# Prevention

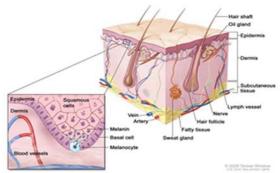
Skin Cancer Awareness Month May 2017

## SKIN CANCER AWARENESS MONTH

### **General Information about Skin Cancer**

Skin cancer is a disease in which malignant (cancer) cells form in the tissues of the skin.

There are several types of skin cancer. Skin cancer is the most common cancer in the United States.



## Skin Cancer is a Disease in which Malignant (cancer) Cells Form in the Tissues of the Skin

The skin is the body's largest organ. It protects against heat, sunlight, injury, and infection. Skin also helps control body temperature and stores water, fat, and vitamin D. The skin has several layers; the two main layers are the epidermis (outer layerupper layer) and the dermis (inner layer).

### The epidermis is made up of 3 kinds of cells:

Squamous cells are the thin, flat cells that make up most of the epidermis.

Basal cells are the round cells under the squamous cells.

Melanocytes are found throughout the inner part of the epidermis. They make melanin, the pigment that gives skin its natural color. When skin is exposed to the sun, melanocytes make more pigment, causing the skin to tan, or darken.

The dermis contains blood and lymph vessels, hair follicles, and sweat glands.

## There are Several Types of Skin Cancer

The most common types of skin cancer are:Squamous cell carcinoma and Basal cell carcinoma Squamous basal cell carcinoma are also called non-melanoma skin cancers.

Melanoma is a less common type of skin cancer that grows and spreads quickly.

Skin cancer can occur anywhere on the body, but it is most common in areas exposed to sunlight such as the face, neck, hands and arms.

### Skin Cancer is the most Common Cancer in the United States

Basal cell carcinoma and squamous cell carcinoma are the most common types of skin cancer in the United States. The number of new cases of non-melanoma skin cancer appears to be increasing every year. These non-melanoma skin cancers can usually be cured.

The number of new cases of melanoma has been increasing for at least 30 years. Melanoma is more likely to spread to nearby tissues and other parts of the body and can be harder to cure. Finding and treating melanoma skin cancer early may help prevent death from melanoma.

## SKIN CANCER PREVENTION

## Avoiding Risk Factors and Increasing Protective Factors may Help Prevent Cancer

Being exposed to ultraviolet radiation is a risk factor for skin cancer.

## Being Exposed to Ultraviolet Radiation is a Risk factor for skin cancer.

Some studies suggest that being exposed to ultraviolet (UV) radiation and the sensitivity of a person's skin to UV radiation are risk factors for skin cancer. UV radiation is the name for the invisible rays that are part of the energy that comes from the sun. Sunlamps and tanning beds also give off UV radiation.

### Risk factors for non-melanoma and melanoma cancers are not the same.

### Risk factors for non-melanoma skin cancer

Being exposed to natural sunlight or artificial sunlight (such as from tanning beds) over long periods of time.

Having a fair complexion, which includes the following:

Fair skin that freckles and burns easily, does not tan, or tans poorly.

Blue or green or other light-colored eyes.

Red or blond hair.

Having actinic keratosis.

Past treatment with radiation.

Having a weakened immune system.

Being exposed to arsenic.

### Risk Factors for melanoma skin cancer

Having a fair complexion which includes the following:

Fair skin that freckles and burns easily, does not tan, or tans poorly.

Blue or green or other light-colored eyes.

Red or blond hair.

Being exposed to natural sunlight or artificial sunlight (such as from tanning beds) over long periods of time.

Having a history of many blistering sunburns, especially as a child or teenager.

Having several large or many small moles.

Having a family history of unusual moles (atypical nevus syndrome).

Having a family or personal history of melanoma.

Being white.

## It is Not Known if the Following Lower the Risk of Non-melanoma Skin Cancer

### **Sunscreen Use and Avoiding Sun Exposure**

It is not known if non-melanoma skin cancer risk is decreased by staying out of the sun, using sunscreens, or wearing protective clothing when outdoors. This is because not enough studies have been done to prove this.

Sunscreen helps decrease the amount of UV radiation to the skin. One study found that wearing sunscreen can help prevent actinic keratoses, scaly patches of skin that sometimes become squamous cell carcinoma.

The harms of using sunscreen are likely to be small and include allergic reactions to skin creams and lower levels of vitamin D made in the skin because of less sun exposure.

It is also possible that when a person uses sunscreen to avoid sunburn they may spend too much time in the sun and be exposed to harmful UV radiation.

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For further information please visit the Strang website www.strang.org

## SKIN CANCER PREVENTION

Consumer Reports have Evaluated 66 Sunscreen Products and have Found that Many Do Not Provide Adequate Protection

### The Following were Highly Recommended

La Roche Posay Athelios 60

Equate Sport Lotion SPF 50

Pure Sun Defense SPF 50

## Although Protecting the Skin and Eyes from the Sun Has Not been Proven to Lower the Chance of Getting Skin Cancer, Skin Experts Suggest the Following:

Use sunscreen that protects against UV radiation.

Do not stay out in the sun for long periods of time, especially when the sun is at its strongest.

Wear long sleeve shirts, long pants, sun hats, and sunglasses, when outdoors.

## **Chemopreventive Agents**

Chemoprevention is the use of drugs, vitamins, or other agents to try to reduce the risk of cancer. The following chemopreventive agents have been studied to find whether they lower the risk of non-melanoma skin cancer.

#### Beta carotene

Studies of beta carotene (taken as a supplement in pills) have not shown that it prevents non-melanoma skin cancer from forming or coming back.

### Isotretinoin

High doses of isotretinoin have been shown to prevent new skin cancers in patients with the rare disease xeroderma pigmentosum. However, isotretinoin has not been shown to prevent non-melanoma skin cancers from coming back in patients previously treated for non-melanoma skin cancers. Treatment with isotretinoin can cause serious side effects

#### Selenium

Studies have shown that selenium (taken in brewer's yeast tablets) does not lower the risk of basal cell carcinoma, and may increase the risk of squamous cell carcinoma.

### Celecoxib

A study of celecoxib in patients with actinic keratosis and a history of non-melanoma skin cancer found those who took celecoxib had slightly lower rates of recurrent non-melanoma skin cancers. Celecoxib may have serious side effects on the heart and blood vessels.

## Alpha-difluoromethylornithine (DFMO)

A study of alpha-difluoromethylornithine (DFMO) in patients with a history of non-melanoma skin cancer showed that those who took DFMO had lower rates of non-melanoma skin cancers coming back than those who took a placebo. DFMO may cause hearing loss which is usually temporary.

### Nicotinamide (vitamin B3).

Studies have shown that nicotinamide (vitamin B3) helps prevent new actinic keratoses lesions from forming in people who had four or fewer actinic lesions before taking nicotinamide. More studies are needed to find out if nicotinamide prevents non-melanoma skin cancer from forming or coming back.

## It is Not Known if the Following Lower the Risk of Melanoma:

### Sunscreen

It has not been proven that using sunscreen to prevent sunburn can protect against melanoma caused by UV radiation. Other risk factors such as having skin that burns easily, having a large number of benign moles, or having atypical nevi may also play a role in whether melanoma forms.

### Counseling and protecting the skin from the sun

It is not known if people who receive counseling or information about avoiding sun exposure make changes in their behavior to protect their skin from the sun.

## **The Strang Cancer Prevention Cookbook**

## Reduce your Risk for Cancer by Eating a Healthy Diet!

### No-Fuss Broccoli Soufflé

4 Servings

4 cups fresh broccoli florets or 1 1/4 pounds frozen broccoli, thawed and drained

1 medium potato peeled and cut into 1/2-inch cubes

2 large egg whites

1 large egg

1/3 cup freshly grated Parmesan cheese

1/8 to 1/4 teaspoon cayenne pepper, to taste

1/3 teaspoon salt

Freshly ground black pepper to taste

1 teaspoon olive oil or olive oil based cooking spray



Cook the broccoli florets and potato in boiling salted water until very tender, 5-7 minutes. Drain.

Puree the broccoli and potato in a food processor until no large chunks remain.

Add the remaining ingredients except for the olive oil and puree until very smooth.

Evenly coat four 4-6 ounce ramekins or small ceramic bowls with olive oil and fill with the broccoli mixture.

Pat down and smooth out the surface with a rubber spatula so that it is flat and firmly packed.

Microwave individually for 5-8 minutes on high (time depends on the power of the oven) until the center is set and firm. Run a paring knife around the sides of the ramekins to loosen the soufflé's for easy removal. Carefully invert each mold and serve hot or at room temperature.

Notes: For a lighter soufflé whip the egg whites separately until soft peaks form. Fold the egg whites into the seasoned, pureed broccoli mixture and continue as directed.

Calories 126 Protein 12g Carbohydrates 14g Fat 4g Cholesterol 59mg Dietary fiber 5g Saturated fat 2g

Major sources of Potential cancer fighters: Phytochemicals: capsaicin, glucosinolates, plant polyphenols (flavonoids), plant sterols, terpenes (carotenoids, monoterpenes).

Recipe by Laura Pensiero, R.D. Owner Gigi Trattoria, Rinebeck, New York



May is Skin Cancer Awareness Month



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