It's Okay to Eat Beans.

Lisa Everett Andersen, B.SC. PHARM, FACA, CCN Author, Holistic Clinical Pharmacist and Board Certified Clinical Nutritionist



It is not only ok to eat beans, but global experts agree eating more beans and fruits are the top two ways to increase health and longevity.

There was an idea that became popular in a book written by Dr. Steven Gundry that people should not eat beans because they contain lectins. It would seem that he comes to this conclusion from a misinterpretation of history and not from science or epidemiological studies. He even sells lectin blocking supplements. He also says egg yolks decrease total cholesterol (quoting the egg industry) which has been proven over and over again as not only untrue but opposite of the truth. Even though he is a former cardiologist, he basically supports the keto-type diet: low carbs and high protein. But as Dr. Greger reminds us in one of his videos on the subject, Dr. Atkins of the Atkins diet was also a cardiologist, and he had heart disease, a history of hypertension and congestive heart failure, and weighed 258 pounds when he died.

The reality is, there are many types of lectins that occur in the plant kingdom. Some lectins can be toxic, such as those found in castor beans or kidney beans. Others are non-toxic, such as those found in lentils, tomatoes, and peanuts.

Studies show non-toxic and non-toxic levels of lectins can turn colorectal cancer cells back to normal cells. Four servings of legumes per week resulted in significant drop (40%) in C-reactive protein. It is no wonder that the healthiest populations on our planet eat a lot of legumes and beans.

The lectins found in beans, including kidney beans, are toxic only if eaten raw and in large quantities. But who eats raw beans that are hard as a rock?! Cooking beans to the point of being soft enough to smash with a fork destroys 100% of the lectins.

The whole "bad bean" lectin theory was based on a fad weight loss program in Japan, whereby participants were instructed to toast raw white kidney beans for 3 minutes. The beans were then ground into powder and sprinkled onto rice. Three minutes of toasting is not long enough to denature and destroy the lectin proteins. Therefore, many of those people became ill with vomiting and diarrhea, and a few were even hospitalized. Raw beans need to be soaked overnight then boiled for 15-30 minutes, or if not soaked, boiled for an hour or more. They could also be pressure cooked per the instructions of the cooker device or on the package of beans. Remember, the key is to cook them long enough to be smashable. There are no lectins in canned beans because they have been soaked and boiled appropriately.

I have patients who tried the "lectin-free diet" only to find that they were missing out on some of their favorite foods and many, many nutrients. They found it too hard to follow and void of benefits. The belief that they would be rid of all their digestive gas simply did not pan out. So every one of them abandoned the restrictive diet.

If you have trouble with gassiness after eating beans, it is probably because you do not eat them often enough for your intestine to develop the enzymes necessary to break down the various components present in beans. Cultures who eat beans every day are rarely bothered with bloated tummies. A very effective trick is to open a can of organic beans and start eating 1 teaspoon to 1 tablespoonful every day. This will help you build the necessary enzymes to digest legumes. You can also try taking enzymes with betaine HCl with your meals. Over time, these highly nutritious, delicious legumes will be your friend.

Greger, M. (2017). Dr. Gundry's The Plant Paradox is Wrong. https://nutritionfacts.org/video/dr-gundrys-the-plant-paradox-is-wrong/

Spence J.D. (2016). Dietary Cholesterol and Egg Yolk Should be Avoided by Patients at Risk of Vascular Disease. J Transl Int Med, 4(1), 20-24

Trumbo P.R., Shimakawa T. (2011) Tolerable Upper Intake Levels for Trans Fat, Saturated Fat, and Cholesterol. Nutr Rev, 69(5), 270-78

Freed D.L., Green F.H. (1975, Dec.). Letter: Do Dietary Lectins Protect Against Colonic Cancer? Lancet, 2(7947), 1261-62

Abdullaev F., & de Mejia E. (1997). Antitumor Effect of Plant Lectins. Nat Toxins, 5(4),157-63

Jordinson M., El-Hariry I., Calnan D., Calam J., Pignatelli M. (1999, May). Vicia Faba Agglutinin, the Lectin Present in Broad Beans, Stimulates Differentiation of Undifferentiated Colon Cancer Cells. Gut, 44(5), 709-14

Dan X., Ng T.B., Wong J.H., Chan Y.S., et.al. (2016, Sept.). A Hemagglutinin Isolated From Northeast China Black Beans Induced Mitochondrial Dysfunction and Apoptosis in Colorectal Cancer Cells. Biochim Biophys Acta, 1863(9), 2201-11

Desilets D., Davis K., Nair P., Salata K., et.al. (1999, March). Lectin Binding to Human Colonocytes is Predictive of Colonic Neoplasia. Am J Gastroenterol, 94(3), 744-50

de Mejía E., & Prisecaru V. (2005). Lectins as Bioactive Plant Proteins: A Potential in Cancer Treatment. Crit Rev Food Sci Nutr, 45(6), 425-45

Giacometti J. (2015). Plant Lectins in Cancer Prevention and Treatment. Medicina Fluminensis, 51(2), 211-29

Davidson K.T., Zhu Z., Fang Y. (2016, Oct.). Phytochemicals in the Fight Against Cancer. Pathol Oncol Res, 22(4), 655-60 Aub J., Tieslau C., Lankester A. (1963, Oct.). Reactions Of Normal and Tumor Cell Surfaces to Enzymes. I. Wheat-Germ Lipase and Associated Mucopolysaccharides. Proc Natl Acad Sci USA, 50, 613-19

Wang Q., Yu L.G., Campbell B.J., Milton J.D., Rhodes J.M. (1998, Dec.). Identification of Intact Peanut Lectin in Peripheral Venous Blood. Lancet, 352(9143), 1831-32

Pedrosa M.M., Cuadrado C., Burbano C., Muzquiz M., et.al. (2015, Jan.). Effects of Industrial Canning on the Proximate Composition, Bioactive Compounds Contents and Nutritional Profile of Two Spanish Common Dry Beans (Phaseolus vulgaris L.). Food Chem, 166, 68-75

Kilpatrick D.C., Pusztai A., Grant G., Graham C., Ewen S.W. (1985, June). Tomato Lectin Resists Digestion in the Mammalian Alimentary Canal and Binds to Intestinal Villi Without Deleterious Effects. FEBS Lett, 185(2), 299-305 Chan Y.S., Xia L., Ng T.B. (2016, April). White Kidney Bean Lectin Exerts Anti-Proliferative and Apoptotic Effects on Cancer Cells. Int J Biol Macromol, 85, 335-45

Venter F.S., & Thiel P.G. (1995, April). Red Kidney Beans - To Eat or Not to Eat? S Afr Med J, 85(4), 250-52 Ogawa H., & Date K. (2014). The "White Kidney Bean Incident" in Japan. Methods Mol Biol, 1200, 39-45 van Buul V., & Brouns F. (2014, March). Health Effects of Wheat Lectins: A Review. Journal of Cereal Science, 59(2),112-17

Zhu B., Sun Y., Qi L., Zhong R., Miao X. (2015, March). Dietary Legume Consumption Reduces Risk of Colorectal Cancer: Evidence From a Meta-Analysis of Cohort Studies. Sci Rep, 5, 8797

Zhang J., Shi J., Ilic S., Xue S.J., Kakuda Y. (2008). Biological Properties and Characterization of Lectin from Red Kidney Bean (Phaseolus Vulgaris). Journal Food Reviews International, 25(1)

Thompson, L., Rea R., Jenkins D. (1983). Effect of Heat Processing on Hemagglutinin Activity in Red Kidney Beans. Journal of Food Science, (48), 235–36

Darmadi-Blackberry I., Wahlqvist M.L., Kouris-Blazos A., et al. (2004). Legumes: The Most Important Dietary Predictor of Survival in Older People of Different Ethnicities. Asia Pac J Clin Nutr, 13(2), 217-20

Buettner D. (2012). The Blue Zones, 9 Lessons for Living Longer from the People Who've Lived the Longest. National Geographic Books

De Mejía E., & Prisecaru V. (2005). Lectins as Bioactive Plant Proteins: A Potential in Cancer Treatment. Crit Rev Food Sci Nutr, 45(6), 425-45

Deshpande S., & Singh R. (1991, June). Hemagglutinating Activity of Lectins in Selected Varieties of Raw and Processed Dry Beans. Journal Paper No. 12,106 of Purdue Agricultural Experiment Station. 15(2), 81–87

Kumar S., Verma A., Das M., Jain S., Dwivedi P. (2013, June). Clinical Complications of Kidney Bean (Phaseolus vulgaris L.) Consumption. Nutrition, 29(6), 821-27

Rodhouse J., Haugh C., Roberts D., Gilbert R. (1990, Dec.). Red Kidney Bean Poisoning in the UK: An Analysis of 50 Suspected Incidents Between 1976 and 1989. Epidemiol Infect, 105(3), 485-91

Hamid R., & Masood A. (2009). Dietary Lectins as Disease Causing Toxicants. Pakistan Journal of Nutrition, 8, 293-303

Jönsson T., Olsson S., Ahrén B., Bøg-Hansen T., et.al. (2005, Dec.). Agrarian Diet and Diseases of Affluence - Do Evolutionary Novel Dietary Lectins Cause Leptin Resistance? BMC Endocr Disord, 5, 10

Noah N., Bender A., Reaidi G., Gilbert R. (1980, July). Food Poisoning From Raw Red Kidney Beans. Br Med J, 281(6234), 236-7

5453 W. 61st Place • Mission, Kansas 66205 • (913) 322-0001 • (913) 322-002 fax • (800) 627-4360 • www.lisaeverettandersen.com

Deshpande S. (1992). Food Legumes in Human Nutrition: A Personal Perspective. Crit Rev Food Sci Nutr, 32(4), 333-63

Freed D. (1991). Lectins in Food: Their Importance in Health and Disease. Journal of Nutritional Medicine, 2(1)

Nachbar M., & Oppenheim J. (1980, Nov.). Lectins in the United States Diet: A Survey of Lectins in Commonly Consumed Foods and a Review of the Literature. Am J Clin Nutr, 33(11), 2338-45

Schwingshackl L., Schwedhelm C., Hoffmann G., Lampousi A.M., et.al. (2017, June). Food Groups and Risk of All-Cause Mortality: A Systematic Review and Meta-Analysis of Prospective Studies. Am J Clin Nutr, 105(6),1462-73

Zhu B., Sun Y., Qi L., Zhong R., Miao X. (2015, March). Dietary Legume Consumption Reduces Risk of Colorectal Cancer: Evidence From a Meta-Analysis of Cohort Studies. Sci Rep, 5, 8797

Schep L., Temple W., Butt G., Beasley M. (2009, Nov.). Ricin as a Weapon of Mass Terror - Separating Fact From Fiction. Environ Int, 35(8), 1267-71.

Singhal P., Kaushik G., Mathur P. (2014). Antidiabetic Potential of Commonly Consumed Legumes: A Review. Crit Rev Food Sci Nutr, 54(5), 655-72

Mollard R.C., Luhovyy B.L., Panahi S., Nunez M., et.al. (2012, Aug.). Regular Consumption of Pulses for 8 Weeks Reduces Metabolic Syndrome Risk Factors in Overweight and Obese Adults. Br J Nutr, 108(Suppl1), S111-22

Hermsdorff H., Zulet M., Abete I., Martínez J. (2011, Feb.). A Legume-Based Hypocaloric Diet Reduces Proinflammatory Status and Improves Metabolic Features in Overweight/Obese Subjects. Eur J Nutr, 50(1), 61-9

5453 W. 61st Place • Mission, Kansas 66205 • (913) 322-0001 • (913) 322-002 fax • (800) 627-4360 • www.lisaeverettandersen.com