

Nutrition & Breast Cancer

Nutrition is only one of many factors that can influence risk for breast cancer. Nevertheless, numerous studies have demonstrated that certain foods and nutrients are associated with increased/decreased risk.

FOODS THAT DECREASE RISK FOR BREAST CANCER	FOODS/BEVERAGES THAT INCREASE RISK FOR BREAST CANCER
<ol style="list-style-type: none"> Vegetables & Fruits <ul style="list-style-type: none"> Aim for 7-10 servings per day¹ Crushed Flaxseeds <ul style="list-style-type: none"> Aim for 1 – 2 tablespoons per day^{2,3} Mushrooms <ul style="list-style-type: none"> As little as one mushroom per day⁴ 	<ol style="list-style-type: none"> Red Meat⁵ <ul style="list-style-type: none"> Beef Pork Veal Lamb Goat Processed Meat⁵ <ul style="list-style-type: none"> Deli meats Hot dogs Canned meats Sugar & Refined/Processed Carbohydrates⁶ <ul style="list-style-type: none"> White bread Baked Goods Candy Desserts White rice Jasmine rice Arborio rice Sticky rice Bagels Baguettes Naan Processed cereals Instant mashed potatoes Crackers Rice cakes Alcohol <ul style="list-style-type: none"> Very light drinking (less than half of a standard drink per day) can increase risk for breast cancer⁷
NUTRIENTS THAT DECREASE RISK FOR BREAST CANCER	
<ol style="list-style-type: none"> Beta-Carotene <ul style="list-style-type: none"> Aim for 5 mg per day:⁸ <ul style="list-style-type: none"> < ½ of a sweet potato daily ½ cup cooked spinach daily ½ cup cooked carrots daily ½ cup green leafy vegetables daily 1 cup Squash/Pumpkin daily Fiber <ul style="list-style-type: none"> Aim for at least 25 grams per day:⁹ <ul style="list-style-type: none"> Beans [15g/cup] Oats [8g/cup] Avocado [9g] Pear [5.5g] Apple [4g] Dietary Folate <ul style="list-style-type: none"> Aim for 400 ug per day:¹⁰ <ul style="list-style-type: none"> Lentils [180 ug/½ cup] Beans [150 ug/½ cup] Asparagus [134 ug/½ cup] Cooked Spinach [131 ug/½ cup] Soy Isoflavones <ul style="list-style-type: none"> Aim for 10 mg per day¹¹ <ul style="list-style-type: none"> <1/8 cup mature(beige) soybeans daily <½ cup edamame daily ¼ cup tofu/tempeh daily Vitamin D Supplementation <ul style="list-style-type: none"> 1000-2000 IU per day¹² 	

REFERENCES

1. Kazemi A, Barati-Boldaji R, Soltani S, et al. Intake of Various Food Groups and Risk of Breast Cancer: A Systematic Review and Dose-Response Meta-Analysis of Prospective Studies. *Advances in nutrition (Bethesda, Md.)*. 2021;12:809-49.
2. Touillaud MS, Thiébaud AC, Fournier A, Niravong M, Boutron-Ruault MC, Clavel-Chapelon F. Dietary lignan intake and postmenopausal breast cancer risk by estrogen and progesterone receptor status. *J Natl Cancer Inst*. 2007;99:475-86.
3. Suzuki R, Rylander-Rudqvist T, Saji S, Bergkvist L, Adlercreutz H, Wolk A. Dietary lignans and postmenopausal breast cancer risk by oestrogen receptor status: a prospective cohort study of Swedish women. *Br J Cancer*. 2008;98:636-40.
4. Li J, Zou L, Chen W, et al. Dietary mushroom intake may reduce the risk of breast cancer: evidence from a meta-analysis of observational studies. *PloS one*. 2014;9:e93437.
5. Guo J, Wei W, Zhan L. Red and processed meat intake and risk of breast cancer: a meta-analysis of prospective studies. *Breast Cancer Res Treat*. 2015;151:191-8.
6. Schlesinger S, Chan DSM, Vingeliene S, et al. Carbohydrates, glycemic index, glycemic load, and breast cancer risk: a systematic review and dose-response meta-analysis of prospective studies. *Nutrition reviews*. 2017;75:420-41.
7. Choi YJ, Myung SK, Lee JH. Light Alcohol Drinking and Risk of Cancer: A Meta-Analysis of Cohort Studies. *Cancer research and treatment : official journal of Korean Cancer Association*. 2018;50:474-87.
8. Hu F, Wang Yi B, Zhang W, et al. Carotenoids and breast cancer risk: a meta-analysis and meta-regression. *Breast Cancer Res Treat*. 2012;131:239-53.
9. Aune D, Chan DS, Greenwood DC, et al. Dietary fiber and breast cancer risk: a systematic review and meta-analysis of prospective studies. *Annals of oncology : official journal of the European Society for Medical Oncology*. 2012;23:1394-402.
10. Chen P, Li C, Li X, Li J, Chu R, Wang H. Higher dietary folate intake reduces the breast cancer risk: a systematic review and meta-analysis. *Br J Cancer*. 2014;110:2327-38.
11. Wei Y, Lv J, Guo Y, et al. Soy intake and breast cancer risk: a prospective study of 300,000 Chinese women and a dose-response meta-analysis. *Eur J Epidemiol*. 2020;35:567-78.
12. Hossain S, Beydoun MA, Beydoun HA, Chen X, Zonderman AB, Wood RJ. Vitamin D and breast cancer: A systematic review and meta-analysis of observational studies. *Clinical nutrition ESPEN*. 2019;30:170-84.