



Strang

Cancer Prevention Institute
Dedicated to Promote Cure by Early Detection and Research to Prevent Cancer since 1933

Prevention

Skin Cancer Awareness Month May 2020

SKIN CANCER AWARENESS MONTH

SKIN CANCER PREVENTION

Skin cancer is the **most preventable cancer** simply by **reducing ultraviolet radiation (UVR) exposure**. Both melanoma and keratinocyte carcinoma (squamous and basal cell cancers) have **tripled** in the **last 50 years**.

Screening by skin examination is inefficient with small **potential benefit**. Therefore, **behavioral modification**, particularly by the **young**, is the primary available intervention.

UV exposures occur **naturally** and **commercially** (UVR-emitting tanning beds). Public policy may reduce commercial exposures. For example, skin cancer prevention policy guidelines by the American Society of Medical Oncology, like other health and professional bodies, recommend **regulatory prohibition against UVR-emitting device use**, especially children.¹

Avoiding direct sunlight and using **sunscreen** reduce natural exposures. **Education** may alter behavior to reduce exposures, but **uptake is poor**. Data from the Healthy Passages study found that only **23% of US fifth graders routinely use sunscreen**, including 6% of non-Hispanic blacks, 24% of Hispanics and 45% of non-Hispanic whites. School based sun-safety education and team sports activities had no effect.²

Essential agricultural workers are at great occupational risk. About a **third report past sunburn**, a major skin cancer risk factor, and **half did not use sunscreen regularly** for 1-hour-plus exposures. Using **protective clothing**, such as broad-brim hats, long-sleeve shirts and long pants, could protect them better.³

While school and occupational training have little documented impact, **physicians** may have a unique opportunity to **influence behavior**. Our guidance for shared decision making, which significantly improved doctor-patient communication in the **Strang Cancer Prevention Institute Cancer Screening Trial** on skin cancer prevention.

SKIN CANCER PREVENTION: SHARED DECISION MAKING

Skin cancer prevention requires behavioral changes. The **Strang Cancer Prevention Institute Cancer Screening Trial** of primary care providers found a **strong association between shared decision making (SDM) and better communication**, because SDM is a conversation, not a lecture. The **3 basic elements of SDM** are **arguments for and against** and a statement that the **patient has a choice**.

REDUCING UV EXPOSURE

Reasons to reduce UV exposure: Sun exposure, sunburns and use of tanning beds.

Prevents both melanoma and non-melanoma skin cancers: An Australian trial of free sunscreen for daily use in patients 25-75 reduced melanoma 50% over 10 years.⁴

Slows skin aging: No detectable skin aging after 4-1/2 years in Australian trial.⁵

Especially important if fair-skinned: By appearance (ivory or pale skin, light hair and eye color, freckles) and **sunburn behavior** (easily sunburned).

Reasons not to reduce UV exposure:

Cost: Yes, but a good investment. Reduces future skin cancer treatment costs. **Preapplication** and **reapplication** more important than SPF number. SPF 15 blocks 93% of sun, SPF 70 blocks 98.5% (see below).

Messy but not risky: No increased mortality 20 years after sunscreen trial (non-significant 6% reduction in mortality).⁶

HOW TO REDUCE UV EXPOSURE

Avoid sun exposure, especially mid-day (10 AM to 4 PM; 1 hour earlier with daylight savings time). **Shaded play areas** reduce exposure to young children.

Broad-brimmed hats, sunglasses and densely-woven clothing: Protection from **clothing** depends on **fabric and weave**. Denim is dense and highly protective; a cotton T-shirt is about SPF 8. **Clothing UPF ratings** correlate with SPF sunscreen ratings. (**Face masks** will help a little.)

Sunscreen: Pre apply sunscreen at least SPF (sun-protection factor) 15 at least **15 minutes before** exposure for skin absorption, **reapply every 2 hours** and after swimming or heavy sweating. **SPF refers to the fraction of sunlight allowed** (alternatively, the extension of safe exposure). For example, SPF 15 = 1/15, or about 7% of sunlight allowed (93% of sunlight blocked). Benefit rises slowly with higher SPF: SPF 30 blocks 97%, SPF 50 98%, SPF 70 98.5%. Early, **adequate (about 1 oz, a palmful)** application and frequent reapplication are far more important than SPF factor.

Tanning beds: Avoid.

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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., [Strang](#) Nutrition Consultant
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