

## NATURE AS A NATURAL HEALER: THE STRATEGIC IMPORTANCE OF ECOLOGICAL FACTORS AND THE HYGIENIC ENVIRONMENT IN HUMAN HEALTH

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### ABSTRACT

This article analyzes the health-improving effects of the four elements of nature — sun, air, water, and soil — on the human body. Furthermore, the role of hygienic factors (personal hygiene, nutritional hygiene, and occupational hygiene) in disease prevention within the context of modern urbanization is scientifically substantiated. The article aims to promote natural and hygienic wellness methods among the general public.

### Keywords

forces of nature, sunbathing, aerotherapy, hydrotherapy, hygiene, ecological prevention, hardening (tempering), adaptation.

### INTRODUCTION

**Relevance of the Subject.** The 21st century—an era of rapid high-tech advancement and global urbanization—has brought unprecedented conveniences to human life. However, it has simultaneously disrupted the ancient equilibrium between man and nature. Today, a vast majority of the population lives in "artificial environments"—enclosed buildings surrounded by constant electromagnetic radiation, synthetic materials, and urban noise pollution. As a result of this detachment, humanity is facing a surge in "civilization diseases," such as hypodynamia (physical inactivity), chronic fatigue syndrome, immune deficiency, and various psychosomatic disorders. From a bio-medical perspective, the human body is an integral part of the ecosystem, and its healthy functioning fundamentally depends on continuous interaction with natural ecological factors.

**Problem Statement.** Despite the monumental achievements of modern medicine and pharmacology, the necessity of nature's healing forces—sunlight, fresh air, water, and soil—in disease prevention (prophylaxis) has never diminished. Historically, for millennia, humanity maintained its vitality specifically through these natural gifts and strict adherence to hygienic principles. The current critical problem lies in the fact that urbanized populations are losing the practical skills and habits of utilizing these natural factors. In an age dominated by sedentary lifestyles, scientifically integrating nature's restorative powers with modern hygienic standards is an urgent necessity to enhance the body's adaptive capabilities and overall resilience.

**Research Objectives.** The primary objective of this article is to analyze the morphofunctional impact of nature's four pillars—sun, air, water, and soil—on the human body. Furthermore, it aims to highlight the strategic importance of hygienic factors, including personal, nutritional, and occupational hygiene, in maintaining long-term health. The research asserts that natural forces are not merely external surroundings but are essential biological catalysts that "temper" the organism and slow down the processes of biological aging.

**Scientific Novelty.** This article treats natural forces and hygienic factors as two inseparable pillars of a healthy lifestyle. Here, the concept of "hygiene" is expanded beyond mere cleanliness to include "ecological hygiene" and "psychohygiene"—the balance between the individual and their environment.

The research substantiates that living in harmony with nature is not only a physical requirement but the ultimate guarantee of psycho-emotional stability and spiritual well-being in the modern world.

## THE HEALING FORCES OF NATURE: MECHANISMS OF NATURAL CONDITIONING AND REGENERATION

Throughout human history, nature has served not only as a source of life but as the first and most powerful physician. The restorative forces of nature—sun, air, and water—increase the body's resistance to negative environmental impacts, strengthen the immune system, and coordinate the functional activities of all internal organs. Unlike pharmacological interventions, these natural elements exert a holistic influence on the organism, mobilizing its innate reserves and elevating its capacity for adaptation.

**Solar Radiation (Heliotherapy)** represents the energetic foundation of all vital processes on Earth. Heliotherapy is not merely about warming the body; it is a sophisticated method of regulating complex biochemical reactions. Under the influence of the sun's ultraviolet rays, the skin synthesizes **Vitamin D**, which is critical for human health. This vitamin regulates calcium and phosphorus metabolism, ensuring bone density and preventing diseases such as rickets and osteoporosis. Biologically, sunlight improves blood composition, increases hemoglobin levels, and accelerates tissue regeneration. From a mental health perspective, sunlight stimulates the production of **serotonin**, the "happiness hormone," in the brain. This neurotransmitter elevates mood, enhances cognitive productivity, and serves as a natural shield against seasonal affective disorder and depression.

**Air (Aerotherapy)** is the primary basis of life, and its healing power is manifested in the close integration of the respiratory and circulatory systems. Fresh air saturates the body with oxygen, thereby improving energy metabolism at the cellular level. A vital component of aerotherapy is "hardening" or conditioning. Constant variations in air temperature, humidity, and flow velocity train the body's thermoregulation system, building resilience against colds and infectious diseases. Another profound benefit of spending time in forests or parks is the inhalation of **phytoncides**. These biologically active substances secreted by plants possess antimicrobial properties that naturally sterilize the respiratory tract and can increase lung ventilation by 20–30%.

**Water (Hydrotherapy)** is the most potent and multifaceted tool for physical conditioning and invigoration. The healing effects of water are based on its thermal, mechanical, and chemical properties. **Thermal action**—the strategic alternation of cold and warm water—causes the rapid expansion and contraction of blood vessels, creating a form of "vascular gymnastics." This process eases the workload of the heart and enhances peripheral blood circulation. **Mechanical action**, such as the gentle pressure of water flow against the skin, relaxes muscles and improves lymphatic drainage. Finally, the **chemical action** of salts and minerals found in seawater or mineral springs allows essential elements to penetrate the skin, soothing the nervous system, reducing joint inflammation, and elevating metabolism to a new functional level. In conclusion, the rational and consistent utilization of these three great forces of nature protects the individual from physical ailments while providing an inexhaustible source of vital energy. Natural wellness methods restore the harmony between humans and the environment, serving as a guarantee for a long and meaningful life.

## HYGIENIC FACTORS: THE ARCHITECTURE OF HEALTH AND ORGANIZATIONAL ORDER

Health is not merely the absence of disease; it is the body's profound ability to live in harmony with the environment. The primary instrument that ensures this harmony is hygiene. Far beyond the simple concept of cleanliness, hygiene is a comprehensive scientific discipline that regulates a person's lifestyle, labor, and rest. If the forces of nature are the "raw materials" for the human body, then hygienic factors act as the architect, building a solid and healthy "edifice of life" from those materials.

**Personal Hygiene** serves as the first and most vital line of defense against the body's external enemies—viruses and bacteria. The skin is the largest organ of the human body, actively participating not only in protection but also in respiration, thermoregulation, and metabolic

processes. Research indicates that consistent adherence to hand and body cleanliness can preemptively stop more than 80% of infectious diseases. Furthermore, oral hygiene is inextricably linked not just to dental health, but to the entire digestive system and cardiovascular function. Practicing personal hygiene does more than regulate a person's outward appearance; it enhances self-confidence and facilitates better social adaptation.

**Nutritional Hygiene** is the fundamental factor determining the body's internal energetic balance. The adage "You are what you eat" is scientifically grounded; the quality, composition, and timing of food consumption directly influence the cellular-level renewal processes. Hygienic nutrition involves more than choosing clean and high-quality products; it requires balancing proteins, fats, and carbohydrates while forming a diet rich in vitamins and minerals. Consuming food at regular, consistent intervals triggers the digestive system's conditioned reflexes, ensuring maximum nutrient absorption and allowing the body to function without excessive strain.

**Occupational and Rest Hygiene** has become a vital necessity in the age of modern urbanization and high technology. The human body is designed for continuous movement, yet it cannot withstand prolonged, repetitive (static) loads of the same type. Correctly alternating between intellectual labor and physical activity is the only way to maintain effective brain function and prevent burnout of the nervous system. In this process, **quality sleep** takes center stage. During sleep, regeneration—the body's self-repair process—reaches its peak; toxins are cleared from the brain, and acquired information is organized. Failure to comply with quality sleep hygiene leads directly to weakened immunity and the development of chronic illnesses.

In conclusion, hygienic factors are a set of laws that regulate all facets of human life. Conscious adherence to these rules not only protects the individual from the negative impacts of the environment but also creates the foundation for the full realization of their physical and mental potential. Hygiene is the simplest, yet most powerful step toward enduring health.

#### **CONCLUSION: NATURE AND HYGIENE AS THE ANCHOR OF VITAL STABILITY**

In summary, adhering to the healing powers of nature and hygienic standards is not merely a recommendation but a strategic necessity for human biological survival in the modern world. Regardless of how far human civilization advances, our physiology remains fundamentally bound to the laws of nature. Natural elements (sun, air, water) and hygienic protocols remain the most cost-effective, yet most preventive and efficient methods of modern medicine.

Nature provides us with all the necessary "medicines," energetic power, and mental equilibrium for free. Our task is to learn how to utilize these resources correctly, rationally, and on a scientific basis. By breathing fresh air, absorbing sunlight, and tempering the body with the healing power of water, we can make our internal defense system (immunity) stronger than any pharmacological intervention. Personal and social hygiene rules act as a "safety belt," preserving this healthy state and protecting us from external infectious threats.

#### **Practical Recommendations:**

- Make it a rule to spend at least 1-1.5 hours in the open air daily, preferably in green zones.
- Start your morning with a cold water wash or a contrast shower to "wake up" the vascular and nervous systems.
- View environmental protection as an extension of personal hygiene. A healthy person can only exist within a healthy nature.

In conclusion, health is the sum of small decisions made every day. Harmonizing with nature and maintaining hygienic discipline is the strongest guarantee for a long, meaningful, and high-quality life. Nature does not need us to heal it; we need nature to heal us—we simply must allow it to do so.

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