

# CAMELLIA NEWSLETTER

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## Take care of sun tan from inside the body!

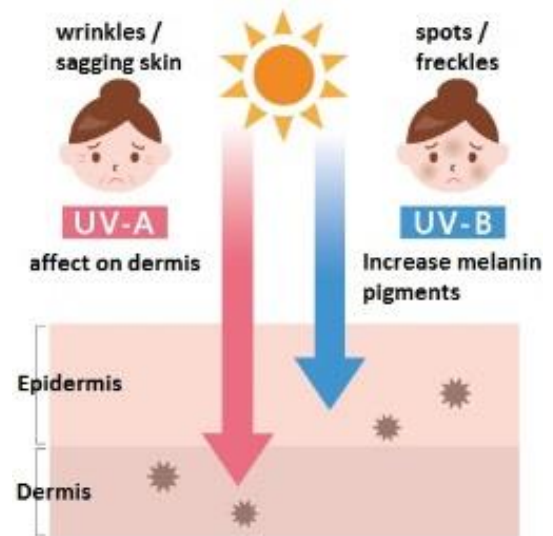
We are exposed to ultraviolet rays without even noticing while commuting or doing our daily housekeeping. In this issue, we will introduce some countermeasures against tanning not only from the outside but also from the inside of the body. Let's take this opportunity to learn how to protect your skin from tanning in order to keep it healthy.

### ◆◆ What is sun tanning?

When the sunny season arrives, there are more chances of going outside. However, are you aware of the effects of getting a suntan? Ultraviolet rays start increase rapidly from spring and their peak season is from July to August. Sun tanning is the process where ultraviolet rays in sunlight make the skin red or cause melanin pigmentation on the skin surface. Sun tanning causes skin dryness, spots and wrinkles, and accelerates aging of the skin. The risks of developing skin cancer also increase. Therefore, we need to be careful to avoid overexposure to strong sunlight. Frequent application of sun block is necessary in daily life as well as when you do outdoor activities.

### ◆◆ Symptoms and care of tanning

Tanning is the same thing as a burn. Symptoms such as itching, having a blister, skin peeling and a strong burning sensation occur with the exposure to strong ultraviolet rays. In Japan, we run cold water over the affected area from strong sunlight. The pain or itching calms down by chilling the affected area with a cold shower, a water bath or an ice pack because these items can suppress inflammation at the affected area. The affected area becomes dry which make the barrier function weak; therefore, applying enough moisturizer to the affected skin is very important.



The time of day when the ultraviolet rays become the strongest is between 10:00 to 13:00. If you go out during this time, you have to be careful about getting a suntan. You can be affected by ultraviolet rays by being in the vicinity of a window in the room, out for a short time to hang out your laundry and even in a cloudy day. Since ultraviolet rays accumulate on a daily basis, frequent application of sunblock is important. Ultraviolet rays shower down on us throughout the year. You should be aware of them even when their peak period is over.

Tanning will darken your skin. This is because the body creates a lot of melanin pigments to protect the skin from ultraviolet rays. The amount of melanin pigment is on the skin is low that means the skin color is light. However, it also makes the skin weaker against ultraviolet rays. Depending on the skin type, there are individual differences in the effect on the skin from the exposure to ultraviolet rays as there are people who "get red immediately after the exposure", "get red and then turn black" and "turn black without being red".

### ◆◆ External protection against ultraviolet rays

There are two kinds of ultraviolet rays: ultraviolet A (UV-A) and ultraviolet B (UV-B). UV-A penetrates deep into the skin, takes away its tone and elasticity, and induces photo aging which cause wrinkles and sagging skin. UV-B induces skin inflammation and pigmentation which causes spots and freckles.

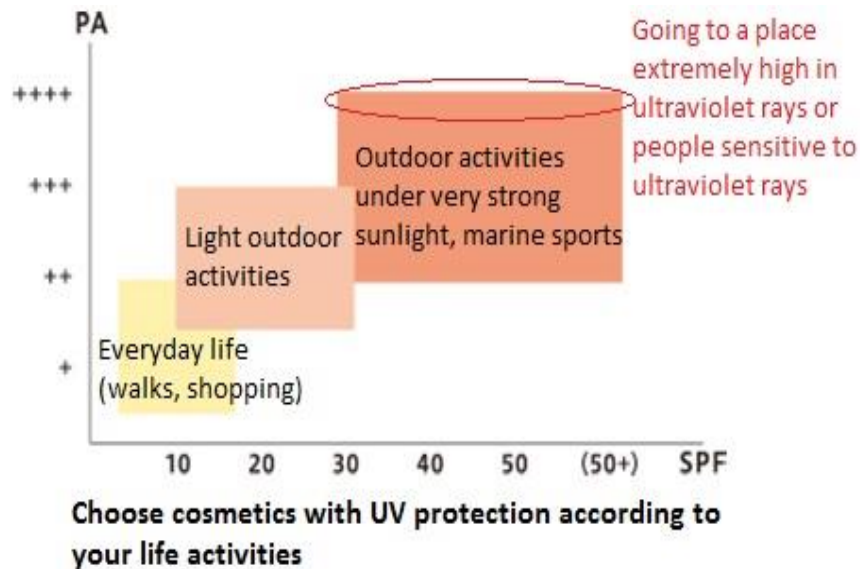
You find indications about SPF and PA on the label of sunscreens. SPF measures sunscreen protection from UV-B rays. The larger the number, the greater the sunscreen protection will be. The greatest protection is displayed as 50+. The higher SPF level is more effective to prevent

redness and inflammation of the skin. PA measures sunscreen protection from UV-A. If the label has more + signs, the prevention level against skin aging is higher. Currently, PA is indicated with 4 levels. The following table explains the protection level of sunscreen. It is recommended to select the sunscreen according to your life activities.

Check the level of sunscreen on the label!



**If you use a little amount of sunscreen or apply it unevenly, you cannot have sufficient protection!**



### ◆◆ Internal protection against ultraviolet radiation

Daily diet is deeply involved in the regeneration of skin. Here are recommended nutrients effective to protect the skin from tanning.

#### ● Vitamin C

Vitamin C suppresses the formation of melanin pigment and pigmentation. It also helps in the formation of collagen which is the base of elasticity of the skin. Vitamin C is important not only to prevent damage of the skin from ultraviolet rays, but also to soothe tanning.

Foods rich in vitamin C are red peppers, broccoli, mulukhiya (corchorus olitorius), kiwi and strawberries.

#### ● Vitamin E

Vitamin E is a strong antioxidant nutrient. It is also called "rejuvenating vitamin". It improves blood circulation and promotes metabolism, making the skin to have less spots and freckles. It also prevents the generation of reactive oxygen species which is a major cause of aging of the skin which in turn protects it from oxidation. Taking vitamin E with vitamin C enhances further effects.

Since vitamin E is lipid soluble, its absorption improves when it is taken with oil. Foods rich in vitamin E are eels, sardines, salmon roe, egg, pumpkins, red peppers and avocados.

#### ● Lycopene

Lycopene is a red pigment contained in tomatoes and watermelons, and has the effect of suppressing the formation of melanin pigment which causes pigmentation such as spots and freckles. In addition, it has a strong antioxidant effect, it is said to contain about 100 times the antioxidant power of vitamin E.

Lycopene is also known for having its effect enhanced when taken together with vitamin E. The whitening of the skin as well as the absorption level of lycopene can be improved by taking it with vitamin E. Foods rich in lycopene are tomato, watermelon and pink grapefruit.

We tend to lose our appetite during the hot season, but having sufficient nutrients is an important countermeasure to protect the skin from tanning.

◆◆ **Good foods for the prevention of tanning: chopped salad**



Chopped salad is just like regular salad with a presentation where the ingredients are chopped and incorporated together instead of layered. Besides vegetables, we can easily eat a wide variety of ingredients such as meat, fish, eggs, and beans within one dish. You can also enjoy it with a variety of flavor by using different dressings for seasoning.

**Foods containing a lot of vitamin C:**

Red pepper, Broccoli, Mulukhiya(corchorus olitorius), Kiwi, Strawberry

**Foods containing a lot of vitamin E:**

Eel, Sardine, Salmon roe, Egg, Pumpkin, Red pepper, Avocado

**Foods containing a lot of lycopene:**

Tomato, Watermelon, Pink grapefruit

