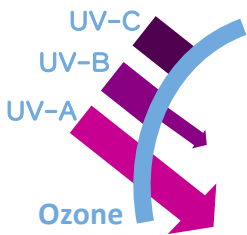


# Caring for your Skin

Ultraviolet rays are light rays with shorter wavelengths than visible light in sunlight. In recent years, the destruction of the ozone layer has become an environmental problem, and along with this, the amount of ultraviolet rays that are harmful to the human body has increased.

When humans are exposed to ultraviolet light, the genes in the basal cells of the skin are damaged. However, damaged genes can be repaired, but if the damage is severe due to exposure to a large amount of ultraviolet rays, the damage may not be repaired, and the DNA of normal cells may mutate and cause skin cancer.



Ultraviolet rays are classified into three types according to the length of the wavelength, and are called "UV-C", "UV-B", and "UV-A" in descending order of wavelength. UV-C, which is said to be the most harmful, is absorbed by the ozone layer and does not reach the earth, but UV-A and UV-B can damage our eyes and skin. Sunglasses, umbrellas and sunscreen products can protect us from long exposure outdoors.

## THE OZONE LAYER

### <What is the ozone layer? >

The ozone layer is ozone that gathers about 10 to 50 km above the ground (the stratosphere), and is an important layer of the atmosphere that protects us.

### <The ozone layer acts as a filter>

Phytoplankton, which was born in the primordial sea, created oxygen over a period of about 3.2 billion years, and the earth became covered with air.

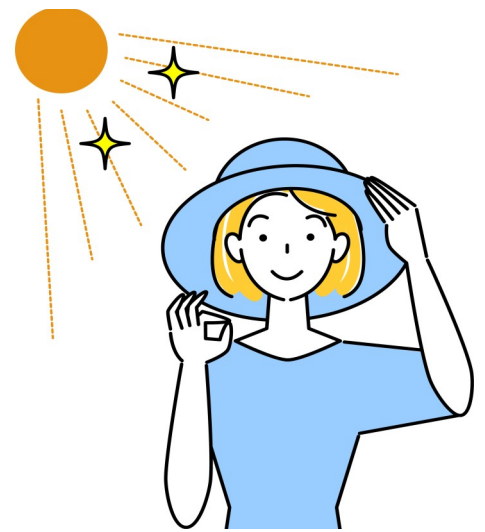
About 400 million years ago, a small portion of the atmosphere became the ozone layer. It is because the ozone layer cuts out harmful ultraviolet rays from the sun that life has become possible on earth. In other words, life on earth does not receive the light directly from the sun, but the "soft sunlight" that the ozone layer allows without harmful ultraviolet rays.

■ **UV Rays and Vitamin D:** UV rays, which tend to get a lot of attention for their harmful effects, actually is responsible for the production of vitamin D in our bodies. Vitamin D is widely known for its ability to promote calcium absorption and improve bone formation and muscle strength.

■ **UV Rays and Eyes:** UV rays can also affect your eyes. Exposure to strong UV rays is said to induce not only UV keratitis, in which the cornea becomes inflamed, but also cataracts. According to the WHO, 16 million people worldwide are currently blind as a result of cataracts, of which 20% are estimated to be caused by UV radiation.

■ **Melanin and blemishes:** Melanin has the function of "protecting skin cells from ultraviolet rays", but if melanin is excessively produced by exposure to ultraviolet rays, it causes blemishes and spots.

参考資料: <https://www.pref.okayama.jp/site/712/detail-40980.html> [https://gansenshiniryō.jp/nutrition/post\\_75](https://gansenshiniryō.jp/nutrition/post_75) | <https://www.niigata-cc.jp/disease/shigaisen.html>



## How to protect my skin?



- Avoid going out during hours when UV rays are strong
- Stay in the shade ● Wear sunglasses ● Wear a hat
- Wear a scarf
- Apply Skin protector various times in very sunny days.

## Magnus Products

- ① UV50: SRP\$50  
Protect your skin health
- ② NanoCollagen (granule): SRP\$60
- ③ NanoCollagen (grain): SRP\$60  
Restores elasticity and skin strength
- ④ Vitamin C: SRP\$16  
Repairing antioxidant
- ⑤ Caltop-D: SRP\$50  
Contains Calcium and Vitamin D

