

Considering Carnivore: an emerging nutritional approach

'Participants cited numerous health and well-being advantages as key reasons for taking up and maintaining the diet.' [Protogerou et al., 2021](#)

Nutrition Network

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Introduction

Carnivore diets are a subcategory of the ketogenic diet where plant material is excluded and may also be referred to as animal-based or zero-carbohydrate ketogenic diets. This approach is an emerging nutritional therapy that may offer benefits beyond standard carbohydrate reduction interventions for a selection of patients and clinical indications. While specific studies are lacking in number, various evidence streams point to potential mechanisms. Reported benefits appear focused around **gastrointestinal disorders, autoimmune disorders and mental health conditions**. As with any nutritional therapy, a personalised, appropriately monitored approach is advised.

The following papers were among the first to draw attention to the carnivore diet:

1. Lennerz, B.S. et al. (2021) 'Behavioral Characteristics and Self-reported Health Status Among 2029 Adults Consuming a "Carnivore Diet"', Current Developments in Nutrition [Preprint], (nzab133). Available at: <https://doi.org/10.1093/cdn/nzab133>.
2. Protogerou, C., Leroy, F. and Hagger, M.S. (2021) 'Beliefs and Experiences of Individuals Following a Zero-Carb Diet', Behavioral Sciences, 11(12), p. 161. Available at: <https://doi.org/10.3390/bs11120161>.

Nutritional Considerations

A common concern is that nutritional deficiency may occur – vitamin C is commonly mentioned. However, in the context of a ketogenic metabolism, vitamin requirements may alter. See the article, O'Hearn, L. (2020) [Can a carnivore diet provide all essential nutrients?](#)

In general, the consumption of animal-sourced foods is associated with [improved nutrient status](#). That said, monitoring vitamin status as well as metabolic health status is recommended to ensure therapeutic goals are being met without adverse effects.

1. Goedeke, S. et al. (2024) 'Assessing the Nutrient Composition of a Carnivore Diet: A Case Study Model', *Nutrients*, 17(1), p. 140. Available at: <https://doi.org/10.3390/nu17010140>.

Elimination Diet

One of the core features of the carnivore diet is that it removes food components that can [trigger inflammation](#) or [autoimmune responses](#) in sensitive individuals. An [elimination diet](#) has a number of applications and several types exist with a zero-carbohydrate approach being the most restrictive (and simplest) version.

Autoimmunity and Inflammation

As mentioned above, the elimination of triggering foods may be a key feature of the carnivore approach. Additional benefits of a ketogenic exclusion protocol include [regulation of stem cell function](#), [immune regulation](#), and [reduction of inflammation](#) via suppression of the NLRP3 inflammasome.

1. Norwitz, N.G. and Soto-Mota, A. (2024) 'Case report: Carnivore–ketogenic diet for the treatment of inflammatory bowel disease: a case series of 10 patients', *Frontiers in Nutrition*, 11. Available at: <https://doi.org/10.3389/fnut.2024.1467475>.
2. Yar, N. et al. (2022) 'Consuming an All-Meat Ketogenic Diet for the Long-Term Management of Candida Vulvovaginitis and Vaginal Hidradenitis Suppurativa: A 47-Month Follow-Up Case Report', *Cureus* [Preprint]. Available at: <https://doi.org/10.7759/cureus.30510>.

Gastrointestinal Disorders

A carnivore diet may allow the gut to heal by removing [irritants](#), [addressing gut dysbiosis](#), [reducing inflammation](#), and [improving immune function](#). Addressing underlying metabolic dysregulation by reducing [insulin resistance](#) also supports healing.

1. Martin, P., Johansson, M. and Ek, A. (2021) 'A Zero Carbohydrate, Carnivore Diet can Normalize Hydrogen Positive Small Intestinal Bacterial Overgrowth Lactulose Breath Tests: A Case Report'. Available at: <https://doi.org/10.21203/rs.3.rs-148500/v1>.

Mental Health

Improvements in mental well-being are [commonly reported](#) using a carnivore approach, and a [recent case series](#) has drawn attention to the utility of this

approach for anorexia nervosa (AN), a psychiatric condition carrying a [high risk of mortality](#).

1. Norwitz, N.G., Hurn, M. and Forcen, F.E. (2023) 'Animal-based ketogenic diet puts severe anorexia nervosa into multi-year remission: A case series', *Journal of Insulin Resistance*, 6(1), p. 8. Available at: <https://insulinresistance.org/index.php/jir/article/view/84>.

This potentially provocative case series deserves a closer look. AN is strongly associated with [obsessive-compulsive disorder](#) (OCD), and the mechanisms through which a ketogenic approach can benefit mental health conditions (improving brain energy metabolism, reducing neuroinflammation, and regulating neurotransmitter activity) have been [well described](#). Additionally, OCD implicates altered [cerebral glucose metabolism](#) and [insulin signalling](#), which is common with other psychiatric conditions. Gastrointestinal disorders like [carbohydrate malabsorption](#) also exist in those with AN, and elimination diets may have utility for [other psychiatric disorders](#). There is some evidence that a [higher fat diet](#) affects dopamine tone in a way that promotes more regulated eating patterns. This, along with other evidence that [appetite and hunger hormone signals](#) become more regulated using a ketogenic diet, may also contribute to success.

Taken together, these factors, along with a simple diet regime where quality nutrition can be delivered in a small volume, may help explain why this approach can be successful in this population.

Conclusions

A medically supervised carnivore approach may be applied to promote healing, followed by a phase of reintroduction to identify problematic foods. Decisions about reintroduction should be guided by clinical indicators, patient preferences, and the consideration of competing conditions. A personalised approach to any nutritional therapy is a guiding principle, and many people are choosing to continue a carnivore lifestyle long-term.

Further Resources

The Nutrition Network [reference resource](#) has an extensive listing where you can read more about the application of therapeutic carbohydrate restriction (TCR) for a range of conditions. Nutrition Network offers [training modules](#) where you can learn more about the science and application of TCR for a range of conditions, which includes specific [carnivore training](#).

Individual responses to dietary composition can vary, so appropriate medical monitoring is advised. Patients who are taking medication should consult with their doctor, as the following [guidelines](#) (Society of Metabolic Health Practitioners) may need to be considered.