

Plant-Based Milk and Meat Alternatives – Take them or “Leaf” Them?

References and Additional Information

Ahnan-Winarno AD, Cordeiro L, Winarno FG, Gibbons J, Xiao H. Tempeh: A semicentennial review on its health benefits, fermentation, safety, processing, sustainability, and affordability. *Compr Rev Food Sci Food Saf*. 2021 Mar;20(2):1717-1767. doi: 10.1111/1541-4337.12710.

Anderson CAM, Bradley R. The potential of novel plant protein foods to improve dietary patterns and markers of cardiovascular health. *Am J Clin Nutr*. 2020 Nov 11;112(5):1151-1152. doi: 10.1093/ajcn/nqaa253.

Bhatia J, Greer F; American Academy of Pediatrics Committee on Nutrition. Use of soy protein-based formulas in infant feeding. *Pediatrics*. 2008 May;121(5):1062-8. doi: 10.1542/peds.2008-0564.

Bao W, Rong Y, Rong S, Liu L. Dietary iron intake, body iron stores, and the risk of type 2 diabetes: a systematic review and meta-analysis. *BMC Med*. 2012 Oct 10;10:119. doi: 10.1186/1741-7015-10-119.

Corrin T, Papadopoulos A. Understanding the attitudes and perceptions of vegetarian and plant-based diets to shape future health promotion programs. *Appetite*. 2017 Feb 1;109:40-47. doi: 10.1016/j.appet.2016.11.018.

Crimarco A, Springfield S, Petlura C, Streaty T, Cunanan K, Lee J, Fielding-Singh P, Carter MM, Topf MA, Wastyk HC, Sonnenburg ED, Sonnenburg JL, Gardner CD. A randomized crossover trial on the effect of plant-based compared with animal-based meat on trimethylamine-N-oxide and cardiovascular disease risk factors in generally healthy adults: Study With Appetizing Plantfood-Meat Eating Alternative Trial (SWAP-MEAT). *Am J Clin Nutr*. 2020 Nov 11;112(5):1188-1199. doi: 10.1093/ajcn/nqaa203.

FAO. Dietary Protein Quality Evaluation in Human Nutrition: Report of an FAO Expert Consultation; FAO: Rome, Italy, 2013; Volume 92.

Fanelli NS, Bailey HM, Thompson TW, Delmore R, Nair MN, Stein HH. Digestible indispensable amino acid score (DIAAS) is greater in animal-based burgers than in plant-based burgers if determined in pigs. *Eur J Nutr*. 2021 Sep 3. doi: 10.1007/s00394-021-02658-1.

Finnigan TJA, Wall BT, Wilde PJ, Stephens FB, Taylor SL, Freedman MR. Mycoprotein: The Future of Nutritious Nonmeat Protein, a Symposium Review. *Curr Dev Nutr*. 2019;3(6):nzz021. Published 2019 Apr 4. doi:10.1093/cdn/nzz021

Fructuoso I, Romão B, Han H, Raposo A, Ariza-Montes A, Araya-Castillo L, Zandonadi RP. An Overview on Nutritional Aspects of Plant-Based Beverages Used as Substitutes for Cow's Milk. *Nutrients*. 2021 Jul 30;13(8):2650. doi: 10.3390/nu13082650.

Guasch-Ferré M, Satija A, Blondin SA, Janiszewski M, Emlen E, O'Connor LE, Campbell WW, Hu FB, Willett WC, Stampfer MJ. Meta-Analysis of Randomized Controlled Trials of Red Meat Consumption in Comparison With Various Comparison Diets on Cardiovascular Risk Factors. *Circulation*. 2019 Apr 9;139(15):1828-1845. doi: 10.1161/CIRCULATIONAHA.118.035225.

Gibney MJ. Food Technology and Plant-Based Diets. *J Nutr*. 2021 Jan 4;151(1):1-2. doi: 10.1093/jn/nxaa301. PMID: 33096549.

Halton TL, Liu S, Manson JE, Hu FB. Low-carbohydrate-diet score and risk of type 2 diabetes in women. *Am J Clin Nutr*. 2008 Feb;87(2):339-46. doi: 10.1093/ajcn/87.2.339.

He J, Evans NM, Liu H, Shao S. A review of research on plant-based meat alternatives: Driving forces, history, manufacturing, and consumer attitudes. *Compr Rev Food Sci Food Saf*. 2020 Sep;19(5):2639-2656. doi: 10.1111/1541-4337.12610.

Hu FB, Otis BO, McCarthy G. Can Plant-Based Meat Alternatives Be Part of a Healthy and Sustainable Diet? *JAMA*. 2019;322(16):1547–1548. doi:10.1001/jama.2019.13187

Huang J, Liao LM, Weinstein SJ, Sinha R, Graubard BI, Albanes D. Association Between Plant and Animal Protein Intake and Overall and Cause-Specific Mortality. *JAMA Intern Med.* 2020;180(9):1173–1184. doi:10.1001/jamainternmed.2020.2790

Janeiro MH, Ramírez MJ, Milagro FI, Martínez JA, Solas M. Implication of Trimethylamine N-Oxide (TMAO) in Disease: Potential Biomarker or New Therapeutic Target. *Nutrients.* 2018;10(10):1398. Published 2018 Oct 1. doi:10.3390/nu10101398

Ley SH, Hamdy O, Mohan V, Hu FB. Prevention and management of type 2 diabetes: dietary components and nutritional strategies. *Lancet.* 2014 Jun 7;383(9933):1999-2007. doi: 10.1016/S0140-6736(14)60613-9..

Lott M, Callahan E, Welker Duffy E, Story M, Daniels S. Consensus Statement: Healthy Beverage Consumption in Early Childhood: Recommendations from Key National Health and Nutrition Organizations. 2019. Robert Wood Johnson Foundation. <https://healthyeatingresearch.org/research/consensus-statement-healthy-beverage-consumption-in-early-childhood-recommendations-from-key-national-health-and-nutrition-organizations/>

Lott M, Callahan E, Welker Duffy E, Story M, Daniels S. Technical Report: Healthy Beverage Consumption in Early Childhood: Recommendations from Key National Health and Nutrition Organizations. 2019. Robert Wood Johnson Foundation. <https://healthyeatingresearch.org/research/technical-scientific-report-healthy-beverage-consumption-in-early-childhood-recommendations-from-key-national-health-and-nutrition-organizations/>

McHugh T. How Plant-Based Milks are Processed. *Food Technology.* 2018. https://www.ift.org/~media/food%20technology/pdf/2018/12/1218_col_processing.pdf

Messina M. Soy and Health Update: Evaluation of the Clinical and Epidemiologic Literature. *Nutrients.* 2016 Nov 24;8(12):754. doi: 10.3390/nu8120754. PMID: 27886135; PMCID: PMC5188409.

Messina M, Rogero MM, Fisberg M, Waitzberg D. Health impact of childhood and adolescent soy consumption. *Nutr Rev.* 2017 Jul 1;75(7):500-515. doi: 10.1093/nutrit/nux016.

Merritt RJ, Fleet SE, Fifi A, Jump C, Schwartz S, Sentongo T, Duro D, Rudolph J, Turner J; NASPGHAN Committee on Nutrition. North American Society for Pediatric Gastroenterology, Hepatology, and Nutrition Position Paper: Plant-based Milks. *J Pediatr Gastroenterol Nutr.* 2020 Aug;71(2):276-281. doi: 10.1097/MPG.0000000000002799.

Milk Requirements in the Child Nutrition Programs. California Department of Education. April 13, 2021. <https://www.cde.ca.gov/ls/nu/he/milkrequirementsincnps.asp>

Moubarac JC, Parra DC, Cannon G, Monteiro CA. Food Classification Systems Based on Food Processing: Significance and Implications for Policies and Actions: A Systematic Literature Review and Assessment. *Curr Obes Rep.* 2014 Jun;3(2):256-72. doi: 10.1007/s13679-014-0092-0.

Mousan G, Kamat D. Cow's Milk Protein Allergy. *Clin Pediatr (Phila).* 2016 Oct;55(11):1054-63. doi: 10.1177/0009922816664512.

Popper N. Behold the Beefless Impossible Whopper. April 1, 2019. *NY Times.* <https://www.nytimes.com/2019/04/01/technology/burger-king-impossible-whopper.html>

Reynaud Y, Buffière C, Cohade B, Vauris M, Liebermann K, Hafnaoui N, Lopez M, Souchon I, Dupont D, Rémond D. True ileal amino acid digestibility and digestible indispensable amino acid scores (DIAASs) of plant-based protein foods. *Food Chem.* 2021 Feb 15;338:128020. doi: 10.1016/j.foodchem.2020.128020.

Rosenfeld DL, Burrow AL. Vegetarian on purpose: Understanding the motivations of plant-based dieters. *Appetite.* 2017 Sep 1;116:456-463. doi: 10.1016/j.appet.2017.05.039.

Rubio NR, Xiang N, Kaplan DL. Plant-based and cell-based approaches to meat production. *Nat Commun.* 2020 Dec 8;11(1):6276. doi: 10.1038/s41467-020-20061-y.

Satija A, Bhupathiraju SN, Spiegelman D, Chiuve SE, Manson JE, Willett W, Rexrode KM, Rimm EB, Hu FB. Healthful and Unhealthful Plant-Based Diets and the Risk of Coronary Heart Disease in U.S. Adults. *J Am Coll Cardiol*. 2017 Jul 25;70(4):411-422. doi: 10.1016/j.jacc.2017.05.047.

Snapshot - Food Packages for Women, Infants, and Children. WIC Works Resource System, USDA. October, 2019. <https://wicworks.fns.usda.gov/resources/snapshot-food-packages-women-infants-and-children>

Storhaug CL, Fosse SK, Fadnes LT. Country, regional, and global estimates for lactose malabsorption in adults: a systematic review and meta-analysis. *Lancet Gastroenterol Hepatol*. 2017 Oct;2(10):738-746. doi: 10.1016/S2468-1253(17)30154-1.

Tonstad S, Butler T, Yan R, Fraser GE. Type of vegetarian diet, body weight, and prevalence of type 2 diabetes. *Diabetes Care*. 2009 May;32(5):791-6. doi: 10.2337/dc08-1886.

Tso R, Lim AJ, Forde CG. A Critical Appraisal of the Evidence Supporting Consumer Motivations for Alternative Proteins. *Foods*. 2020 Dec 23;10(1):24. doi: 10.3390/foods10010024.

US Department of Agriculture. MyPlate.gov Website. Washington, DC.

US Department of Agriculture and US Department of Health and Human Services. Dietary Guidelines for Americans, 2020-2025. 9th Edition. December 2020. Available at [DietaryGuidelines.gov](https://www.dietaryguidelines.gov).

Vanga SK, Raghavan V. How well do plant based alternatives fare nutritionally compared to cow's milk? *J Food Sci Technol*. 2018 Jan;55(1):10-20. doi: 10.1007/s13197-017-2915-y.

van Vliet S, Bain JR, Muehlbauer MJ, Provenza FD, Kronberg SL, Pieper CF, Huffman KM. A metabolomics comparison of plant-based meat and grass-fed meat indicates large nutritional differences despite comparable Nutrition Facts panels. *Sci Rep*. 2021 Jul 5;11(1):13828. doi: 10.1038/s41598-021-93100-3.

Würtz AML, Jakobsen MU, Bertoia ML, Hou T, Schmidt EB, Willett WC, Overvad K, Sun Q, Manson JE, Hu FB, Rimm EB. Replacing the consumption of red meat with other major dietary protein sources and risk of type 2 diabetes mellitus: a prospective cohort study. *Am J Clin Nutr*. 2021 Mar 11;113(3):612-621. doi: 10.1093/ajcn/nqaa284.

Zheng L, Regenstein JM, Teng F, Li Y. Tofu products: A review of their raw materials, processing conditions, and packaging. *Compr Rev Food Sci Food Saf*. 2020 Nov;19(6):3683-3714. doi: 10.1111/1541-4337.12640.