



## **CURIOSITY OF THE POPULATION OF TURKEY 'PROBIOTIC': AN INFODEMOLOGICAL STUDY**

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### **GENERAL INFORMATION AND GOAL**

- The term probiotic comes from the Greek "pro bios" origin (for pro, bios: life) and means "for life". In the dictionary of probiotic drugs and medicine terms, "Biological product containing live microorganisms such as Lactobacillus or Bifidobacteria, which are taken with foods or given in the form of formulations prepared separately to ensure the ecological balance of the microflora in the digestive tract, have positive effects on the health of the host by regulating mucosal and systemic immunity." It is defined as. Probiotics are used in reducing the symptoms and signs of lactose intolerance, preventing and relieving diarrhea associated with rotavirus and antibiotic, preventing and treating allergies (atopic eczema and food allergies), reducing the risk associated with mutagenicity and carcinogenicity, enhancing intestinal immunity and inhibition of intestinal pathogens, and inhibition of intestinal pathogens. It has a proven effect on lowering cholesterol (Coşkun, 2014).
- With the increasing technology, internet use has become a place for people to research and obtain information in recent years. Search engines make analyzes that show in which areas people's information acquisition processes are concentrated. In this study, it was aimed to evaluate the trends of Turkish society by monitoring the frequency and distribution of probiotic use, which is a current issue, in search engines.

### **METHOD**

- Search engine (<https://www.google.com/trends>) using Google Trends, January 15, 2004 and January 15, 2020 and January 15, 2015 between the dates of January 15, 2020 from Turkey "probiotics" and related terms Data on global search queries, graphics and statistics obtained from the website were analyzed and the search tendency of individuals was tried to be understood.

### **FINDINGS**

- The most popular time for searching the word 'probiotic' on the internet between January 15, 2004 and January 15, 2020 was December 2019. Looking at the probiotic research trends, it is observed that exploration increased in the winter months in general compared to the previous months.
- Probiotics lot of research about the top 5 cities in Turkey's population and is considered to be in the top 3 in terms of development in Ankara, Istanbul, Izmir's absence was noted. The most common expression used to search in the field of probiotics has been found to be "Yogurt", after the word probiotic. Then comes 'Prebiotic' and 'Medicine'. Users searching for probiotics also mostly searched for 'What is probiotic'.
- When focusing on the last 5 years (from January 15, 2015 to January 15, 2020), it is observed that the frequency of searching for the term probiotic has increased. During this period, there was a significant peak value in January 2016. When the searches in January 2016 are examined, the most searched phrase about probiotics is Dr. It seems to be Ümit Aktaş. At the same time, two names in the trend of being investigated together with probiotics; Fevzi Özgönül and Canan Karatay are also noteworthy.
- When we focus on the last 5 years (15 January 2015 - 15 January 2020 '), the most searched word was 'Basillus Clausii', which is the probiotic bacterium, and it was seen that the most searched queries consisted entirely of the probiotic generic name.

### **DISCUSSION**

- Looking at the probiotic research trends, it is observed that the search has increased in the winter months in general in the last 15 years compared to the previous months. Considering the increasing number of diseases during the winter months, this indicates that the use of probiotics is increasing and probiotics are used as treatment or an adjunct to treatment. Probiotic search has been in an overall upward trend since January 2015. This proves the increasing awareness of probiotics recently.
- While people who search for probiotics in the last 15 years mostly search for 'yogurt' and 'what is probiotic', when we focus on the last 5 years, all of the frequently searched items consist of probiotic brands. In this context, it can be said that, in the process, people focus on which probiotics and how to use them rather than the definition of probiotics.
- Two names in the trend of being researched together with probiotics in the last 5 years; Fevzi Özgönül and Canan Karatay are noteworthy. At the same time, Fevzi Özgönül's book was published simultaneously with the peak value formed in 2016 and Ümit Aktaş made explanations about probiotics. This situation proves us that media names guide the probiotic awareness level of the society.

### **CONCLUSION**

- Probiotics have been in an increasing process in Google searches over the past 15 years. In probiotic research, people have learned the definition of probiotics over time and concentrated their research on how to obtain probiotics by natural or artificial means. The factor that formed the significant peak points in the last 15 years has been the statements of people valued by the society.

**KEYWORDS:** Turkey, Probiotics, Google Trends, Canan Karatay