

DECISION OF DIETARY SUPPLEMENT CONSUMERS IN THE B2C MARKET BY NEEDS, MOTIVATIONS AND PURCHASE PREFERENCES

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Purpose: The consumption of dietary supplements around the world is constantly increasing, and this trend is observed in all countries that provide data in this area. Consumer spending on dietary supplements is becoming an important source of government revenue, and the long-term consumption increase indicates a lasting change in consumer behaviour. The authors attempted to identify the sources of dietary supplement consumer decisions, examining them in the context of market segmentation based on needs, motivations and purchase preferences. The aim of this paper is to determine the factors that influence the purchasing decisions of dietary supplement consumers in the B2C market, taking into account three categories: needs, motivations and purchase preferences.

Design/methodology/approach: The research was conducted based on a literature review which allowed for identifying the key determinants influencing purchasing decisions in this market segment.

Findings: The results provide important information for both marketing practitioners and researchers in the dietary supplement market, pointing to the variety of motives that shape consumer behaviour and the need for a balanced and informed exploration of this market.

Originality/value: This article presents a structured analysis, including an original synthesis, concerning the sources of decision-making by consumers in the B2C market, taking into account their needs, motivations, and purchasing preferences (referred to as "factors shaping types of dietary supplement consumers"). The results of the study can be used in a versatile manner—both by researchers in the field (as a basis for conducting original studies) and by managers to support the development of organizational management strategies in this area.

Keywords: dietary supplements, purchasing decisions, needs, motivations and purchase preferences, B2C market.

Category of the paper: research paper.

1. Introduction

The consumption of dietary supplements around the world is constantly increasing, and this trend is observed in all countries that provide data in this area (Report 1, 2024; Report 2, 2025; Report 3, 2024). The dietary supplements market is on an upward trend both in terms of consumption and in its increasing share in national budgets (Report 4, 2025; Report 5, 2024).

Consumer spending on dietary supplements is therefore becoming an important source of revenue for the state budget, and the long-lasting trend of increasing consumption points to a permanent change in consumer behaviour. This change, due to its extent and consequences for consumers, is an important and scientifically interesting research topic. Therefore, the authors identified the key factors characterising dietary supplement consumers and, as a result of their research, attempted to identify the sources of dietary supplement consumer decisions in terms of market segmentation factors and the corresponding specific criteria. It was assumed that the dietary supplement market's segmentation factors would be extracted for three main categories, i.e. consumer needs, motivations and purchase preferences.

With reference to the above, this paper focuses on the issues for the following research problem: *what sources of consumer decisions for dietary supplements in the B2C market can be distinguished? The research was restricted to a logical sequence of concepts: needs-motivations-preferences of dietary supplement consumers (hereafter: factor categories).* The following specific questions were defined for the formulated problem:

- Q1) *What needs do dietary supplement consumers demonstrate in the B2C market?*
- Q2) *What purchase motivations do dietary supplement consumers demonstrate in the B2C market?*
- Q3) *What purchase preferences do dietary supplement consumers demonstrate in the B2C market?*

In view of the above, the authors of this publication defined the aim of the paper as to *systematise knowledge in terms of identifying the factors underlying the differentiation of the sources of dietary supplement consumer decisions in the B2C market.*

It should be noted that the research conducted by the authors is new. Its results provide the basis, on both a scientific and practical level, for an informed and sustainable exploration and exploitation of the dietary supplement market, particularly from the view-point of individual consumers (B2C).

2. Materials & Methods

A literature review procedure was applied in accordance with Hart and Chakon's methodology in order to achieve the defined research objective.

Both Hart and Czakon proposed a systematic algorithm that should be followed in order to properly conduct a literature review in a given research area (Hart, 1998; Czakon, 2011). The methodology contains a five-part procedure to follow, including:

- stage 1 – data identification and collection,
- stage 2 – data assessment and verification,
- stage 3 – bibliometric analysis,
- stage 4 – visualization,
- stage 5 – interpretation and description of results (Figure 1).

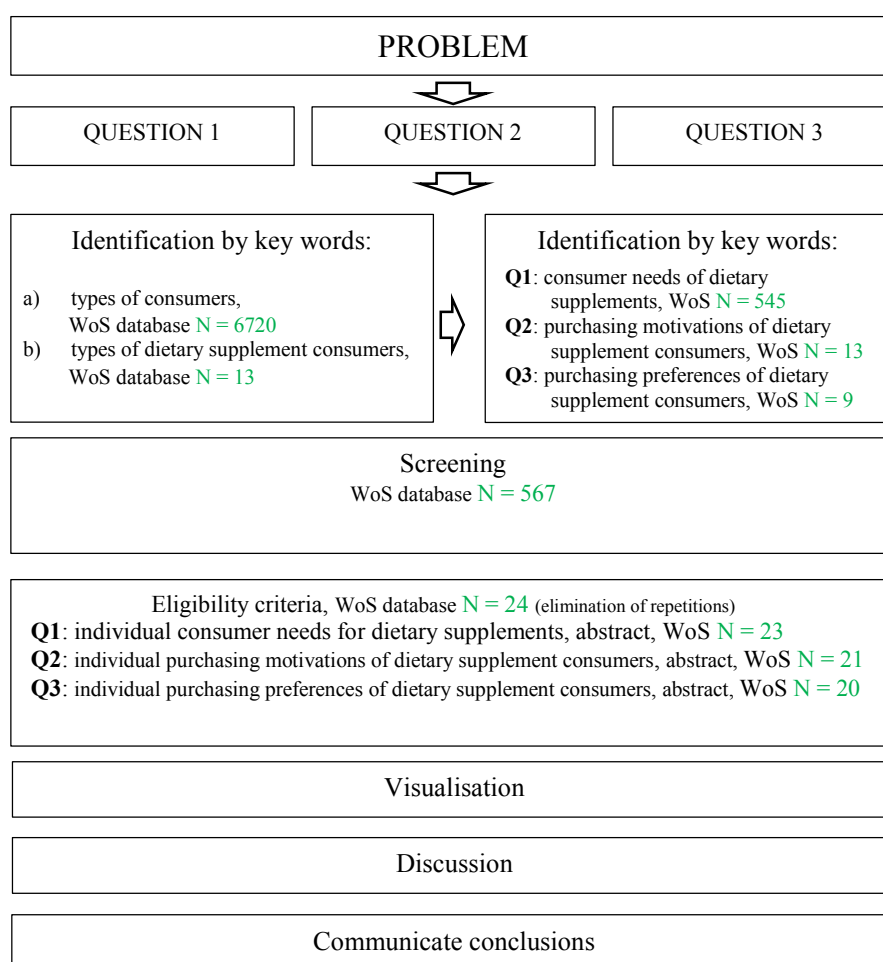


Figure 1. Literature review procedure (as of 28/02/2025).

Source: own study.

Stage 1 of the procedure, i.e. data identification and collection, was undertaken for the formulated research problem and the three research questions (Q1, Q2, Q3). In order to identify thematic scientific publications, the authors used the Web of Science (WoS) bibliographic

database, which is one of the recommended repositories for scientific publications (Munn et al., 2018; Kumar, 2021; Czakon et al., 2023; Azarian et al., 2023). The authors distinguished 6733 publications based on the selected keywords "types of consumers" and "types of dietary supplement consumers".

A database of 567 papers was generated in the next stage of publication selection. The authors focused on the keywords assigned to each specific question, i.e.: "dietary supplement consumer needs" (Q1), "purchasing motivations of dietary supplement consumers" (Q2) and "purchasing preferences of dietary supplement consumers" (Q3). The main objective of the stage called early screening was to eliminate papers with a weak thematic link to the research questions. This resulted in another elimination of documents that were not related to the defined scientific problem.

In the next step of publication selection, a database of 24 papers was generated according to the logical key adopted. At this stage, the keywords were made more specific and, at the same time, the authors focused on the content of abstracts of papers published in English – mapped to specific questions, i.e.: "individual consumer needs for dietary supplements" (Q1), "individual purchasing motivations of dietary supplement consumers" (Q2) and "individual purchasing preferences of dietary supplement consumers" (Q3). The time range was not restricted, but the search provided papers created between 1995-2024. An additional criterion for the selection of thematic publications was the document type. Journal articles, conference papers, chapters in books and books were selected. Ultimately, titles, keywords and abstracts were reselected, and all publications that were repetitive, unrelated or did not address the types of dietary supplement consumers were eliminated. After all criteria had been met, 24 documents remained to be analysed. The final stage of the analyses presented a visualisation of the research in the form of a drawing (Fig. 2) and, at a later stage, a discussion of the analysis results in accordance with the adopted methodology.

3. Results

The main source of knowledge concerning the types of dietary supplement consumers is the literature on management and, in particular, marketing in its broadest sense. This type of literature focuses on customer issues (Sweeney, Soutar, 2016; Schiffman, Kanuk, 2020; Lamb et al., 2020; Solomon, 2021; Babin et al., 2021). Due to the scientific problem studied, the authors' research was focused on the areas of: *needs, motivations and purchase preferences of dietary supplement consumers on the Polish market* (Figure 2).

Ph. Kotler defines a human *need as the state of feeling unfulfilled* (Kotler et al., 1999; Tao et al., 2009; de Souza et al., 2010). Extending this definition to *consumer needs*, it is possible to assume that they present a state of psycho-physical and/or spiritual discomfort that stems from a sense of absence.

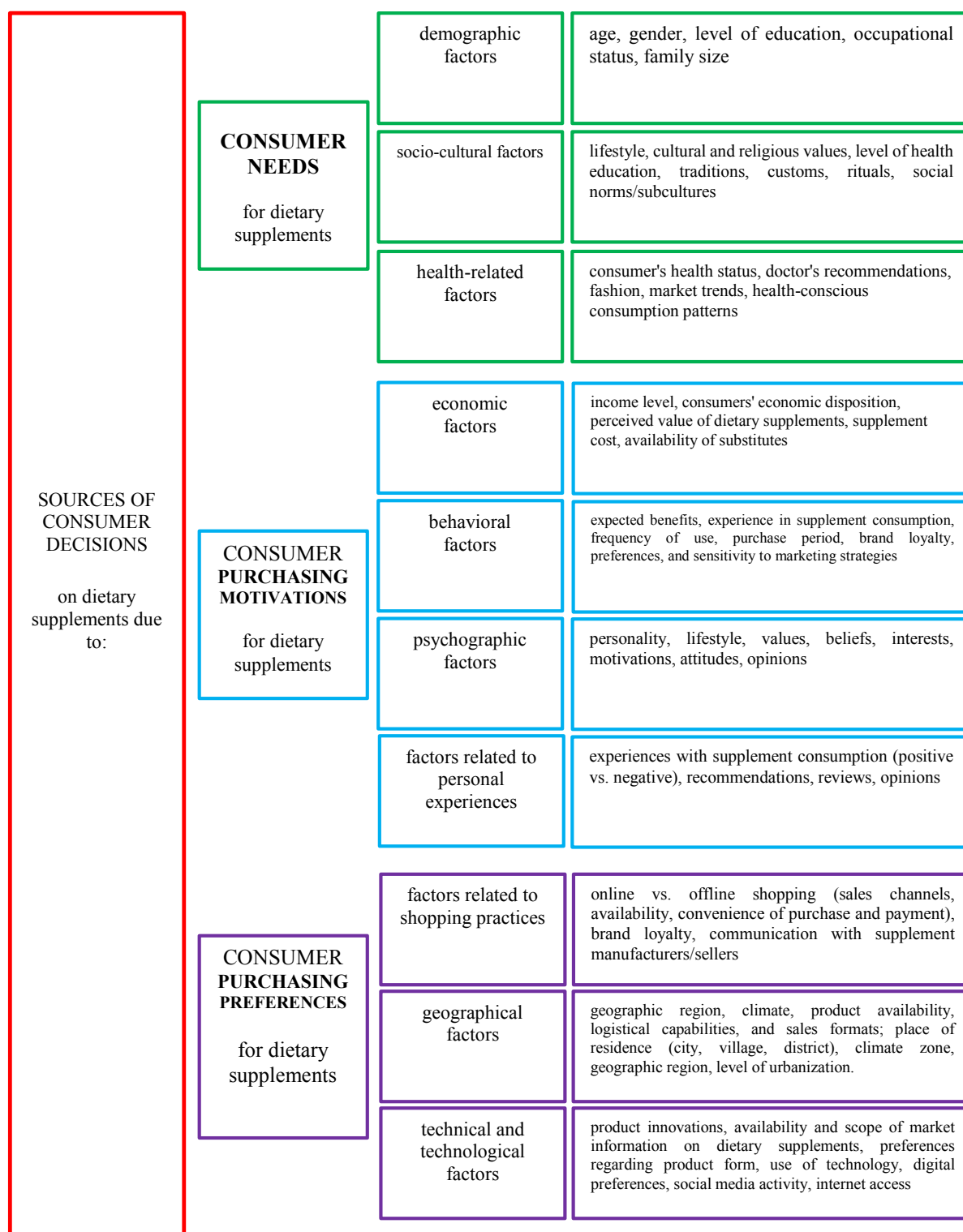


Figure 2. Factors shaping types of dietary supplement consumers.

Source: own study based on: (Arora, Gupta, 2021; Babin et al., 2021; Blackwell et al., 2021; Burgiel, Zrałek, 2010; Hoyer et al., 2020; Schiffman, Kanuk, 2020; Solomon, 2021; Sweeney, Soutar, 2001; Choi, Park, 2020; Sharma, Yadav, 2023).

Continuing with the accepted line of reasoning, the authors assume that ***the consumer need for dietary supplements*** reflects the perceived state of psycho-physical and/or spiritual discomfort that results from the lack of consumption of dietary supplements (Hys, 2018). In this category, dietary supplement consumers most often indicate needs that are directly related to supplementing their own diet, improving their general psycho-physical condition, health-promoting prevention, or compensating for nutritional deficiencies due to illness or recovery (Hys, 2020). In order to identify the types of dietary supplement consumers, it is crucial to extend the analysis of customer needs to further issues, such as their *motivations and purchase preferences* (Figure 2).

Consumer behaviour is influenced by factors that, arranged in semantic groups, are recorded, among others, in the following models:

A model of factors influencing consumer behaviour (Kotler, 1999, p. 161; Noor et al., 2014):

- a) cultural factors (culture, subculture, social class),
- b) social (reference group, family, role and status),
- c) personal (age and life stage, occupation, economic situation, lifestyle, personality and life ambitions),
- d) psycho-social (*motivation*, perception, learning process, beliefs and attitudes).

A model of factors shaping consumer behaviour (Burgiel, Zrałek, 2010):

- a) objective, economic: internal (level and sources of income, credit, savings, durable goods, level and structure of consumption), external (supply, level and relationship of prices, trade and service infrastructure, sales policy information system, general economic situation of the country),
- b) objective, non-economic:
 - internal (*demographic* such as age, gender, marital status, household size and *socio-professional* such as level and type of education, and *social*, i.e. family, reference group),
 - external (*geo-environmental* such as geographical location, place of residence, climate, environmental conditions, degree of pollution, and *civilisational-cultural*, i.e. culture and subculture),
- c) subjective, psychological, including: *motives*, habits, perception, learning process, habits, emotions, attitudes, personality, private information, habits.

Among the multitude of determinants of consumer behaviour in the market, it is important to note the ***motives and purchase motivations*** of consumers, which are mentioned at the psycho-social and psychological levels (Burgiel, Zrałek, 2010; Kotler, 1999; Carrasco et al., 2012; Blanco Gonzalez, 2012; Bharadwaj, 2022). Thus, it can be assumed that purchasing motivations reflect the consumers' psycho-social and psychological reasons which determine their purchase of dietary supplements. This category lists many sources of motivation for dietary supplement consumers arising from beliefs, experiences and their emotions (Hys et al., 2022; Eldesouky et al., 2020; Song et al., 2022). Some of the motivations include:

- improving the quality of nutrition – supplementing the daily diet with missing ingredients,
- supporting the body's functioning in terms of psycho-physical and emotional well-being, including stress reduction,
- improving the quality of life – by influencing their physical appearance.

In contrast, from the view-point of the *purchase preferences* of dietary supplement consumers, it should be assumed that these reflect their individual choices (Kaminski et al., 2021). Dietary supplement consumers individually identify sets of preferred characteristics of dietary supplements that directly influence purchasing decisions. The source of purchase preferences of dietary supplement consumers can be traced back to a variety of levels and may result from the priorities adopted by consumers in terms of the brand of dietary supplements, their country of production, the form of the product offered (e.g. liquid, solid, aerosol), price, availability, environmental aspects, or opinions and recommendations (Hys, Koziarska, 2020, 2021; Trajanovska et al., 2010; Curdova, Lostakova, 2012).

As a consequence of the analysis carried out, it is important to make a conscious distinction between the concepts of needs, motivations and purchase preferences of dietary supplement consumers. The fundamental difference between these concepts is derived, among others, from the following (Kotler, 1999; Kotler, Keller, 2021; Tanner, Raymond, 2020; Warinthaksa et al., 2024; Corbett et al., 2024):

1. The nature of needs – these are usually general in nature and focus on requirements that demonstrate a nutritional or other physiological effect.
2. The sources of dietary supplement consumers' purchase motivations – they reflect the intrinsic reasons for their purchases, taking into account a range of the consumers' psycho-social and psychological factors (e.g. personal goals, emotional states, or lifestyles).
3. The purchase preferences, which result from a defined set of specific characteristics belonging to the dietary supplements in question that influence consumer decisions (e.g. form, administration method, brand).

As a consequence of the research – focusing on market segmentation factors – the authors defined the following structure taking into account the types of dietary supplement consumers (Figure 2).

4. Discussion

In an attempt to identify the factors differentiating dietary supplement consumers, the authors focused on three main categories forming a logical sequence of concepts, i.e. needs – purchase motivations – purchase preferences (Q1 – Q2 – Q3).

Assigning the identified factors to the identified conceptual groups (needs – motivations – preferences) was not a straightforward task due to different opinions among researchers (Choi, Park, 2020).

4.1. Determinants influencing the perception of need of dietary supplement consumers (Q1)

Needs are general in nature and stem from the perceptions of dietary supplement consumers. Consumers wishing to make positive changes in their lives in terms of prevention, maintenance and/or improvement of their health and quality of life take a number of measures to counterbalance their discomfort in this regard (Kotler, 1999; Hys, 2018, 2020). Accordingly, the authors assigned demographic, socio-cultural and health-promoting factors to the category of purchasing needs.

Demographic factors provide the criteria for the basic classification of dietary supplement consumers. This is related to the fact that criteria such as age, gender or health status and general psycho-physical and spiritual condition directly influence the perceived needs of consumers (Reid et al., 2014; Hys, 2020).

The issue of age is raised in literature as a key determinant in the distribution of dietary supplement consumers. Infants, children, adolescents, adults and the elderly have different needs for supplements – both in terms of the type of supplement and the functions it should perform (DiNicolantonio, O'Keefe, 2023). Vitamins supplemented in each age group can be provided as an example, however these differ in terms of type and concentration, such as:

- in infants (0-12 months), due to the limited capacity for absorption of certain vitamins with food, mainly vitamins A, B12, D, K are supplemented, because they are essential for their proper growth and further development (Kędzierska, 2017; Szymański, Dąbrowska, 2015),
- in children (1-12 years of age), supplementation with vitamins A, B6, B12, C, D is recommended in order to ensure the proper development of the immune and nervous systems, among others (Szymański, Dąbrowska, 2015; Radhakrishnan, 2018),
- in adolescents (13-18 years of age), supplementation with vitamins A, B9, B12, C, D is recommended in order to ensure proper development of the skeletal system, among others (Szymański, Dąbrowska, 2015; Radhakrishnan, 2018),
- in adults (19-64 years of age), supplementation with vitamins B6, C, D, E is recommended in order to ensure the proper functioning of the immune system, prevent osteoporosis, oxidative stress and support metabolism, among others (Witkowska, Król, 2019; Matusiak, 2018),
- in the elderly (64+), supplementation with vitamins B12, C, D, E is recommended to support the proper body functioning (Kohlmeier, 2015; Hochberg, 2015; Michałowicz, Binkowska, 2020; Shah, Binns, 2022; Michałowicz, Binkowska, 2022; Manson, Bassuk, 2025).

Socio-cultural factors influence the perceived needs of dietary supplement consumers in relation to traditions, regional culture, social beliefs (Yang, Wang, 2015). The approach to the origin of dietary supplements – natural or pharmacological – can be provided as an example (McCarty, 2009; Sharma, Yadav, 2023). Reference to in dietary supplement ingredients, e.g. vegan, halal.

Health-promoting factors, on the other hand, shape the needs of dietary supplement consumers by their approach to maintenance, prevention or taking care of their health. Examples include supplements that support systems (e.g. immune, circulatory, bone) or human body functions (e.g. improving sleep quality, sexual function) (Fitzgerald, Michael, 2000).

4.2. Determinants influencing motivations of dietary supplement consumers (Q2)

Determinants of consumer purchase motivations reflect the reasons that lead dietary supplement consumers to decide to purchase a particular product. Motivations are a set of factors that derive from the goals defined by the consumer, the experiences he or she has (both positive and negative) and the beliefs and values he or she presents.

In a detailed manner, it can be assumed that:

- economic factors (Wardle et al., 2000), including income, determine the consumers' financial accessibility to particular dietary supplements (e.g. basic supplements vs luxury supplements; using special offers for one-off larger orders),
- behavioural factors (Kramer et al., 2004) are usually results of consumer habits (e.g. brand loyalty, frequency of consumption, set goal, determination),
- psychographic factors (Keller et al., 2015) stem from the personality of dietary supplement consumers and are related to the personal values and beliefs they present (e.g. eating habits, health and nutrition priorities; concern for environmental impact, i.e. type of biodegradable or non-biodegradable packaging),
- factors related to personal experience (Arnett et al., 2006) usually stem from the consumers' previous experience with the dietary supplements in question and influence their ability to assess their suitability, efficacy and nutritional or physiological effectiveness.

4.3. Determinants influencing purchase preferences of dietary supplement consumers (Q3)

A number of factors influence the purchase preferences of dietary supplement consumers. These include technical and technological factors, those related to purchasing practices and those resulting from their geographical location.

Technical and technological factors (Boudet et al., 2012) are those related to the consumers' ability to use technology and the capabilities of ICT systems (e.g. online shopping, payment solutions, convenience of purchase). In addition, they may relate to technical and technological

solutions used by dietary supplement manufacturers for supplement applications (e.g. used to support monitoring of supplement consumption by consumers).

Dietary supplement consumers have different purchasing practices (Kim et al., 2011) resulting from the evaluation system they use to select a product. They arise from tastes, preferences or certain behavioural disorders (e.g. phobias). Consumers pay attention to the availability of supplements (e.g. 24/7) or the additional expert services offered (e.g. advice from pharmacists).

The last group of factors are geographical factors (Wigand, 2004) which determine the behaviour of dietary supplement consumers by their geographical location. The location may influence the awareness of dietary supplement consumers (e.g. residents of small towns and big agglomerations show different purchase preferences).

5. Discussion

In this paper, the authors have attempted to identify the sources of decisions of individual dietary supplement consumers (constituting B2C market customers). An analysis of the subject literature allowed the authors to identify the main *categories that constitute the source of consumers' purchasing decisions, i.e. the needs, motivations and purchase preferences* of dietary supplement consumers.

The authors assigned a number of specific criteria to the sources of purchasing decisions thus defined. They were able to establish the following: *What purchase preferences do dietary supplement consumers demonstrate in the B2C market?*

The authors found that the allocation of factors to the different groups was due to the following:

- Consumer needs understood as a set of health, demographic and social aspects that determine the purchasing decisions of dietary supplement consumers.
- Purchase motivations that stem from emotions, beliefs, experiences and technology (mainly digital), which are responsible for the consumer's choice of a particular dietary supplement.
- Purchase preferences are an important and a complex set of criteria used by the consumer to choose dietary supplements.

Each of the above-mentioned factors is driven by different conditions, making in-depth research in this field fundamental to understanding changes and trends in the dietary supplement market.

Thus, the authors systematised the scattered knowledge on identifying the factors underlying the differentiation of the sources of dietary supplement consumer decisions in the B2C market. Furthermore, they proposed an original classification of these factors with the identification and description of the different criteria describing them.

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