



# Prevention

Breast Cancer Awareness Month October 2023

## REDUCING MORTALITY FROM BREAST CANCER

**Note to Readers:** Innovation is essential to cancer prevention. Genomic data support **precision prevention** as well as precision medicine. Strang is increasingly focused on innovation in cancer prevention. We will continue to highlight novel approaches as we have the consequences of Covid.

**Summary: Draft USPSTF guideline updates support screening for 40-50-year-old women**, based on statistical models. Because of **low breast cancer incidence** in this age group, **lower benefits and greater harms** expected compared to older women.<sup>1</sup> More screening for high-risk women may be more effective. Early mammography (age 30-74 years) after chest irradiation for Hodgkin lymphoma prolongs life and is cost-effective.<sup>2</sup> While screening mammography is free, **post-mammography out-of-pocket costs (OOPCs)** may be an **unappreciated obstacle** to screening.<sup>3</sup> **Adjusting the mammography screening starting age by race** could reduce mortality.<sup>4</sup> **Chemoprevention** with tamoxifen and screening may reduce breast cancers and death for high-risk women (3% or more).<sup>5</sup>

**Breast Cancer Screening Draft USPSTF guideline updates support screening for 40-50-year-old women**, based on **new statistical models**, not new trials data. One goal is reducing the nearly two-fold **breast cancer mortality disparity for African American (AA) women**. However, because breast cancer is **less common in younger women**, **fewer benefits** from earlier diagnosis and **greater harms** from overdiagnosis are expected. Model assumptions may overestimate mammography benefits: the 25% mortality benefit for mammography is likely high, different international screening rates are not related to mortality rates, AA women screen at the same rate, and treatment may account for most of declining mortality rates. **Increased access to breast cancer treatment** may reduce mortality for AA women more effectively than more screening.<sup>1</sup>

**Chest irradiation** for young Hodgkin lymphoma patients **increases risk of breast cancer**. Modeling found that **annual mammography extended women's lives by 0.34-0.46 years** over no screening. Adding MRI to the annual screening, useful for imaging younger, more fibrous breasts, would require price reduction of about ½, possible with abbreviated MRI procedures.<sup>2</sup>

The Affordable Care Act (ACA) and Protecting Access to Lifesaving Screenings (PALS) Act **removed out-of-pocket costs (OOPCs) for screening mammography but not tests and care after positive results**. Post mammography OOPCs vary by insurance plan type. Higher OOPCs reduce post-mammography imaging and care. The modest decreases (up to 2.4%) document that **OOPCs affect post-screening care**. Bundling subsequent care with screening procedures or eliminating cost of subsequent procedures as was recently done for colorectal cancer screening are potential solutions.<sup>3</sup>

**Modeling mammography starting ages by race**. The breast cancer mortality risk of all 50-year-old women has been the accepted threshold to start mammography screening. Modeling indicates that **Black females** reached that risk at **age 42 years**, **White females at age 51 years**, American Indian or Alaska **Native and Hispanic females at age 57 years**, and Asian or **Pacific Islander females at age 61 years**.<sup>4</sup>

**BREAST CANCER PREVENTION Chemoprevention and screening in women at high risk of breast cancer:** Randomized trials have found chemoprevention for high-risk ( $\geq 3\%$ ) women reduces breast cancer by 30-60% but remains **highly underused**. **Individualized risk assessment tools** and **mortality benefits** may **reduce underuse**. Using the Cancer Intervention and Surveillance Modeling Network (CISNET) model, 5 years of tamoxifen and screening for high-risk women would prevent 95 breast cancers and 42 breast cancer deaths.<sup>5</sup>

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# The Strang Cancer Prevention Cookbook

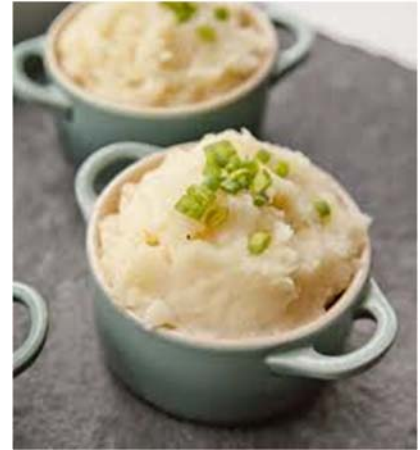
**Reduce your Risk for Cancer by Eating a Healthy Diet!**

## Root Vegetable Mashed Potatoes

10 Servings

*The blend of autumn root vegetables is nutrient rich and contains only half the fat and calories of traditional mashed potatoes*

1 medium rutabaga ( about 1 ½ pounds) peeled and cut into 1-inch cubes  
3 medium turnips (about 1 pound), peeled and cut into 1 ½ -inch chunks  
¼ teaspoon salt  
4 large white potatoes ( about 2 ½ pounds) peeled and cut into 1 ½ inch chunks  
1 ½ cups warm 2% milk  
2 tablespoons unsalted butter  
Salt and freshly ground black pepper



Place the rutabaga and turnips in a large saucepan, cover with cold water and add the salt. Bring to a boil, then reduce the heat and simmer for 30 minutes. Add the potatoes and cook until the vegetables are tender when pierced with a knife, 10 to 15 minutes. Drain the boiled vegetables and transfer them to a large bowl.

Heat the milk in a small saucepan on the stove or microwave Using an electric mixer, begin creaming the rutabaga, turnips and potatoes white slowly pouring the warm milk into the bowl ( use only as much milk is needed to make the puree creamy and light). Beat in the butter and season with salt and pepper to taste. Serve hot.

Calories 174 Protein 5g Carbohydrates 30g Fat 4g Cholesterol 10mg Dietary fiber 3g Saturated fat 1g

Major sources of Potential cancer fighters: Phytochemicals: glucosinolates, plant polyphenols (flavonoids phenolic acids), allium compounds,

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**October is Breast Cancer Awareness Month**

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