# Sun Safety

We all need some time in the sun, it gives us vitamin D, which helps our bodies soak up calcium for stronger, healthier bones.

However, too much of the sun's ultraviolet (UV) rays can cause skin damage, eye damage and skin cancer.

Taking the right safety measures is very important when looking after your skin.



### Sun Exposure

The sun gives light to the earth, and part of that light is invisible UV rays. When these rays reach the skin, they cause tanning, burning, and other skin damage. Sunlight contains three types of ultraviolet rays: UVA, UVB and UVC.

- **UVA** rays cause skin aging and contribute to skin cancer; they make up the most of our sun exposure.
- **UVB** rays are also dangerous, causing sunburn and eye damage; they also add to skin cancer.
- **UVC** rays are the most dangerous, but these rays are blocked by the ozone layer and don't reach the earth.

### Melanin: The Body's First Line of Defence

UV rays react with a chemical called melanin, which is found in the skin. Melanin absorbs dangerous UV rays before they cause skin damage.

## Avoid the Strongest Rays of the Day

Stay in the shade when the sun is at its strongest (usually from 10am to 4pm).





If you are in the sun during this time, be sure to apply and reapply sunscreen.

#### Cover Up

One of the best ways to protect yourself from the sun is to cover up your skin from UV rays.

### Use Protective Eyewear

Sun exposure damages the eyes as well as the skin. The best way to protect eyes is to wear sunglasses.

#### Use Sunscreen

Select an SPF sunscreen of 30 or higher to prevent sunburn and tanning, both of which are signs of sun damage.





#### Be sure to:

- apply sunscreen whenever you are in the sun;
- reapply sunscreen often, about every two hours. Reapply after sweating or swimming;
- apply a water-resistant sunscreen around water or when swimming.



# Sun Safety Questions

1.	How does vitamin D help our bodies?
2.	What are the three types of ultraviolet rays which radiate from the sun?
3.	Which is the least dangerous type of ultraviolet and which is the most dangerous?
4.	How does the ozone layer work to protect us from the sun's rays?
5.	How does melanin protect the skin?
6.	When is the sun at its strongest?
7.	True or false: Clouds filter out ultraviolet rays.
8.	What three things should we do to look after our skin?
9.	What does 'SPF' stand for?



# Sun Safety **Answers**

1. How does vitamin D help our bodies?

Vitamin D helps our bodies by absorbing calcium for stronger, healthier bones.

2. What are the three types of ultraviolet rays which radiate from the sun?

The three types of rays that radiate from the sun are UVA, UVB and UVC.

3. Which is the least dangerous type of ultraviolet and which is the most dangerous?

UVA rays are the least dangerous to humans and UVC rays are the most dangerous.

4. How does the ozone layer work to protect us from the sun's rays?

The ozone layer protects us by absorbing UVC rays and some UVB rays.

5. How does melanin protect the skin?

Melanin protects the skin by absorbing dangerous UV rays before they cause sun damage.

6. When is the sun at its strongest?

The sun is usually at its strongest from 10am to 4pm.

7. True or false: Clouds filter out ultraviolet rays.

**False** 

8. What three things should we do to look after our skin?

We should cover up, use sunscreen and use protective eyewear.

9. What does 'SPF' stand for?

SPF stands for Sun Protection Factor.



# Sun Safety

We all need some sun exposure – it's the best source of vitamin D, which helps our bodies absorb calcium for stronger, healthier bones.

However, too much time spent in the sun's ultraviolet (UV) rays can cause skin damage, eye damage and skin cancer.

Taking the right precautions is very important when protecting your skin.



### Sun Exposure

The sun radiates light to the earth, and part of that light is invisible UV rays. When these rays reach the skin, they cause tanning, burning, and other skin damage. Sunlight contains three types of ultraviolet rays: UVA, UVB and UVC.

- **UVA** rays cause skin aging and contribute to skin cancer. UVA rays easily pass through the ozone layer (the protective layer of atmosphere, or shield, surrounding the earth); they make up the most of our sun exposure.
- **UVB** rays are also dangerous, causing sunburn and eye damage (cataracts). They also contribute to skin cancer. Most UVB rays are absorbed by the ozone layer, but enough of these rays pass through to cause serious damage.
- **UVC** rays are the most dangerous. Fortunately, these rays are blocked by the ozone layer and don't reach the earth.

## Melanin: The Body's First Line of Defence

UV rays react with a chemical called melanin, which is found in the skin. Melanin absorbs dangerous UV rays before they cause skin damage.





#### Avoid the Strongest Rays of the Day

Seek shade when the sun is at its strongest (usually from 10am to 4pm). If you are in the sun during this time, be sure to apply and reapply sunscreen. UV rays can travel through the clouds; people are often unaware that they're developing sunburn on cooler or windy days because the breeze makes the air feel cool.

#### Cover Up

One of the best ways to protect yourself from the sun is to cover up your skin to stop the UV rays reaching it.

#### Use Protective Eyewear

Sun exposure damages the eyes as well as the skin. The best way to protect eyes is to wear sunglasses.

#### Use Sunscreen

Select an SPF of 30 or higher to prevent sunburn and tanning, both of which are signs of sun damage.





For sunscreen to do its job, it must be applied correctly, so be sure to:

- apply sunscreen whenever you are in the sun;
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**False** 

8. What three things should we do to look after our skin?

We should cover up, use sunscreen and use protective eyewear.

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# Sun Safety

We all need some sun exposure – it's the best source of vitamin D, which helps our bodies absorb calcium for stronger, healthier bones.

However, repeated, unprotected exposure to the sun's ultraviolet (UV) rays can cause skin damage, eye damage and skin cancer.

Most children get much of their lifetime sun exposure before age 18, so it's important for parents to teach them how to enjoy fun in the sun safely. Taking the right precautions is very important when protecting your skin.



#### Sun Exposure

The sun radiates light to the earth, and part of that light consists of invisible UV rays. When these rays reach the skin, they cause tanning, burning, and other skin damage. Sunlight contains three types of ultraviolet rays: UVA, UVB and UVC.

- **UVA** rays cause skin aging and contribute to skin cancer.

  Because UVA rays pass effortlessly through the ozone layer (the protective layer of atmosphere, or shield, surrounding the earth), they make up the majority of our sun exposure.
- **UVB** rays are also dangerous, causing sunburn and eye damage (cataracts). They also contribute to skin cancer. Melanoma, the most dangerous form of skin cancer, is associated with severe UVB sunburns that occur before the age of 20. Most UVB rays are absorbed by the ozone layer, but enough of these rays pass through to cause serious damage.





• **UVC** rays are the most dangerous, although fortunately these rays are blocked by the ozone layer and don't reach the earth.

#### Melanin: The Body's First Line of Defence

UV rays react with a chemical called melanin that's found in the skin. Melanin absorbs dangerous UV rays before they cause skin damage. The lighter someone's natural skin colour, the less melanin it has and the darker a person's natural skin colour, the more melanin it has to protect itself.

#### Avoid the Strongest Rays of the Day

Seek shade when the sun is at its strongest (usually from 10am to 4pm). If you are in the sun during this time, be sure to apply and reapply sunscreen. Most damage occurs as a result of incidental exposure during day-to-day activities, not sunbathing! Even on a cloudy, cool or overcast days, UV rays travel through the clouds. Clouds don't filter out UV rays and this 'invisible sun' can cause unexpected sunburn and sun damage. People are often unaware that they're developing sunburn or cooler or windy days because the temperature or breeze keeps the air feeling cool.

#### Cover Up

One of the best ways to protect yourself from the sun is to cover up and shield skin from UV rays. Be sure that clothes will screen out harmful UV rays by placing your hand inside the garments and making sure you can't see through them. Babies under six months should be kept out of the sun.

### Use Protective Eyewear

Sun exposure damages the eyes as well as the skin. The best way to protect eyes is to wear sunglasses. However, not all sunglasses provide the same level of ultraviolet protection; purchase sunglasses with labels ensuring that they provide 100% UV protection.







#### Use Sunscreen

Select an SPF of 30 or higher to prevent sunburn and tanning, both of which are signs of sun damage. Choose a sunscreen that protects against UVA and UVB rays.



For sunscreen to do its job, it must be applied correctly, so be sure to:

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5.	How does melanin protect the skin?
6.	Why does sunburn happen?
7.	When is the sun at its strongest?
8.	True or false: Clouds filter out UV rays.
9.	What is meant by 'invisible sun'? '
10.	What precautions should parents of babies take?
11.	What should you look for when purchasing sunglasses?



# Sun Safety **Answers**

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The ozone layer protects us by absorbing UVC rays and some UVB rays.

5. How does melanin protect the skin?

Melanin protects the skin by absorbing dangerous UV rays before they cause sun damage.

6. Why does sunburn happen?

Sunburn happens when the amount of UV exposure is greater than the skin's melanin can absorb.

7. When is the sun at its strongest?

The sun is usually at its strongest from 10am to 4pm.

8. True or false: Clouds filter out UV rays.

**False** 

9. What is meant by 'invisible sun'?

'Invisible sun' means that the UV rays are still coming through the clouds, but we don't see the sun itself.

10. What precautions should parents of babies take?

Parents should keep babies under six months out of the sun.

11. What should you look for when purchasing sunglasses?

When purchasing sunglasses you should look for 100% UV protection.



