



# Protection from the Sun

Key Points at a Glance

Information from the Cancer League



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# UV RAYS

## The Sun and its Rays

The sun is vital for all. It provides us with light, warmth and well-being. However, the sun's UV rays also pose some risks because they can damage the skin. Under the influence of UVB rays, the epidermis thickens, but on the other hand, the UVB rays help the skin's pigment cells produce melanin which causes tanning. As a result, the skin tries to protect itself from UV rays. UVA and UVB rays are one of the main causes of skin cancer and can prematurely age the skin.

## Solariums

In addition to the sun's natural UV rays, a solarium's artificial UV rays can also harm your skin. You increase the risk of skin cancer and accelerate the aging of your skin each time you have a solarium session. It's advised to avoid using solariums.

## Vitamin D

Vitamin D production in the body is stimulated by UVB rays on the skin. Vitamin D is also absorbed by the body through food, but this does not fully cover the body's needs. An adequate supply of vitamin D is essential for muscles, as well as for bone and teeth development.

UV exposure to resolve a vitamin D deficiency is not a good idea, due to the harmful effects of UV rays. When deficiencies are noted or an increased need is manifested, vitamin D can be taken; for example, in the form of drops. Any suspicions of a vitamin D deficiency should be validated by a doctor.

# PROTECTION FROM THE SUN

## Why Do We Need to Protect Ourselves from the Sun?

Sun protection is essential in shielding our skin from solar radiation's harmful effects. The skin can only be exposed to the sun for a certain amount of time without reddening. Any skin redness may indicate damage. However, skin damage may even occur without redness.

Everyone has a reaction to solar radiation but each individual's reaction is different. Whether dark-skinned or fair-skinned – everybody should protect themselves from the sun. It is advisable to wear suitable clothing and head gear to protect the skin, as well as to wear sunglasses to protect the eyes. Sunscreen should be applied to uncovered areas of skin.

People whose skin seldom tans or whose skin always gets red first are particularly sensitive to solar radiation and should especially take care in protecting themselves from the sun.

## When and What Kind of Sun Protection Do You Need?

Staying out in the open air is great for a variety of recreational activities and enhances our well-being. We can protect ourselves from the sun with a few simple measures. The right kind of sun protection depends on various factors; such as the UV rays intensity, the type of outdoor activity, how long you stay in the sun, as well as your skin's sensitivity to the sun.

### The Most Important Tips

- Stay in the shade from 11:00 to 15:00 hours
- Wear clothing, a hat, and sunglasses
- Apply sunscreen
- Never use solariums

## Shade

Shade is the best sunscreen – especially during the midday hours when the sun is most intense. However, be aware that the shade does not always protect you from indirect radiation coming from reflective surfaces such as sand, concrete and snow, or from stray radiation; that is, radiation reflected from an object's surface.

## Clothing

Clothing generally provides good protection from UV rays. Clothed parts of the body remain constantly protected throughout the day. For example, a t-shirt that covers the shoulders offers good protection. Also, a wide-brimmed hat which shades the forehead, nose, ears and neck offers good protection from the sun.

## Sunglasses

Too much UV radiation not only damages the skin, but can also harm the eyes. Anyone who is frequently out in the open air, should wear sunglasses to protect their eyes. It is important to look for the CE label with the “100% UV” mark certification, when purchasing sunglasses.

## Sunscreen

Correct and consistent sunscreen application is recommended, in addition to staying in the shade and wearing clothing for protection from the sun. Proper use of sunscreen provides protection against UVB and UVA rays and can reduce the risk of skin cancer. However, caution is advised here – even sunscreen with a high SPF is not a free pass for staying in the sunshine all day.



## Children's Skin

Children's skin is more sensitive than adults. Children's natural self-protection mechanisms are not yet fully developed, especially in the first years of life. Therefore, children's skin always needs special sunscreen.

### Protection from the Sun – Tips for Children

- Do not put babies in the direct sunlight
- Give preference to shade over sun
- Avoid exposing children to the sun from 11:00 to 15:00 hours
- Cover the child's head with a hat that has neck protection or a wide brim. Dress the child in a t-shirt and pants and have the child wear sunglasses
- Apply sunscreen to the child's uncovered areas of skin. Make sure the sunscreen protects against UVA rays (UVA signet) and UVB rays (indicating the SPF – sun protection factor), and also has a high sun protection factor (at least SPF 30).
- Even waterproof sunscreen should be re-applied after swimming or time in the water
- Also protect the child's lips, ears, nose and feet

# SKIN CANCER

## What is Skin Cancer?

Genetic material (DNA) inside each of our cells contains essential information on cell development and metabolism. UV radiation damages the DNA. To a certain extent, the body can repair the damage to the DNA; although some individual cells can remain damaged and then develop into cancer cells.

## What is a Melanoma (Malignant Melanoma)?

The most dangerous form of skin cancer is melanoma, because it can metastasize. A melanoma can develop in the skin's pigment cells. Moles as well as birthmarks are harmless. In rare cases, pigment cells can form tumours (melanomas). Every year in Switzerland around 2400 people are diagnosed with melanoma and about 300 patients die as a result of this type of cancer.

## What is Non-melanoma Skin Cancer?

Frequently, non-melanoma skin cancers such as basal cell carcinoma or prickle-cell carcinoma are more common but less dangerous than melanoma. The exact number of new cases in Switzerland is not known because most cancer registries do not record non-melanoma skin cancer. It is estimated that 20 000 to 25 000 people are diagnosed in Switzerland each year with basal cell or prickle-cell carcinoma. These are usually surgically removed and, as a rule, require no further therapy.

## Risks

In addition to UV radiation, there are other factors that can increase the risk of melanoma.

People who have one or more of the listed characteristics below should especially protect themselves very well from the sun and regularly examine themselves for skin changes. It's also recommended to discuss with a doctor if a regular skin examination by a doctor is necessary.

- A high number of moles on the body (more than 100);
- Multiple, atypical moles (irregular in shape and colour);
- Previous skin cancer illness;
- Immune suppression (a person's natural defence system [immune system] is weakened due to illness, or their immune system has been suppressed due to medication use; for example, after an organ transplant).



## Skin Examination

It is important to pay attention to changes in the skin and if any noticeable changes are recognized, to consult with a doctor. The scientific basis is currently insufficient for recommending systematic examinations for early detection of skin cancer (skin cancer screening) to people who are not at an increased risk. However, if you have a feeling that a mole has changed in any way, it is reason enough to show it to a doctor.

## ABCD Rule

The adjacent “ABCD Rule” can be of help in detecting changes in the skin.

**Harmless Pigmentation**      **Potentially Dangerous Pigmentation**

**A = Asymmetry**

Regular, symmetrical shape



Irregular, non-symmetrical shape

**B = Border**

Regular, distinct border



Irregular, indistinct border (ragged, notched or blurred)

**C = Color**

Uniform color



Color is varied, spotted; not uniform

**D = Dynamic**

Unchanged, remains the same



Has changed (size, color, shape or thickness)

# THE CANCER LEAGUE IN YOUR REGION

## **Krebsliga Aargau**

Tel. 062 834 75 75

[www.krebsliga-aargau.ch](http://www.krebsliga-aargau.ch)

## **Krebsliga beider Basel**

Tel. 061 319 99 88

[www.klbb.ch](http://www.klbb.ch)

## **Bernische Krebsliga**

### **Ligue bernoise**

### **contre le cancer**

Tel. 031 313 24 24

[www.bernischekrebsliga.ch](http://www.bernischekrebsliga.ch)

## **Ligue fribourgeoise**

### **contre le cancer**

### **Krebsliga Freiburg**

tél. 026 426 02 90

[www.liguecancer-fr.ch](http://www.liguecancer-fr.ch)

## **Ligue genevoise**

### **contre le cancer**

tél. 022 322 13 33

[www.lgc.ch](http://www.lgc.ch)

## **Krebsliga Graubünden**

Tel. 081 252 50 90

[www.krebsliga-gr.ch](http://www.krebsliga-gr.ch)

## **Ligue jurassienne**

### **contre le cancer**

tél. 032 422 20 30

[www.liguecancer-ju.ch](http://www.liguecancer-ju.ch)

## **Ligue neuchâteloise**

### **contre le cancer**

tél. 032 721 23 25

[www.liguecancer-ne.ch](http://www.liguecancer-ne.ch)

## **Krebsliga Ostschweiz**

### **SG, AR, AI, GL**

Tel. 071 242 70 00

[www.krebsliga-ostschweiz.ch](http://www.krebsliga-ostschweiz.ch)

## **Krebsliga Schaffhausen**

Tel. 052 741 45 45

[www.krebsliga-sh.ch](http://www.krebsliga-sh.ch)

## **Krebsliga Solothurn**

Tel. 032 628 68 10

[www.krebsliga-so.ch](http://www.krebsliga-so.ch)



**Thurgauische Krebsliga**

Tel. 071 626 70 00

[www.tgkl.ch](http://www.tgkl.ch)**Lega ticinese contro il cancro**

Tel. 091 820 64 20

[www.legacancro-ti.ch](http://www.legacancro-ti.ch)**Ligue vaudoise  
contre le cancer**

tél. 021 623 11 11

[www.lvc.ch](http://www.lvc.ch)**Ligue valaisanne  
contre le cancer (Sion)**

tél. 027 322 99 74

[www.lvcc.ch](http://www.lvcc.ch)**Krebsliga Wallis (Brig)**

Tel. 027 970 35 41

[www.krebsliga-wallis.ch](http://www.krebsliga-wallis.ch)**Krebsliga Zentralschweiz****LU, OW, NW, SZ, UR**

Tel. 041 210 25 50

[www.krebsliga.info](http://www.krebsliga.info)**Krebsliga Zug**

Tel. 041 720 20 45

[www.krebsliga-zug.ch](http://www.krebsliga-zug.ch)**Krebsliga Zürich**

Tel. 044 388 55 00

[www.krebsligazuerich.ch](http://www.krebsligazuerich.ch)**Krebshilfe Liechtenstein**

Tel. 00423 233 18 45

[www.krebshilfe.li](http://www.krebshilfe.li)

# USEFUL INFORMATION

## **Brochures**

Tel. 0844 85 00 00  
shop@krebsliga.ch  
www.krebsliga.ch/broschueren

## **Cancer Hotline**

Tel. 0800 11 88 11  
Monday to Friday  
9:00 – 19:00 hours  
Calls are Free  
helpline@krebsliga.ch

## **Cancer Forum**

www.krebsforum.ch,  
Cancer League Internet Forum

## **Cancerline**

www.krebsliga.ch/cancerline  
Chat about Cancer: For Children,  
Young People and Adults  
Monday to Friday  
11:00 – 16:00 hours

## **Guide Post**

www.krebsliga.ch/wegweiser  
Cancer League internet  
directory for psycho-social  
support (classes, consultation  
services, etc.) in Switzerland

## **Stop Smoking Hotline**

Tel. 0848 000 181  
max. 8 centimes per minute  
(Land Line)  
Monday to Friday  
11:00 – 19:00 hours

# IMPRINT

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**swiss cancer league**

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