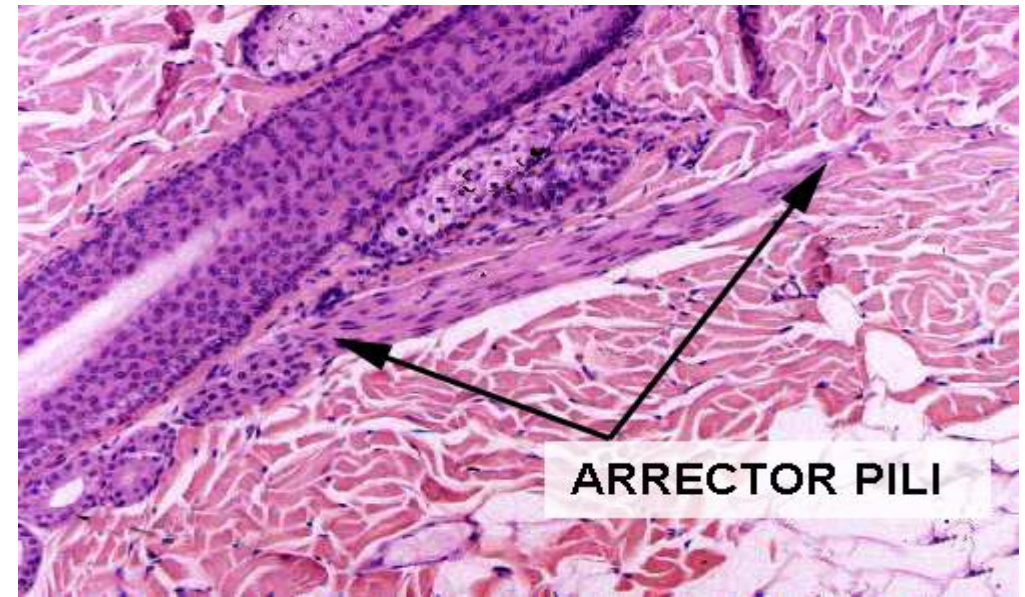
Smooth muscle

Pulls hairs upright when cold or frightened

## Sebaceous gland

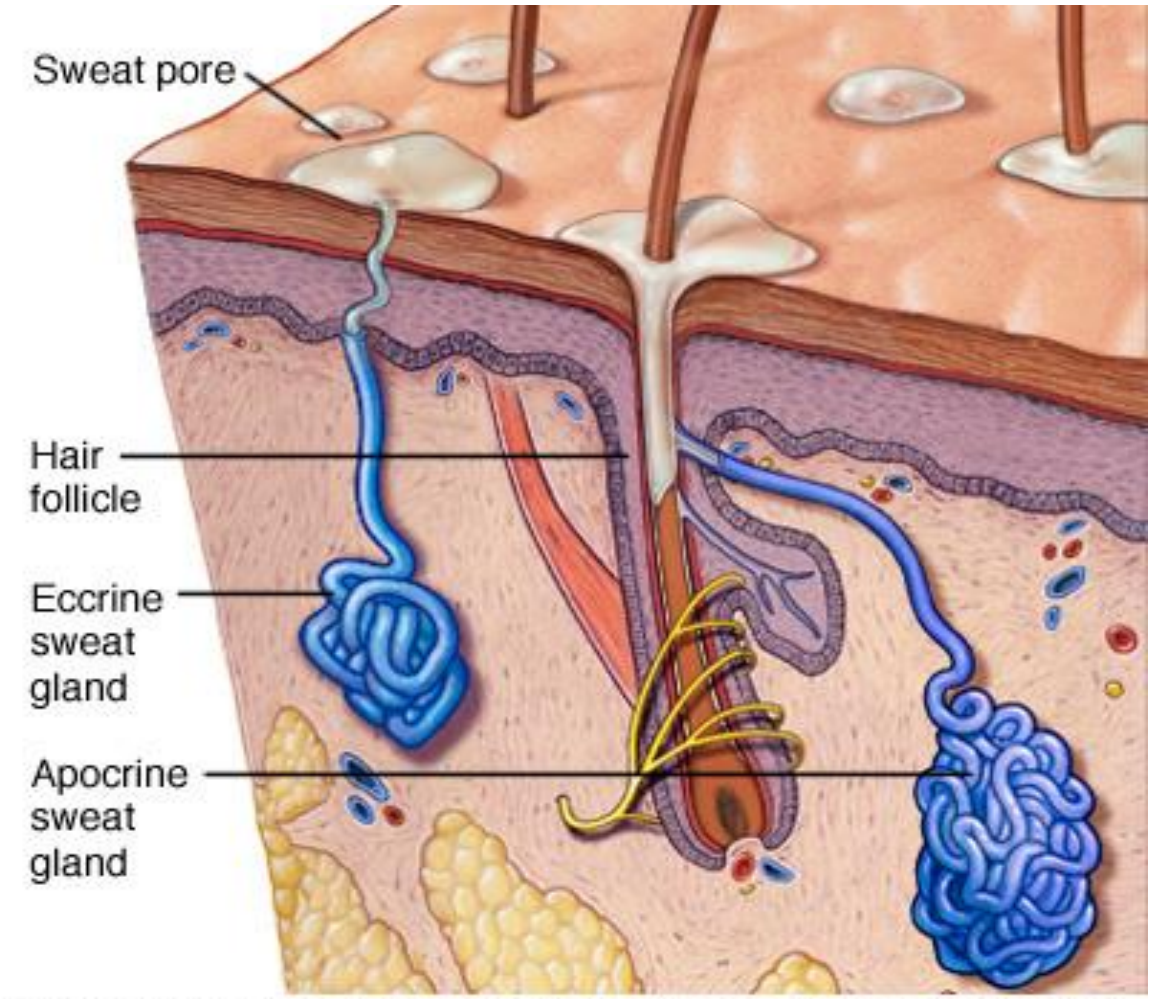


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# Sebaceous glands

Sebum discharged mostly into hair follicles (lubrication & bactericidal)



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# Sweat Glands

## ECCRINE SWEAT GLANDS

- Merocrine secretion
- Empty directly via pores onto skin surface
- Location: most all over body (esp. abundant on palms & soles, Forehead ~ 500/cm<sup>2</sup>)
- Clear, watery secretion (99% H<sub>2</sub>O; rest NaCl + some waste products.
- Structurally simple-Coiled tubular gland
- Secretory part lies coiled in the dermis

## APOCRINE SWEAT GLANDS

- Empty into hair follicle
- Location: armpits, ano-genital region, nipples,
- Viscous, cloudy secretion \_ contains fatty acids and protein- good nutrient source for bacteria (odor !!)
- Secretion may contain Pheromones
- Secretion begins at puberty and is stimulated during emotional distress.
- Normally odorless but when decomposed by skin bacteria a “*body odor*” is created.

# The Two Types of Sweat Glands in Humans

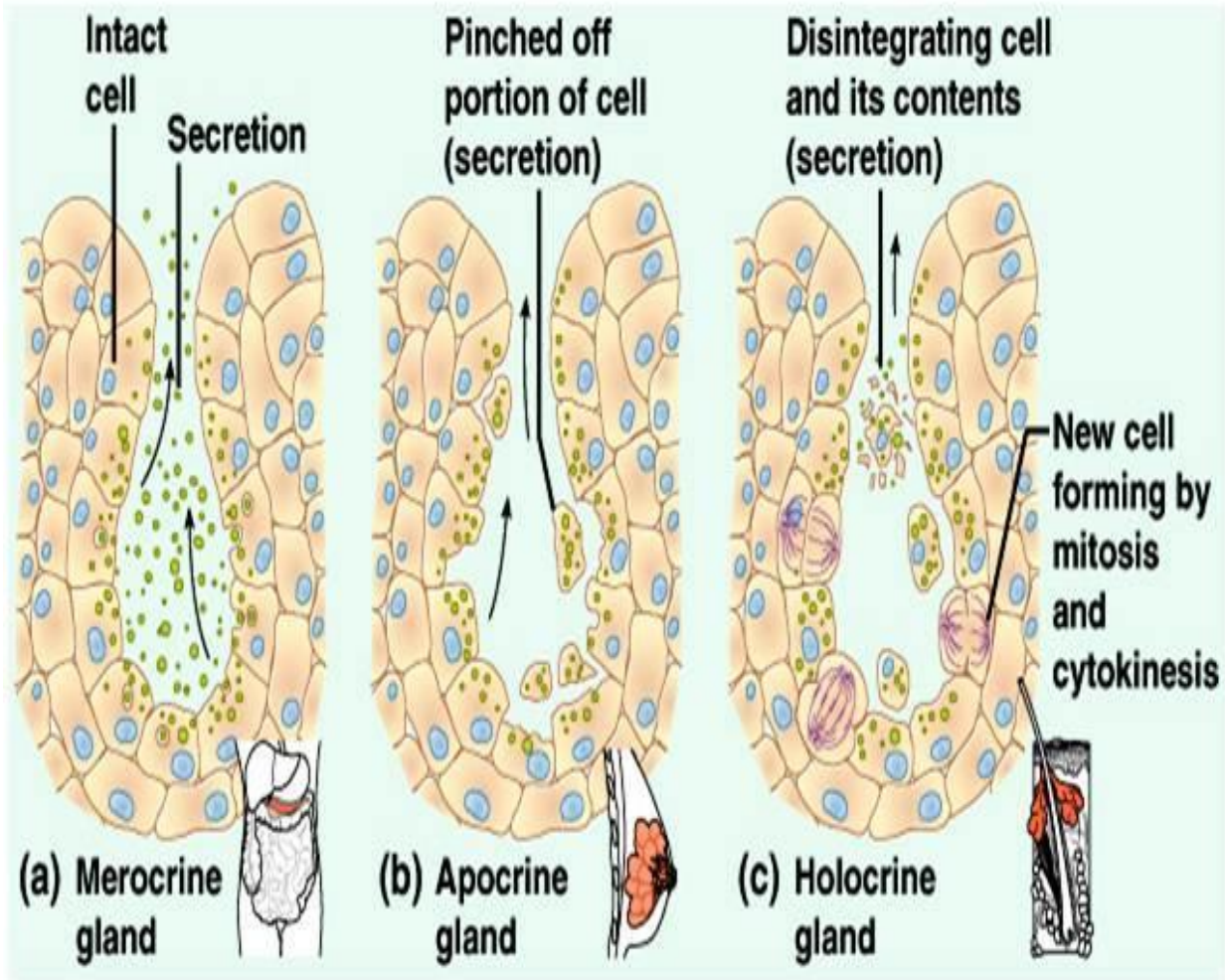


**ECCRINE GLANDS**  
(ALL OVER BODY)



**APOCRINE GLANDS**  
(UNDERARMS AND PELVIC AREA)







# Nails

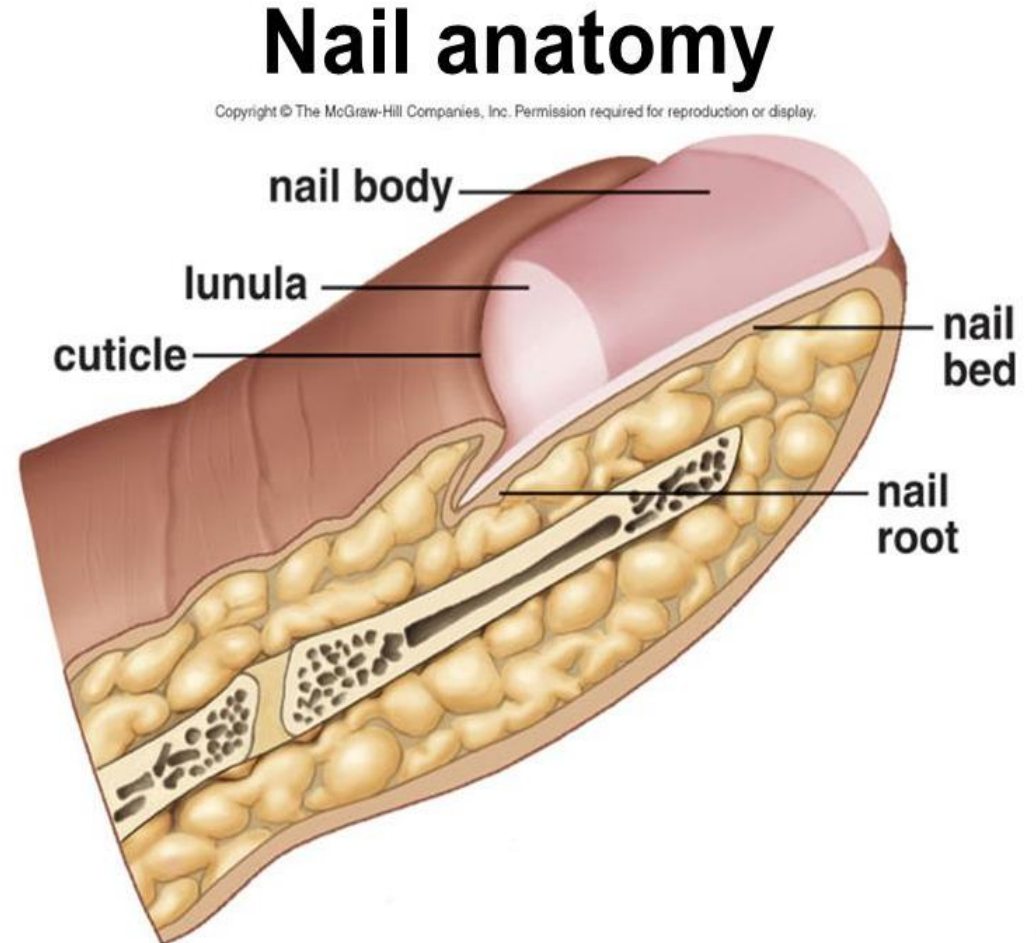


# Nail

- Scale-like modifications of the epidermis
- Heavily keratinized
- Stratum Basale extends beneath the nail bed
- Responsible for growth
- Lack of pigment makes them colorless

## Nail Anatomy

1. Free edge
2. Body is the visible attached portion
3. Root of nail embedded in skin
4. Cuticle is the proximal nail fold that projects onto the nail body



**Applied histology**  
**Common skin problems**

# Skin facts

An average adult's skin

- spans 21 square feet,
- weighs nine pounds, and
- contains more than 11 miles of blood vessels.
- Your skin is your largest organ .
- Blowin' in the wind: Globally, dead skin accounts for about a billion tons of dust in the atmosphere. Your skin sheds 50,000 cells every minute.

# Scabies

**Cause:** mites under skin

**Symptoms:** itching esp. in under arms and genital areas

**Transmission:** scratching, picking up the mites under the fingernails, touching another person's skin, rubbing onto objects like keyboards, toilets, clothing, towels, bedding, furniture,

**Prevention:** wash and hot iron all material.

**Treatment:** Sulfur, cleaning the environment

Anti parasitic creams.





# Ringworm

**Cause:** fungus living off dead skin, hair, and nail tissue

**Symptoms:** red, scaly patch or bump, it develops into itchy red ring(s) with raised, blistering, or scaly borders

**Transmission:** skin-to-skin contact, sharing items like towels or sports gear

**Treatment:** antifungal creams



# Eczema

**Cause:** unknown; stress, irritants (like soaps), allergens, and climate trigger flare-ups, genetic predisposition.

**Symptoms:** skin is inflamed, red, dry, and itchy

**Transmission:** genetics

**Treatment:** cortisone creams, pills, shots, antibiotics, antihistamines, or phototherapy, cold compresses



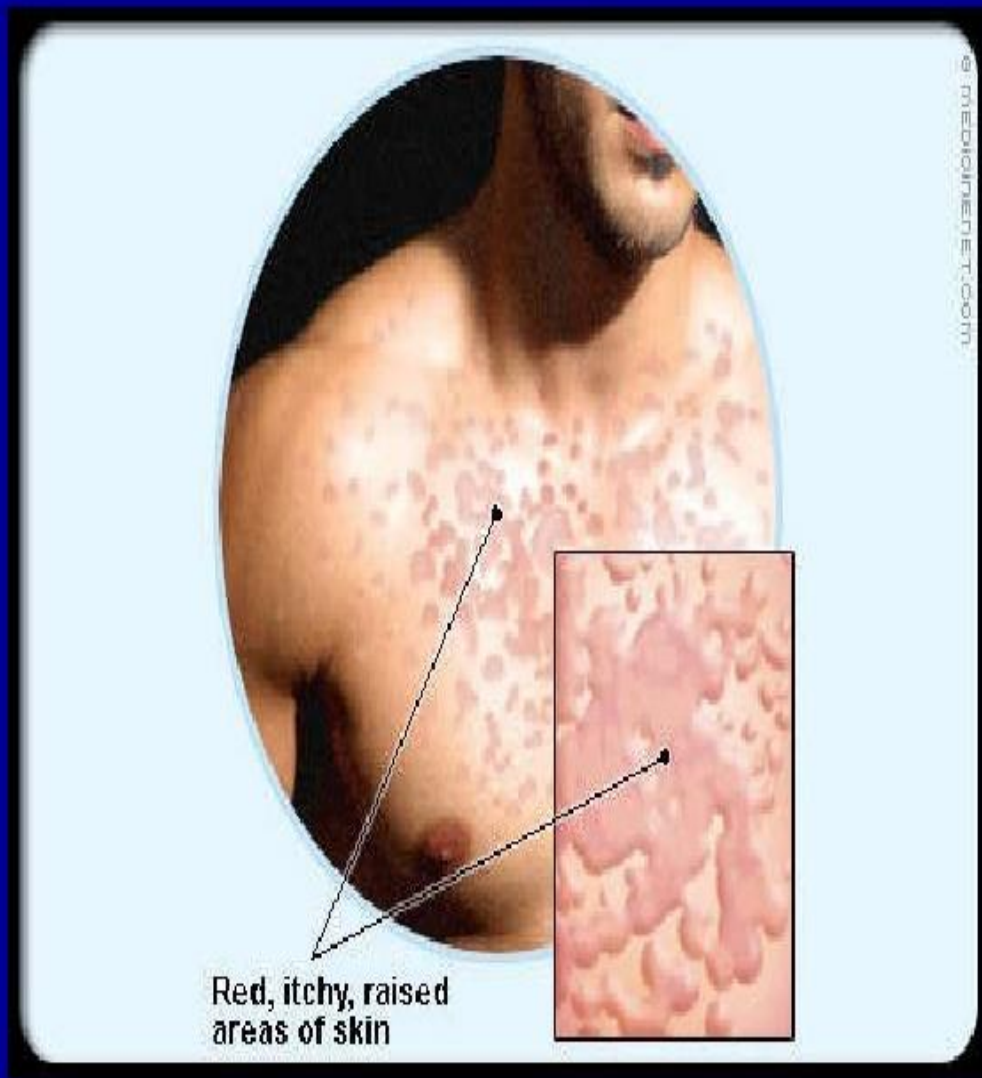
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# Drug allergy (Hives)

**Cause:** aspirin or penicillin; foods like eggs, nuts, and shellfish; food additives; temperature extremes; and infections like strep throat

**Symptoms:** looks like welts, often itchy, stinging, or burning or difficulty breathing

**Prevention:** Antihistamines can provide relief /systemic steroids



# Psoriasis

**Cause:** unknown, but skin inflammation may be triggering new skin cells to develop too quickly

**Symptoms:** rash of thick red plaques covered with silvery scales

**Treatment:** steroid or retinoid creams, light therapy, and medications.





# Acne

**Cause:** many things, including hormones

**Symptoms:** circumscribed, solid elevation of skin can be either brown, purple, pink or red in color

**Prevention:** DRINK PLENTY OF WATER

keep oily areas clean and don't squeeze pimples (it may cause infection and scars).

**Treatment:** three effective medication for acne- benzoyl peroxide, retinoids, and antibiotics.



# Acne

- Is a common disorder of the **sebaceous gland** associated with ***excess production of sebum*** and ***blockage of the duct*** resulting in a variety of inflammatory manifestations.
- Common **in puberty** and usually regresses in early adult hood
- Patient complain of oiliness of the skin.
- Occurs on the face, upper trunk and shoulders
- Appears to be multiple inflammatory papules, pustules and nodules

# Physical Assessment

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## Comedo

- **Enlarged hair follicle plugged with sebum, bacteria, skin cells (keratin)**
- **Closed: whitehead**
- **Open: blackhead**



# Acne

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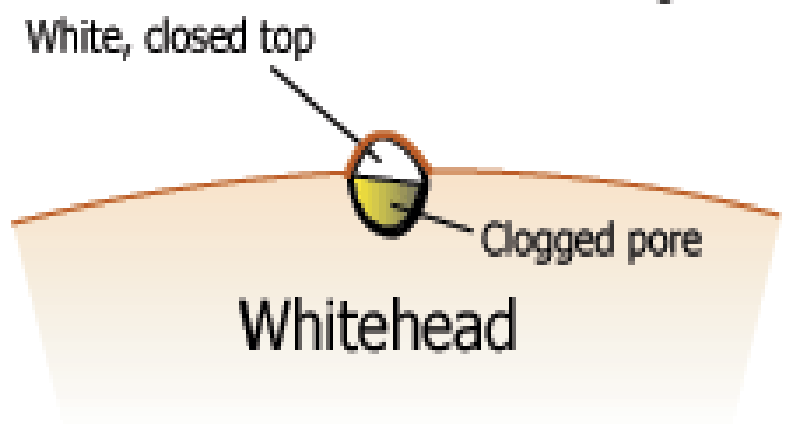
Adult facial acne



ADAM.

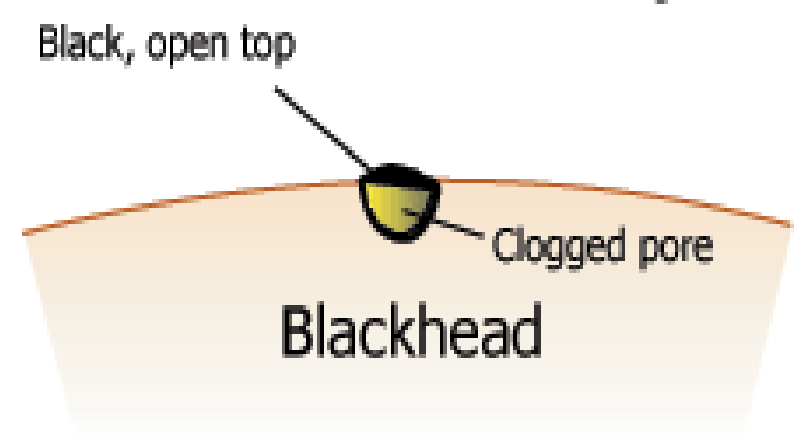
- **Chronic skin disorder caused by inflammation of sebaceous glands**
  - Interplay of hormonal, bacterial and genetic factors
- **Assessment:**
  - Comedones (blackheads/whiteheads)
  - Papules and pustules

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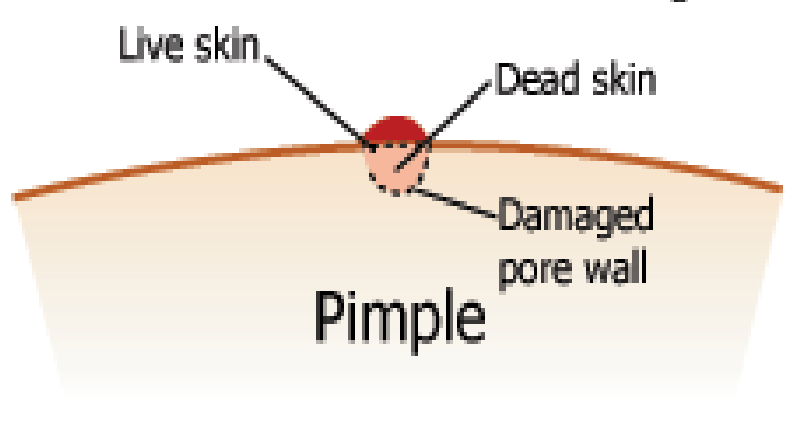
<http://www.acne-site.com/>

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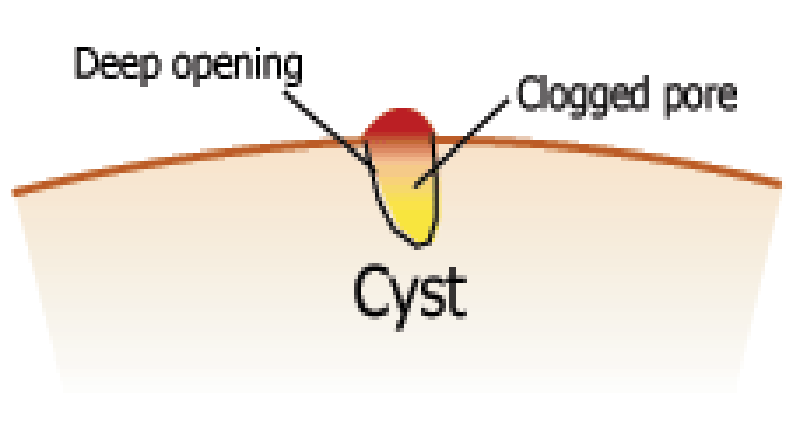
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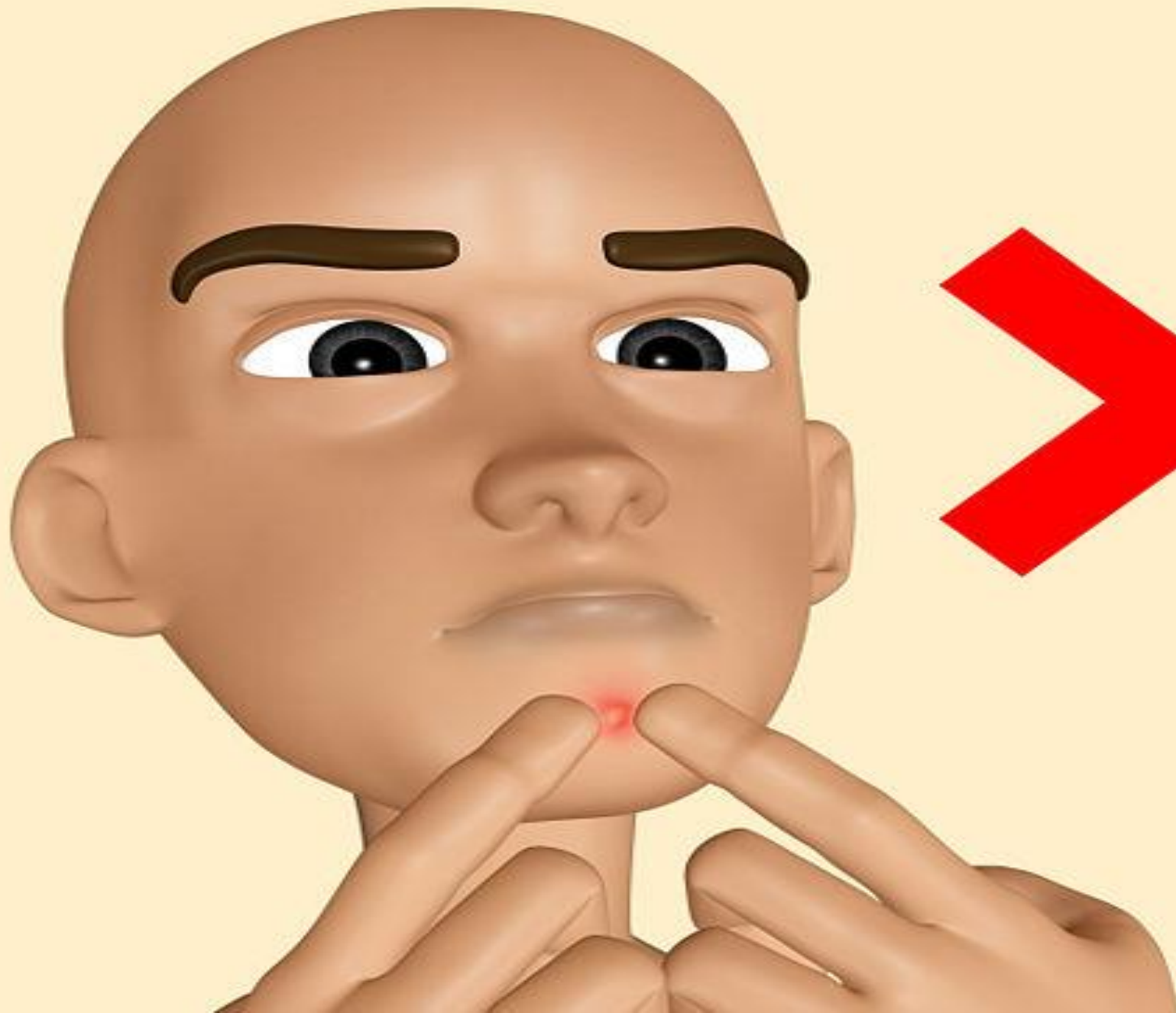
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Normal  
Skin Pore

Whitehead

Blackhead





**Tip 1:** Don't pick, press or rub the pimples. It is often hard to resist, but rubbing or picking actually increases the production of sebum and ruptures the membranes under the skin. Consequently, the infection and sebum spreads and causes more pimples. Furthermore, you risk the chances of leaving scars on the face.



# Warts

**Cause:** human papillomavirus

**Symptoms:** small, rough tumor, typically on hands and feet but often other locations, that can resemble a cauliflower or a solid blister

**Transmission:** from person to person or via contact with something used by a person with the virus

**Prevention:** not picking them, covering them with bandages, and keeping them dry.

**Treatment:** freezing, surgery, lasers, and chemicals wash



# Melasma ('pregnancy mask')

**Cause:** Pregnancy, men can also develop

**Symptoms:** tan or brown patches on the cheeks, nose, forehead, and chin

**Prevention:** stay away from sunlight- it worsens the condition.

**Treatment:** prescription creams and over-the-counter products, vit C and iron



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# Chickenpox

**Cause:** primary infection with varicella zoster virus (VZV)- one of eight herpes viruses

**Symptoms:** itchy rash and red spots or blisters

**Transmission:** personal contact

**Prevention:** chickenpox vaccine

**Treatment:** rest and medication, to reduce itching, fever and other flu-like symptoms



## *NORMAL SKIN*

- **Normal Skin Is Neither Oily Nor Dry.**
- **Normal Skin Has Even Tone.**
- **Normal Skin Has Clear Face .**
- **Smooth Texture .**
- **Smooth Skin .**





# *OILY SKIN*

- In Oily Skin Oil Producing Glands Are Over Active And Produce More Oil .
- Oily Skin Usually Looks Greasy , Thick , Coarse And Shiny.
- Oily Skin Has Enlarged Pores And Tends To Break Into Acne.
- Oily Skin Prone To Blackheads.



## COMBINATION SKIN

- As the name itself suggests, it is a combination of both oily and dry skin with certain areas of the face oily and rest dry.
- This type of skin is very common.
- Oily panel consisting of forehead nose and chin.
- Dry panel consisting of cheeks and areas around eyes and mouth.
- It is referred as T zone.





# Hygiene

From the Greek word  
“hygies” (Hygieia- Goddess of  
Health)

Meaning  
“healthy, sound”



*Hygieia*

ﷺ

فرمان رسول

الطَّهْوَرُ شَطْرُ الْإِيمَانِ

(صحیح مسلم، حدیث: 223)

پاکیزگی  
نصف ایمان  
ہے

**Cleanliness  
is Half of  
Faith.**



# Cleanliness

- A Muslim is required to be pure morally and spiritually as well as physically.
- Prophet Muhammad (SAW) advised the Muslims to appear neat and tidy in private and in public. Once returning from an expedition he said:
- "You are soon going to meet your brothers, so tidy your saddles and clothes. Be distinguished in the eyes of the people." [Abu Dawud]
- "Don't ever come with your hair and beard disheveled like a devil." [Al-Tirmidhi]



# What is Personal Hygiene?

Regular Routine of Personal Care

Washing and Grooming of

- Hair
- Face and Skin
- Teeth
- Ears
- Hands
- Nails
- Feet





## Why Brush Your Hair?

- Brushing helps keep the scalp clean by loosening and removing dust and dead cells.
- It also adds shine



# Hair

- Hair is made of dead cells.
- Hair is important because it brings oil to the surface of the skin.
- Hair helps warm the body by trapping a layer of air next to the scalp.



## Normal Skin care

A mixture of  
1/2 cup olive oil,  
1/4 cup vinegar &  
1/4 cup water used  
as a night cream will  
make your skin glow.



## Sensitive & dry skin care

*Honey, Oat + Avocado Mask*  
1 tbs organic honey  
2 tbs ripe mashed avocado  
2 tbs oats.



Mix + apply to slightly damp  
skin for 10 -15 minutes.

## Acne prone skin care

*Honey, Lemon + Nutmeg Mask*  
1 tbs organic honey  
1/2 tsp nutmeg  
juice of 1/2 organic lemon



Mix + apply to slightly damp skin for  
10 minutes.

## Aging + dull skin care

*Wheatgrass & Coconut Oil Treatment*  
1 ounce of organic  
wheatgrass juice  
1 tsp coconut oil.



Dab wheatgrass juice onto skin + leave  
on for 10 minutes. Rinse with warm  
water. Massage coconut oil into skin for  
2-3 minutes. Rinse using a wet washcloth  
or (gently) with exfoliating gloves. Dab  
coconut oil around eyes + leave on.



Almonds



Cucumber



Lemon Juice



Aloe-Vera

# *Natural Remedies*



Olive Oil



Honey And Tomato



Turmeric



Potato

# NATURAL HOME REMEDIES FOR OILY SKIN AND FACE



**EGG WHITES**



**15 MIN**



**YOGURT**



**15 MIN**



**TOMATOES**



**15 MIN**



**OATMEAL & ALOE VERA**



**10 - 15 MIN**



**10 - 15 MIN**



**ALMOND HONEY**

FOR MORE, VISIT: [WWW.BEAUTYHEALTHTIPS.IN](http://WWW.BEAUTYHEALTHTIPS.IN)



Beauty Health Tips

# Top 10 Home Remedies

## Home Remedy for

# ACNE



**1** Take 1-2 tsp baking soda (sodium bicarbonate).



**2** Add a little clean water to make a paste.



**3** Apply it on your acne and rinse it off after a few mins. Do this 1 or 2 times in a week. Don't overdo this remedy.

# Home Remedies for Dark Circles under the Eyes

## Cucumber

1. Cut a cucumber into thick slices and chill them in the refrigerator.
2. Put a **cool cucumber slice** over each eye for 10-15 min.
3. Then wash the area with lukewarm water.
4. Do this **twice daily** for at least a week to notice changes.

You can also apply **cucumber juice**.

### Other remedies include:

- Potato
- Green Tea Bags
- Rose Water
- Almond Oil
- Milk
- Tomato
- Mint
- Coconut Oil
- Fenugreek Seeds

**Top 10**  
Home Remedies

# PREVENT HAIR LOSS

\*Apply onion juice on your hair and leave it for fifteen minutes and then wash your hair with a shampoo.

\* Alongside boil few cloves of garlic in coconut oil and when this mixture is cooled down massage it on your hair. Regular use of this technique can greatly prevent hair loss.

## Hair Loss Natural Remedy

### Foods Rich in Vitamin C



Citrus fruits	Watermelon
Cantaloupe	Spinach
Guava	Red Pepper
Pineapple	Green Pepper
Blueberries	Broccoli
Raspberries	Cauliflower
Strawberries	Tomatoes

### Foods Rich in Vitamin B12



Eggs  
Organ meats  
Poultry  
Meats  
Dairy products  
Shellfish

*Note: There are no plant sources for vitamin B12.*

### Foods Rich in Iron



Animal source:	Plant source:
Chicken liver	Beans
Beef liver	Tofu
Clams	Pumpkin
Oysters	Apricots
Sardines	Baked potatoes
Cooked beef	Peanuts
Chicken meat	Broccoli
Pork	Raisins
	Prunes
	Pasta/ rice