



# Current issues of healthy lifestyle prevention: past and present

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**Abstract.** *The purpose* was to study the views evolution concerning the healthy lifestyle principles formation. *The object:* factors that contribute to a healthy lifestyle and longevity. *The subject of the study:* the study of ideas about a healthy lifestyle — today and in the past. *Research methods:* theoretical (system analysis, generalization, system approach), bibliographic (relevant articles were searched in the Scopus and UpToDate databases, relevant articles for 2018–2022 were selected and processed by the title and abstracts, 15 scientific works were presented in this study). *Results.* It was evaluated that a healthy diet, the consumption of alcohol in small doses, the absence of passive and active smoking, a normal body mass index, moderate regular physical activity, timely vaccination, sufficient quality sleep, sufficient daily mental activity definitely contribute to the extension of the life expectancy and its qualities improvement. It was concluded that together with the society's development, views regarding the principles of a healthy lifestyle partially changed, however, eating high-quality food and moderate sports were always relevant. Today, many approaches have been developed to ensure a qualitative healthy life. A significant number of types and examples of healthy nutrition are described, it is proven that a qualitative sleep increases the immunity and helps in the fight against numerous diseases, as well as the absence of bad habits and control over a normal body mass significantly reduce the risk of diseases.

**Key words:** longevity, healthy nutrition, quality life.

## Introduction

Nowadays people have a unique opportunity to live a hundred years or more. To do this, there is a need to carefully monitor the health, to observe medical recommendations and rules of a healthy lifestyle.

There is a great amount of information about a healthy lifestyle. Its components are considered to be good quality nutritious food, absence of bad habits, maintaining a normal body mass index, moderate regular physical activity, timely immunizations, sufficient qualitative sleep, and daily mental activity. However, there are still discussions about the optimal type of diet; it has not been definitively established what amount of alcohol can be considered safe and whether it exists at all; various myths about vaccination, its harm, and negative impact on human health are widespread in society.

Today, no one is surprised by the qualitative medicine, by its availability. Almost everyone considers it the norm to observe personal hygiene, regular walks in the fresh air, and the absence of bad habits. However, this has not always been the case, which is why the purpose of this study was to examine the evolution of views on the formation of the principles of a healthy lifestyle.

## Objects and methods of research

Factors contributing to a healthy lifestyle and longevity were chosen as the object of research.

The subject of the research was the idea of a healthy lifestyle: today and in the past.

Research methods: theoretical methods (system analysis, generalization, and systematic approach were applied); bibliographic method (search for relevant articles in Scopus and UpToDate databases, selected and processed relevant articles for 2018–2022 by title and abstracts, 15 of which are presented in this study).

## Results and discussion

The study evaluated that the main factors that contribute to the quality and long life are healthy food, a consumption

of a small amount of alcohol (for women 5–15 g/day, for men 5–30 g/day) [1], an absence of bad habits, a normal body mass index, a timely vaccination, a regular physical activity (more than 30 min/day), a healthy sleep and an active mental activity.

It has been proven [2] that the regular consumption of the right amount of nutrients has a positive effect on health and contributes to the prevention of the most common diseases. It is recommended to limit the intake of saturated fats, salt, and sugar in the daily diet, and to increase the amount of fresh fruit and vegetables. Among the considerable variety of dietary patterns, the following are considered the most useful: the Mediterranean diet, dietary approaches against hypertension, and the Nordic diet [3], which are based on whole-grain products, cereals, vegetables and fruit, nuts, seafood and unprocessed meat (a certain proportion) (Table).

It is visible that these views on nutrition were formed relatively recently. Several centuries ago, members of the wealthy populace mostly consumed meat, seafood, sweets, and foods rich in fructose. However, they consumed these healthy foods in excessive amounts and not in a balanced way. It often leads to the gout development, which significantly spoils the life quality.

Even Hippocrates mentioned that by performing moderate loads on all parts of the body, a person will be healthy and will age more slowly; however, with inactivity, the entire body will weaken and be prone to various diseases [4]. To date, it has been proven [5] that physical activity prevents and significantly alleviates the course and improves the prognosis of a significant number of serious diseases (type 2 diabetes, stroke, rheumatoid arthritis, obesity, metabolic syndrome, hypertension, coronary heart disease, cancer, depression, cognitive dysfunction). It has been found that physically active older people have significantly better physical and cognitive development, such individuals are more mobile and have significantly lower risk of falls, fractures and depression. After a physical activity, people usually experience less stress and negative emotions, noting improved well-being [7].

**Table** Beneficial food models (authors' development)

	<b>Mediterranean type of food</b>	<b>Dietary type of diet against hypertension</b>	<b>Nordic type of food</b>
Fruit consumption	1–2 servings per day	4–5 servings per day	About 200–250 g/day
Vegetable consumption	2 or more servings daily	4–5 servings per day	About 200–250 g/day
Wholemeal products consumption	2 servings daily	7–8 servings per day	5 slices of bread per day; pasta 3 products per week
Dairy products	Low-fat foods 2 servings daily	Low-fat foods 2–3 servings per day	Dairy products with low-fat content
Seeds, nuts, and beans consumption	Seeds and nuts 1 to 2 servings per day; Beans more than 2 servings per week	4–5 servings per day	Mostly almonds 10–20 g/day
Meat products	Red meat 1–2 servings per week; white meat 2 or more servings per week	Low-fat varieties 1 serving per day	Red meat less than 500 g/week; Poultry less than 300 g/week
Seafood consumption	2 or more servings per week	Low-fat varieties 1 serving per day	3–5 servings per week
Unsaturated fats, oils	1–2 servings per day	2–3 servings per day	1–2 servings per day
Sweets must be consumed	Less than 2 servings per week	Less than 5 servings per week	2 or less times a week
Alcohol consumption	Wine in moderation	In moderate amounts	In moderate amounts
Other products	Eggs 2–3 servings per week	Total salt less than 2300 mg/day	Eggs 1–2 times a week; potatoes 100–150 g/day

The benefits of healthy sleep have been known for a long time. A qualitative sleep promotes immunity, improves concentration and memory. It has been noted that patients with arterial hypertension who followed a sleep schedule had a decreased risk of developing type 2 diabetes [8]. At the same time, the lack of adequate night's rest leads to a deterioration of the general condition, accompanied with marked apathy, mood disorders. Studies indicate that chronic sleep disorders increase the risk of new and recurrent depression in adolescents and adults [9]. Also, scientists hypothesized that cognitive disorders in elderly patients may be a manifestation of neuroendocrine disorders due to a failure of biorhythms [10]. Consequently, the sleep regimen compliance is an integral component of a healthy lifestyle and disease prevention.

For many centuries, the development of medicine was considerably hampered by the Church, and mankind suffered terrible epidemics without vaccines and medicines. There was virtually no concept of personal hygiene, most people could not afford good nutrition, walks in the fresh air were not popular, the streets were drowning in filth — all this led to a weakening of human immunity and the rapid spread of infectious diseases.

The situation improved relatively recently with the discovering of the first antibiotic and the beginning of vaccine development [11, 12]. In the 18th century, the smallpox vaccine was invented. Initially it led to considerable resistance among the population and especially among religious communities, but subsequently contributed to a significant decrease in the incidence of the disease and a better prognosis for the disease. Since then, a large number of vaccines have been developed, bringing the most deadly infectious diseases under human control. Today, with the COVID-19 pandemic, scientists have created new, effective vaccines to quickly overcome the disease. Therefore, the question has arisen of providing a robust pharmacovigilance system to minimize the side effects associated with vaccination and to ensure patient confidence [13].

## Conclusion

It has been revealed that views on a healthy lifestyle are partially different in the past and today. During the Middle Ages, there was practically no concept of personal hygiene,

little was known about the benefits of clean air and sunlight, the quality of nutrition was poor, especially among the poor population. A few centuries ago, there was no access to quality medicine and treatment, which led to the spread of terrible long-term epidemics. Nowadays, many approaches have been developed to ensure quality long-term life. They include models of healthy eating (Mediterranean diet, dietary approaches against hypertension, and the Nordic diet), vaccinations against severe infectious diseases have been developed and implemented; qualitative sleep has been proven to boost immunity and help fight many diseases, and the absence of bad habits as well as the control of normal body mass index significantly reduce the risk of disease.

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## Актуальні проблеми профілактики здорового способу життя: минуле та сьогодення

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**Анотація.** *Мета:* вивчити еволюцію поглядів щодо формування принципів здорового способу життя. *Об'єкт:* фактори, що сприяють здоровому способу життя та довголіттю. *Предмет дослідження:* вивчення уявлень про здоровий спосіб життя сьогодні і в минулому. *Методи дослідження:* теоретичні (системний аналіз, узагальнення, системний підхід),

бібліографічний (здійснено пошук релевантних статей у базах даних Scopus та UpToDate, відібрано та опрацьовано за назвою та анотаціями релевантні статті за період 2018–2022 рр., у даному дослідженні представлено 15 наукових праць). **Результати.** У ході дослідження встановлено, що здорове харчування, споживання алкоголю в низьких дозах, відсутність пасивного та активного тютюнопаління, нормальний індекс маси тіла, помірна регулярна фізична активність, своєчасна вакцинація, достатній якісний сон, достатня повсякденна розумова діяльність безперечно сприяють подовженню тривалості життя та покращанню його якості. Зроблено висновок, що разом із розвитком суспільства частково змінювалися погляди на принципи здорового способу життя, однак повноцінне харчування та помірні заняття спортом завжди були актуальними. Сьогодні розроблено багато підходів для забезпечення якісного здорового життя. Описано значну кількість видів і прикладів здорового харчування, доведено, що якісний сон підвищує імунітет і допомагає в боротьбі з численними захворюваннями, а також відсутність шкідливих звичок і контроль нормальної маси тіла значно знижують ризик розвитку захворювань.

**Ключові слова:** довголіття, здорове харчування, якісне життя.

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