



HEALTH NOTES



amen
Adventist Medical
Evangelism Network

AMEN's mission is to motivate, train, and equip Seventh-day Adventist healthcare professionals to team with pastors and members, uniting the church to restore Christ's ministry of healing to the world, hastening His return.

To learn more about AMEN and get involved go to: amensda.org.

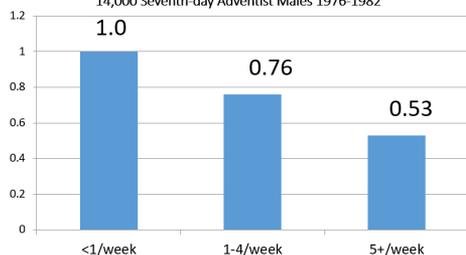
Principal contributor: Elvin Adams, MD

Citrus and Health

Citrus fruits have long been appreciated as a part of a nourishing and tasty diet. Oranges, grapefruit, lemons, and limes are the citrus with the largest commercial value and are sold the world around.

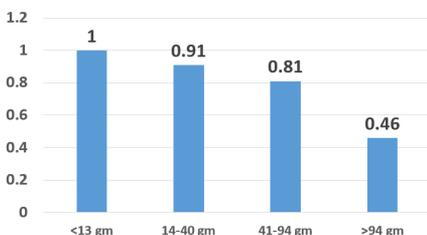
Prostate Cancer by Fresh Citrus Fruit

14,000 Seventh-day Adventist Males 1976-1982



Including citrus in the diet results in significant health benefits. In the Adventist Health Study citrus was found to dramatically reduce the risk of prostate cancer. In this portion of the study 14,000 men were followed for seven years.¹ Men eating citrus 5 or more days a week had a 47% reduction in the risk of developing prostate cancer.

Bladder Cancer in Women for Citrus by grams/1000 kcal/day



A study of bladder cancer in a non-Adventist population followed over 100,000 women for several years. It was found that the risk of developing invasive bladder cancer in women was steadily diminished by increasing the intake of citrus.² Women with the highest citrus intake had a greater than 50% reduction in the risk of developing bladder cancer.

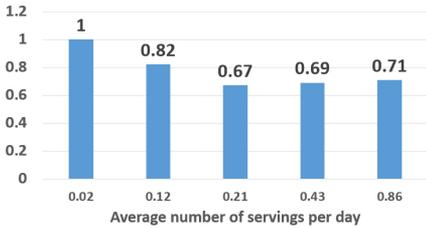
Other studies have shown that citrus in the diet reduces the risk of breast cancer, esophagus cancer, and lung cancer.^{3,4,5}

Citrus can also lower the risk of heart disease. One large study that specifically

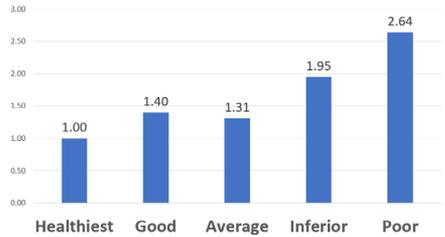
looked at citrus and heart disease used data from the Nurses' Health Study that followed 71,141 women, and the Health Professionals Follow-up Study that included 42,135 men.⁶ Modest intakes of citrus resulted in a 30% reduction in heart attacks among women and a 15% reduction in heart attacks among men.



Risk of Coronary Heart Disease in Women by Citrus Servings per day



Liver Cancer in Women by Diet



Citrus is an important component of a healthful diet. Ellen White includes citrus in her prescription for good health. "Patients should be asked to discard the things that have ruined their health, and the place of these things should be supplied with an abundance of fruit. Oranges, lemons, prunes, peaches, and many other varieties can be obtained; for the Lord's world is productive, if painstaking effort is put forth." *Counsels on Diet and Foods* 311.

Eating citrus regularly has great health benefits that reduce the risk of developing several kinds of cancer and cuts the risk of heart attacks.

¹ P. K. Mills, et. al, Cohort Study of Diet, Lifestyle, and Prostate Cancer in Adventist Men, *Cancer*, 1989, 64:598-604.

² Song-Yi Park, et. al. Fruit and Vegetable Intakes are Associates with Lower Risk of Bladder Cancer among Women in Multiethnic Cohort Study, *The Journal of Nutrition* 2013, 1283-1292.

³ Ping-Ping Bao, et. al. Fruit, Vegetable, and Animal Food Intake and Breast Cancer Risk by Hormone Receptor Status, *Nutrition and Cancer* August 2012, 64(6): 806-819.

⁴ Anqiang Wang, et. al. Citrus Fruit Intake Substantially Reduces the Risk of Esophageal Cancer. A Meta-Analysis of Epidemiologic Studies. *Medicine* October 2015 94:39

⁵ S.A. Smith-Warner et. al. Fruits, Vegetables and Lung Cancer: a Pooled Analysis of Cohort Studies, *International Journal of Cancer* 2003, 107:1001-1011.

⁶ S.N. Bhupathiraju et. al. Quantity and variety in fruit and vegetable intake and risk of coronary heart disease, *American Journal of Clinical Nutrition* 2013; 98:1514-1523.

Graphs were created by the author based on data found in references 1,2,5 and 6.

