

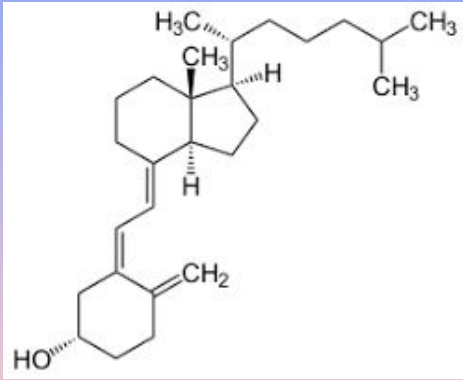


# Sun Exposure

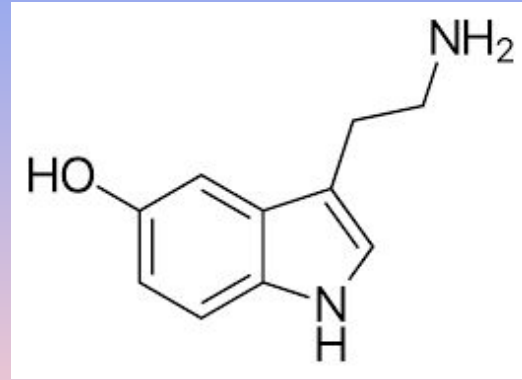
Jasmine Tzeng  
Bruins Public Health  
Living in LA Campaign



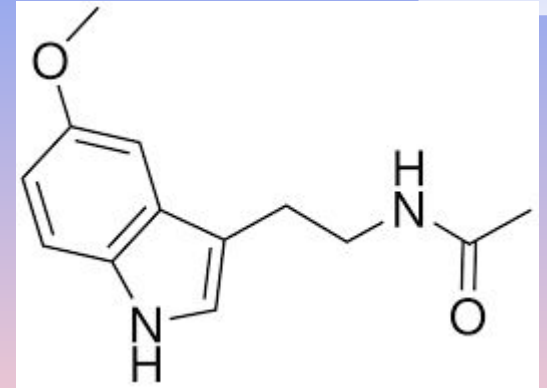
## Benefits of Sun Exposure



Vitamin D



Serotonin



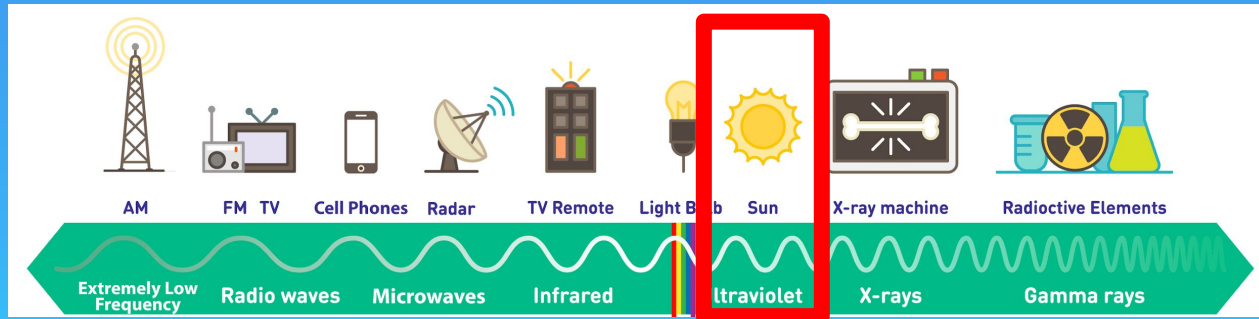
Melatonin

[https://en.wikipedia.org/wiki/Vitamin\\_D](https://en.wikipedia.org/wiki/Vitamin_D)

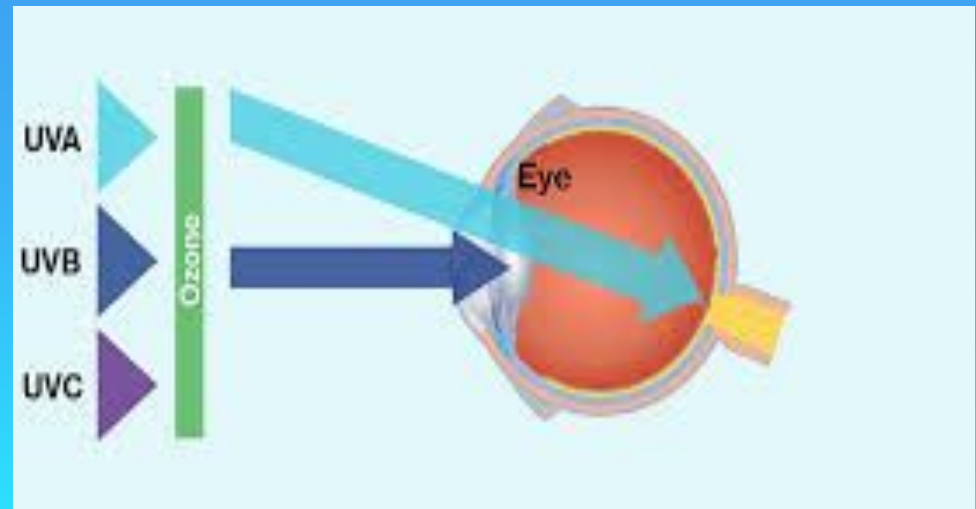
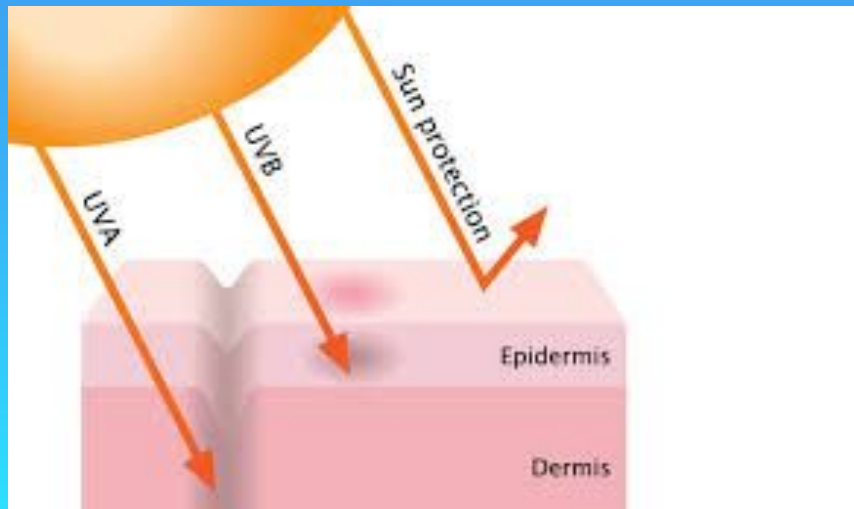
<https://en.wikipedia.org/wiki/Serotonin>

<https://en.wikipedia.org/wiki/Melatonin>

# Ultraviolet Radiation



UVA	Weakest, but penetrates the most deeply into the skin and eyes	Long term skin damage (wrinkles), some skin cancers, macular degeneration
UVB	More energy than UVA, mostly absorbed by ozone layer, hits the surface of skin and eyes	Sunburns, most skin cancers, corneal problems, distorted vision, photokeratitis, cataracts
UVC	Highest energy, absorbed by ozone layer	Not much of a concern



<https://www.uvex-safety.co.uk/en/how-uv-rays-can-damage-eyes/>

<https://blog.safetyglassesusa.com/indoor-uv-protection/>

# Sun Protection



shade



clothing



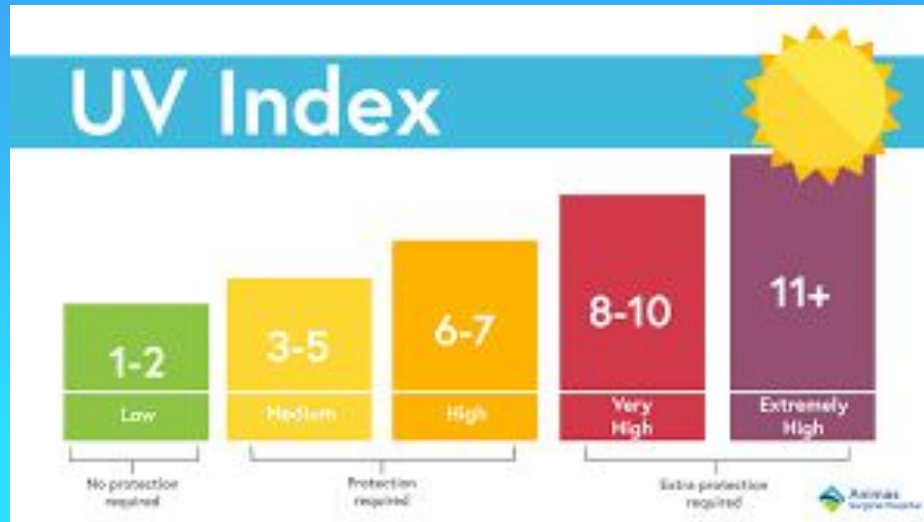
sunscreen and  
sunblock



sunglasses

## Shade

- Stay out of the sun
- Sunlight is the strongest during midday hours
  - Around 10am to 4pm
- <https://www.epa.gov/enviro/uv-index-search>



<https://www.animassurgical.com/the-uv-index-and-why-you-should-care-about-it/>

## Sun Protection - Indoors



## Clothing

- Serves as a physical barrier between the sun and your skin
- Long sleeves and pants that cover bare skin
- Hats with a wide brim that provides shade for head, face, and neck





## Sunscreens and Sunblocks

- Sunscreen: chemically absorbs UV rays
- Sunblock: sits on the skin to block UV rays
- Everyone should wear sunscreen!!!

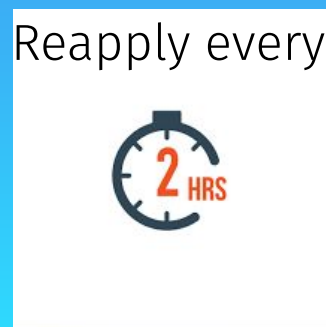
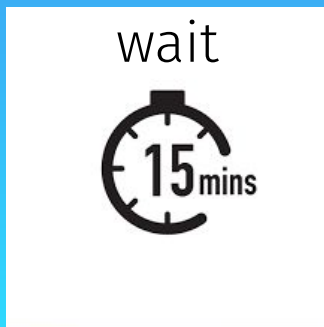


<https://www.today.com/health/top-10-sunburn-soothing-products-according-dermatologists-t132623>

<https://miiskin.com/skin-cancer/>

## Proper Application of Sunscreen

- SPF: sun protection factor
  - SPF 30 = protects against 97% of UVB rays
  - SPF 50 = protects against 98% of UVB rays
- Broad Spectrum: protects against both UVA and UVB

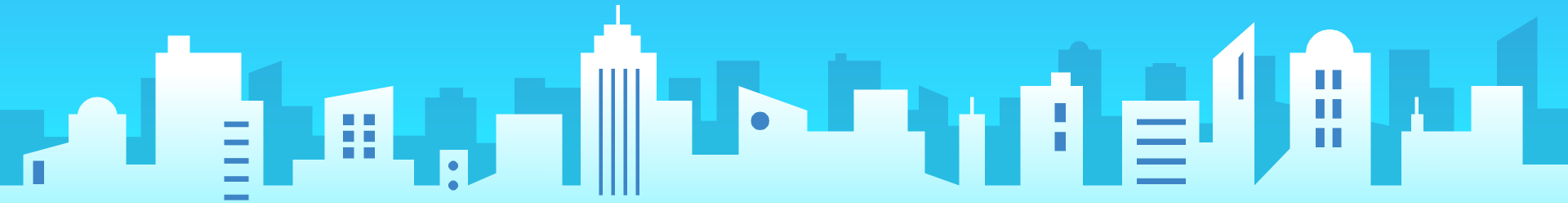


- Reapply after going in the water and excessive sweating



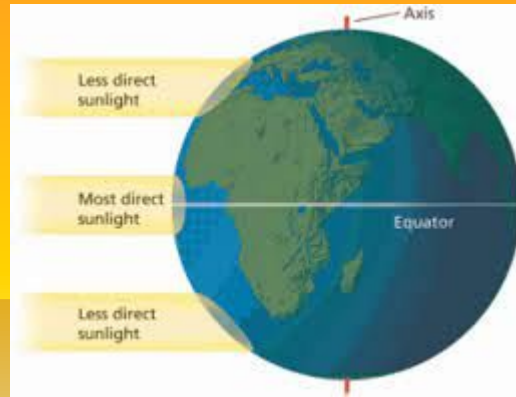
## Sunglasses

- Darker lenses DOES NOT equal more sun protection!
- Lenses need to have UV coating applied to them
  - If labeled as UV protecting, it should block at least 99% of UVA and UVB rays
  - Higher quality sunglasses probably do offer better sun protection



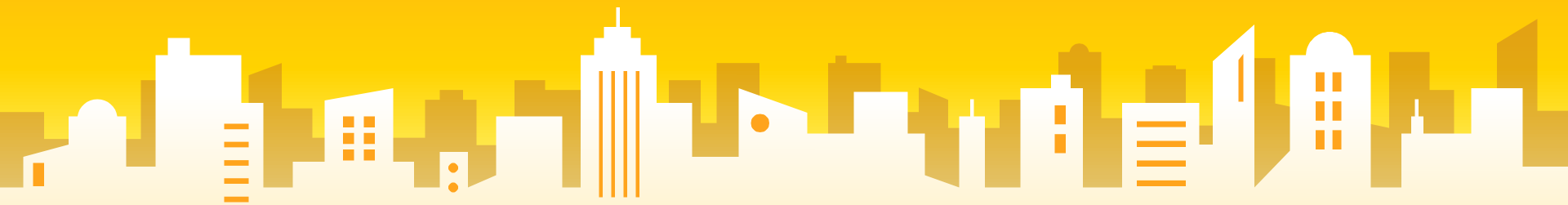
## Sun exposure in LA vs other places

- Very sunny city!
  - 284 days a year of sun on average, US average is 205
- Close to the equator - more direct sunlight



## Conclusion

- While sunlight has benefits, it is important to protect yourself from UV rays
- The best forms of sun protection are shade, clothing, sunscreen, and sunglasses
- Everyone should use SPF 30 sunscreen every day, reapplying every 2 hours, even when indoors



The End



## Sources

- ◻ <https://www.healthline.com/health/depression/benefits-sunlight>
- ◻ <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2290997/>
- ◻ <https://www.cancer.org/cancer/cancer-causes/radiation-exposure/uv-radiation.html>
- ◻ <https://www.cdc.gov/nceh/features/uv-radiation-safety/index.html>
- ◻ <https://www.health.harvard.edu/blog/sun-protection-appropriate-sunscreen-use-2018062114114#:~:text=You%20should%20apply%20sunscreen%2015,they%20are%20labeled%20water%2Dresistant.>
- ◻ [https://enviro.epa.gov/enviro/uv\\_hourly?zipcode=95630&city\\_name=&state\\_code=&minx=&maxx=&miny=&maxy=](https://enviro.epa.gov/enviro/uv_hourly?zipcode=95630&city_name=&state_code=&minx=&maxx=&miny=&maxy=)
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- ◻ <https://www.animassurgical.com/the-uv-index-and-why-you-should-care-about-it/>
- ◻ <https://blog.safetyglassesusa.com/10976-2/>
- ◻ [https://www.bestplaces.net/climate/city/california/los\\_angeles#:~:text=On%20average%2C%20ther,e%20are%20284,average%20is%20205%20sunny%20days.](https://www.bestplaces.net/climate/city/california/los_angeles#:~:text=On%20average%2C%20ther,e%20are%20284,average%20is%20205%20sunny%20days.)