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ANALYSIS OF THE ASSORTMENT OF DIETARY SUPPLEMENTS FOR THE NORMALIZATION OF VISUAL FUNCTION

SUMMARY. Vision is essential for human activity, yet over 2.2 billion people worldwide face visual impairments, many of which are preventable. Digital screen exposure further exacerbates eye health issues. While treatment options exist, their cost makes prevention increasingly relevant. The use of plant-based dietary supplements offers a viable preventive strategy. Analyzing their assortment, composition, and dosage forms is key to improving quality control and guiding the development of effective products for visual function support.

The aim – to investigate the pharmaceutical assortment of dietary supplements for the normalization of visual function.

Material and Methods. The objects of the study were the directory of Compendium online and online resources such as Tabletki.ua and Apteki.ua. The study employed marketing analysis, graphical representation, logical generalization, and mathematical-statistical methods.

Results. As of April 2025, the pharmaceutical assortment comprised 104 dietary supplements for the normalization of visual function. The analysis of the assortment revealed a predominance of domestically produced dietary supplements, accounting for 55.77 %. The leaders among them were Beauty and Health, LLC (10.34 %) and Elit-Pharm, LLC (8.61 %). Imported dietary supplements originated from 16 countries, with the highest shares coming from Germany and the United States (19.57 % each). The majority of dietary supplements had a multi-component composition (86.54 %). The most common dosage forms were capsules and tablets.

Conclusions. The domestic pharmaceutical market of dietary supplements for the normalization of visual function has been analyzed. The results indicate a predominance of domestically produced products, a multi-component structure of the assortment, and a variety of dosage forms, highlighting the high potential for further research and development based on plant-derived raw materials.

KEY WORDS: dietary supplements; pharmaceutical assortment; normalization of visual function; assortment research; commodity analysis.

Introduction. Vision, the most dominant of our senses, plays a critical role in every facet and stage of our lives. We take vision for granted, but without vision, we struggle to learn, to walk, to read, to participate in school and to work.

Worldwide, more than 2.2 billion individuals experience near or distance vision problems, and in at least 1 billion of these cases, the impairment was either preventable or remains unaddressed.

Vision impairment occurs when an eye condition affects the visual system and its vision functions. Everyone, if they live long enough, will experience at least one eye condition in their lifetime that will require appropriate care [1]. A widely accepted theory regarding the link between digital screen use and eye symptoms suggests that screen exposure alters blinking patterns, which contributes to eye dryness [2].

Vision impairment has serious consequences for the individual across the life course. Many of these

consequences can be mitigated by timely access to quality eye care [1].

At present, vision treatment and correction have achieved significant success, but these procedures are often costly [3]. Therefore, preventing ophthalmic diseases through the use of medicines or dietary supplements derived from plant-based raw materials remains a relevant and important approach.

To ensure the rational use and standardization of such preventive products, it is important to study not only their market availability but also their assortment structure, classification features, component composition, dosage forms, and origin. Such a commodity-based analysis allows for the identification of trends, gaps, and dominant product types, which is essential for optimizing consumer choice, improving quality control, and guiding the development of new dietary supplements.

The aim of the study is to investigate the pharmaceutical assortment of dietary supplements for the normalization of visual function.

Material and Methods. The objects of the study were the directory of Compendium online (Compendium, <https://compendium.com.ua>) and online resources for searching medicines and dietary supplements in Ukrainian pharmacies, such as Tabletki.ua and Apteki.ua [4, 5].

The research involved marketing analysis, mathematical and statistical methods, logical generalization, and graphical representation

techniques [6]. The obtained results were structured and presented in diagrams with corresponding explanations and conclusions [7, 8].

Results and discussion. As of April 2025, there were 104 assortment positions of dietary supplements intended to improve visual function available in Ukraine.

The pharmaceutical assortment of dietary supplements intended to improve visual function in Ukraine includes both domestic (58 assortment positions) and imported (46 assortment positions) products (Fig. 1).

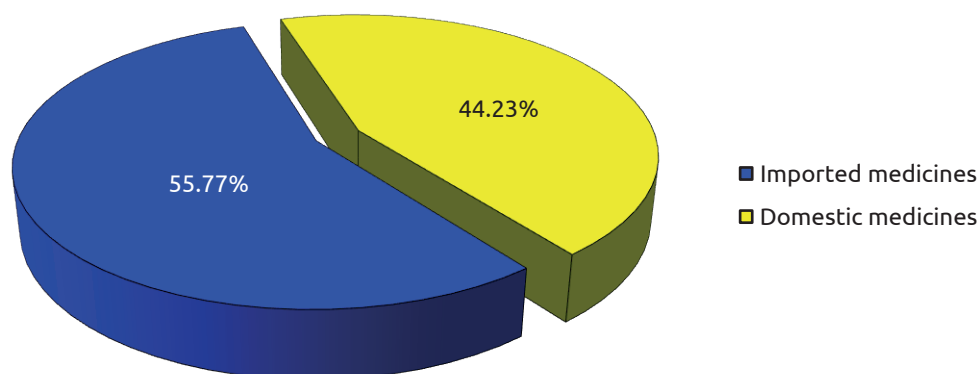


Fig. 1. The ratio of domestic and imported dietary supplements within the pharmaceutical assortment aimed at improving visual function

Among domestic manufacturers, the leading positions in the nomenclature of medicines belong to Beauty and Health, LTD (10.34%; 6 assortment positions), Elit-Pharm, LLC (8.61%; 5 assortment positions), Nutrimed, LLC (6.89%; 4 assortment positions), Kyiv Vitamin Plant, PJSC (6.89%; 4 assortment positions), Visus Pharm, LLC (6.89%; 4

assortment positions), Universe Pharm, LLC (6.89%; 4 assortment positions), Keys to Health, LLC (5.17%; 3 assortment positions), Phytoproduct, SRL, LLC (5.17%; 3 assortment positions), Pharmacom, PTP, LLC (5.17%; 3 assortment positions) with other manufacturers accounting for 37.98% of the assortment of dietary supplements (Table 1).

Table 1 – Distribution of domestic manufacturers of dietary supplements intended to improve visual function

Manufacturer	Number of assortment positions of dietary supplements	
	absolute	relative
1	2	3
Beauty and Health, LLC	6	10.34%
Elit-Pharm, LLC	5	8.61%
Nutrimed, LLC	4	6.89%
Kyiv Vitamin Plant, PJSC	4	6.89%
Visus Pharm, LLC	4	6.89%
Universe Pharm, LLC	4	6.89%
Keys to Health, LLC	3	5.17%
Phytoproduct, SRL, LLC	3	5.17%
Pharmacom, PTP, LLC	3	5.17%
Bovios Pharm, LLC	2	3.44%
Viola Pharmaceutical Factory, PrJSC	2	3.44%
MSK-MED, PE	2	3.44%
Pharmproduct, LLC	2	3.44%
Farmak, PJSC	1	1.73%
Valartin Pharma, LLC	1	1.73%

1	2	3
Ozymuk Pharm, LLC	1	1.73%
Euro Plus, PE	1	1.73%
Dr. Healthy, PE	1	1.73%
Maryna, PE	1	1.73%
Neopharm Ltd, LLC	1	1.73%
Forsage Plus, LLC	1	1.73%
Kharkiv Vitamin Plant, LLC	1	1.73%
Eliksyr, LLC	1	1.73%
Golden-Pharm, LLC	1	1.73%
Farmaplant Ukraine, LLC	1	1.73%
PhytoBioTechnologies SPC, LLC	1	1.73%
Svit Phyto, LLC	1	1.73%

Dietary supplements for the normalization of visual function are supplied to the Ukrainian pharmaceutical market by manufacturers from 16 countries.

The leading suppliers are Germany (19.57%; 9 assortment positions) and the United States of

America (19.57%; 9 assortment positions). The remaining 60.86% of dietary supplements are provided by manufacturers from France, Romania, Italy, India, Switzerland, Poland, Slovakia, China, Finland, Lithuania, Bulgaria, Austria, Slovenia, and Latvia (Fig. 2).

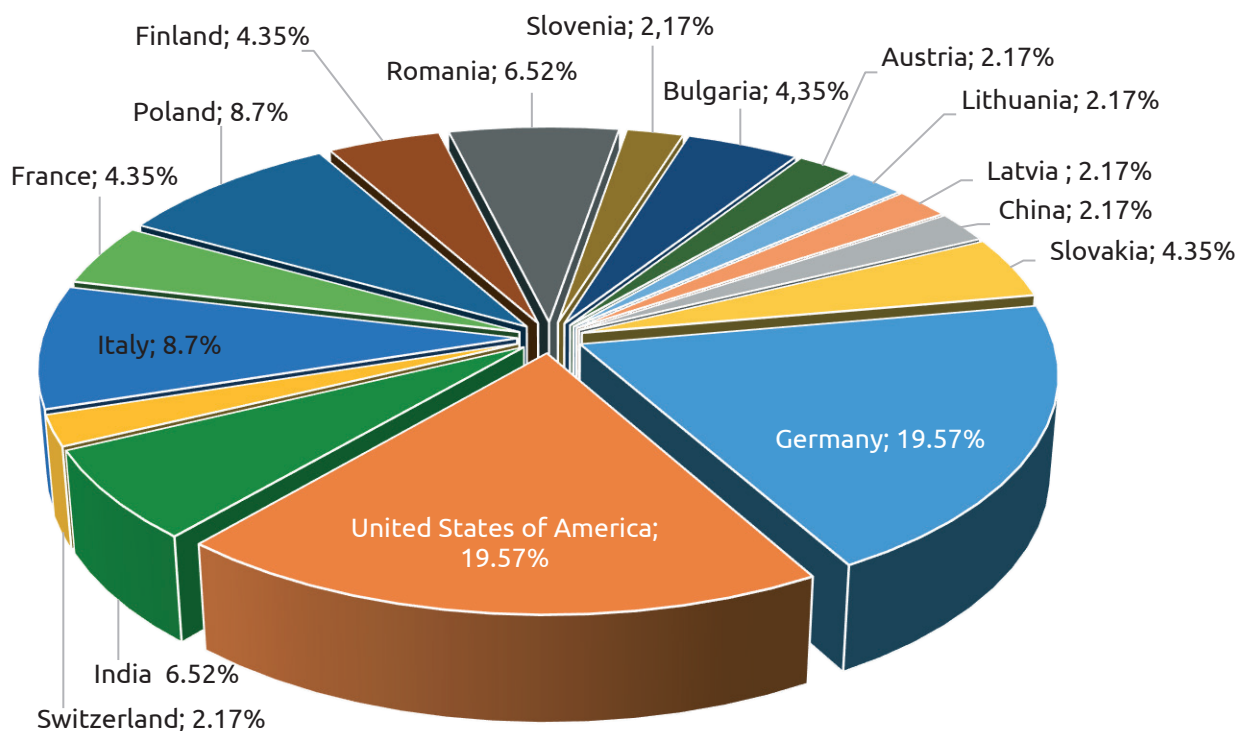


Fig. 2. The distribution of manufacturing countries of dietary supplements intended to improve visual function on the pharmaceutical market of Ukraine.

Depending on the number of ingredients in their composition, dietary supplements are classified as single-component, two-component, or multi-component. Among the dietary supplements intended to improve visual function, 86.54% (90 assortment positions) are multi-component. In

contrast, the shares of single- and two-component dietary supplements are significantly lower (Fig. 3).

The studied group of dietary supplements is represented on the Ukrainian pharmaceutical market in various dosage forms, including capsules, tablets, herbal teas, and granules.

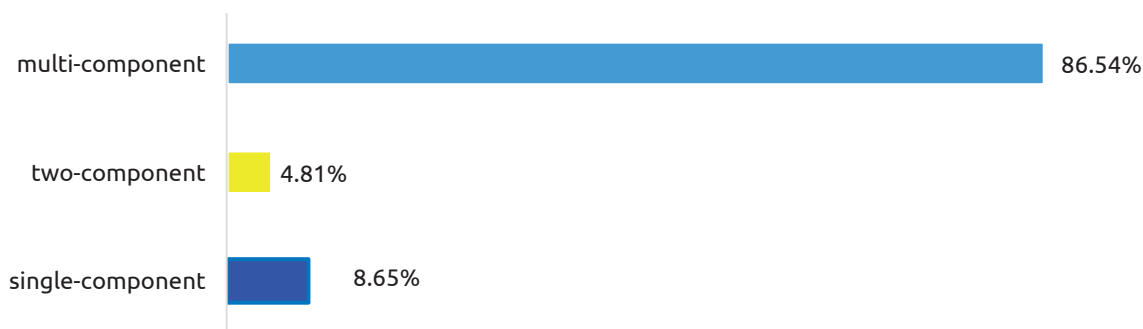


Fig. 3. Distribution of dietary supplements intended to improve visual function by component composition.

The obtained results indicate a wide and diverse range of dietary supplements intended to improve visual function available on the pharmaceutical market of Ukraine and can serve as a basis for the rational selection of the component composition and dosage form of the obtained phytosubstances from plant raw materials, and subsequently – for the development of dietary supplements or medicines based on them.

Conclusions. 1. As of April 2025, the pharmaceutical assortment included 104 dietary supplements for the normalization of visual function.

2. The analysis of the assortment showed a predominance of domestic manufacturers (55.77%). The leaders in the nomenclature of domestic products are Beauty and Health, LLC (10.34%), Elit-Pharm, LLC (8.61%), and several others with smaller shares. The imported dietary supplements are supplied by manufacturers from 16 countries, with Germany and the United States of America leading (19.57% each).

3. The majority of dietary supplements for the normalization of visual function are multi-component (86.54%), with single- and two-component products comprising only a small portion of the market. The

most common dosage forms are capsules and tablets.

Perspectives for further research. The obtained results reflect a broad and diverse pharmaceutical assortment and may serve as a foundation for further chemical and pharmacological studies of phytosubstances derived from plant materials, as well as for the rational selection of their component composition and dosage forms in the development of new dietary supplements and medicines for the normalization of visual function.

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Authors' contribution:

L. I. Budniak – research design, data collection, statistical data processing, description of research results and writing of the publication.

I. P. Bilyk – data collection, description of research results.

N. Ya. Muzyka – literature review, forming research conclusions.

S. B. Chernetska – data collection, statistical data processing.

Conflict of interest. There is no conflict of interest.

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АНАЛІЗ АСОРТИМЕНТУ ДІЄТИЧНИХ ДОБАВОК ДЛЯ НОРМАЛІЗАЦІЇ ФУНКЦІЇ ЗОРУ

РЕЗЮМЕ. Зір є необхідним для людської діяльності, однак понад 2,2 мільярда людей у світі мають порушення зору, багатьом з яких можна запобігти. Використання цифрових екранів додатково погіршує стан зору. Попри наявність методів лікування, їх висока вартість актуалізує необхідність профілактики. Застосування дієтичних добавок на основі рослинної сировини є ефективною профілактичною стратегією. Аналіз їхнього асортименту, складу та лікарських форм є важливим для підвищення якості та розробки ефективних засобів для підтримки зорової функції.

Мета дослідження – проаналізувати аптечний асортимент дієтичних добавок для нормалізації функції зору.

Матеріал і методи. Об'єктами дослідження були онлайн-довідник Компендіум та ресурси для пошуку лікарських засобів і дієтичних добавок в українських аптеках: Tabletki.ua та Apteki.ua. Використано методи маркетингового аналізу, графічні, логічного узагальнення та математико-статистичної обробки даних.

Результати. Станом на квітень 2025 року аптечний асортимент налічував 104 позиції дієтичних добавок для нормалізації функції зору. Аналіз асортименту показав переважання дієтичних добавок вітчизняного виробництва, їх частка становить 55,77 %. Лідерами серед них були ТОВ «Красота та Здоров'я» (10,34 %) і ТОВ «Еліт-Фарм» (8,61 %). Імпортні дієтичні добавки надходили з 16 країн, найбільше з Німеччини та США (по 19,57 %). Більшість дієтичних добавок мали багатокомпонентний склад (86,54 %). Найпоширенішими формами випуску були капсули і таблетки.

Висновки. Проаналізовано вітчизняний фармацевтичний ринок дієтичних добавок для нормалізації функції зору. Результати свідчать про переважання продукції вітчизняного виробництва, багатокомпонентну структуру асортименту та різноманітність лікарських форм, що підкреслює високий потенціал для подальших досліджень і розробок на основі рослинної сировини.

КЛЮЧОВІ СЛОВА: дієтичні добавки; аптечний асортимент; нормалізація функції зору; дослідження асортименту; товарознавчий аналіз.

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