

AUTUMN 2022



NUTRITION BULLETIN

IN THE LATEST EDITION OF THE ALMOND BOARD NUTRITION BULLETIN:

Welcome to our Autumn Issue!

Read on for a current research study about the association between nut consumption and breast cancer mortality, a brand-new client handout about stress management and a delicious no-bake almond recipe.

RESEARCH UPDATE



October is Breast Cancer Awareness Month and a good time to talk to patients about the role of a healthy diet in relationship to the development of some cancers.

According to the World Health Organization, there were 2.3 million women diagnosed with breast cancer and 685,000 deaths globally in 2020¹. Maintaining a healthy diet can play an important role in reducing breast cancer risk and improving survival. Further, 20 to 40% of breast cancer patients have recurrence of the disease².

Wang C, Gu K, Wang F, Cai H, Zheng W, Bao P and Shu X-O. Nut consumption in association with overall mortality and recurrence/disease-specific mortality among long-term breast cancer survivors. *International Journal of Cancer*. 2021; doi: 10.1002/ijc.33824.

STUDY SUMMARY

The study examined the associations of nut consumption (including peanuts and tree nuts), assessed at 5-year postdiagnosis, with overall survival (OS) and disease-free survival (DFS) among 3,449 long-term breast cancer survivors from the Shanghai Breast Cancer Survivor Study. Approximately 6.5 months after cancer diagnosis, participants were enrolled in the study via in-person interviews. Clinical information collected included cancer stage, tumor status and progesterone receptor status, and primary treatments.

In-person follow-up surveys were conducted at 18 months and 3, 5 and 10 years after diagnosis. At the 5-year postdiagnosis survey, a comprehensive dietary survey was conducted using a validated food frequency questionnaire designed to measure the consumption of commonly consumed foods in Shanghai. Total nut consumption was calculated as the sum of intake from peanuts, walnuts and other nuts (including almonds). Consumption of total nuts was further categorized into three groups (0, 0-median [17.32 g/wk], and >median).

RESULTS

- Among 3,449 participants included in the final analysis, 3,148 were nut consumers. Compared with non-consumers, nut consumers had a younger age at diagnosis, lower BMI, higher total energy intake, higher diet quality score and higher soy food intake, more likely to have a higher education, higher personal income, higher physical activity level and received immunotherapy.
- At 10-year postdiagnosis, nut consumers had a higher overall survival (OS) rate (93.7% vs 89.0%, P = .003) and disease-free survival (DFS) rate (94.1% vs 86.2%, P < .001) compared with non-consumers. Similar survival differences were observed for consumption of peanuts, walnuts and other nuts including almonds.
- After adjustment for lifestyle factors and disease stage, every nut consumption level was associated with significantly better DFS (HR = 0.52, 95% confidence interval [CI] = 0.35-0.75), but a non-significantly improved OS (HR = 0.90, 95% CI = 0.66-1.23). Analyses by amount of nut intake showed a dose-response relationship for both OS and DFS. The association between total nut consumption and DFS was consistently observed across almost all the subgroups of breast cancer patients.

STUDY TAKE-AWAYS

Nut consumption, no matter the type, was associated with better survival, particularly disease-free survival, among long-term breast cancer survivors, following a dose-response pattern, which means the survival rates increased with eating more nuts. The average nut intake was 17g per day, which is about half of a recommended daily 30-gram portion of almonds. The researchers recommend that nuts should be included in breast cancer survivors' dietary guidance.

LIMITATIONS

The recurrence and metastasis statuses were self-reported. Misclassification, particularly regarding the event date, is likely. Despite the large number of participants in the study, the number of events was relatively small for subgroups of patients, resulting in a limited statistical power. Nut consumption information was collected only once, at the 5-year follow-up survey and information on possible change of nut consumption was not captured. Bias due to reverse causality is possible because individuals with chronic diseases and poor health status may change their dietary habits. Further research is required.

¹ <https://www.who.int/news-room/fact-sheets/detail/breast-cancer>

² Takeshita T, Yan L, Asaoka M, Rashid O, Takabe K. *Late recurrence of breast cancer is associated with pro-cancerous immune microenvironment in the primary tumor*. *Sci Rep*. 2019;9:16942. doi:10.1038/s41598-019-53482-x.

HP CORNER

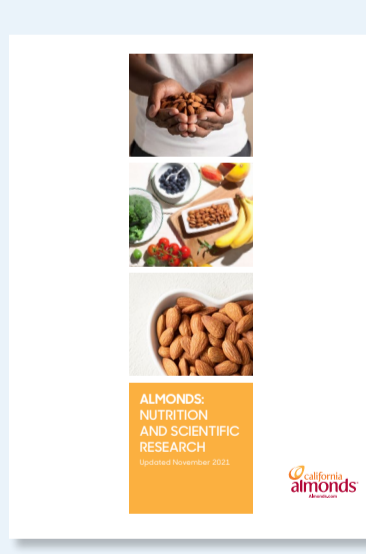


Managing Stress Handout:

We have created a brand-new resource that explores the harmful impact that stress can have on our minds and bodies and shares details about a novel study investigating how an almond snack may improve the body's resilience to mental stress.

State of the Science

The Almond Board has deep roots in research with more than 25 years of peer-reviewed published studies. Our current State of the Science is a handy guide to stay on top of the latest almond nutrition findings - for patient needs and for media work.



Almond Academy: Webinars 101 Guide

Hosting or participating in a webinar is a fantastic platform to showcase your expertise and communicate healthy eating habits to a larger audience. Check out this resource to create your own memorable webinar.



RECIPE INSPIRATION: NO BAKE SUMMER BERRIES + ALMOND BUTTER BARS

This new recipe from Dietitian Natalie Rizzo is a perfect make-ahead snack and a delicious way to make the most of the last of the summer berries.

Made the recipe? Why not share it?

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