



# Prevention

Skin Cancer Awareness Month May 2019

## SKIN CANCER AWARENESS MONTH

### SKIN CANCER

**Skin cancer**, both melanoma and non-melanoma, **has tripled since the 1970s** with about **3.5 million cases** diagnosed **annually**. Melanoma, 2% of skin cancers, causes 80% of deaths. Both are caused by UV radiation and can be reduced by reducing UV exposure.

**Screening by whole body skin examination** is time-consuming, largely unproven and the **potential benefit is small**. Therefore, behavioral counseling, particularly of young, fair-skinned individuals, is the primary intervention.

**The most important strategy** is reducing **exposure to ionizing radiation**, including **tanning beds, especially those under 25 years and fair-skinned**. However, **older patients also benefit**. For example, a trial that provided **free sunscreen for daily use** to patients **age 25-75 reduced melanoma by 50%** over 10 years.<sup>1</sup>

### SKIN CANCER PREVENTION: SHARED DECISION MAKING

**Skin cancer prevention requires behavioral changes**. **Physician advice** is a **powerful factor** in health decision making. The **Strang Institute Cancer Screening Trial** of educational interventions for primary care providers found a **strong association between shared decision making and better communication**. Shared decision making is a conversation, not a lecture. The **3 basic elements of SDM** are **arguments for the intervention** (here, a change of behavior), **arguments against** and stating that the **patient has a choice**.

### REDUCING UV EXPOSURE

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

- 1. Prevents both melanoma and non-melanoma skin cancers:** A trial of free sunscreen for daily use in patients 25-75 reduced melanoma 50% over 10 years.<sup>1</sup>
- 2. Slows skin aging:** No detectable skin aging after 4-1/2 years in Australian trial.<sup>2</sup>
- 3. 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:**

- 1. 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).
- 2. Messy** but not risky: No increased mortality 20 years after sunscreen trial (non-significant 6% reduction in mortality).<sup>3</sup>

### HOW TO REDUCE UV EXPOSURE

**Avoid sun exposure**, especially mid-day (10 AM to 4 PM; shifts 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. **Sunscreen: Preapply** 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.**

### REFERENCES

1. Green AC, Williams GM, Logan V, Strutton GM. Reduced melanoma after regular sunscreen use: randomized trial follow-up. *J Clin Oncol* 2011;29:257-63.
2. Hughes MC, Williams GM, Baker P, Green AC. Sunscreen and prevention of skin aging: a randomized trial. *Ann Intern Med* 2013;158:781-90.
3. Lindstrom AR, von Schuckmann LA, Hughes MCB, Williams GM, Green AC, van der Pols JC. Regular sunscreen use and risk of mortality: Long-term follow-up of a skin cancer prevention trial. *Am J Prev Med* 2019;56:742-6.

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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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