

# Sources of obtaining information by customers of dietary supplements in Poland

**Beata Nowotarska-Romaniak** 

University of Economics in Katowice, Department of Marketing

e-mail: beata.nowotarska-romaniak@uekat.pl

**Sonia Szczepanik** 

University of Economics in Katowice, Department of Marketing

e-mail: sonia.szczepanik@edu.uekat.pl

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## Abstract

The dynamic development of the dietary supplements market, as well as the progressing process of digitization of society, forced the participants of this market to look for reliable sources of information. Along with the growing interest in dietary supplements, there are growing requirements for effective marketing communication with customers already present in this market. This study aims to identify the information sources that Polish customers of dietary supplements deem most valuable. The authors based their analysis on a quantitative study of customers of dietary supplements. The study was conducted in the period from June 15 to July 30 of 2023, among participants of meetings of customers of dietary supplements and customers of pharmacies in the Silesian Voivodeship

## Keywords

sources of information, dietary supplements, customers

## Introduction

Progress in medicine, the development of the pharmaceutical industry and the digitization of society have resulted in an exponential increase in interest in dietary

supplements, both among producers and clients. The dietary supplement market is sometimes referred to in the literature as the fastest-expanding pharmaceutical sector [Hrydziuszek and Chodak, 2020, p. 15]. The value of the Polish dietary supplement market is constantly increasing, more than tripling (from PLN 1.7 billion to PLN 4.4 billion) between 2008 and 2017 [Czerwiński and Liebers, 2019, p. 5]. The dietary supplements market in Poland was valued at PLN 5.4 million in 2018, representing a 23% growth over the previous year [Czerwiński and Liebers, 2019, p. 5]. The rate of new product registration at the Chief Sanitary Inspectorate is steadily rising. In 2008, only roughly a thousand new goods were registered, bringing the total to 13,000 in 2018. [Czerwiński and Liebers, 2019, p. 5]

According to the Act on food safety and nutrition, dietary supplements are food-stuffs whose purpose is to supplement a normal diet [Hrydziuszek and Chodak, 2020, p. 15]. Supplements are a concentrated source of vitamins, minerals, or other substances with a nutritional or another physiological effect [Ustawa z dnia 25 sierpnia 2006 r. o bezpieczeństwie żywności i żywienia, art. 3 sec. 3 point 39]. These products are offered for sale in the same form (e.g. capsules, tablets, dragées) as drugs or medical devices that enable dosing, but they are not classified as products with the properties of a medicinal product within the meaning of the provisions of the pharmaceutical law [Kotynia et al., 2017, p. 51]. Dietary supplements' pharmacokinetics and marketing approaches significantly differ from drugs and medical devices.

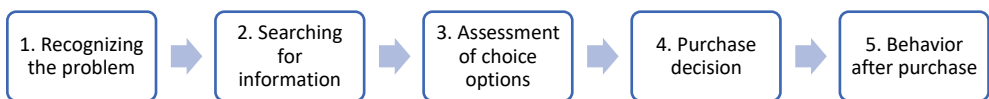
The scale of taking dietary supplements in Poland is relatively large, according to research presented by Czerwiński, Liebers in 2019, as many as 72% of Poles declare that they consume dietary supplements, and almost half of them (48%) do it regularly [Czerwiński and Liebers, 2019, p. 5]. Only 17% of consumers consult their decisions on taking supplementation with a pharmacist or doctor [Hrydziuszek and Chodak, 2020, p. 15]. According to various sources, a particularly high consumption of dietary supplements, exceeding 90% of the population, is characteristic of a group of athletes and pregnant women [Dziedziński et al., 2019, p. 236]. A group of adolescents and children is also clearly visible, among whom supplements were present in the diet of almost half of the respondents [Dziedziński et al., 2019, p. 236].

Alongside the expanding interest in dietary supplements comes the expanding requirement for effective marketing communication with customers already present in this market. This study aims to investigate the information-gathering channels clients of dietary supplements in Poland, utilizing literature analysis, descriptive and statistical analysis of data obtained in primary research carried out by the authors using the CAWI method.

## 1. Literature review

In this publication, the authors, wishing to express the recipient of communication on the market of dietary supplements, will use the term client. The justification for this decision should be seen in the differences in meaning between the client, client and buyer. The concept of a consumer refers to an economic entity that consumes (or uses) purchased products on the market [Kufel and Mruk, 1998, p. 9]. Therefore, it is a person who not only purchases a given product but also uses the utility value of the product [Nowotarska-Romaniak, 2013, p. 66]. Thus, in the case of dietary supplements, these are people purchasing supplements only for their own use. Another concept is the buyer, the meaning of which relates directly to the act of purchase. A buyer is a person who directly purchases a product but does not necessarily have to participate in the process of making a purchase decision, and a given product does not have to be intended for use by the person purchasing it [Janoś-Kresło and Mróz 2006, p. 15]. In Polish households, women are responsible for purchasing 65% of basic groceries [Mindshare Polska, 2019]. Bearing in mind that dietary supplements are classified as foodstuffs, it can be assumed that not all supplements purchased in Polish households are consumed directly by women. The consumer does not have to use the purchased products, and the buyer does not always have to be a consumer of the purchased products [Nowotarska-Romaniak, 2013, p. 67]. A customer is considered to be any economic entity (i.e. a person, household, enterprise or institution) that may be effectively or potentially interested in a product or service [Nowak, 1995; Szydło and Potmalnik, 2022]. Recognition of an individual client as a single or multi-person household as a representative unit is honestly in the context of the dietary supplements market, as it is the most capacious concept indicating all potential recipients of the communication.

The Engel, Blackwell and Kolatt model (EBK model) (fig. 1) explores five stages in client behaviour, considering actions taken before and after the purchase. The EBK model consists of five stages starting from the recognition of the need, through the search for information, the assessment of the choice variants to the purchase decision and the final behaviour after the purchase being the effects of the decision [Kotler and Keller, 2012, p. 183].



**Fig. 1.** EBK model

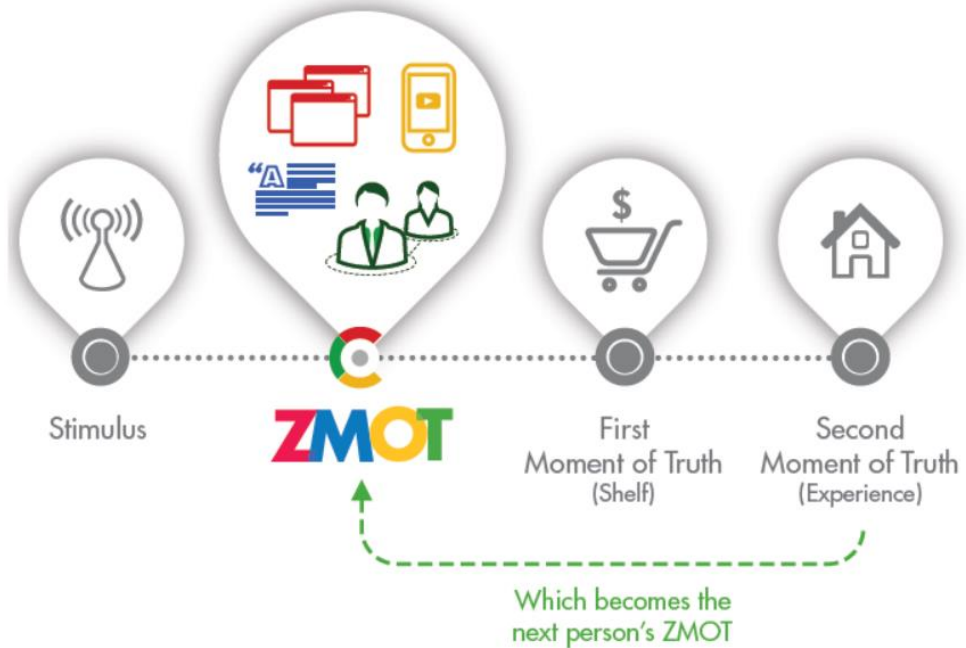
Source: Kotler, Keller 2012 p. 184.

The first step in this process is recognizing the problem. This is the moment when the client feels a need caused by internal (e.g. feeling of hunger or thirst) or external (e.g. inspiration from behaviour observed in other people) [Linkiewicz and Bartosik-Purgat, 2017, p. 21].

The next stage is the search for information to find the possibility of satisfying the need. Initially, in trying to find a solution to the problem, the client appeals to their own knowledge. When this is not enough, they start exploring available external sources. In this case, the first step taken is to seek advice on products or services in your closest circle: family, friends, and acquaintances. Only then do the client turn their attention to other sources of information: commercial (e.g., advertisements), public (e.g., mass media) and experimental (e.g., personal testing of goods) [Kotler, Keller, 2012, pp. 184-185].

After collecting all the information, the client obtained, the stage of assessing the variants follows. They assess the advantages and disadvantages of a given product or service from the perspective of their needs. The final purchase decision is usually made only at the point of sale. In a brick-and-mortar store, the client can directly compare the available offers, which means that, despite the earlier verification of variants, they sometimes change their mind on the spot. This is the fourth stage of the EBK model, i.e., making a purchasing decision. According to the authors, the last stage is client behaviour after the purchase, where the client is satisfied with the decision made or not, and – regardless of their positive or negative opinion – they can share their observations with their circle of friends [Kotler and Keller, 2012].

As rightly noted by Linkiewicz and Bartosik-Purgat [2017, p. 23], during the creation of the EBK model, the main source of information about the product or service was the seller in the store. Authors continue that access to new technologies and, above all, the proliferation of mobile devices: laptops, tablets, smartphones and unlimited access to the Internet thanks to a wireless network mean that information can be obtained at any time. Face-to-face conversations, consultations with people who have already used the product or talking to the salesperson for detailed technical information have become almost superfluous. Much of this information is available whenever the client needs it. This has resulted in a significant change in the decision-making process by clients, as in many cases the purchase decision is made before the client arrives in the store. Google experts defined this moment as the Zero Moment of Truth (ZMOT), adding another term to the nomenclature concerning the decision-making process proposed by Procter & Gamble [Leciński, 2020, p. 11].



**Fig. 2.** The new Zero Moment Truth Model

Source: Leciński, 2011, p. 17

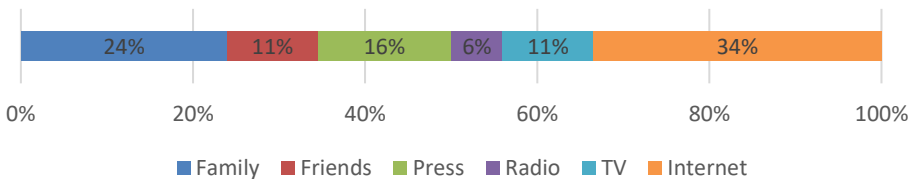
ZMOT model is based on the traditional 3-step mental model, which consists of three critical moments: stimulus, shelf (first model of truth) and experience (second model of truth). Stimulus simply comes to the realization of need. The first moment of truth (FMOT) represents a moment when an individual visits a stationery store, where they can collect all the necessary information required before the purchase. The second moment of truth (SMOT) begins when the client utilizes the bought product and forms an opinion about it. Researchers noticed that this model lacks a significant fourth step, especially in the current online environment. Zero Moment Truth is a crucial part of the information-gathering process before the purchase that happens online by an interested individual. Leciński [2011, p. 10] describes this simply as “the moment when you grab your laptop, mobile phone or some other wired device and start learning about a product or service (...) you’re thinking about trying or buying”. Adding another step into the 3-step model caused a significant shift in the moment of making a purchase decision in comparison to the EBK model.

## 2. Research methodology

The aim of the research was to determine the preferred sources of obtaining information on dietary supplements among the surveyed group of customers. The computer-assisted web interviewing method was used to conduct the research, and the tool was a survey questionnaire. The study was conducted in the period from June to July 30, 2023, among participants of meetings of customers of dietary supplements and customers of pharmacies in the Silesian Voivodeship. The selection of the sample was intentional and involved adults who expressed willingness to participate in the survey. 212 correctly completed questionnaires were received. The results were presented according to gender: women (57%), men (43%) and age of the participants 18-30 years old (21%), 31-45 years old (24%), 44-60 years old (32%) and over 60 years old (23%).

## 3. Research results

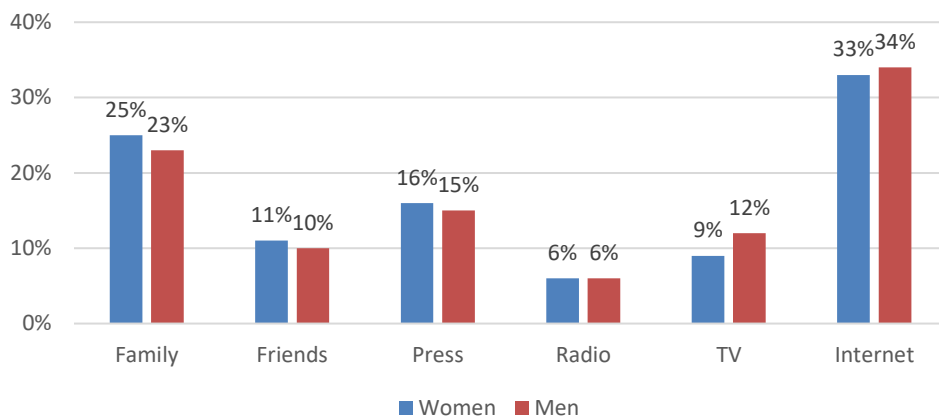
Overall (fig. 3) participants find the Internet (34%) to be the most crucial source of information, followed by their family (24%) and the press (15%).



**Fig. 3.** Used sources of information on dietary supplements (in %)

Source: own elaboration.

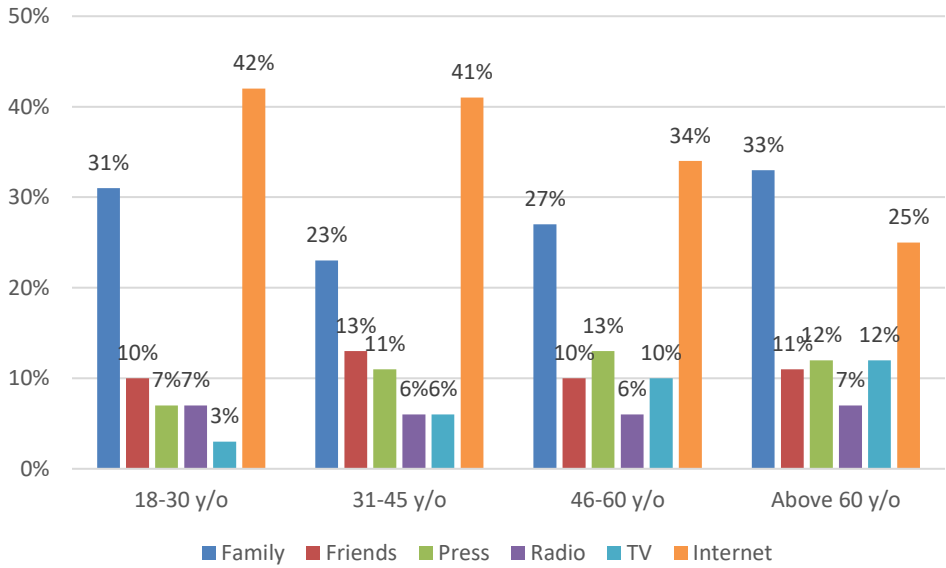
Women (fig. 4) rely on the family (25%), press (16%) and friends (11%) slightly more than men, who rather seek their information on the internet (34%) and on TV (12%).



**Fig. 4.** Used sources of information on dietary supplements by gender (in %)

Source: own elaboration.

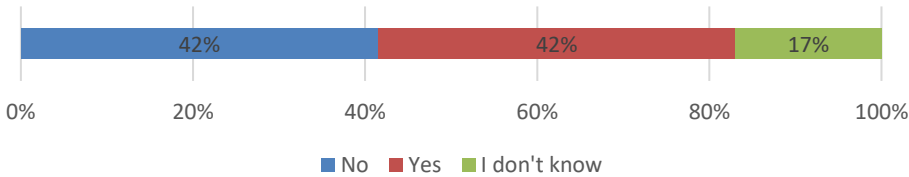
Almost all of the examined age groups also find the Internet to be their primary source of information on dietary supplements (fig. 5). The youngest participants preferred the Internet the most (42%), followed by their family (31%). They find other sources to be marginal. The visible shift occurs in the 31-45 age range, where apart from the internet (41%) and family (23%) other sources play visibly more significant roles. The same mechanism can be observed while analysing the age group of 46-60 y/o. They also tend to collect information from the press (13%) rather than younger responders. The oldest participants aged 60+ prefer to consult dietary supplements with their family (33%) over using the Internet (25%).



**Fig. 5.** Used sources of information on dietary supplements by age (in %)

Source: own elaboration.

Another researched problem centred on responders’ awareness of promotional efforts utilized in the dietary supplement market. This question was meant to differentiate clients who independently seek information from those who rely only on the promotional efforts of dietary supplement companies. The opinions of the respondents were heavily divided, with 42% indicating that they were aware of promotional activity and 41% claiming ignorance (fig. 6).

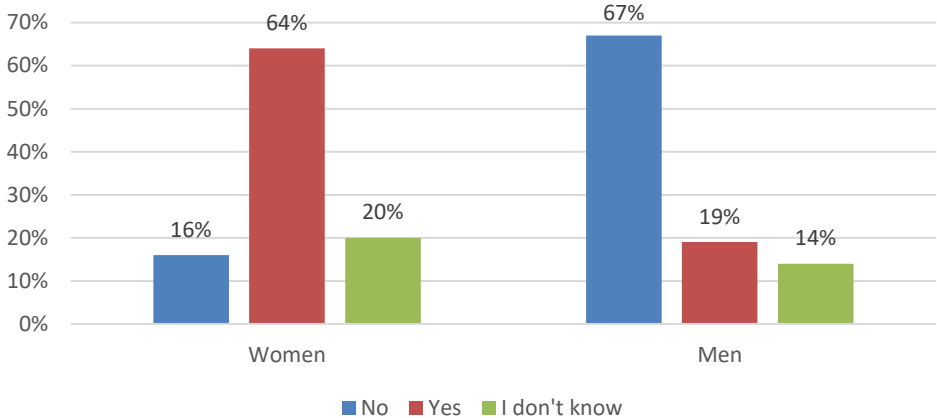


**Fig. 6.** Awareness of promotional activities in the dietary supplements market by gender (in %)

Source: own elaboration.



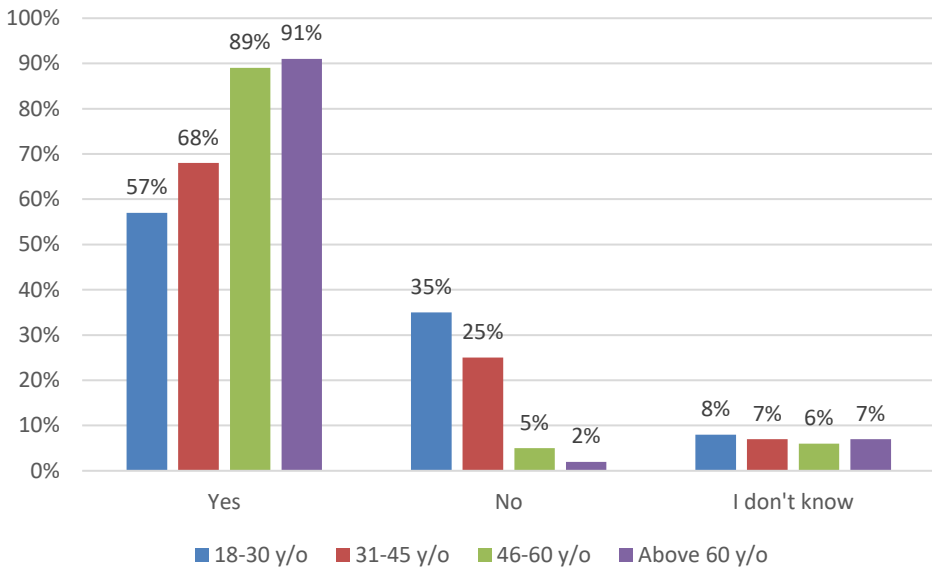
More than half (64 %) of the women polled stated they were aware of the promotional efforts taking place in the dietary supplement market (fig. 7). Only one-sixth of them (16%) said they were unaware of the promotion campaign. On the other hand, barely one-fourth (19%) of men polled detect promotional efforts, and three-fourths (67%) are completely unaware of them.



**Fig. 7.** Awareness of promotional activities in the dietary supplements market by gender (in %).

Source: own elaboration.

Overall, most of the age groups stated that they are aware of the promotional activities of dietary supplements in the dietary supplements market (fig. 8). It is worth adding that people over 60 years of age are the most aware (91%) of promotional activities on the dietary supplements market. Slightly less (89%) of the middle-aged respondents state that they are aware of promotional activities. Therefore, responders aged 18-30 y/o and 31-45 y/o are the most unaware responders.



**fig. 8.** Awareness of promotional activities in the dietary supplements market by age (in %).

Source: own elaboration.

## 4. Discussion

This study aimed to investigate the information-gathering channels clients of dietary supplements in Poland find to be most useful. The findings highlight the process of information gathering according to the sex and age of the respondents.

Results suggest that the internet has become the prime source of information about dietary supplements in the current information society. According to Jafari [2021, p. 108], people nowadays approach health and dietary decisions in significantly different ways. 80% of people who use the internet regularly report seeking medical information for themselves or others. The result of this information revolution is complex. Fortunately, more individuals now have access to medical information than ever before; yet, the quality of this information varies greatly, and the average person may not always be able to evaluate it effectively.

American experience has shown that at least 35% of Americans self-diagnose their symptoms in Google search engine [Fox, 2013]. The accuracy of the diagnosis has not yet been fully established. One study that was conducted in 2015 suggests

that only one-third of the diagnosis listed first is correct [Semigran et al., 2015]. From the perspective of physicians, this is a common occurrence. Increased patient knowledge is beneficial, but self-diagnosis and therapy based on incorrect information can be fatal [Peters et al., 2003]. From a marketing standpoint, it makes sense to capitalize on this occurrence. Companies are attempting to attract the "self-diagnosed" health client by delivering product pitches in ways that closely resemble research. It is not uncommon to come across what appears to be sponsored advertisements [Jafari, 2021, p. 109-110].

Looking at the results through an age lens perspective, it is visible, that the internet is the prime source of information for everyone from 18 to 60 y/o. This phenomenon is reversed in the elderly group of clients, where family becomes the primary source of information. These results align with a previous study conducted on a group of Polish students in 2014 where the internet was a main source of information among them. [Ciszek and Duma, 2013, p. 408]. As pointed out before, the reason for such an overwhelming advantage of internet sources of information stands from the internet revolution where information sharing minimized the distance and time between the sender and the receiver of the information. This situation comes with a variety of negative consequences such as unattended treatment, self-diagnosis and misunderstanding of dietary supplements' properties which will be studied in further research.

The study has shown that male clients are unaware of the promotional efforts in the supplement market. On the opposite, women are seemingly well aware of such activities. The reasoning behind this occurrence is yet to be fully discovered. However, it can be traced down to the classification of dietary supplements as part of food and nutrition. According to the stereotypical image of a Polish family, it is women who are responsible for both the actual purchase of food and the related decisions. When comparing the decision-making processes of women and men, it is emphasized that women initiate the process by gathering information, that they seek a specific, satisfying solution (choice), that they require additional information and consider more alternatives, and that, once satisfied, they typically repeat the process [Kieźel, 2012, p. 99].

The study has shown that especially older people are more aware of the promotional activities in this market. The motivation behind this element can be traced back to the widely held belief that supplements are used to improve one's health. According to research conducted by the Market and Opinion Research Agency SW Research [2017], the motivation to supplement food with supplements is most often: striving to strengthen the body and increase immunity, supplement an unbalanced

diet, a will to improve well-being, lower cholesterol, treat various ailments, strengthening concentration or arousal, taking care of one's appearance, as well as fashion [Dziedziński et al. 2019, p. 236]. Therefore, when deciding to take supplementation, clients are most typically guided by the need to improve their health, which is in opposition to the intended use of these products, which in principle are foodstuffs supplementing an unbalanced diet.

There are at least three potential limitations concerning the results of this study. The first limitation relates to the fact that the selected CAWI technique is only accessible to people with an internet connection and a computer or mobile device. Many individuals are not always interested in completing online surveys. The second limitation concerns the sample size, which may not represent the variety and complexity of the Polish population. 4.5 million people live in the Silesian Voivodeship, which constitutes only 11.8% of the country's population [GUS, 2019, p.2]. The third limitation concerns the limited scope of factors considered in this study. Despite these limitations, the study allows the identification of the fundamental features of a typical Polish client of dietary supplements in terms of preferred information sources. In addition, this study supports the continuation of research on Polish supplement users. Future studies might benefit from comparing data from different survey instruments or using a quantitative approach to better comprehend the motivations and traits of dietary supplement customers.

## **Conclusions**

This shift in how people use technology has exposed us to a plethora of voices attempting to impact our health, and these voices are one of the most influential aspects that shape people's understanding of dietary supplements and drive the supplement industry's sales.

According to the data, it is likely that in the not-too-distant future, the Internet will be Poland's primary resource for gathering information regarding dietary supplements. The findings of this research have shown that there are substantial variations in people's opinions regarding the effectiveness of various promotional initiatives in this industry.

This research provides essential insight into the information sources that Polish customers of dietary supplements deem most valuable. Since communication in this market is becoming more and more digital, but not all its participants are aware of the promotional procedures taking place there, this poses a serious threat to clients. The results call for implementing efficient education about dietary supplements, in-

cluding the promotion of advertising literacy, to correct clients' attitudes toward dietary supplements. The results also highlight the need to implement more stringent regulatory frameworks for online marketing of dietary supplements. New communication tactics, particularly online information on dietary supplements, include universality, availability date, interactivity, and privacy. The primary drawback is the unequal distribution of information access. There are worries that the fast growth of Internet communication technology may lead to growing inequities in access to dependable information, as less affluent, less educated, and older individuals use the Internet less frequently.

## ORCID iD

Beata Nowotarska-Romaniak: <https://orcid.org/0000-0003-3563-2596>

Sonia Szczepaniak: <https://orcid.org/0000-0002-4275-3700>

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# **Źródła pozyskiwania informacji przez konsumentów suplementów diety w Polsce**

## **Streszczenie**

Dynamiczny rozwój rynku suplementów diety oraz postępujący proces cyfryzacji społeczeństwa zmusiły uczestników tego rynku do poszukiwania wiarygodnych źródeł informacji. Wraz z rosnącym zainteresowaniem suplementami diety, wzrastają również wymagania dotyczące skutecznej komunikacji marketingowej z już obecnymi na tym rynku klientami. Celem tego badania jest zidentyfikowanie źródeł informacji, które polscy konsumenci suplementów diety uważają za najbardziej wartościowe. Autorzy oparli swoją analizę na badaniach ilościowych dotyczących klientów suplementów diety. Badanie przeprowadzono w okresie od 15 czerwca do 30 lipca 2023 roku wśród uczestników spotkań klientów suplementów diety oraz klientów aptek województwa śląskiego.

## **Słowa kluczowe**

źródła informacji, suplementy diety, klienci