

Concise Communication

Increased Popularity of Goat Milk Soap: Analyzing Five Years of Google Trends

Marissa Yaldo, BS¹, Meghan R. Mansour, MD², Geoffrey A. Potts, MD³

- ¹ Wayne State University School of Medicine, Detroit, MI, ² Oakland University William Beaumont School of Medicine, Rochester Hills, MI,
- ³ Department of Dermatology, Wayne State University School of Medicine, Detroit, MI

Keywords: atopic dermatitis, eczema, goat milk soap, goat soap, mild soap, gentle soap, eczema soap, integrative dermatology

Journal of Integrative Dermatology

In recent years, patients have sought out alternative, non-pharmacologic therapies to manage their skin conditions such as atopic dermatitis. Accordingly, goat milk soap (GMS) is a product that has gained increasing popularity as its sales have been driven by online consumer endorsements promising significant improvement in the overall health, hydration, and appearance of the skin. As patients continue to utilize the internet for health recommendations, Google remains a primary source of information. Using a Google Trends analysis, our study aimed to analyze the popularity of GMS on Google. Authors queried all searches in the United States from January 2018 through December 2023 using the terms "goat soap" and "eczema soap" as well as the topic "Goat Milk Soap". Within the aforementioned timeframe, the interest in the term "goat soap" was greater than all other categories, including the term "eczema soap". All searches demonstrated a positive trend, with searches for "goat soap" and "goat milk soap" having positive trends of +0.44 and +0.61 respectively. These results highlight the growing interest in GMS over the last five years, despite a lack of clinical evidence supporting the claimed benefits. Few studies discuss the potential benefits of using goat milk-containing products, highlighting their anti-inflammatory, anti-bacterial, and moisturizing properties as well as their potential use for atopic dermatitis. Therefore, there is a need for further research in this area so that providers within the dermatology community are able to offer well- informed recommendations to atopic dermatitis patients.

Anti-inflammatory solutions, particularly products devoid of fragrances and skin irritants, are recommended to manage many different skin conditions such as acne, psoriasis, and atopic dermatitis (AD). Goat milk soap (GMS) has grown in popularity for these skin conditions, driven by consumer endorsements online claiming that this product has natural emollient, anti-inflammatory, and soothing properties. As patients increasingly seek online resources for guidance, Google emerges as a primary source of information, with recent studies identifying it among the most visited sources regarding cosmetic treatments. Thus, our study aimed to analyze the trending popularity of GMS on Google, with a focus on its relevance to AD by comparing it to searches for eczema-related products.

Google Trends, a publicly accessible tool, enables users to explore search volumes of keywords within the Google search engine over a specified period. Geospatial analysis can also stratify these data regionally. Within Google Trends, a value of 100 represents peak popularity for a search term, while a value of 0 indicates insufficient data is available. Authors queried all searches in the United States from January 2018 through December 2023 regarding the terms "goat soap" and "eczema soap," with the latter serving as a control. "Atopic dermatitis" was not used in place of eczema since the medical jargon yielded insufficient data. We also populated trends for the topic "Goat Milk Soap," as the topic may encompass a range of related keywords.

Within the aforementioned timeframe, the interest in the term "goat soap" was greater than all other categories, including the term "eczema soap" and the topic "Goat Milk Soap." All searches demonstrated a positive trend (Figure 1a). The search volume for "goat soap" nearly doubled between 2018 to 2023, peaked between August and September 2022 and remained consistently elevated. The states with the greatest relative search volume are demonstrated in Figure 1b. The topic "Goat Milk Soap" demonstrated minimal interest between January 2018 and April 2022, but sharply increased in May 2022 and remained elevated (Figure 1a).

Maintenance of AD is focused on replenishing skin moisture. Current recommendations highlight the consistent use of emollients and regular bathing. While bathing, patients should use soap-free, dye-free, fragrance-free, and hyporeactive cleansers. Our study supports a growing interest in alternative cleansers that may be used to manage conditions such as AD, as searches for "goat soap" and "goat milk soap" demonstrated positive trends of +0.44 and +0.61 respectively. Although searches for goat milk soap cannot be definitively attributed to individuals with AD, it is reasonable that this population comprises a subset of searchers, given that goat milk soap is frequently marketed for sensitive and dry skin, which are clinical features commonly associated with AD.

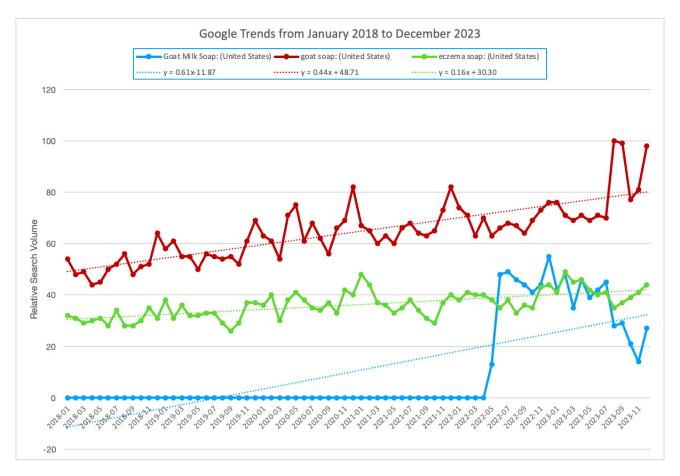


Figure 1a. Graph of data extracted from Google Trends analysis from 1/1/2018 to 12/31/2023 for the topic "Goat Milk Soap" and the terms "goat soap" and "eczema soap."

The key ingredients consistently identified in GMS are goat milk, oils and butters like olive oil, coconut oil, or shea butter, sodium hydroxide (lye), and optional additives such as essential oils. Cosmetic websites emphasize goat milk as the primary skin-benefiting component, marketing GMS as hypoallergenic and claiming it can significantly enhance skin health, hydration, and overall appearance. While these claims are widespread in commercial marketing, only a limited number of studies have explored the actual benefits of goat milk-containing products. Existing research points goat milk's anti-inflammatory, antibacterial, and moisturizing properties as well as its potential role in managing skin conditions such as AD.³⁻⁶ Recent genomic research identified key goat milk proteins and associated genes such as LALBA, LTF, IL10, TGF-β1, COL7A1. Because these genes are involved in processes such as immune regulation, skin barrier function, and wound healing, their presence in goat milk highlights GMS's potential for managing skin conditions such as AD.6 Yet, the body of available data still remains limited with a lack of comparative studies assessing the efficacy of GMS against conventional cleansers.

The results of this study may pique the interest of dermatologists, particularly as the efficacy of GMS remains in question. Dermatologists can anticipate questions regarding GMS benefits and safety, especially those practicing in states where Google inquiries were highest. Our results demonstrate a surge in public interest, although cosmetic

companies may advertise outcomes that surpass current scientific evidence. Therefore, there is a need for further research by the medical community so that physicians are able to offer well-informed recommendations to patients.

CORRESPONDING AUTHOR

Marissa M. Yaldo, BS

E-mail: marissa.yaldo@med.wayne.edu

FUNDING SOURCES

None declared

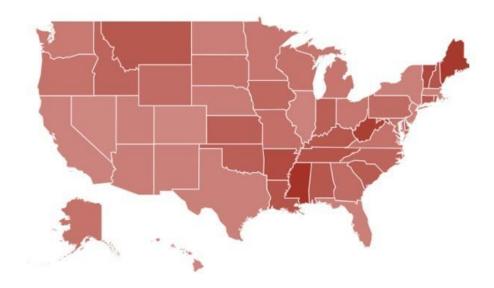
IRB APPROVAL STATUS

N/A

PATIENT CONSENT

Not applicable

Submitted: August 18, 2025 PDT. Accepted: August 19, 2025 PDT. Published: August 28, 2025 PDT.



"Goat Soap" Search Popularity by State

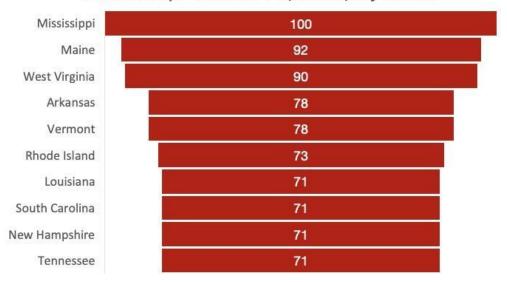


Figure 1b. Relative search popularity of "goat soap" by state between January 2018 and December 2023.



This is an open-access article distributed under the terms of the Creative Commons Attribution 4.0 International License (CC0). View this license's legal deed at https://creativecommons.org/publicdomain/zero/1.0 and legal code at https://creativecommons.org/publicdomain/zero/1.0/legalcode for more information.

REFERENCES

- 1. Frazier W, Bhardwaj N. Atopic Dermatitis: Diagnosis and Treatment. *Am Fam Physician*. 2020;101(10):590-598.
- 3. Ashraf Z, Jamil A, Umar S, Nadeem SG. Antimicrobial Pattern Associated With Handmade Goat Milk Soap. *RADS Journal of Biological Research & Applied Sciences*. 2016;7(2):19-23.
- 4. Brown DG, Holman RL. A trial of goats' milk in eczema in childhood. *Br Med J*. 1953;1(4821):1202-1203. doi:10.1136/bmj.1.4821.1202
- 5. Ncube KT, Modiba MC, Mpofu TJ, Nephawe KA, Mtileni B. Genomic Tools for Medicinal Properties of Goat Milk for Cosmetic and Health Benefits: A Narrative Review. *Int J Mol Sci.* 2025;26(3):893. doi:10.3390/ijms26030893. PMID:39940662
- 6. Voloshyna IM, Soloshenko KI, Lych IV, Shkotova LV. PRACTICAL USE OF GOAT MILK AND COLOSTRUM. *Biotechnologia Acta*. 2021;14(5):38-48. doi:10.15407/biotech14.05.038