International Journal of Innovative Technologies in Social Science

e-ISSN: 2544-9435

Operating Publisher
SciFormat Publishing Inc.
ISNI: 0000 0005 1449 8214

2734 17 Avenue SW,
Calgary, Alberta, T3E0A7,
Canada
+15878858911
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ARTICLE TITLE	THE USE OF LOW HISTAMINE DIET – A REVIEW
DOI	https://doi.org/10.31435/ijitss.1(49).2026.5122
RECEIVED	22 January 2026
ACCEPTED	23 March 2026
PUBLISHED	30 March 2026
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THE USE OF LOW HISTAMINE DIET – A REVIEW

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ABSTRACT

Introduction: Histamine is a biologically active amine involved in inflammatory, immunological, neurological, and gastrointestinal processes. Impaired degradation of histamine, may lead to histamine intolerance and multisystem symptoms. The low-histamine diet is interesting strategy as a non-pharmacological recommendation for managing histamine-related disorders.
Background: There are many disorders which symptoms may be associated with the level of histamine, for instance: chronic spontaneous urticaria, inflammatory bowel disease, recurrent headaches, gastrointestinal manifestations in hypermobile Ehlers–Danlos syndrome, and anaphylaxis-like reactions. Although dietary histamine restriction is frequently recommended, the consistency between online dietary advice and scientific evidence could be misleading.
Methods: Scientific articles adressing the use of low-histamine diet were identified through an analysis of databases. Secondly, five publicly accessible websites identified through search phrases related to the low-histamine diet were analyzed. Afterwards, five scientific studies from literature databases were reviewed to compare publicly accessible information to recommendations in scientific articles from literature databases.
Key findings: Analyzed articles suggest that impaired histamine degradation can result in multisystem symptoms, which may improve after implication dietary histamine restriction. The analysis of low-histamine diet recommendations revealed inconsistencies between internet-based information and literature from scientific databases.
Conclusions: A low-histamine diet may provide clinical benefit in selected patients with histamine-related disorders. However, dietary recommendations are often inconsistent with scientific evidence. Implementation of the diet should be individualized and evidence-based. Further studies could be beneficial to establish clear and standardized dietary guidelines for histamine related conditions.

KEYWORDS

Histamine, Low-Histamine Diet, Antihistamine Diet, Histamine-Containing Foods, Histamine-Rich Food

CITATION

Karolina Domosud, Gabriela Makulec, Damian Zienkiewicz, Julia Maria Kostro, Dorota Kacprzyk, Lizaveta Novik, Maciej Jakub Kozicki, Anna Libera, Karolina Bartkiewicz, Zofia Jędra. (2026) The Use of Low Histamine Diet – A Review. *International Journal of Innovative Technologies in Social Science*. 1(49). doi: 10.31435/ijitss.1(49).2026.5122

Introduction

What is a histamine?

Histamine is a biogenic amine produced and stored in granules of basophils and mast cells. It performs numerous roles in human body — an overview of its functions were summarized in a Table 1 (Patel RH, 2023). However, among its functions, the involvement in inflammatory responses and allergic reactions are considered one of the most significant.

Table 1. Analysis of histamine receptors, their localizations and functions

Histamine receptor	Localization	Function
H1	Neurons, smooth muscle cells of the airways and blood vessels	• Inflammatory and allergic reactions (example: vasodilation, pruritus, bronchoconstriction) • Regulates physiological functions (example: thermoregulation)
H2	Gastric mucosa parietal cells, smooth muscle cells and heart	• Gastric acid secretion) • Induce: tachycardia, bronchoconstriction, hypotension, flushing
H3	Histaminergic neurons	Regulate releasing: histamine, dopamine, serotonin, noradrenaline, acetylcholine
H4	Bone marrow and peripheral hematopoietic cells	• Differentiation of myeloblasts and promyeloblasts • Chemotaxis of immune cells

Example of histamine-related issue

Undoubtedly, histamine is an essential biogenic amine in the human body, however with impaired regulation mechanisms causing its excess, patient may experience symptoms that are difficult to tolerate or even be potentially harmful and life-threatening.

Certain conditions characterized by impaired histamine metabolism or metabolic dysfunction result in histamine accumulation and the subsequent development of diverse clinical manifestations. One of the condition worth mentioning is caused by abnormal degradation of histamine that leads to its accumulation – histamine intolerance. After consumption of histamine-rich food, the enzyme called diamine oxidase (DAO) inhibits the passage of exogenous histamine from intestines into the systemic circulation (Comas-Basté O, 2020). However, studies shows that decreased level of DAO can cause excessive amount of histamine leading to symptoms like neurological manifestations (headache, fatigue or dizziness), gastrointestinal disorders (bloating, diarrhea, dyspepsia, abdominal pain, nausea or vomiting), respiratory symptoms (cough, sneezing or nasal congestion), muscle twitching, skin disorders and more (Białek et al., 2025; Comas-Basté O, 2020; Tamasi & Kalabay, 2025).

What is low-histamine diet?

In addition to the use of antihistamines of various generations, a recently popular medical approach involves a low-histamine diet, which can help to better manage symptoms associated with histamine excess or intolerance. This diet should be designed to eliminate or reduce histamine-rich or histamine-containing foods, intended to minimalize symptoms caused by elevated histamine levels. (Sánchez-Pérez et al., 2021).

Aim of the study

The aim of this study was to evaluate the scientific evidence supporting the use of a low-histamine diet in medical conditions and to compare dietary recommendations available on publicly accessible websites with scientific literature.

Methodology

Scientific articles addressing the use of low-histamine diet were identified through an analysis of databases such as PubMed and Scopus with using Mendeley – reference manager. These articles were analyzed by titles, abstracts and full texts of the articles to identify studies aligned with the topic of the present research. The results were compared in a Table 2. Secondly, five publicly accessible websites identified through search phrases related to the low-histamine diet were found. Afterwards, these scientific studies from literature databases such as: PubMed or Google Scholar were reviewed to compare publicly accessible information to recommendations in scientific articles from literature databases. Products classified as recommended and not recommended were compared in Table 3 and Table 4.

Results and discussion

For which medical conditions is a low-histamine diet beneficial?

Scientific articles adressing the use of low-histamine diet were identified through an analysis of databases such as PubMed and Scopus and listed in Table 2 along with diseases mechanisms proposed by the authors and reported effects of the diet on specific clinical conditions.

Histamine has been increasingly implicated in the pathophysiology of several disorders. Gastrointestinal tract appeared to be one of the most important group of diseases associated with histamine. In inflammatory bowel disease, chronic inflammation leads to villous atrophy, which influences on localization and activity of diamine oxidase — the primary enzyme responsible for intestinal histamine degradation. Elevated histamine levels further impair intestinal barrier integrity. Those mechanisms increased permeability, allowing histamine to access surrounding tissues and the systemic circulation. Additionally, induced mast cell activation, which contributes to barrier dysfunction and sustained histamine release, enhanced the inflammation. Consequently, researchers suggest that low-histamine diet could be helpful for patients due to minimizing the exogenous histamine (Kanta et al., 2025).

Another medical state in which reduced activity of DAO and histamine N-methyltransferase occurred to be relevant is an adverse reactions to histamine-containing foods and beverages. Moreover, this disorder is often combined with external triggers such as microorganisms that produce histamine or histamine-rich foods (Tamasi J, 2022). Nevertheless, histamine intolerance characterized by an imbalance between histamine intake and degradation is also often associated with decreased DAO activity or genetic variations affecting histamine-

metabolizing enzymes (Tamasi & Kalabay, 2025). Dietary interventions, including elimination of high-histamine foods and adherence to low-histamine diets based on fresh, minimally processed foods, have demonstrated symptom improvement across gastrointestinal, neurological, and systemic domains (Tamasi J, 2022; Tamasi & Kalabay, 2025)

Similar mechanisms have been proposed in chronic spontaneous urticaria. Although the exact pathophysiology remains incompletely understood, ingestion of histamine-rich foods leads to intensifying the symptoms. Clinical observations indicate that low-histamine diets may reduce disease severity, with reported improvements in urticaria activity scores and quality-of-life indices. However, while some studies demonstrate superior outcomes when dietary modifications are combined with pharmacological treatment, not all observed differences reach statistical significance.(Kapat A, 2025; Wagner N, 2017).

Moreover, histamine-related mechanisms have been associated with recurrent headaches and migraine (Schnedl & Enko, 2021), gastrointestinal manifestations in hypermobile Ehlers–Danlos syndrome (Aziz et al., 2025) and recurrent anaphylaxis-like symptoms after ingesting seafood. The role of histamine in headache and migraine has been increasingly explored. However, the underlying mechanisms are not fully acknowledged. Researchers suggests that dietary histamine may be a trigger, because consumption of histamine-containing foods and beverages has been linked to headache onset. Therefore, low-histamine diet and products with lower histamine level, such as organic wine, may be associated with a reduction in headache frequency and intensity (Schnedl & Enko, 2021).

What is more, scientists hypothesized that gastrointestinal symptoms in patients with hypermobile Ehlers–Danlos syndrome and related hypermobility spectrum disorders, may be associated with mast cell dysregulation. Early or excessive mast cell activation may promote histamine release, leading to increased peristalsis, permeability, and visceral hypersensitivity. Consequently, researchers suggested that dietary strategies, including elimination or low-histamine diets, could be a potential approaches to reduce gastrointestinal symptoms in this patient population (Aziz et al., 2025).

Patients presenting a recurrent anaphylaxis-like symptoms, particularly following the ingestion of histamine-rich foods such as seafood has been suggested to be implicated with histamine intolerance Accumulation of histamine due to impaired degradation can lead to multisystem manifestations. Researchers highlighted patients" disorders including cutaneous, respiratory, cardiovascular, and gastrointestinal symptoms. Long-term following a low-histamine diet, often combined with prophylactic antihistamine therapy, has been shown to prevent symptom recurrence, further highlighting the role of histamine intolerance in these clinical presentations (Nakamura T, 2025).

Analyzed articles consistently suggest that impaired histamine degradation can result in multisystem symptoms, many of which improve after implication dietary histamine restriction. Collectively, these findings support the role of histamine as a clinically relevant amine and highlight that using low-histamine diet among patients could be a potentially beneficial way of treatment. However, that is crucial to emphasize that a low-histamine diet does not treat or cure the above-mentioned diseases. This diet may represent a supportive strategy that typically works by reducing metabolic burden associated with histamine accumulation. By limiting exogenous histamine intake, the diet may decrease the frequency and severity of symptoms, making them less intense or less disruptive, without addressing the underlying pathophysiology of mentioned diseases.

Table 2. Scientific articles addressing the use of low-histamine diet

Disease	Source and cause	Source and effect of low histamine diet
Inflammatory bowel disease	(Kanta et al., 2025) • Inflammation leads to atrophy of vilous where DAO is localized. • High level of histamine can damage integrity of intestinal barrier even further. • More histamine get access to surrounding tissues and systemic circulation. • Activation of mast cells due to inflammation dysregulate intestinal barrier even further.	(Kanta et al., 2025) — After analyzing literature scientists suggest that low-histamine diet could be helpful for patients due to minimizing the exogenous histamine. The mean reduction in DLQI score was 2.08 points across all patients.
Chronic spontaneous urticaria	(Wagner N, 2017) • After analyzing literature scientists admitted that pathomechanism is not fully understood, however histamine intolerance symptoms are reported to be worsening after consuming histamine-rich food. • High level of histamine can damage integrity of intestinal barrier even further. (Kapat A, 2025) — The process of appearing symptoms involves a sequence of events: stimulation and degranulation of mast cells, histamine release, activation of sensory neurons, vascular dilation, plasma leakage and recruitment of inflammatory cells.	(Wagner N, 2017) — 75% of patients with gastrointestinal symptoms benefited from using low-histamine diet and 61% improved their Urticaria Activity Score 4 by ≥ 3 points. (Kapat A, 2025) — Six weeks after the division of patients into two groups (DR — drugs alone, and DRDI — drugs combined with a pseudoallergen-free, low-histamine diet) and the appropriate intervention, the scientists observed that the weekly urticaria activity score was lower in the DRDI group compared to the DR group. However, this difference was not statistically significant
Headache	(Schnedl & Enko, 2021) — Scientists admitted that pathomechanism is not fully understood, however biogenic amines within histamine are associated with reoccurring headaches and possibly migraine.	(Schnedl & Enko, 2021) and (Maykish et al., 2021) — Researchers suggested that consumed histamine with food may be a trigger of headaches, what is more consuming organic wine with lower amount of histamine decreases headaches.
Gastrointestinal symptoms in Hypermobile Ehlers-Danlos Syndrome	(Aziz et al., 2025) — There is a theory of association between hypermobile Ehlers–Danlos syndrome or hypermobility spectrum disorders and mast cell activation syndrome in which early or overly intense activation of mast cells may cause, among other things, gastrointestinal symptoms.	(Aziz et al., 2025) — Scientists suggested that special or elimination diets within low-histamine diet can improve gastrointestinal symptoms.
Adverse reaction to histamine in food and beverages	(Tamasi J, 2022) — The state can be caused by non-toxic amounts of histamine due to decreased function of diamine oxidase and histamine N-methyltransferase, associated with provoking factors like microorganisms producing histamine and foods containing high levels of histamine.	(Tamasi J, 2022) — Researchers reported a case study presenting 36-year-old man with reoccurring symptoms (every 3-6 weeks and lasted for 10-14 days) including: nausea, malaise, fatigue, fever, lack of appetite, emesis, headaches, erythematous rush, loose stools, abdominal cramps, sore throat, rhinorrhea, coughing, heartburn, muscle twitching, sneezing, phantosmia or sleepiness after meals. Subsequent to low-histamine diet, patient achieved a symptom-free state.

Disease	Source and cause	Source and effect of low histamine diet
Recurrent anaphylaxis-like symptoms after ingesting seafood	(Nakamura T, 2025) — The scientists emphasized that histamine intolerance can be related to accumulation of histamine in human body and impaired histamine degradation.	(Nakamura T, 2025) — Researchers reported a case study presenting 26-year-old with reoccurring symptoms (flush, pruritus, oral discomfort, dyspnea, diarrhea,abdominal pain, wheal,tachycardia, fatigue or headache) after seafood consumption. Condition excluded: histamine poisoning, mast cell activation. 50-skin-prick test supported the diagnosis of histamine intolerance (at 50 minutes the wheal was greater than 3mm).After four years of following a low-histamine diet and prophylactic oral antihistamines, the symptoms have not reappeared.
Histamine intolerance	(Tamasi & Kalabay, 2025) • Possible mutation in diamine oxidase or hydroxy-N-methyl transferase — among patients in this study, scientists noted a positive family history of similar symptoms. • Decreased DAO levels, which were as well confirmed in 74% of all patients participating in the study. Among patients with confirmed histamine intolerance, percentage of positive results was higher — 82%.	(Tamasi & Kalabay, 2025) — The elimination diet (exclusion of high-histamine food) or low-histamine diet (based of fresh fruits, vegetables, potatoes, rice and fresh poultry) were implemented for patients with confirmed histamine intolerance for 3–6 months. After dietary adjustments, scientists conducted among patients questionnaire. Noted improvements: symptom reduction (loose stools instead of diarrhea; moderate, dull headaches or only aura in migraine-like symptoms), mood improvements observed among 38% of patients. Other observations: if a dietary mistake occurred, the symptoms manifested within an average of 1,1 hours; sudden lethargy co-occur with symptoms in 52%; symptoms severity varied with the quantity of food consumed in 68%.

Analysis of products related to the low-histamine diet

In order to systematize the products recommended and not recommended in a low-histamine diet, five publicly accessible websites were analyzed. Reviewed websites are available to all users after entering search phrases such as “low histamine diet” or “low histamine diet – food” or “low histamine diet – products” into search engine. Afterwards, five scientific studies were found using databases like: Pubmed or Google Scholar. These articles were analyzed from the same perspective to determine whether the information generally available on the internet is consistent with scientific research findings that are less accessible to patients. The aforementioned analysis is presented in Table 3 and Table 4.

Firstly, the analysis revealed that certain products appeared in both categories as recommended and not recommended. These products included: eggs, squash, asparagus, cucumber, passion fruit and nuts. However, inconsistencies concerning these products were also identified in the used sources. For example, according to the scientific literature, squash was confirmed as a recommended product. There were no information in scientific articles that squash could have high amount of histamine or could increase level of histamine. That information appeared only on internet websites. A similar situation was observed for asparagus, cucumber, and passion fruit. The observed discrepancies may be caused by the lack of standardized criteria distinguishing between histamine-containing foods, histamine liberators, and DAO-inhibiting products in some of the sources.

Products that frequently appeared online as recommended but were not confirmed in the reviewed studies include fresh salmon, chicken, gluten-free grains, grains in general, pomegranates, dragon fruit, beets, goat’s milk and sheep’s milk, mozzarella, almonds, chia, flax, animal fats, sweets, and stevia, maple syrup, and coconut sugar. Certain products identified on websites as not recommended in the diet were also not mentioned in the scientific sources. These include artificial colors, passion fruit, flavored milk, squash, asparagus, cucumber, sour cream, cinnamon, and chili powder. However, that is important to acknowledge that the absence of evidence in the reviewed literature does not necessarily confirm or exclude safety. It may rather indicate insufficient research data.

What is interesting, scientific consensus appears stronger for fermented and processed foods than for fresh plant-based products. Consequently, the more processed a food product is, the higher amount of the

histamine it tends to contain. The analysis suggests that food processing and storage conditions may play a more critical role in histamine content than the food category itself.

Lastly, that is worth mentioning that among the least recommended products, most frequently: alcohol, fermented or matured cheeses, spinach, eggplant, sausages or canned meat, canned fish, and soybeans were identified. Alternatively, among the most recommended products, those most commonly mentioned were fresh meat or fish, apples, apricots, onions, broccoli, and potatoes.

Table 3. Analyzed products that should be recommended for low-histamine diet.

Product	Internet sites	Scientific articles from literature databases
Fresh meat (cooled, frozen or fresh)	(Liane Reeves et al., 2024; Masterman, n.d.; MelbourneFunctionalMedicine, 2024; Peter Rowe, 2020)	(Comas-Basté O, 2020; Hrubisko et al., 2021; Sánchez-Pérez et al., 2021)
Fresh/frozen fish	(Burkhart, n.d.; Liane Reeves et al., 2024; Masterman, n.d.)	(Comas-Basté O, 2020; Hrubisko et al., 2021; Sánchez-Pérez et al., 2021)
Fresh salmon	(MelbourneFunctionalMedicine, 2024; Peter Rowe, 2020)	Not found
Chicken (cooled, frozen or fresh)	(Masterman, n.d.; MelbourneFunctionalMedicine, 2024)	Not found
Egg	(Burkhart, n.d.; Liane Reeves et al., 2024; Masterman, n.d.; MelbourneFunctionalMedicine, 2024)	(Hrubisko et al., 2021; Sánchez-Pérez et al., 2021)
Gluten-free grains	(MelbourneFunctionalMedicine, 2024; Peter Rowe, 2020)	Not found
Grains	(Burkhart, n.d.; Liane Reeves et al., 2024; Masterman, n.d.)	Not found
Apples	(Burkhart, n.d.; Liane Reeves et al., 2024; Masterman, n.d.; MelbourneFunctionalMedicine, 2024; Peter Rowe, 2020)	(Hrubisko et al., 2021; Sánchez-Pérez S, 2018)
Blueberries	(Burkhart, n.d.; Liane Reeves et al., 2024; Masterman, n.d.; MelbourneFunctionalMedicine, 2024; Peter Rowe, 2020)	(Hrubisko et al., 2021)
Mangoes	(Burkhart, n.d.; Liane Reeves et al., 2024; Masterman, n.d.; MelbourneFunctionalMedicine, 2024; Peter Rowe, 2020)	(Sánchez-Pérez S, 2018)
Peaches	(Burkhart, n.d.; Liane Reeves et al., 2024; Masterman, n.d.; MelbourneFunctionalMedicine, 2024; Peter Rowe, 2020)	(Hrubisko et al., 2021; Sánchez-Pérez S, 2018)
Pomegranates	(Liane Reeves et al., 2024; Masterman, n.d.; MelbourneFunctionalMedicine, 2024; Peter Rowe, 2020)	Not found
Dragon fruit	(MelbourneFunctionalMedicine, 2024)	Not found
Passion fruit	(MelbourneFunctionalMedicine, 2024)	(Sánchez-Pérez S, 2018)
Apricots	(Burkhart, n.d.; Liane Reeves et al., 2024; Masterman, n.d.; MelbourneFunctionalMedicine, 2024)	(Hrubisko et al., 2021; Sánchez-Pérez et al., 2021)
Onion	(Burkhart, n.d.; Liane Reeves et al., 2024; Masterman, n.d.; MelbourneFunctionalMedicine, 2024; Peter Rowe, 2020)	(Hrubisko et al., 2021; Sánchez-Pérez S, 2018)
Asparagus	(Burkhart, n.d.; Liane Reeves et al., 2024; Masterman, n.d.; MelbourneFunctionalMedicine, 2024; Peter Rowe, 2020)	(Hrubisko et al., 2021; Sánchez-Pérez S, 2018)

Product	Internet sites	Scientific articles from literature databases
Broccoli	(Burkhart, n.d.; Liane Reeves et al., 2024; Masterman, n.d.; MelbourneFunctionalMedicine, 2024; Peter Rowe, 2020)	(Hrubisko et al., 2021; Sánchez-Pérez S, 2018)
Cucumbers	(Burkhart, n.d.; Liane Reeves et al., 2024; Masterman, n.d.; MelbourneFunctionalMedicine, 2024; Peter Rowe, 2020)	(Hrubisko et al., 2021; Sánchez-Pérez S, 2018)
Squash	(Burkhart, n.d.; Liane Reeves et al., 2024; Masterman, n.d.; MelbourneFunctionalMedicine, 2024; Peter Rowe, 2020)	(Sánchez-Pérez et al., 2021)
Beets	(Burkhart, n.d., n.d.; Liane Reeves et al., 2024; Masterman, n.d.; MelbourneFunctionalMedicine, 2024)	Not found
Non-dairy milk like almond, coconut, or hemp	(Liane Reeves et al., 2024; MelbourneFunctionalMedicine, 2024; Peter Rowe, 2020)	(Sánchez-Pérez S, 2018)
Milk substitutes – goat milk, sheep milk	(Masterman, n.d.; MelbourneFunctionalMedicine, 2024)	Not found
Fresh pasteurised milk and milk products	(Burkhart, n.d.; Masterman, n.d.)	(Sánchez-Pérez et al., 2021) -milk
Cream cheese, butter	(Burkhart, n.d.; Liane Reeves et al., 2024; Masterman, n.d.; MelbourneFunctionalMedicine, 2024; Peter Rowe, 2020)	(Hrubisko et al., 2021)
Mozzarella	(Liane Reeves et al., 2024; Masterman, n.d.; Peter Rowe, 2020)	Not found
Almonds	(Liane Reeves et al., 2024; MelbourneFunctionalMedicine, 2024; Peter Rowe, 2020)	Not found
Nuts without pistachios	(Liane Reeves et al., 2024)	Not found
Nuts with pistachios	(MelbourneFunctionalMedicine, 2024)	(Sánchez-Pérez S, 2018; Sánchez-Pérez et al., 2021)
Potatoes	(Burkhart, n.d.; MelbourneFunctionalMedicine, 2024; Peter Rowe, 2020)	(Hrubisko et al., 2021; Sánchez-Pérez S, 2018)
Chia	(MelbourneFunctionalMedicine, 2024; Peter Rowe, 2020)	Not found
Flax	(MelbourneFunctionalMedicine, 2024; Peter Rowe, 2020)	Not found
Olive oil,Coconut oil or other vegetable oil	(MelbourneFunctionalMedicine, 2024; Peter Rowe, 2020)	(Hrubisko et al., 2021)
Animal fats and oil	(Burkhart, n.d.)	Not found
Herbal tea (without black tea)	(Burkhart, n.d.; Masterman, n.d.; MelbourneFunctionalMedicine, 2024)	(Hrubisko et al., 2021; Sánchez-Pérez et al., 2021)
Fruit juice (without citrus)	(Burkhart, n.d.; Masterman, n.d.; MelbourneFunctionalMedicine, 2024)	(Hrubisko et al., 2021)
Fresh and dried herbs	(Burkhart, n.d.; Liane Reeves et al., 2024; MelbourneFunctionalMedicine, 2024)	(Hrubisko et al., 2021)
Sweets, cakes, biscuits,crisps, sugar, syrup	(Liane Reeves et al., 2024)	Not found
Homemade sweets with allowed ingredients	(MelbourneFunctionalMedicine, 2024)	(Hrubisko et al., 2021) -jam
Stevia, maple syrup, coconut sugar	(MelbourneFunctionalMedicine, 2024)	Not found

Table 4. Analyzed products that should NOT be recommended for low-histamine diet.

Product	Internet sites	Scientific articles from literature databases
Fermented or matured cheese	(Burkhart, n.d.; Liane Reeves et al., 2024; Masterman, n.d.; MelbourneFunctionalMedicine, 2024; Peter Rowe, 2020)	(Comas-Basté O, 2020; Hrubisko et al., 2021; Sánchez-Pérez et al., 2021)
Alcohol	(Burkhart, n.d.; Liane Reeves et al., 2024; Masterman, n.d.; MelbourneFunctionalMedicine, 2024; Peter Rowe, 2020)	(Comas-Basté O, 2020; Hrubisko et al., 2021; Jackson et al., 2025; Sánchez-Pérez et al., 2021)
Artificial colors and flavoring	(Masterman, n.d.; MelbourneFunctionalMedicine, 2024; Peter Rowe, 2020)	Not found
Avocado	(Burkhart, n.d.; MelbourneFunctionalMedicine, 2024; Peter Rowe, 2020)	(Comas-Basté O, 2020; Hrubisko et al., 2021; Jackson et al., 2025)
Kiwi	(Liane Reeves et al., 2024; Masterman, n.d.; Peter Rowe, 2020)	(Comas-Basté O, 2020; Hrubisko et al., 2021; Jackson et al., 2025)
Pineapple	(Burkhart, n.d.; Liane Reeves et al., 2024; Masterman, n.d.; MelbourneFunctionalMedicine, 2024; Peter Rowe, 2020)	(Comas-Basté O, 2020; Jackson et al., 2025)
Strawberries	(Burkhart, n.d.; Liane Reeves et al., 2024; MelbourneFunctionalMedicine, 2024; Peter Rowe, 2020)	(Comas-Basté O, 2020; Hrubisko et al., 2021; Jackson et al., 2025)
Passionfruit	(Peter Rowe, 2020)	Not found
Bananas	(Burkhart, n.d.; Liane Reeves et al., 2024; Masterman, n.d.; Peter Rowe, 2020)	(Comas-Basté O, 2020; Hrubisko et al., 2021; Jackson et al., 2025)
Citrus	(Burkhart, n.d.; Liane Reeves et al., 2024; Masterman, n.d.; MelbourneFunctionalMedicine, 2024; Peter Rowe, 2020)	(Comas-Basté O, 2020; Hrubisko et al., 2021; Jackson et al., 2025)
Peanuts, walnuts, cashews	(Masterman, n.d.; MelbourneFunctionalMedicine, 2024; Peter Rowe, 2020)	(Comas-Basté O, 2020; Hrubisko et al., 2021; Jackson et al., 2025)
Pistachios	(Liane Reeves et al., 2024; Masterman, n.d.)	(Comas-Basté O, 2020; Hrubisko et al., 2021)
Eggplant	(Burkhart, n.d.; Masterman, n.d.; MelbourneFunctionalMedicine, 2024; Peter Rowe, 2020)	(Comas-Basté O, 2020; Jackson et al., 2025; Sánchez-Pérez S, 2018; Sánchez-Pérez et al., 2021)
Yoghurt	(Burkhart, n.d.; Liane Reeves et al., 2024; Masterman, n.d.; MelbourneFunctionalMedicine, 2024; Peter Rowe, 2020)	(Jackson et al., 2025)
Fish, especially canned	(Burkhart, n.d.; Liane Reeves et al., 2024; MelbourneFunctionalMedicine, 2024; Peter Rowe, 2020)	(Comas-Basté O, 2020; Hrubisko et al., 2021; Jackson et al., 2025)
Flavored milk	(Peter Rowe, 2020)	Not found
Beans	(Burkhart, n.d.; Masterman, n.d.; MelbourneFunctionalMedicine, 2024; Peter Rowe, 2020)	(Hrubisko et al., 2021)
Soybeans	(Liane Reeves et al., 2024; MelbourneFunctionalMedicine, 2024; Peter Rowe, 2020)	(Comas-Basté O, 2020; Hrubisko et al., 2021; Jackson et al., 2025)
Spinach	(Liane Reeves et al., 2024; MelbourneFunctionalMedicine, 2024; Peter Rowe, 2020)	(Comas-Basté O, 2020; Hrubisko et al., 2021; Jackson et al., 2025; Sánchez-Pérez S, 2018; Sánchez-Pérez et al., 2021)
Squash	(MelbourneFunctionalMedicine, 2024; Peter Rowe, 2020)	Not found

Product	Internet sites	Scientific articles from literature databases
Tomatoes	(Burkhart, n.d.; Liane Reeves et al., 2024; Masterman, n.d.; MelbourneFunctionalMedicine, 2024; Peter Rowe, 2020)	(Comas-Basté O, 2020; Hrubisko et al., 2021; Jackson et al., 2025; Sánchez-Pérez S, 2018; Sánchez-Pérez et al., 2021)
Asparagus	(Liane Reeves et al., 2024)	Not found
Cucumber	(Liane Reeves et al., 2024)	Not found
Unpasteurized milk including goat and sheep	(MelbourneFunctionalMedicine, 2024; Peter Rowe, 2020)	(Comas-Basté O, 2020)
Sour cream and buttermilk	(Burkhart, n.d.; Liane Reeves et al., 2024; MelbourneFunctionalMedicine, 2024; Peter Rowe, 2020)	Not found
Sausage or canned meat	(Burkhart, n.d.; Liane Reeves et al., 2024; Masterman, n.d.; MelbourneFunctionalMedicine, 2024; Peter Rowe, 2020)	(Comas-Basté O, 2020; Hrubisko et al., 2021; Jackson et al., 2025; Sánchez-Pérez et al., 2021)
Shellfish	(Burkhart, n.d.; Liane Reeves et al., 2024; Masterman, n.d.; MelbourneFunctionalMedicine, 2024; Peter Rowe, 2020)	(Comas-Basté O, 2020; Hrubisko et al., 2021; Jackson et al., 2025)
Tofu	(MelbourneFunctionalMedicine, 2024; Peter Rowe, 2020)	(Hrubisko et al., 2021)
Vinegear-containing foods like ketchup or mustard	(Burkhart, n.d.; Liane Reeves et al., 2024; Masterman, n.d.; MelbourneFunctionalMedicine, 2024; Peter Rowe, 2020)	(Jackson et al., 2025)
Cinnamon	(MelbourneFunctionalMedicine, 2024; Peter Rowe, 2020)	Not found
Chili powder	(Burkhart, n.d.; MelbourneFunctionalMedicine, 2024; Peter Rowe, 2020)	Not found
Chocolate	(Liane Reeves et al., 2024; Masterman, n.d.; MelbourneFunctionalMedicine, 2024; Peter Rowe, 2020)	(Comas-Basté O, 2020; Jackson et al., 2025)
Eggs, especially raw egg white	(Burkhart, n.d.; Peter Rowe, 2020)	(Comas-Basté O, 2020; Hrubisko et al., 2021; Jackson et al., 2025)
Coffee, black or green tea	(Burkhart, n.d.; Liane Reeves et al., 2024); only tea - (Masterman, n.d.; MelbourneFunctionalMedicine, 2024)	(Jackson et al., 2025)

Conclusions

The aim of the study was to analyze and demonstrate the role of histamine in multiple disorders. The reviewed scientific literature indicates that a low-histamine diet may be beneficial in clinical conditions, such as histamine intolerance, chronic spontaneous urticaria, inflammatory bowel disease, recurrent headaches or migraine, gastrointestinal manifestations in hypermobile Ehlers–Danlos syndrome and recurrent anaphylaxis-like reactions. In many of these cases, dietary intervention resulted in symptom reduction, although the strength of evidence varies and not all studies demonstrated statistically significant superiority over pharmacological treatment alone. That is why to assess the role of the low-histamine diet more accurately, it would be necessary to design more studies involving larger groups of patients.

The second part of the study involving dietary recommendations proves that there is discrepancy between publicly available information and scientific articles. What is a key conclusion of this study is that advising patients a low-histamine diet, should be discussed by healthcare professionals to recommend appropriate products, since reliance exclusively on online sources may result in misguided dietary choices. What is more, further well-designed clinical studies could be needed to standardize dietary guidelines and to better define which products truly require restriction in histamine-related disorders.

Acknowledgments: No conflicts of interest to declare.

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