# What do patients with acne eat? Eating habits as a triggering factor for acne

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# Introduction

Association between acne and dietary behaviors have been a controversial topic over time. Some literature affirms that certain dietary products may play a role in acne appearance, however there is a lack of information about this subject. Research from recent years suggests that acne development or exacerbation is promoted by high glycomic load/glycomic index foods, fat food, chocolate and dairy proteins. Since acne is one of the main diagnoses in the dairy medical appointment, the aim of this study is to describe and assess the intake of different food groups that had been proposed as acne promoting factors in patients from a dermatological center in Bogota, Colombia.

### Materials and Methods

We performed a multicentric observational descriptive study in patients diagnosed with acre in two demnatological centers in Bogota. We analyzed 24 patients from March to April 2021. We assessed eating habits by asking patients about consumption of western diet, which includes fried foods, dairy products, sugary foods (cookies, soda and sweets), chocalate, deil meats, soy products, snacks such as potato chips, and gym supplements. Data was collected and analyzed in Microsoft<sup>®</sup> Excel 365.

### Results

Of 224 patients, 72.3% (n=162) were women. Dairy was the most consumed food group in 91.1% (n = 204) of patients, and 64.8% of individuals consume it more than 3 times per week. Regarding the rest of the categories, the percentage of consumption reported was also high: field foods 78.5% (n = 176), foods with high sugar content 83.0% (n = 180), clocale 84.3% (n = 189), sauges and deli mests in 65.1% (n = 146) and snacks 49.5% (n = 111). However, for the latter categories the patients affirmed to consume this food alegories were sports supplements and foods with soy and its derivatives, in 83.0% (n = 180) and 70.9% (n = 159) of responses denying their consumption, respectively.



# Conclusions

The consumption of fatty and sugary products, sugary beverages, and milk appears to be associated with acne. Our results support the hypothesis that Western diet is highly consumed by patients affected by this inflammatory skin disease. Since it has been proposed that the Western diet favors the appearance and exacerbation of inflammatory lesions, we consider that further studies are needed to compare the impact between eastern and western diet as with to develop or worsen acne.

#### References:

 Penso L, Touvier M, Deschasaux M, Szabo de Edelenyi F, Hercherg S, Ezzedine K, et al. Association between adult acne and dietary behaviors: Findings from the NutriNet-Santé prospective cohort study. Findings from the NutriNet-santé prospective cohort study. JAMA Dematlo. 2020;156(8):854–662.

 Dall'Oglio F, Nasca MR, Fiorentini F, Micali G. Diet and acne: review of the evidence from 2009 to 2020. Int J Dermatol. 2021;60(6):672–85.

 Wyrzykowska N, Wyrzykowski M, Żaba RW, Silny W, Grzymisławski M. Diet and acne vulgaris. Prz Gastroenterol. 2013;2:93–7.