

In the Event of World War III, Will Omnivores or Plant-Based Dieters Have the Survival Advantage?

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ABSTRACT

In the event of a global catastrophe, such as World War III (WW3), human survival may depend not only on military, political, and technological factors, but also on lifestyle determinants, including diet. This article examines the survival advantages and disadvantages of omnivorous versus plant-based diet (PBD) patterns in a world characterized by scarcity, environmental degradation, and limited infrastructure. Through an analysis of nutritional adaptability, resource sustainability, health resilience, and food availability during crises, we argue that plant-based dieters may be better equipped for long-term survival. Rooted in evolutionary biology, agricultural economics, and disaster preparedness research, the discussion highlights how the simplicity, efficiency, and sustainability of plant-based nutrition confer tangible advantages in extreme wartime conditions. As geopolitical tensions escalate, particularly in the volatile Middle East, where conflicts such as the ongoing confrontation between Iran and Israel threaten to expand into broader conflicts involving global superpowers like the US, Russia, and China, this examination becomes both timely and crucial.

Keywords: Plant-Based Diet, Omnivorous Diet, Survival, World War Iii, Sustainability, Resilience, Disaster Preparedness, Nutrition, Food Security.

Introduction

The spectre of WW3 looms as one of the most feared global cataclysms, potentially leading to nuclear fallout, infrastructure collapse, food shortages, and ecological devastation. In such extreme conditions, survival may hinge not just on shelter or security, but also on access to nutrition and the body's ability to maintain health under duress. This raises a provocative question: would those adhering to a PBD or those consuming an omnivorous diet have a better chance of survival?

While the modern debate between omnivorous and PBDs often centres on ethics, environmental impact, or chronic disease prevention, the context of total war forces us to assess these diets through the lens of survival: caloric sufficiency, food sourcing, supply chain vulnerability, and biological adaptability. If geopolitical instability intensifies, notably if tensions between

Iran and Israel escalate further, potentially drawing major powers such as the United States and its allies into conflict with Russia, China, and their allies, preparedness becomes essential. Therefore, evaluating dietary strategies in terms of their resilience and adaptability in prolonged crises is not only prudent but urgently necessary. This article thus critically examines the comparative advantages and disadvantages of both dietary models within the hypothetical yet increasingly plausible scenario of World War III.

Nutritional Sufficiency in Scarcity

PBDs, when properly planned, are rich in fibre, phytonutrients, antioxidants, and essential micronutrients. In peacetime, critics of veganism often cite the need for B12 supplementation or potential protein deficiencies [1-3]. However, in wartime conditions, animal products become even more scarce and logistically demanding to produce and distribute [4-6].

In contrast, legumes, grains, tubers, and seeds—staples of a PBD—are non-perishable, easy to store, and require fewer

resources to cultivate. During WW3, populations in blockaded regions survived almost exclusively on potatoes, cabbage, grains, and legumes. Famine resilience studies indicate that populations with access to agricultural resources for basic plant staples tend to fare better during wartime than those dependent on livestock [7-14].

Food System Fragility and Infrastructure

Omnivorous diets rely heavily on complex supply chains involving refrigeration, transport, antibiotics, and feed crops. In the aftermath of a global war, these systems are among the first to collapse. Animals require significantly more calories, water, and land than crops to yield the same amount of food for human consumption. Producing one kilogram of beef, for instance, may require up to 15,000 litres of water—an unsustainable cost in wartime [15-17].

Plant-based food production, particularly at local or community levels, is less reliant on advanced logistics. Urban gardens, root cellars, and seed-saving systems can sustain populations with far greater independence. Thus, plant-based eaters may adapt more readily to decentralized, self-reliant food systems [18-20].

Health Resilience and Immunity

War elevates the burden of infections, trauma, and chronic stress. Diet plays a key role in modulating the immune system and inflammation. PBDs are associated with lower systemic inflammation, improved cardiovascular health, and reduced rates of obesity and diabetes, conditions that significantly compromise survival in high-stress environments [21-23].

In contrast, high intake of animal-based foods, especially in the absence of refrigeration and under stress-related immunosuppression, can increase risks of foodborne illness and metabolic dysregulation [24-26]. Individuals on a long-term PBD may experience a more balanced gut microbiome and enhanced nitric oxide production, both of which are associated with improved vascular and immune function [27-31].

Ethical Cohesion and Psychological Strength

Interestingly, plant-based communities often report higher levels of social cohesion and altruistic behaviour, values that enhance group survival in times of catastrophe. In a fragmented and violent world, groups that maintain internal trust, cooperation, and ethical conviction may withstand societal collapse more effectively. A diet rooted in compassion and sustainability may serve as both a nutritional and psychological anchor during moral and existential crises [32-34].

Foraging, Cultivation, and Wild Edibility

Plant-based survivors have a broader palette when it comes to wild foraging—edible leaves, roots, berries, and tree bark are often overlooked by omnivores who rely on animal protein. The knowledge and practice of consuming a diverse array of plants, especially in tropical or temperate climates, confers a strategic advantage in survival situations. Conversely, hunting requires tools, energy, and luck—resources that may be scarce or dangerous to pursue in war-torn zones [35-37].

What Was Fed to Prisoners During War: Historical Evidence
During times of war, especially in prisoner-of-war (POW)

camp or concentration camps, such as those in World War I and II, prisoner diets were overwhelmingly plant-based, not by ethical choice, but due to practicality, scarcity, and cost efficiency. Historical records indicate that prisoners were typically fed basic staples, including bread, boiled potatoes, cabbage, cornmeal gruel, and watery porridge made from oats or barley. Occasionally, they received minimal animal products such as rancid lard, dried fish, or meat scraps, but these were rare and insufficient. The main objective was to keep prisoners barely alive while minimizing resource use. In many authoritarian regimes and famine-stricken prisons—like those in North Korea—diets became even more austere, consisting of grass, tree bark, or spoiled corn soup. These patterns are echoed in modern low-budget prison systems around the world, where meals still consist primarily of rice, beans, lentils, bread, and processed starches with only traces of low-quality meat. Thus, both historical and contemporary evidence confirm that prisoners have survived, albeit with poor health, on predominantly PBDs, proving their resilience and feasibility in extreme conditions [8-12].

Conclusion

While both omnivorous and PBDs can offer health benefits in stable, modern societies, the scenario of WW3 alters the equation dramatically. In an age of widespread destruction, environmental degradation, and food insecurity, plant-based eaters are likely to have greater survival advantages. These include resilience through simpler food systems, health durability, lower dependence on cold chains, and the ability to cultivate or forage sustainable, nutrient-dense foods.

Far from being a luxury of peace, plant-based nutrition may prove to be one of the most practical, efficient, and strategic lifestyle choices for survival in a world at war.

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References

1. Viroli G, Kalmipourtzidou A, Cena H. Exploring Benefits and Barriers of Plant-Based Diets: Health, Environmental Impact, Food Accessibility and Acceptability. *Nutrients*. 2023. 15: 4723.
2. Rickerby A, Green R. Barriers to Adopting a Plant-Based Diet in High-Income Countries: A Systematic Review. *Nutrients*. 2024. 16: 823.
3. Lea EJ, Crawford D, Worsley A. Public views of the benefits and barriers to the consumption of a plant-based diet. *Eur J Clin Nutr*. 2006. 60: 828-837.

4. Kaiho K. An animal crisis caused by pollution, deforestation, and warming in the late 21st century and exacerbation by nuclear war. *Heliyon*. 2023. 9: 15221.
5. Lillquist K. Farming the Desert: agriculture in the World War II-era Japanese-American relocation centers. *Agric Hist*. 2010. 84: 74-104.
6. Peters A, de Hemptinne J. Animals in war: At the vanishing point of international humanitarian law. *International Review of the Red Cross*. 2022. 104: 1285-1314.
7. Churchill MH. Dietary deficiency diseases among prisoners of war. *J R Army Med Corps*. 1945. 85: 294-298.
8. Burgess RC. Deficiency diseases in prisoners of war at Changi, Singapore, February 1942 to August 1945. *Lancet*. 1946. 2: 411-418.
9. Bergen, Doris L. *War and Genocide: A Concise History of the Holocaust*. Rowman & Littlefield. 2003.
10. United States Holocaust Memorial Museum. Nutrition and Health in the Concentration Camps. ushmm.org
11. Harden, Blaine. *Escape from Camp 14: One Man's Remarkable Odyssey from North Korea to Freedom in the West*. Viking, 2012.
12. Amnesty International. North Korea: The Crumbling State of Health Care. Amnesty Report. 2010.
13. American Civil Liberties Union (ACLU). *Cruel and Unusual Punishment: The Shame of Our Prisons*. Food service reports from U.S. prisons documented by the Marshall Project. 2015-2020.
14. Chriki S, Hocquette JF. The Myth of Cultured Meat: A Review. *Front Nutr*. 2020. 7: 7.
15. Melzener L, Verzijden KE, Buijs AJ, Post MJ, Flack JE. Cultured beef: from small biopsy to substantial quantity. *J Sci Food Agric*. 2021. 101: 7-14.
16. Lee DY, Mariano E Jr, Choi Y, Park JM, Han D, et al. Environmental Impact of Meat Protein Substitutes: A Mini-Review. *Food Sci Anim Resour*. 2025. 45: 62-80.
17. Kraak VI, Aschemann-Witzel J. The Future of Plant-Based Diets: Aligning Healthy Marketplace Choices with Equitable, Resilient, and Sustainable Food Systems. *Annu Rev Public Health*. 2024. 45: 253-275.
18. Krzywonos M, Piwowar-Sulej K. Plant-Based Innovations for the Transition to Sustainability: A Bibliometric and in-Depth Content Analysis. *Foods*. 2022. 11: 3137.
19. Arenas-Gaitán J, Peral-Peral B, Reina-Arroyo J. Local Fresh Food Products and Plant-Based Diets: An Analysis of the Relation Between Them. *Sustainability*. 2020. 12: 5082.
20. Key TJ, Papier K, Tong TYN. Plant-based diets and long-term health: findings from the EPIC-Oxford study. *Proc Nutr Soc*. 2022. 81: 190-198.
21. Landry MJ, Ward CP. Health Benefits of a Plant-Based Dietary Pattern and Implementation in Healthcare and Clinical Practice. *Am J Lifestyle Med*. 2024. 18: 657-665.
22. Herpich C, Müller-Werdan U, Norman K. Role of plant-based diets in promoting health and longevity. *Maturitas*. 2022. 165: 47-51.
23. Heredia N, García S. Animals as sources of food-borne pathogens: A review. *Anim Nutr*. 2018. 4: 250-255.
24. Johnston AM. Animal health and food safety. *Br Med Bull*. 2000. 56: 51-61.
25. Jacob MCM, Feitosa IS, Albuquerque UP. Animal-based food systems are unsafe: severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) fosters the debate on meat consumption. *Public Health Nutr*. 2020. 23: 3250-3255.
26. Koutentakis M, Surma S, Rogula S, Filipiak KJ, Gąsecka A. The Effect of a Vegan Diet on the Cardiovascular System. *J Cardiovasc Dev Dis*. 2023. 10 :94.
27. Satija A, Hu FB. Plant-based diets and cardiovascular health. *Trends Cardiovasc Med*. 2018. 28: 437-441.
28. Salehin S, Rasmussen P, Mai S, Mushtaq M, Agarwal M, et al. Plant Based Diet and Its Effect on Cardiovascular Disease. *Int J Environ Res Public Health*. 2023. 20: 3337.
29. Khalid W, Arshad MS, Ranjha MMAN, Różańska MB, Irfan S, et al. Functional constituents of plant-based foods boost immunity against acute and chronic disorders. *Open Life Sci*. 2022. 17: 1075-1093.
30. Calder PC. Foods to deliver immune-supporting nutrients. *Curr Opin Food Sci*. 2022. 43: 136-145.
31. Tan MM, Chan CK, Reidpath DD. Religiosity and spirituality and the intake of fruit, vegetable, and fat: a systematic review. *Evid Based Complement Alternat Med*. 2013. 146214.
32. Major-Smith D, Morgan J, Emmett P, Golding J, Northstone K. Associations between religious/spiritual beliefs and behaviours and dietary patterns: analysis of the parental generation in a prospective cohort study (ALSPAC) in Southwest England. *Public Health Nutr*. 2023. 2895-2911.
33. Dominguez LJ, Veronese N, Ragusa FS, Petralia V, Ciriminna S, et al. Mediterranean diet and spirituality/religion: eating with meaning. *Aging Clin Exp Res*. 2024. 36: 223.
34. Kraak VI, Aschemann-Witzel J. The Future of Plant-Based Diets: Aligning Healthy Marketplace Choices with Equitable, Resilient, and Sustainable Food Systems. *Annu Rev Public Health*. 2024. 45: 253-275.
35. Willett W, Rockström J, Loken B, Springmann M, Lang T, et al. Food in the Anthropocene: the EAT-Lancet Commission on healthy diets from sustainable food systems. *Lancet*. 2019. 393: 447-492.
36. Hargreaves SM, Raposo A, Saraiva A, Zandonadi RP. Vegetarian Diet: An Overview through the Perspective of Quality-of-Life Domains. *Int J Environ Res Public Health*. 2021. 18: 4067.