



Minimizing Skin Damage While Tanning

Tanning Operator Training – 2025 Edition

Take your time – this open-book exam rewards careful thought over quick answers.





Purpose

- The primary responsibility of the Tanning Operator is to help customers achieve a tan while minimizing damage to the skin.



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Light and Ultraviolet Radiation

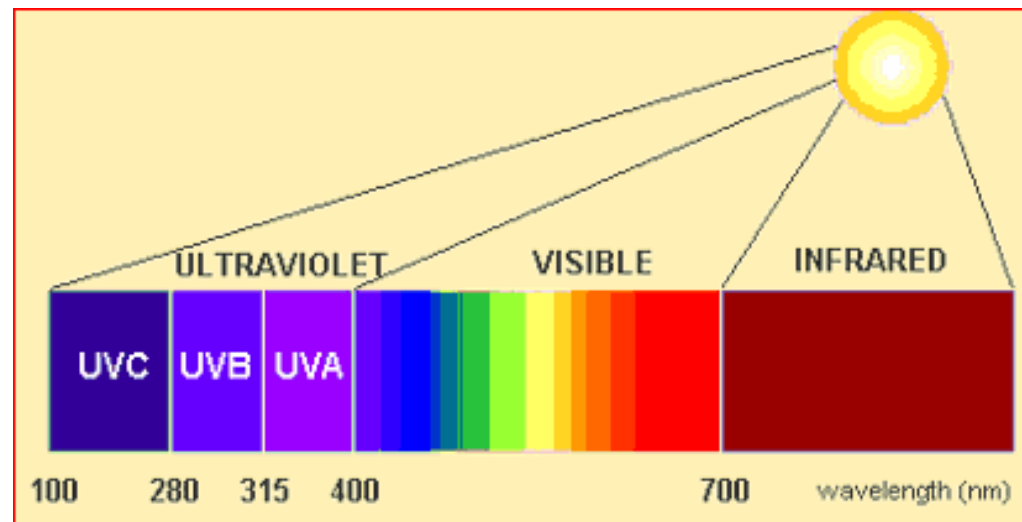


- Ultraviolet radiation (UVR) is found in sunlight.
- It is divided according to wavelength and measured in nanometers.
- Humans evolved in the outdoors. But we only need 5 – 15 minutes of sun exposure per day.¹

¹ – Mead MN. Benefits of sunlight: a bright spot for human health. Environ Health Perspect. 2008 Apr;116(4):A160-7. doi: 10.1289/ehp.116-a160. Erratum in: Environ Health Perspect. 2008 May;116(5):A197. PMID: 18414615; PMCID: PMC2290997.

■ ■ ■ Ultraviolet Light

- Ultraviolet (UV) light from the sun can be divided into the following three categories:
 - UVA – 315 to 400 nm
 - UVB – 280 to 315 nm
 - UVC – 100 to 280 nm



UVC

- UVC is the shortest ultraviolet wave.
- The ozone layer prevents it from reaching the earth's surface.
- Most living things would be destroyed if UVC was not filtered.



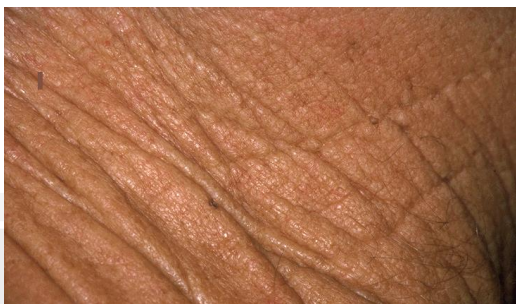
UVB



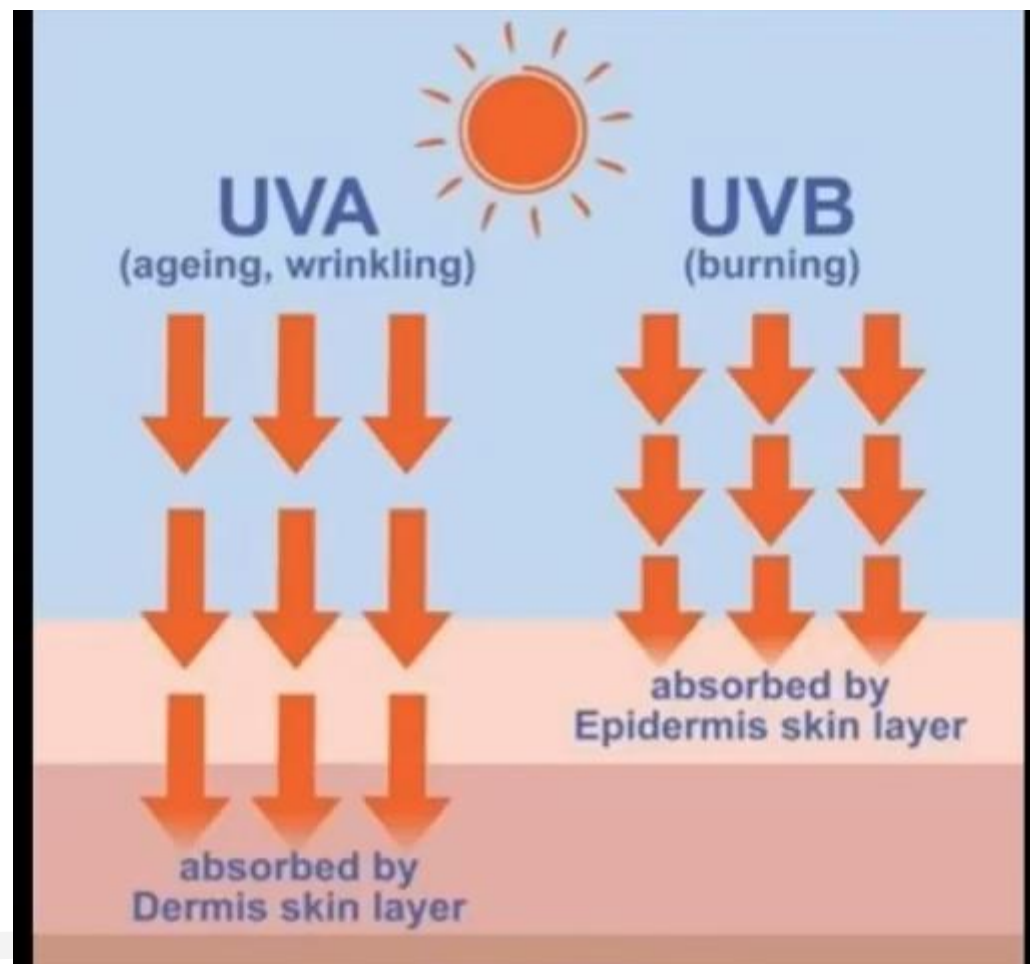
- UVB is usually associated with sunburn and the increased incidence of skin cancers.
- However, UVB is the most efficient wavelength for tanning.

UVA

- UVA is the longest ultraviolet wave.
- Most indoor tanning equipment emits mostly UVA light.
- UVA penetrates deeper into the skin than UVB.
- UVA is responsible for an increase in the incidence of skin cancers, premature aging, fine wrinkling, age spots, and irregular pigmentation.



UVA and UVB

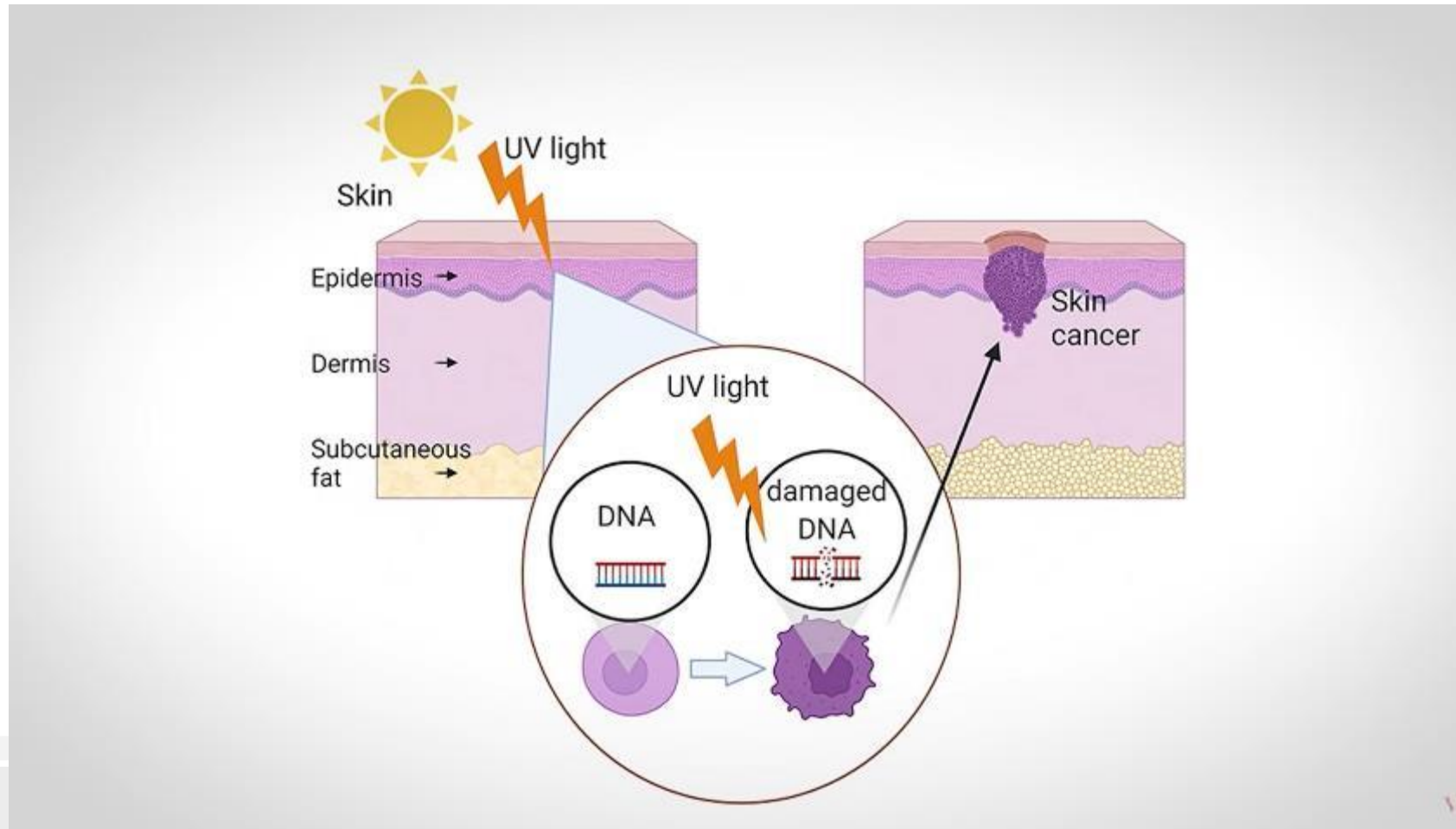


Tanning for a special occasion?

- Some tanning devices can emit 10 – 15 times more UVA than the sun.²
- Indoor tanning is thought to be so harmful, the AAD (American Academy of Dermatology) has sought a ban on nonmedical usage.

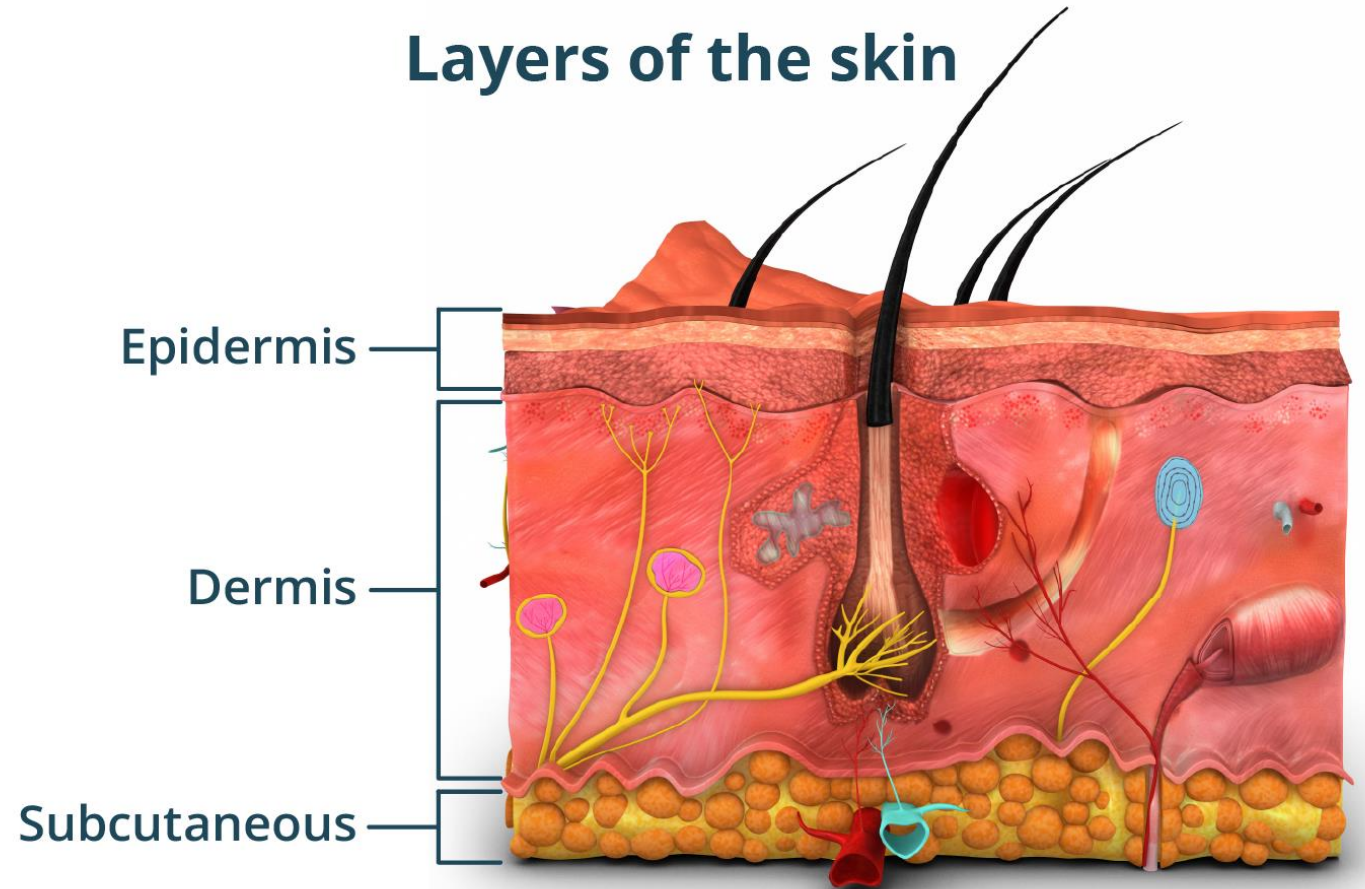


UV light causes DNA damage and is a known cause of skin cancer



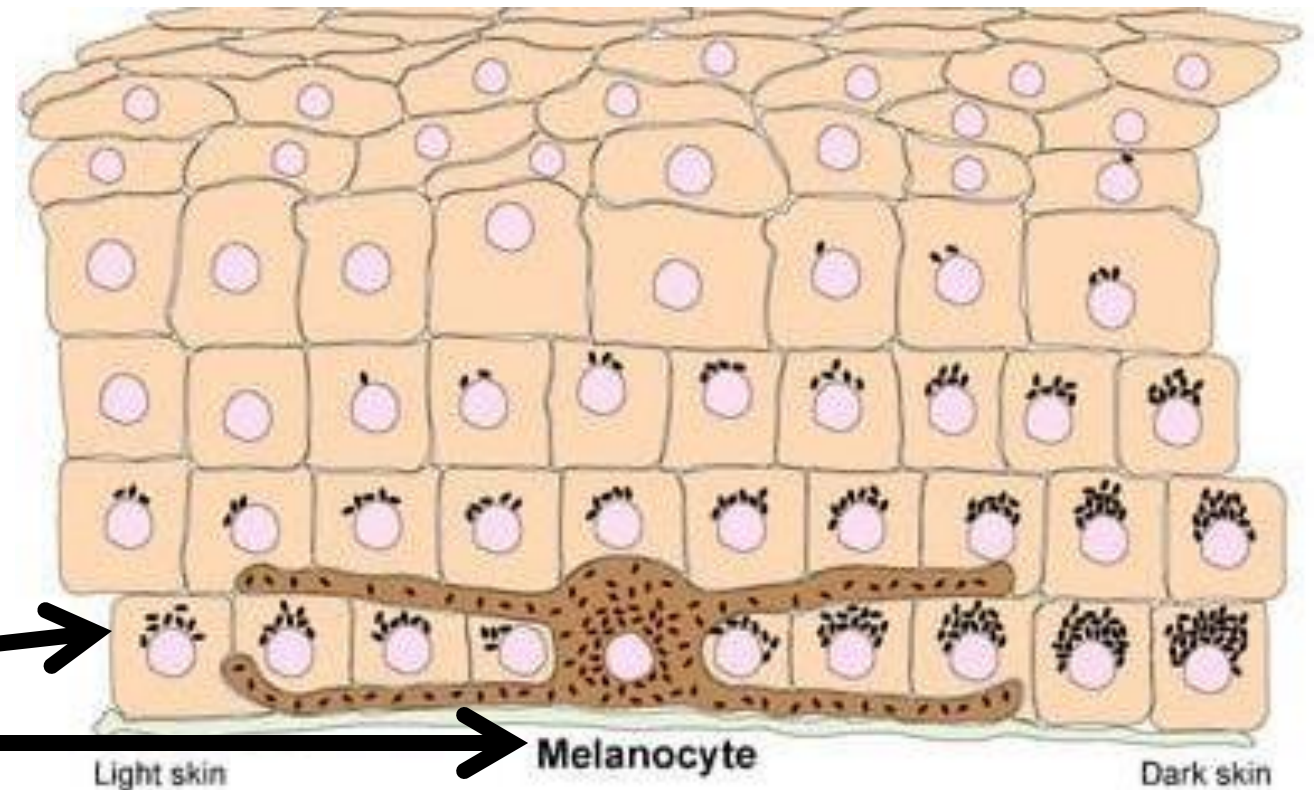
Epidermis

- The skin is divided into layers, including the epidermis, dermis and subcutaneous.
- The epidermis is the outer layer.
- The epidermis normally replaces itself every 28-30 days as part of its repair mechanism.

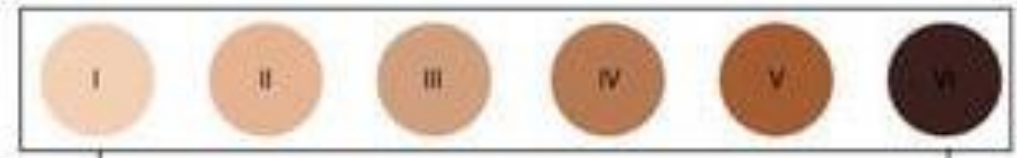


Melanocytes

- In the bottom layer of the epidermis are a special type of skin cell called melanocytes that produce tiny granules of melanin.



- All humans have about the same number of melanocytes.



Skin color is determined by the amount of melanin the melanocytes produce.



Melanin and Tanning

- When exposed to UVB, the melanin darkens and rises to the skin's surface to darken or “tan” the skin.
- Tanning is the skin's response to exposure of ultraviolet radiation and is the way it protects itself from more damaging UV rays.
 - A “base tan” only provides an SPF (Sun Protection Factor) of 2 to 4
 - Getting a “base tan” is like trying to protect yourself from lung cancer by putting a filter on your cigarette
- However, each time the skin is forced to darken itself, it may be damaged permanently.





The Dermis and UVA

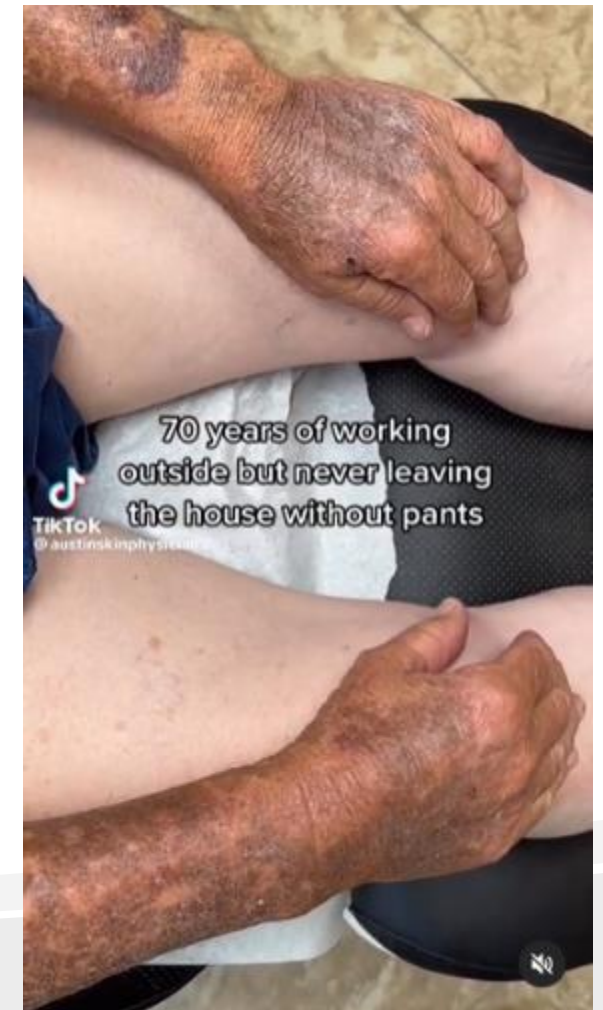
- The dermis is much thicker than the epidermis, contains fewer cells, and consists mostly of connective tissue and blood vessels.
- Its main function is to hold the body together and to give the body shape and elasticity.
- Since UVA penetrates to the dermis and there is no built-in repair mechanism in the dermis, chronic overexposure causes permanent damage such as basal cell carcinoma, squamous cell carcinoma, and malignant melanomas, and an increased chance of skin thickening and premature aging.

Tanning Phases

- The first phase of tanning can be immediate – color begins immediately and may fade in minutes.
- The second phase (delayed tanning) is the familiar longer lasting tan induced by repeated exposure to UV.
- Since results are usually not readily visible for 36-48 hours, tanning more frequently than every 48 hours can encourage burning.

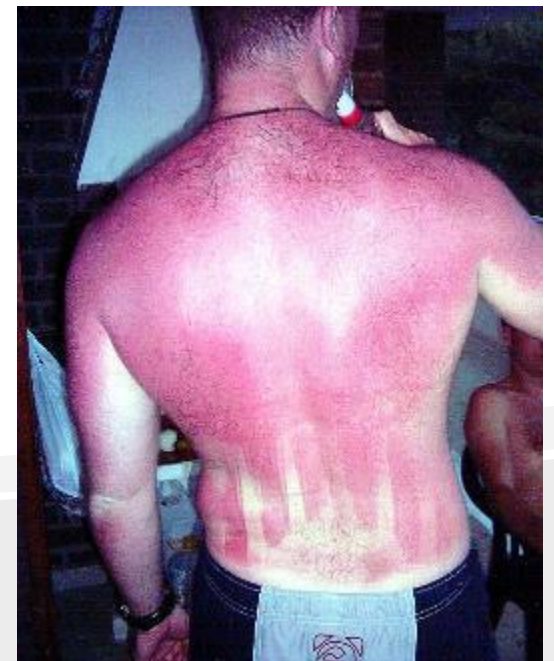


Tanning Only Impacts the Exposed Areas of the Skin



Sunburns Can Cause Permanent Damage

- If the melanin cannot rise quickly enough, erythema or reddening of the skin (sunburn) occurs.
- Severe burns or chronic exposure can destroy the melanocytes and permanently impair the function of the melanin so it cannot protect the skin properly.



Minimum Erythema Dose

- Minimal Erythema Dose (MED) refers to the least amount of UV radiation received on the skin that can cause sunburn to appear within 7 to 24 hours following exposure.
- Many tanning beds list the MED for various skin types on the manufacturer's label.

DANGER: ULTRAVIOLET RADIATION. FOLLOW INSTRUCTIONS. AVOID OVER EXPOSURE. AS WITH NATURAL SUNLIGHT, OVEREXPOSURE CAN CAUSE EYE AND SKIN INJURY AND ALLERGIC REACTION. REPEATED EXPOSURE MAY CAUSE PREMATURE AGING OF THE SKIN AND SKIN CANCER.

WEAR PROTECTIVE EYEWEAR; FAILURE TO MAY RESULT IN SEVERE BURNS OR LONG-TERM INJURY TO THE EYES

CAUTION! EXPOSURE POSITIONS OTHER THAN SPECIFIED CAN BE HARMFUL AND ARE NOT RECOMMENDED

THIS DEVICE IS INTENDED TO BE USED BY ONE PERSON AT A TIME. YOU MAY LIE DIRECTLY ON TANNING SURFACE.

THE MINIMUM EXPOSURE POSITION IS 0.5 IN. (1.27CM) FROM THE LAMP'S SURFACE (PRESET BY THE MANUFACTURER). READ THE INSTRUCTION BOOKLET BEFORE USING THIS DEVICE.

SKIN TYPE II - THIS IS THE INDIVIDUAL THAT USUALLY BURNS EASILY AND SEVERELY, TANS MINIMALLY OR LIGHTLY AND PEELS.
SKIN TYPE III - OFTEN REFERRED TO AS "AVERAGE" COMPLEXION, BURNS MODERATELY AND TANS ABOUT AVERAGE.
SKIN TYPE IV - THIS INDIVIDUAL BURNS MINIMALLY, TANS EASILY AND ABOVE AVERAGE.
SKIN TYPE V - THIS INDIVIDUAL'S SKIN RARELY BURNS, TANS EASILY AND SUBSTANTIALLY.

FOR PARTS AND SERVICE CALL:
SonnenBraune, Inc.
Ringgold GA
1-800-829-6533

MEDICATION OR COSMETICS MAY INCREASE YOUR SENSITIVITY TO THE ULTRAVIOLET RADIATION. CONSULT PHYSICIAN BEFORE USING SUNLAMP IF YOU ARE USING MEDICATIONS OR HAVE A HISTORY OF SKIN PROBLEMS OR BELIEVE YOURSELF ESPECIALLY SENSITIVE TO SUN LIGHT. IF YOU DO NOT TAN IN THE SUN, YOU ARE UNLIKELY TO TAN FROM THE USE OF THIS PRODUCT.

RECOMMENDED EXPOSURE SCHEDULE:

SKIN TYPE	WEEK 1 SESSIONS 1-3	WEEK 2 SESSIONS 4-6	WEEK 3 SESSIONS 7-10	WEEK 4 SESSIONS 11-15	BI-WEEKLY MAINTENANCE SESSIONS
II FAIR	2 MIN.	4 MIN.	6 MIN.	8 MIN.	10 MIN.
III MEDIUM	2 MIN.	4 MIN.	6 MIN.	8 MIN.	10 MIN.
IV DARK	4 MIN.	8 MIN.	10 MIN.	12 MIN.	12 MIN.
V VERY DARK	4 MIN.	8 MIN.	10 MIN.	12 MIN.	12 MIN.

MAXIMUM USE TIME: 12 MINUTES

IN MOST CASES, TANNING WILL APPEAR WITHIN SIX HOURS OF THE FIRST APPLICATION. PROVIDED YOUR SKIN IS CAPABLE OF DEVELOPING A TAN. A MOISTURIZER MAYBE USED AFTER EACH TANNING SESSION.
THIS SYSTEM IS INTENDED TO BE USED ONLY WITH THE WOLFF SYSTEM BODYSCAN XR F71R160W BIPIN OR BODYSCAN XXR F71R160W BIPIN AND PHILIPS CLEO HPA30 SIV 400W

THIS PRODUCT IS IN CONFORMITY WITH PERFORMANCE STANDARDS FOR SUNLAMP PRODUCTS UNDER NO. 21 CFR SUBCHAPTER J.

Skin Type

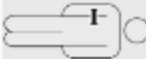



- Operators and patrons must determine the patron's skin type as accurately as possible.

- The most common way to judge skin type is using the Fitzpatrick Scale.

THE FITZPATRICK SKIN TYPE SCALE

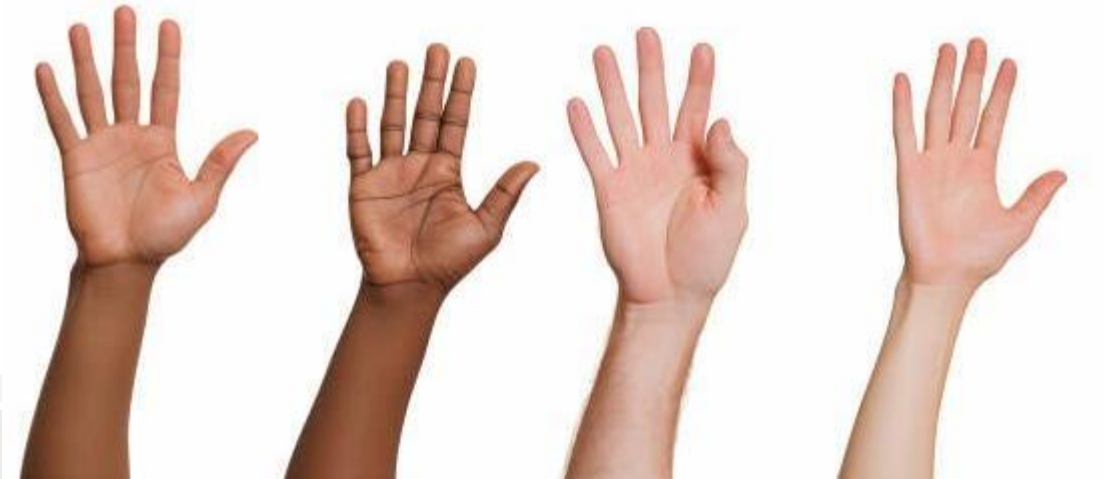
I IVORY	II BEIGE	III LIGHT BROWN	IV MEDIUM BROWN	V DARK BROWN	VI VERY DARK BROWN
Characteristics Pale skin, light or red hair, prone to freckles. Burns very easily and rarely tans.	Characteristics Fair skin, likely to have light hair, blue or brown eyes. Some have dark hair but still have a fair skin. Usually burns but may gradually tan.	Characteristics Light olive skin with dark hair and brown or green eyes. Burns with long exposure to the sun but generally tans quite easily.	Characteristics Brown eyes and dark hair. Burns with very lengthy exposures but always tans easily.	Characteristics Naturally brown skin, brown eyes and dark hair. Burns only with excessive exposure to the sun. Skin easily darkens further.	Characteristics Black skin with dark brown eyes and black hair. Burns only with extreme exposure to the sun. Skin very easily darkens further.
Sun protection At the greatest risk of developing skin cancer. Needs to protect skin, preferably with clothing.	Sun protection At the greatest risk of developing skin cancer. Needs to protect skin, preferably with clothing.	Sun protection Should protect themselves in strong sunshine.	Sun protection Should protect themselves in strong sunshine.	Sun protection Protect themselves when outdoors in the sun for a long time.	Sun protection Protect themselves when outdoors in the sun for a long time.
					

- But other skin type systems do exist.

Skin type I	Skin type II	Skin type III	Skin type IV
			
Sensitive skin	Light skin	Normal skin	Dark skin
Always/frequently burns	Usually burns	Sometimes burns	Rarely burns
Tolerates only a small amount of natural sun.	Tolerates approx. 10-20 min. of natural sun.	Tolerates approx. 20-30 min. of natural sun.	Tolerates approx. 40 min. of natural sun.

How do I type someone's skin?

- Look at areas of the skin that have not been exposed to sunlight. This can include:
 - Palms
 - Inside of elbows and knees
 - Soles of the feet
 - Between the toes and fingers





Skin Type and You

- Explain to people who sunburn easily and don't tan in the sun (skin type I) that they probably won't tan in a tanning bed and shouldn't be using one.
- If in doubt about a consumer's skin type, choose a lighter skin type and start with less tanning time.
- There is no such thing as a “safe” tan for any skin type.
- Releasing melanin is the body's way to protect itself against UV light. A suntan is not a good indication of good skin health.



Photosensitivity

- Photosensitivity is a condition in which the human skin reacts abnormally to light, especially ultraviolet rays (UVA) or sunlight.
- If a substance is a photosensitizer, it acts in combination with UV light and causes a sensitivity reaction in the skin.
- Common photosensitizers are medications, cosmetics, or toiletry items.
- A patron or prospective tanner must be provided with a comparative list of photosensitizing agents.



Symptoms of Photosensitivity

- Symptoms of photosensitivity include severe burning, blotchy formation, rash, and uneven pigmentation.



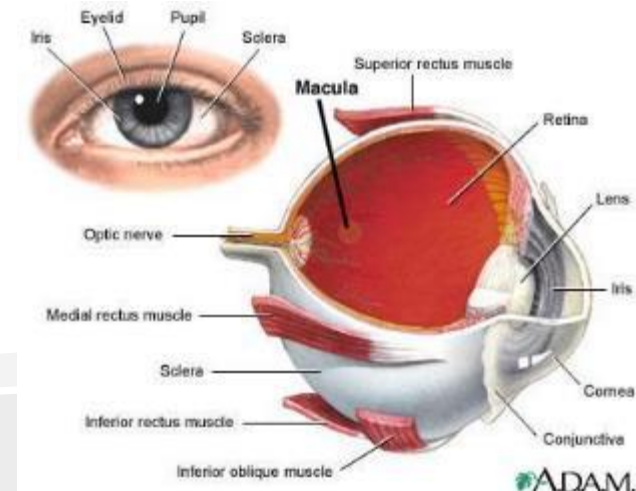
Pregnancy and Tanning



- Tanning may be inadvisable during pregnancy.
- Overheating and/or skin blotching may occur.
- Have the patron consult her physician before using the tanning device if she thinks she might be pregnant.

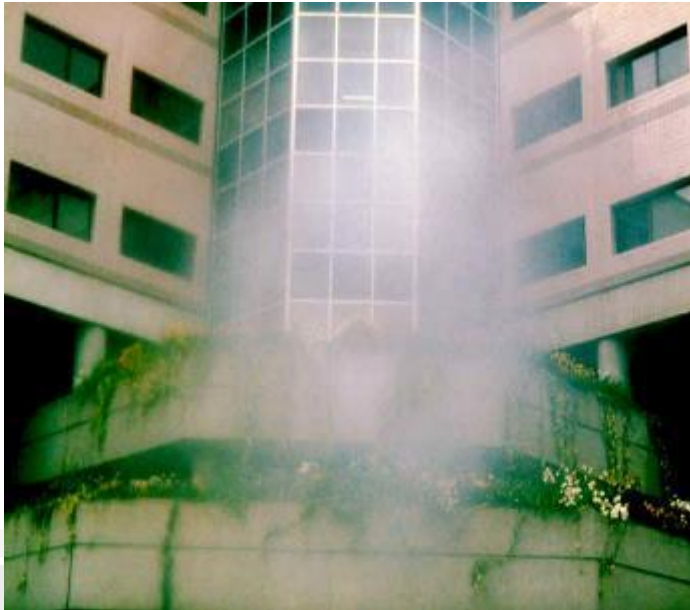
Why is eye protection important?

- The human eye is poorly adapted for protection against ultraviolet light.
 - The thickness of the eyelid is very thin . . . about 0.6 millimeters or the thickness of a piece of paper
- Too much UVA can damage the retina and contribute to a loss of color perception.
- Too much UVB can damage the cornea.



Permanent Eye Damage

- UVA and UVB may cause:
 - Permanent eye injury, cataracts, or blindness
 - Reduced visual sharpness, decreased sensitivity to color, and difficulty with night vision



Normal Eye



Eye with Cataract



Eye Protection

- Goggles or eye protection must be:
 - Approved to block UVA and UVB rays
 - Used according to manufacturer recommendations





Patron Form

- Patrons must be provided with a form containing the following information:
 - List of potentially photosensitizing drugs
 - Potential negative health effects related to ultraviolet exposure including increased risk of skin cancer, skin wrinkling, premature aging, and possible activation of some viral conditions
 - Information on how different skin types respond to tanning
 - An explanation of the need to use eyewear to prevent against UVA and UVB exposure with a warning that closing the eyes is not sufficient to prevent possible eye damage
 - Information that tanning may be inadvisable during pregnancy

Patron Form (continued)

- Patrons must have the opportunity to read the information on the form and ask questions.
- Forms must be reviewed, signed, and dated by the patron each year.
- Forms must be kept at the tanning establishment and be available for inspection by Salt Lake County Health Department.

NAME _____
WK. PHONE _____ HM. PHONE _____
WORKING HOURS _____ BIRTHDATE _____
ADDRESS _____
CITY _____ STATE _____

Please answer the following questions to the best of your knowledge. These answers will aid our technicians in designing the best possible program for your needs.

1. Are you taking any drugs which would cause sensitivity to sunlight? (Your doctor would have provided this information when he prescribed the drug.) Yes _____ No _____
2. Are you in any way allergic to sunlight? Yes _____ No _____
3. Natural hair color _____ Do you color your hair? Yes _____ No _____
4. Do you tan easily? Yes _____ No _____
5. Do you have oily or dry skin? _____
6. Do you tend to freckle? Yes _____ No _____
7. How much exposure to sunlight do you get per day? _____
8. Are you active in outdoor activities? Yes _____ No _____
9. Do you presently use a lotion or moisturizer? Yes _____ No _____
10. For your health and safety, you MUST always use Protective Eyewear. Use of the Suntan Unit without protective eyewear can cause early formation of cataracts and/or temporary or permanent blindness.

I, the undersigned, hereby state:
1. I have truthfully answered the written questions with regard to the use of the Suntan facility.



First Time Customers

- First-time customers need to be shown the Manufacturer's label on the tanning device.
- Do not start first-time consumers with longer tanning sessions than recommended.
- Do not allow tanning sessions more frequently than recommended.



DANGER ULTRAVIOLET RADIATION		Recommended Exposure Schedule				
Follow instructions. Avoid over-exposure as with natural sunlight. Over-exposure can cause eye and skin injury and allergic reactions. Repeated exposure may cause premature aging of the skin and skin cancer.		Week 1 1st - 3rd Treatments	Week 2 4th - 6th Treatments	Week 3 7th - 10th Treatments	Week 4 11th - 15th Treatments	Weekly Subsequent Treatments
Maximum Tanning Time is 9 Minutes		NOT ADVISED	NOT ADVISED	NOT ADVISED	NOT ADVISED	NOT ADVISED
I - Sensitive		2 Min.	3 Min.	5 Min.	7 Min.	9 Min.
II - Fair		2 Min.	3 Min.	5 Min.	7 Min.	9 Min.
III - Average		2 Min.	5 Min.	7 Min.	9 Min.	9 Min.
IV - Brown		2 Min.	5 Min.	7 Min.	9 Min.	9 Min.
V - Dark Brown		2 Min.	5 Min.	7 Min.	9 Min.	9 Min.



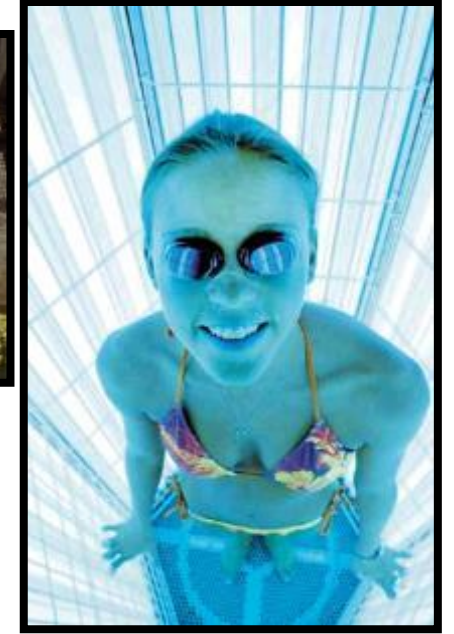
NOTE:

The tanning times are only valid for the lamp set specified on the lamp set sticker.

The tanning sessions should be at least 48 hours apart.

Physical Booth

- Operators must ensure proper temperature:
 - Facility does not exceed 85° F
 - Tanning device surface does not exceed 100° F
- The operator shall clean and store all linens and towels, if provided.



Physical Booth - Disinfection

- Infections can be transferred through skin contact. All items and equipment with which the user can come into contact during tanning must be disinfected after every tanning session. Including:
 - Acrylic glass panels, handles, control panels, protective goggles, base plate, adjustable nozzles etc.
 - To ensure proper disinfection, always adhere to wet contact time specified per the manufacturer's instructions
- All tanning equipment shall be kept clean, in good repair, and maintained sanitary.
- UV light produced by the tanning equipment itself is not an approved sanitizing agent.



Timers

- Tanning equipment shall have a timer which complies with FDA requirements. Maximum time shall not exceed manufacturer's maximum recommended time.
- Tanning equipment must have method of remote timing so consumers cannot control or extend exposure time.
- Operators shall verify the timing accuracy of tanning equipment **at least twice a year** and the results shall be provided upon request.
- Timer intervals shall not have an error greater than 10 percent of the maximum timer intervals of the product.
- The timer shall not be able to automatically reset.



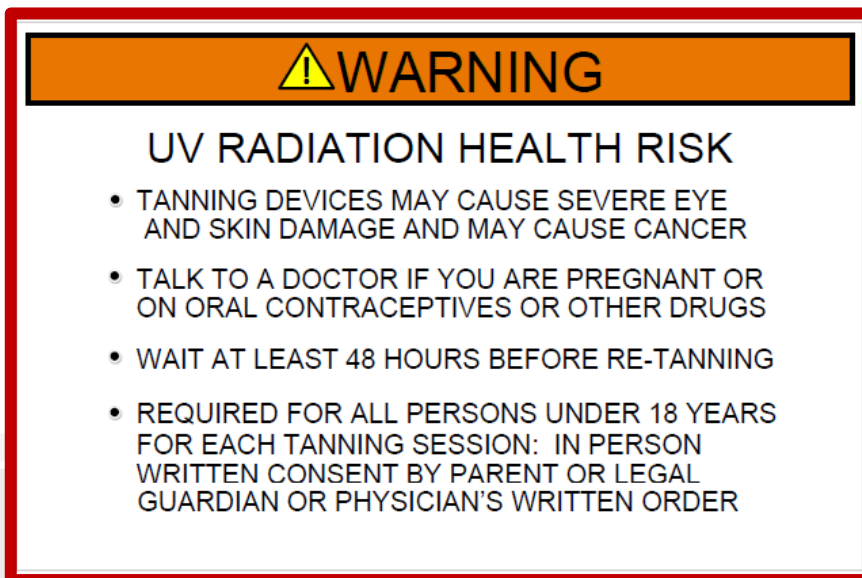
Bulbs and Lamps



- Using the incorrect type of bulb may cause serious harm through overexposure.
- Defective or burned-out bulbs must be replaced according to the manufacturer's specifications.
- Flickering lamps should be replaced. Dirty lamps may reduce tanning exposure results and shorten the life of the unit.

UV Warning Signs

- Warning Signs:
 - Must be posted in the immediate proximity of all tanning equipment
 - Each sign in the tanning room must be 8.5 by 11 inches, clearly visible and legible



Healthy Skin Part 1



- Your skin is a visible reflection of what's happening inside your body and is an indicator of your overall health.
- Skin is your body's largest organ and acts as a protective shield.

Healthy Skin Part 2

Drinking water helps your skin stay hydrated and avoids dryness and flaking.

Consider replacing soda, alcohol or other sugary drinks with water.



Exercise increases your blood flow and circulation. Regular exercise will help flush waste and toxins out of your body.



Healthy Skin Part 3



Sleep is your body's time to repair itself. While you sleep, your skin will turn over dead skin cells and create new, healthy skin cells. Your skin will also produce new collagen while you sleep.

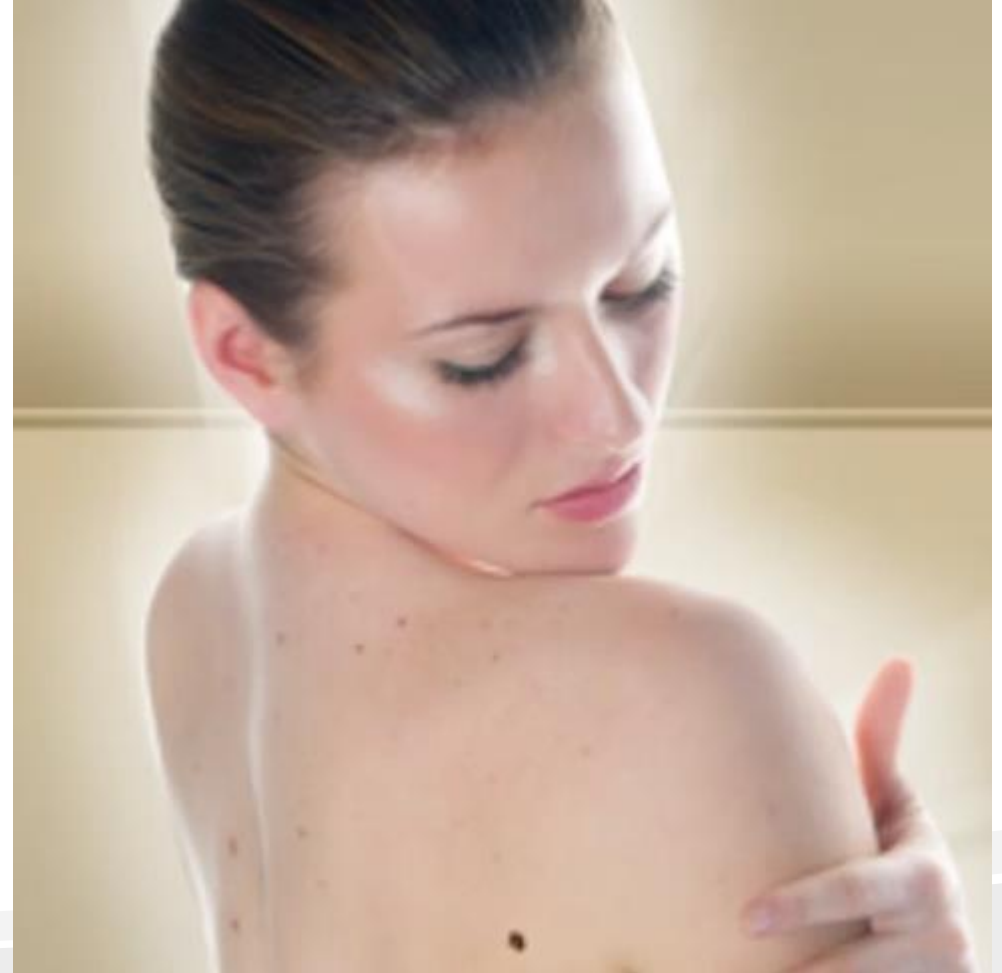


Stress causes your body to release higher amounts of a stress hormone called cortisol. Cortisol can increase oil production in your skin, which can lead to clogged pores and acne.

Eat the rainbow! Fruits and vegetables have antioxidants and other nutrients that are beneficial to your skin's health.

Why is a Skin Self-Examination (SSE) important?

- About 75% of melanomas are detected by patients themselves or by spouses, friends, or other lay persons.³
- Learning what to look for on your own skin gives you the power to detect cancer early when it's easiest to cure, before it can become dangerous, disfiguring or deadly.
- A dermatologist should be seen if a suspicious, stubborn or unusual skin concern requires professional evaluation and treatment. Yearly health screenings are also recommended.



How to do a Skin Self-Examination (SSE)



- Use a well-lit room:
 - Check everything, including hard-to-see areas like your scalp, back and buttocks
- Don't be afraid to ask for a helper or friend.
- If you see:
 - Something unusual
 - Something has changed

... please consult a doctor

What do I look for?



ABCDEs OF SKIN CANCER



A **ASYMMETRY**
ONE HALF OF A MOLE DOES NOT MATCH THE OTHER.



B **BORDER**
THE EDGES ARE IRREGULAR, RAGGED, NOTCHED OR BLURRED.



C **COLOR**
THE MOLE IS NOT EVENLY COLORED. IT MAY INCLUDE SHADES OF BROWN OR BLACK, OR PATCHES OF RED OR PINK.



D **DIAMETER**
THE SPOT IS LARGER THAN 6 MILLIMETERS ACROSS.



E **EVOLVING**
THE MOLE IS CHANGING IN SIZE, SHAPE OR COLOR.

UV Light and Skin Cancer

- A study published by the International Agency for Research on Cancer found:
 - Tanning bed use associated with a 15% increased risk of melanoma
 - And a 75% increased risk of developing melanoma if first exposure to indoor tanning before the age of 35.⁴
- There are three basic types of light-induced skin cancer:
 - Basal Cell Carcinoma
 - Squamous Cell Carcinoma
 - Malignant Melanoma



Basal Cell Carcinoma

- Basal cell cancer is the most common and least harmful form.
- Usually appears as a raised pinkish lump, which is smooth-surfaced with a depression in the center that may bleed easily or will not heal.
- Most commonly found on the face.



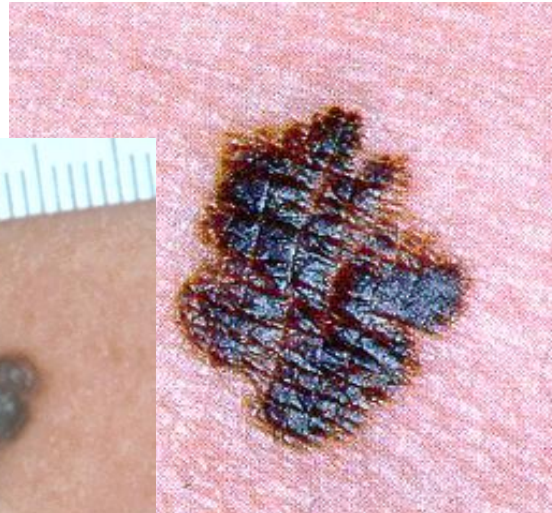
Squamous Cell Carcinoma

- Squamous cell cancer appears as a sore that will not heal or that has a crusted, heaped-up appearance.
- The cancer can spread to local lymph nodes and to distant body sites.











Malignant Melanoma

- Malignant melanoma is the least common, but a deadly form of skin cancer that spreads internally.
- The following are indications of melanoma:
 - Asymmetry
 - Border
 - Color
 - Diameter



Consult your dermatologist immediately if any of your moles or pigmented spots exhibits:

			
A Asymmetry-one half unlike the other half.		B Border irregular-scalloped or poorly circumscribed border.	
			
C Color varied from one area to another; shades of tan and brown; black; sometimes white, red or blue.		D Diameter larger than 6mm as a rule (diameter of pencil eraser).	



Tanning Alternatives – Sunless Tanning

- Sunless tanning products, also called self-tanners, can give your skin a tanned look without exposing it to harmful ultraviolet (UV) rays.
 - The chemical compound dihydroxyacetone (DHA) is commonly used in sunless tanning products. DHA is not a stain or dye, but a chemical derived from sugar and reacts with compounds in the dead layer on the skin surface
 - The Food and Drug Administration (FDA) has approved DHA for external application to the skin
- Sunless tanning products are generally considered safe alternatives to sunbathing, as long as they're used as directed.⁵

Tanning Alternatives – Spray Tan

- Spray tan booths provide automated application of high concentration, no-rub, aerosolized non-UV tanning products.



Tanning Alternatives – Self Tan lotion



- Many types of self tanning products are available:
 - Gradual Self Tanning Lotion
 - Instant Self Tanning Lotion
- If you use a sunless tanning product at home, follow the directions on the label and don't get the product in your eyes, mouth, or nose.



Health Permit Requirements

- All tanning facilities must have a permit from the Salt Lake County Health Department.
 - Health permits cannot be transferred from one owner to another or transferred from one location to another
- Each facility must apply for a permit to operate before beginning to operate.
- The permit is not transferable from owner to owner.
- A health inspector will visit your facility once a year to ensure proper operation and maintenance, review records, determine operator knowledge, and assure compliance with regulations.



Record Keeping

- Important records for every tanning facility must be readily available:
 - Records of operator training,
 - lamp replacement, and
 - patron tanning times and dates





Enforcement Actions

- Permits can be Denied, Suspended or Revoked for any of the following reasons:
 - Submission of false statements
 - Conditions warranting refusal on application
 - Operating in a manner that causes or threatens to cause hazard to public health or safety
 - Operating without tanning facility or tanning operator permits
 - Refusing to allow inspectors to inspect the tanning facility
 - Failure to pay permit fees
 - Violation of the SLCoHD regulations
 - Illegal Advertising:
 - Tanning equipment cannot be advertised or promoted in any way as:
 - Safe
 - No risk or no harm

