

Most research finds **neutral or beneficial effects** of dairy consumption on major health outcomes, with **reduced risks for obesity, type 2 diabetes, and some cardiovascular diseases**, but possible increased risks for prostate cancer and certain conditions in specific populations.

1. Introduction

Dairy consumption and its impact on health outcomes have been extensively studied, with recent high-quality reviews and meta-analyses providing a nuanced picture. The majority of evidence suggests that dairy intake—especially milk, yogurt, and cheese—is associated with either neutral or beneficial effects on cardiometabolic health, including reduced risks of obesity, type 2 diabetes, hypertension, and some cardiovascular diseases, as well as potential benefits for bone health and metabolic syndrome (Zhang et al., 2021; Drouin-Chartier et al., 2016; Godos et al., 2019; Feng et al., 2022; Thorning et al., 2016; Guo et al., 2017; Chen et al., 2021; Fontecha et al., 2019; Gil & Ortega, 2019; Álvarez-Bueno et al., 2019; Soedamah-Muthu & De Goede, 2018; Bhavadharini et al., 2020; Lee et al., 2018; Wallace et al., 2020; Savaiano & Hutkins, 2020; Dehghan et al., 2018). However, some studies indicate possible increased risks for prostate cancer, Parkinson’s disease, and, in certain populations, coronary artery disease or acne (Zhang et al., 2021; Godos et al., 2019; Mazidi et al., 2019; Mohammadifard et al., 2025). The effects can vary by dairy type (e.g., fermented vs. non-fermented, low-fat vs. full-fat), population, and health outcome. While concerns about saturated fat in dairy have led to recommendations for low-fat products, recent evidence challenges the necessity of these guidelines, as full-fat dairy often shows neutral or even beneficial associations with health (Taormina et al., 2024; Lordan et al., 2018; Hirahatake et al., 2020; Astrup et al., 2019; Drouin-Chartier et al., 2016; Astrup et al., 2016). Overall, the literature supports including dairy as part of a healthy diet for most people, though individual risks and preferences should be considered.

2. Methods

A comprehensive search was conducted across over 170 million research papers in Consensus, including databases such as Semantic Scholar and PubMed. The search strategy involved 19 targeted queries across 7 search groups, covering foundational theories, diverse health outcomes, alternative terminology, contrasting evidence, interdisciplinary perspectives, and adjacent nutrition topics. In total, 944 papers were identified, 594 were screened, 563 were deemed eligible, and the top 50 most relevant and high-quality papers were included in this review.

Search Strategy

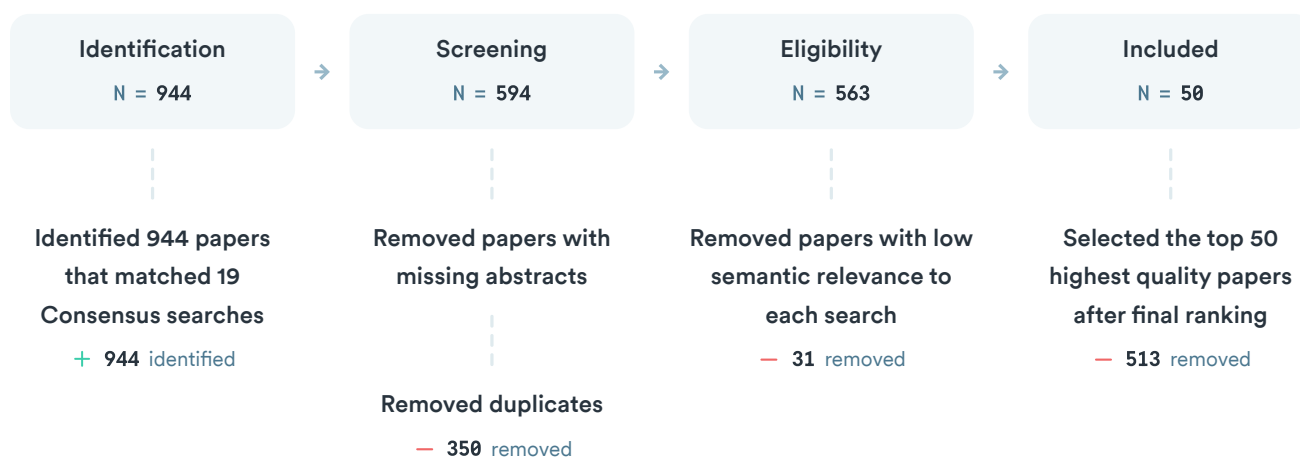


FIGURE 1 Flow diagram of the search and selection process for included papers.

Nineteen unique searches were executed, systematically covering the breadth of dairy consumption and health outcomes using a multi-phase filtering process.

3. Results

3.1. Cardiometabolic Health Outcomes

Multiple systematic reviews and meta-analyses consistently report that dairy consumption is associated with reduced risks of hypertension, metabolic syndrome, and type 2 diabetes, as well as neutral or beneficial effects on cardiovascular disease (CVD) and stroke (Zhang et al., 2021; Drouin-Chartier et al., 2016; Godos et al., 2019; Feng et al., 2022; Thorning et al., 2016; Guo et al., 2017; Chen et al., 2021; Alexander et al., 2016; Fontecha et al., 2019; Gil & Ortega, 2019; Pan et al., 2025; Mozaffarian, 2019; Lordan et al., 2018; Hirahatake et al., 2020; Álvarez-Bueno et al., 2019; Soedamah-Muthu & De Goede, 2018; Bhavadharini et al., 2020; Lee et al., 2018; Mazidi et al., 2019; Bhupathi et al., 2020; Astrup et al., 2019; Drouin-Chartier et al., 2016; Giosuè et al., 2022; Savaiano & Hutkins, 2020; Dehghan et al., 2018; Yu & Hu, 2018; Kiesswetter et al., 2023; Jakobsen et al., 2021; Astrup et al., 2016; Kratz et al., 2013). Both low-fat and full-fat dairy products, including yogurt and cheese, are linked to these benefits, with fermented dairy products often showing the strongest associations (Guo et al., 2017; Chen et al., 2021; Pan et al., 2025; Mozaffarian, 2019; Álvarez-Bueno et al., 2019; Soedamah-Muthu & De Goede, 2018; Lee et al., 2018; Astrup et al., 2019; Savaiano & Hutkins, 2020; Astrup et al., 2016). Some studies note population differences, with effects varying by region and baseline diet (Pan et al., 2025; Bhavadharini et al., 2020; Dehghan et al., 2018).

3.2. Obesity, Body Composition, and Metabolic Syndrome

Dairy intake, particularly milk and yogurt, is associated with lower risks of overweight, obesity, and metabolic syndrome in both adults and children (Feng et al., 2022; Bhavadharini et al., 2020; Lee et al., 2018; Geng et al., 2018; Wang et al., 2016; Kratz et al., 2013; Kim & Kim, 2017). Meta-analyses indicate that increased dairy consumption, especially under energy restriction, can reduce body fat and waist circumference, while high dairy intake without caloric restriction may increase body weight slightly (Geng et al., 2018; Wang et al., 2016). The food matrix effect—how nutrients interact within whole foods—may explain some of these findings (Mozaffarian, 2019; Thorning et al., 2017; Timon et al., 2020; Drouin-Chartier et al., 2016).

3.3. Cancer, Bone Health, and Other Outcomes

Dairy consumption is linked to a reduced risk of colorectal, bladder, gastric, and breast cancers, but may be associated with a higher risk of prostate cancer and, less consistently, Parkinson’s disease (Zhang et al., 2021; Godos et al., 2019; Thorning et al., 2016; Gil & Ortega, 2019; Savaiano & Hutkins, 2020; Díaz-López et al., 2016). For bone health, dairy provides essential nutrients and may improve bone mineral density, especially in older adults, though evidence for fracture prevention is mixed (Thorning et al., 2016; Gil & Ortega, 2019; Wallace et al., 2020; Savaiano & Hutkins, 2020; Hess et al., 2016). Some studies also report benefits for sleep, cognitive function, and digestive health (Hirahatake et al., 2020; Guyonnet et al., 2025; Savaiano & Hutkins, 2020; Tunick & Van Hekken, 2015; Hess et al., 2016; Jakubowska et al., 2024).

3.4. Adverse Effects and Controversies

Potential adverse effects include increased risk of prostate cancer, acne, and, in some populations, coronary artery disease (Zhang et al., 2021; Godos et al., 2019; Mazidi et al., 2019; Ding et al., 2019; Mohammadifard et al., 2025). Lactose intolerance and dairy allergies are important considerations for specific groups (Zhang et al., 2021; Savaiano & Hutkins, 2020). The debate over full-fat versus low-fat dairy continues, with most recent evidence suggesting no clear harm from full-fat dairy and possible benefits for certain outcomes (Taormina et al., 2024; Lordan et al., 2018; Hirahatake et al., 2020; Astrup et al., 2019; Drouin-Chartier et al., 2016; Astrup et al., 2016; Kratz et al., 2013).

Key Papers

Paper	Study Design	Population	Main Findings	Dairy Types Examined
(Zhang et al., 2021)	Umbrella review of meta-analyses	Global, adults	Dairy more often beneficial than harmful; reduced risk of CVD, stroke, T2D, obesity; some increased risks (prostate cancer, acne)	Milk (all types)
(Drouin-Chartier et al., 2016)	Systematic review of meta-analyses	Prospective cohorts	Favorable or neutral associations with CVD, hypertension, T2D; low-fat and yogurt especially beneficial	Total, low-fat, regular-fat, yogurt, cheese
(Thorning et al., 2016)	Narrative review of meta-analyses & RCTs	Global, all ages	Dairy reduces risk of obesity, T2D, CVD, some cancers; neutral for all-cause mortality	Milk, cheese, yogurt, all dairy
(Dehghan et al., 2018)	Prospective cohort (PURE)	21 countries, 136,384 adults	Higher dairy intake linked to lower mortality and CVD; no harm from whole-fat dairy	Milk, yogurt, cheese, butter
(Álvarez-Bueno et al., 2019)	Overview of meta-analyses	4–22 cohorts, 64,227–566,875 participants	Inverse association between dairy (esp. yogurt, low-fat) and T2D risk	Total, low-fat, yogurt, cheese

FIGURE 2 Comparison of key studies on dairy consumption and health outcomes.

Top Contributors

Type	Name	Papers
Author	A. Astrup	(Thorning et al., 2016; Guo et al., 2017; Hirahatake et al., 2020; Soedamah-Muthu & De Goede, 2018; Thorning et al., 2017; Astrup et al., 2019; Astrup et al., 2016)
Author	Jean-Philippe Drouin-Chartier	(Drouin-Chartier et al., 2016; Chen et al., 2021; Drouin-Chartier et al., 2016)
Author	S. Soedamah-Muthu	(Thorning et al., 2016; Guo et al., 2017; Thorning et al., 2017; Soedamah-Muthu & De Goede, 2018)
Journal	<i>Advances in Nutrition</i>	(Drouin-Chartier et al., 2016; Chen et al., 2021; Fontecha et al., 2019; Gil & Ortega, 2019; Mozaffarian, 2019; Hirahatake et al., 2020; Álvarez-Bueno et al., 2019; Soedamah-Muthu & De Goede, 2018; Astrup et al., 2019; Drouin-Chartier et al., 2016; Kiesswetter et al., 2023)
Journal	<i>Nutrients</i>	(Timon et al., 2020; Giosuè et al., 2022; Astrup et al., 2016; Jakubowska et al., 2024)
Journal	<i>The British Journal of Nutrition</i>	(Alexander et al., 2016; Lee et al., 2018; Kim & Kim, 2017)





FIGURE 3 Authors & journals that appeared most frequently in the included papers.

4. Discussion

The current body of research on dairy consumption and health outcomes is robust, with numerous high-quality systematic reviews, meta-analyses, and large cohort studies providing consistent evidence for neutral or beneficial effects of dairy on major health outcomes (Zhang et al., 2021; Drouin-Chartier et al., 2016; Thorning et al., 2016; Guo et al., 2017; Chen et al., 2021; Fontecha et al., 2019; Gil & Ortega, 2019; Pan et al., 2025; Mozaffarian, 2019; Hirahatake et al., 2020; Álvarez-Bueno et al., 2019; Soedamah-Muthu & De Goede, 2018; Bhavadharini et al., 2020; Lee et al., 2018; Astrup et al., 2019; Drouin-Chartier et al., 2016; Savaiano & Hutkins, 2020; Dehghan et al., 2018; Astrup et al., 2016; Kratz et al., 2013). The evidence is particularly strong for reduced risks of obesity, type 2 diabetes, hypertension, and some cardiovascular diseases, especially with fermented dairy products like yogurt and cheese. The long-standing focus on low-fat dairy is increasingly questioned, as full-fat dairy does not appear to increase cardiometabolic risk and may even be protective in some contexts (Taormina et al., 2024; Lordan et al., 2018; Hirahatake et al., 2020; Astrup et al., 2019; Drouin-Chartier et al., 2016; Astrup et al., 2016; Kratz et al., 2013).

However, the literature is not without limitations. Some studies report increased risks for prostate cancer, acne, and, in certain populations, coronary artery disease, highlighting the need for individualized dietary recommendations and further research into population-specific effects (Zhang et al., 2021; Godos et al., 2019; Mazidi et al., 2019; Ding et al., 2019; Mohammadifard et al., 2025). The food matrix effect and differences between dairy types (e.g., fermented vs. non-fermented, low-fat vs. full-fat) are important considerations that complicate broad dietary guidelines (Mozaffarian, 2019; Thorning et al., 2017; Timon et al., 2020; Drouin-Chartier et al., 2016). Additionally, most evidence is observational, and while randomized controlled trials are increasing, more are needed to establish causality and clarify mechanisms.

Claims and Evidence Table

Claim	Evidence Strength	Reasoning	Papers
Dairy consumption is associated with reduced risk of obesity, type 2 diabetes, and metabolic syndrome	 Strong	Multiple large meta-analyses and cohort studies show consistent inverse associations, especially for yogurt and low-fat dairy	(Zhang et al., 2021; Drouin-Chartier et al., 2016; Feng et al., 2022; Thorning et al., 2016; Gil & Ortega, 2019; Álvarez-Bueno et al., 2019; Soedamah-Muthu & De Goede, 2018; Bhavadharini et al., 2020; Lee et al., 2018; Geng et al., 2018; Wang et al., 2016; Kratz et al., 2013; Kim & Kim, 2017)
Dairy intake has neutral or beneficial effects on cardiovascular disease and stroke risk	 Strong	Systematic reviews and meta-analyses report neutral or inverse associations, with strongest effects for fermented dairy	(Zhang et al., 2021; Drouin-Chartier et al., 2016; Godos et al., 2019; Thorning et al., 2016; Guo et al., 2017; Chen et al., 2021; Alexander et al., 2016; Fontecha et al., 2019; Pan et al., 2025; Mozaffarian, 2019; Lordan et al., 2018; Hirahatake et al., 2020; Soedamah-Muthu & De Goede, 2018; Bhavadharini et al., 2020; Mazidi et al., 2019; Bhupathi et al., 2020; Astrup et al., 2019; Drouin-Chartier et al., 2016; Giosuè et al., 2022; Savaiano & Hutkins, 2020; Dehghan et al., 2018; Yu & Hu, 2018; Kiesswetter et al., 2023; Jakobsen et al., 2021; Astrup et al., 2016; Kratz et al., 2013)
Full-fat dairy is not associated with increased cardiometabolic risk compared to low-fat dairy	 Moderate	Recent studies and reviews challenge previous guidelines, showing no harm and possible benefits from full-fat dairy	(Taormina et al., 2024; Lordan et al., 2018; Hirahatake et al., 2020; Astrup et al., 2019; Drouin-Chartier et al., 2016; Astrup et al., 2016; Kratz et al., 2013)
Dairy consumption may increase risk of prostate cancer and acne	 Moderate	Some meta-analyses and reviews report increased risk, but findings are less consistent and may be confounded	(Zhang et al., 2021; Godos et al., 2019; Thorning et al., 2016; Mazidi et al., 2019; Savaiano & Hutkins, 2020; Ding et al., 2019; Mohammadifard et al., 2025)
Dairy intake improves bone	 Moderate	Evidence supports benefits for bone	(Thorning et al., 2016; Gil & Ortega, 2019; Wallace et al., 2020; Savaiano & Hutkins,

Claim	Evidence Strength	Reasoning	Papers
mineral density, especially in older adults	Moderate	health, but fracture prevention data are mixed	2020; Hess et al., 2016)
High dairy intake may increase risk of coronary artery disease in specific populations	 Weak	Some studies in certain populations (e.g., Iran, US) report increased risk, but findings are not consistent globally	(Mazidi et al., 2019; Ding et al., 2019; Mohammadifard et al., 2025)

FIGURE 4 Key claims and support evidence identified in these papers.

5. Conclusion

In summary, the literature overwhelmingly supports that dairy consumption is either neutral or beneficial for most major health outcomes, including obesity, type 2 diabetes, metabolic syndrome, and cardiovascular disease, with some evidence for increased risk of prostate cancer and other conditions in specific populations. The type of dairy product, fat content, and individual health status all influence outcomes, and the superiority of low-fat over full-fat dairy is not strongly supported by current evidence.

5.1. Research Gaps

Despite the breadth of research, gaps remain regarding the effects of dairy in diverse populations, the long-term impact of full-fat versus low-fat dairy, the role of dairy in cancer risk (especially prostate cancer), and the mechanisms underlying the food matrix effect. More randomized controlled trials and studies in underrepresented populations are needed.

Research Gaps Matrix

Health Outcome / Study Attribute	RCTs	Prospective Cohorts	Meta-analyses	Cross-sectional	Case-control
Cardiometabolic disease	8	18	12	3	2
Obesity/metabolic syndrome	6	10	7	4	1
Cancer outcomes	2	7	6	1	1
Bone health/fracture	4	6	3	2	1
Population diversity	1	4	2	1	GAP

FIGURE 5 Matrix showing research coverage by health outcome and study design.

5.2. Open Research Questions

Future research should focus on clarifying the effects of dairy in diverse populations, the long-term impact of full-fat versus low-fat dairy, and the mechanisms underlying both beneficial and adverse effects.

Question	Why
What are the long-term health effects of full-fat versus low-fat dairy consumption in diverse populations?	Current evidence is mixed and population-specific; understanding these effects could refine dietary guidelines and improve public health recommendations.
How do different types of dairy products (fermented vs. non-fermented) influence cardiometabolic and cancer risks?	Fermented dairy often shows stronger benefits, but mechanisms and comparative effects remain unclear, especially for cancer outcomes.
What are the biological mechanisms underlying the food matrix effect in dairy products?	Understanding how nutrients interact within whole foods could explain observed health effects and inform future dietary recommendations.

FIGURE 6 Key open research questions for future studies on dairy and health.

In conclusion, dairy consumption is generally safe and may offer health benefits for most people, but further research is needed to address remaining uncertainties and optimize dietary guidance.

These papers were sourced and synthesized using Consensus, an AI-powered search engine for research. Try it at <https://consensus.app>

References

- Zhang, X., Chen, X., Xu, Y., Yang, J., Du, L., Li, K., & Zhou, Y. (2021). Milk consumption and multiple health outcomes: umbrella review of systematic reviews and meta-analyses in humans. *Nutrition & Metabolism*, 18. <https://doi.org/10.1186/s12986-020-00527-y>
- Drouin-Chartier, J., Brassard, D., Tessier-Grenier, M., Côté, J., Labonté, M., Desroches, S., Couture, P., & Lamarche, B. (2016). Systematic Review of the Association between Dairy Product Consumption and Risk of Cardiovascular-Related Clinical Outcomes. *Advances in Nutrition*, 7, 1026 - 1040. <https://doi.org/10.3945/an.115.011403>
- Godos, J., Tieri, M., Ghelfi, F., Titta, L., Marventano, S., Lafranconi, A., Gambera, A., Alonzo, E., Sciacca, S., Buscemi, S., Ray, S., Del Rio, D., Galvano, F., & Grosso, G. (2019). Dairy foods and health: an umbrella review of observational studies. *International Journal of Food Sciences and Nutrition*, 71, 138 - 151. <https://doi.org/10.1080/09637486.2019.1625035>
- Feng, Y., Zhao, Y., Liu, J., Huang, Z., Yang, X., Qin, P., Chen, C., Luo, X., Li, Y., Wu, Y., Li, X., Huang, H., Hu, F., Hu, D., Liu, Y., & Zhang, M. (2022). Consumption of Dairy Products and the Risk of Overweight or Obesity, Hypertension, and Type 2 Diabetes Mellitus: a Dose-Response Meta-Analysis and Systematic Review of Cohort Studies.. *Advances in nutrition*. <https://doi.org/10.1093/advances/nmac096>
- Thorning, T., Raben, A., Tholstrup, T., Soedamah-Muthu, S., Givens, I., & Astrup, A. (2016). Milk and dairy products: good or bad for human health? An assessment of the totality of scientific evidence. *Food & Nutrition Research*, 60. <https://doi.org/10.3402/fnr.v60.32527>
- Guo, J., Astrup, A., Lovegrove, J., Gijsbers, L., Givens, D., & Soedamah-Muthu, S. (2017). Milk and dairy consumption and risk of cardiovascular diseases and all-cause mortality: dose-response meta-analysis of prospective cohort studies. *European Journal of Epidemiology*, 32, 269 - 287. <https://doi.org/10.1007/s10654-017-0243-1>
- Chen, Z., Ahmed, M., Ha, V., Jefferson, K., Malik, V., Ribeiro, P., Zuchinali, P., & Drouin-Chartier, J. (2021). Dairy Product Consumption and Cardiovascular Health: a Systematic Review and Meta-Analysis of Prospective Cohort Studies.. *Advances in nutrition*. <https://doi.org/10.1093/advances/nmab118>
- Taormina, V., Unger, A., & Kraft, J. (2024). Full-fat dairy products and cardiometabolic health outcomes: Does the dairy-fat matrix matter?. *Frontiers in Nutrition*, 11. <https://doi.org/10.3389/fnut.2024.1386257>
- Alexander, D., Bylsma, L., Vargas, A., Cohen, S., Doucette, A., Mohamed, M., Irvin, S., Miller, P., Watson, H., & Fryzek, J. (2016). Dairy consumption and CVD: a systematic review and meta-analysis.. *The British journal of nutrition*, 115 4, 737-50. <https://doi.org/10.1017/S0007114515005000>
- Fontecha, J., Calvo, M., Juárez, M., Gil, Á., & Martínez-Vizcaíno, V. (2019). Milk and Dairy Product Consumption and Cardiovascular Diseases: An Overview of Systematic Reviews and Meta-Analyses.. *Advances in nutrition*, 10 suppl_2, S164-S189. <https://doi.org/10.1093/advances/nmy099>
- Gil, Á., & Ortega, R. (2019). Introduction and Executive Summary of the Supplement, Role of Milk and Dairy Products in Health and Prevention of Noncommunicable Chronic Diseases: A Series of Systematic Reviews. *Advances in Nutrition*, 10, S67 - S73. <https://doi.org/10.1093/advances/nmz020>
- Pan, Z., Liu, X., Li, Y., Ao, Y., Wu, Y., Ye, H., Wan, X., Zhang, L., Meng, D., Tian, Y., Yu, X., Zhang, F., Wang, A., Zhang, Y., & Jiao, J. (2025). A global analysis of dairy consumption and incident cardiovascular disease. *Nature Communications*, 16. <https://doi.org/10.1038/s41467-024-55585-0>
- Mozaffarian, D. (2019). Dairy Foods, Obesity, and Metabolic Health: The Role of the Food Matrix Compared with Single Nutrients. *Advances in Nutrition*, 10, 917S - 923S. <https://doi.org/10.1093/advances/nmz053>

Lordan, R., Tsoupras, A., Mitra, B., & Zabetakis, I. (2018). Dairy Fats and Cardiovascular Disease: Do We Really Need to Be Concerned?. *Foods*, 7. <https://doi.org/10.3390/foods7030029>

Hirahatake, K., Astrup, A., Hill, J., Slavin, J., Allison, D., & Maki, K. (2020). Potential Cardiometabolic Health Benefits of Full-Fat Dairy: The Evidence Base.. *Advances in nutrition*. <https://doi.org/10.1093/advances/nmz132>

Guyonnet, E., Andreeva, V., & St-Onge, M. (2025). Abstract MP14: Total dairy consumption is associated with healthy sleep patterns in US adults. *Circulation*. https://doi.org/10.1161/cir.151.suppl_1.mp14

Álvarez-Bueno, C., Cavero-Redondo, I., Martínez-Vizcaíno, V., Sotos-Prieto, M., Ruiz, J., & Gil, Á. (2019). Effects of Milk and Dairy Product Consumption on Type 2 Diabetes: Overview of Systematic Reviews and Meta-Analyses.. *Advances in nutrition*, 10 suppl_2, S154-S163. <https://doi.org/10.1093/advances/nmy107>

Soedamah-Muthu, S., & De Goede, J. (2018). Dairy Consumption and Cardiometabolic Diseases: Systematic Review and Updated Meta-Analyses of Prospective Cohort Studies. *Current Nutrition Reports*, 7, 171 - 182. <https://doi.org/10.1007/s13668-018-0253-y>

Thorning, T., Bertram, H., Bonjour, J., De Groot, L., Dupont, D., Feeney, E., Ipsen, R., Lecerf, J., Mackie, A., McKinley, M., Michalski, M., Rémond, D., Risérus, U., Soedamah-Muthu, S., Tholstrup, T., Weaver, C., Astrup, A., & Givens, I. (2017). Whole dairy matrix or single nutrients in assessment of health effects: current evidence and knowledge gaps.. *The American journal of clinical nutrition*, 105 5, 1033-1045. <https://doi.org/10.3945/ajcn.116.151548>

Bhavadharini, B., Dehghan, M., Mente, A., Rangarajan, S., Sheridan, P., Mohan, V., Iqbal, R., Gupta, R., Lear, S., Wentzel-Viljoen, E., Avezum, Á., López-Jaramillo, P., Mony, P., Varma, R., Kumar, R., Chifamba, J., Alhabib, K., Mohammadifard, N., Oguz, A., Lanas, F., Rózańska, D., Bostrom, K., Yusoff, K., Tsolkile, L., Dans, A., Yusufali, A., Orlandini, A., Poirier, P., Khatib, R., Hu, B., Wei, L., Yin, L., Deeraili, A., Yeates, K., Yusuf, R., Ismail, N., Mozaffarian, D., Teo, K., Anand, S., & Yusuf, S. (2020). Association of dairy consumption with metabolic syndrome, hypertension and diabetes in 147 812 individuals from 21 countries. *BMJ Open Diabetes Research & Care*, 8. <https://doi.org/10.1136/bmjdr-2019-000826>

Lee, M., Lee, H., & Kim, J. (2018). Dairy food consumption is associated with a lower risk of the metabolic syndrome and its components: a systematic review and meta-analysis. *British Journal of Nutrition*, 120, 373 - 384. <https://doi.org/10.1017/S0007114518001460>

Mazidi, M., Mikhailidis, D., Sattar, N., Howard, G., Graham, I., & Banach, M. (2019). Consumption of dairy product and its association with total and cause specific mortality - A population-based cohort study and meta-analysis.. *Clinical nutrition*. <https://doi.org/10.1016/j.clnu.2018.12.015>

Bhupathi, V., Mazariegos, M., Rodriguez, J., & Deoker, A. (2020). Dairy Intake and Risk of Cardiovascular Disease. *Current Cardiology Reports*, 22, 1-6. <https://doi.org/10.1007/s11886-020-1263-0>

Wallace, T., Bailey, R., Lappe, J., O'Brien, K., Wang, D., Sahni, S., & Weaver, C. (2020). Dairy intake and bone health across the lifespan: a systematic review and expert narrative.. *Critical reviews in food science and nutrition*, 1-47. <https://doi.org/10.1080/10408398.2020.1810624>

Timon, C., O'Connor, A., Bhargava, N., Gibney, E., & Feeney, E. (2020). Dairy Consumption and Metabolic Health. *Nutrients*, 12. <https://doi.org/10.3390/nu12103040>

Astrup, A., Geiker, N., & Magkos, F. (2019). Effects of Full-Fat and Fermented Dairy Products on Cardiometabolic Disease: Food Is More Than the Sum of Its Parts. *Advances in Nutrition*, 10, 924S - 930S. <https://doi.org/10.1093/advances/nmz069>

Geng, T., Qi, L., & Huang, T. (2018). Effects of Dairy Products Consumption on Body Weight and Body Composition Among Adults: An Updated Meta-Analysis of 37 Randomized Control Trials. *Molecular Nutrition & Food Research*, 62, &NA: <https://doi.org/10.1002/mnfr.201700410>

Drouin-Chartier, J., Côté, J., Labonté, M., Brassard, D., Tessier-Grenier, M., Desroches, S., Couture, P., & Lamarche, B. (2016). Comprehensive Review of the Impact of Dairy Foods and Dairy Fat on Cardiometabolic Risk. *Advances in Nutrition*, 7, 1041 - 1051. <https://doi.org/10.3945/an.115.011619>

Wang, W., Wu, Y., & Zhang, D. (2016). Association of dairy products consumption with risk of obesity in children and adults: a meta-analysis of mainly cross-sectional studies.. *Annals of epidemiology*, 26 12, 870-882.e2. <https://doi.org/10.1016/j.annepidem.2016.09.005>

Giosuè, A., Calabrese, I., Vitale, M., Riccardi, G., & Vaccaro, O. (2022). Consumption of Dairy Foods and Cardiovascular Disease: A Systematic Review. *Nutrients*, 14. <https://doi.org/10.3390/nu14040831>

Savaiano, D., & Hutkins, R. (2020). Yogurt, cultured fermented milk, and health: a systematic review. *Nutrition Reviews*, 79, 599 - 614. <https://doi.org/10.1093/nutrit/nuaa013>

Dehghan, M., Mente, A., Rangarajan, S., Sheridan, P., Mohan, V., Iqbal, R., Gupta, R., Lear, S., Wentzel-Viljoen, E., Avezum, Á., López-Jaramillo, P., Mony, P., Varma, R., Kumar, R., Chifamba, J., Alhabib, K., Mohammadifard, N., Oguz, A., Lanas, F., Rózańska, D., Bostrom, K., Yusoff, K., Tsolkile, L., Dans, A., Yusufali, A., Orlandini, A., Poirier, P., Khatib, R., Hu, B., Wei, L., Yin, L., Deeraili, A., Yeates, K., Yusuf, R., Ismail, N., Mozaffarian, D., Teo, K., Anand, S., & Yusuf, S. (2018). Association of dairy intake with cardiovascular disease and mortality in 21 countries from five continents (PURE): a prospective cohort study. *The Lancet*, 392, 2288-2297. [https://doi.org/10.1016/S0140-6736\(18\)31812-9](https://doi.org/10.1016/S0140-6736(18)31812-9)

Yu, E., & Hu, F. (2018). Dairy Products, Dairy Fatty Acids, and the Prevention of Cardiometabolic Disease: a Review of Recent Evidence. *Current Atherosclerosis Reports*, 20, 1-9. <https://doi.org/10.1007/s11883-018-0724-z>

Ding, M., Li, J., Qi, L., Ellervik, C., Zhang, X., Manson, J., Stampfer, M., Chavarro, J., Rexrode, K., Kraft, P., Chasman, D., Willett, W., & Hu, F. (2019). Associations of dairy intake with risk of mortality in women and men: three prospective cohort studies. *The BMJ*, 367. <https://doi.org/10.1136/bmj.l6204>

Tunick, M., & Van Hekken, D. (2015). Dairy Products and Health: Recent Insights.. *Journal of agricultural and food chemistry*, 63 43, 9381-8. <https://doi.org/10.1021/jf5042454>

Kiesswetter, E., Stadelmaier, J., Petropoulou, M., Morze, J., Grummich, K., Roux, I., Lay, R., Himmelsbach, L., Kussmann, M., Roeger, C., Rubach, M., Hauner, H., & Schwingshackl, L. (2023). Effects of Dairy Intake on Markers of Cardiometabolic Health in Adults: A Systematic Review with Network Meta-Analysis. *Advances in Nutrition*, 14, 438 - 450. <https://doi.org/10.1016/j.advnut.2023.03.004>

Díaz-López, A., Bulló, M., Martínez-González, M., Corella, D., Estruch, R., Fitó, M., Gómez-Gracia, E., Fiol, M., De La Corte, F., Ros, E., Babio, N., Serra-Majem, L., Pintó, X., Muñoz, M., Francés, F., Buil-Cosiales, P., & Salas-Salvadó, J. (2016). Dairy product consumption and risk of type 2 diabetes in an elderly Spanish Mediterranean population at high cardiovascular risk. *European Journal of Nutrition*, 55, 349-360. <https://doi.org/10.1007/s00394-015-0855-8>

Jakobsen, M., Trolle, E., Outzen, M., Mejbørn, H., Grønberg, M., Lyndgaard, C., Stockmarr, A., Venø, S., & Bysted, A. (2021). Intake of dairy products and associations with major atherosclerotic cardiovascular diseases: a systematic review and meta-analysis of cohort studies. *Scientific Reports*, 11. <https://doi.org/10.1038/s41598-020-79708-x>

Astrup, A., Bradley, B., Brenna, J., Delplanque, B., Ferry, M., & Torres-Gonzalez, M. (2016). Regular-Fat Dairy and Human Health: A Synopsis of Symposia Presented in Europe and North America (2014–2015). *Nutrients*, 8. <https://doi.org/10.3390/nu8080463>

- Hess, J., Jonnalagadda, S., & Slavin, J. (2016). Dairy Foods: Current Evidence of their Effects on Bone, Cardiometabolic, Cognitive, and Digestive Health. *The FASEB Journal*, 30. <https://doi.org/10.1111/1541-4337.12183>
- Jakubowska, D., Dąbrowska, A., Staniewska, K., Kiełczewska, K., Przybyłowicz, K., Żulewska, J., & Łobacz, A. (2024). Health Benefits of Dairy Products' Consumption—Consumer Point of View. *Foods*, 13. <https://doi.org/10.3390/foods13233925>
- Kratz, M., Baars, T., & Guyenet, S. (2013). The relationship between high-fat dairy consumption and obesity, cardiovascular, and metabolic disease. *European Journal of Nutrition*, 52, 1-24. <https://doi.org/10.1007/s00394-012-0418-1>
- Kim, D., & Kim, J. (2017). Dairy consumption is associated with a lower incidence of the metabolic syndrome in middle-aged and older Korean adults: the Korean Genome and Epidemiology Study (KoGES).. *The British journal of nutrition*, 117 1, 148-160. <https://doi.org/10.1017/S000711451600444X>
- Mohammadifard, N., Asadi, A., Zarepur, E., Paknahad, M., Khosravi, A., Hassannejad, R., Kermani-Alghoraishi, M., & Sarrafzadegan, N. (2025). Dairy consumption and premature coronary artery disease onset: Iran premature coronary artery disease (IPAD) study insights. *Scientific Reports*, 15. <https://doi.org/10.1038/s41598-024-83072-5>