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**THE IMPACT OF MANICURE AND PEDICURE PROCEDURES ON
NAIL HEALTH: PREVENTION OF ONYCHOLYSIS AND OTHER
DISEASES**

**ВПЛИВ ПРОЦЕДУР МАНІКЮРУ ТА ПЕДИКЮРУ НА ЗДОРОВ'Я
НІГТІВ: ПРОФІЛАКТИКА ОНІХОЛІЗИСУ ТА ІНШИХ
ЗАХВОРЮВАНЬ**

Summary. *Modern manicure and pedicure procedures improve nail aesthetics and play a crucial role in disease prevention. This article discusses hygienic standards, onycholysis prevention methods, the role of innovative technologies and nutrition in maintaining nail health, and the psychological and social benefits of regular nail care. Statistical data support the effectiveness of professional treatments.*

Introduction. *Professional nail care is essential for overall health, as nails provide vital protective functions. Modern techniques and integrated approaches effectively prevent common issues such as onycholysis, fungal infections, and other nail pathologies.*

Hygienic Aspects. Adherence to modern hygiene protocols (sterilization, disinfection, disposable tools) is fundamental for safe manicure and pedicure, preventing infections and trauma.

Prevention of Onycholysis. Proper nail care techniques, including gentle filing, strengthening coatings, and timely rehabilitation after removing artificial materials, significantly reduce the risk of onycholysis.

Innovative Technologies. Contemporary methods such as hardware manicure, laser treatment, photodynamic therapy, and digital nail monitoring ensure high-quality, safe nail care, preventing diseases at early stages.

Nutrition and Vitamins. Balanced nutrition and regular intake of vitamins and minerals (biotin, zinc, iron) support healthy nail structure and prevent brittleness.

Psychological and Social Aspects. Regular nail care procedures positively influence self-esteem, reduce stress levels, and enhance social interactions.

Reduction of Diseases. According to statistics, regular professional care significantly reduces the incidence of onycholysis (by 67%), fungal infections (by 58%), nail dystrophy (by 72%), and ingrown nails (by 81%).

Conclusions. Today, manicure and pedicure services offer comprehensive preventive, psychological, and social benefits, contributing not only to beauty but also to overall health and well-being.

Key words: manicure, pedicure, nail health, onycholysis, prevention, care, hygiene.

Анотація. Сучасні процедури манікюру та педикюру не тільки покращують естетику нігтів, а й є важливим інструментом профілактики захворювань. Стаття розглядає гігієнічні стандарти, методи профілактики оніхолізму, роль інноваційних технологій та харчування у збереженні

здоров'я нігтів, а також вплив процедур на психологічний стан людини та соціальну адаптацію. Наведені статистичні дані підтверджують ефективність професійного догляду.

Вступ. Професійний догляд за нігтями є необхідною складовою загального здоров'я людини, оскільки нігті виконують важливу захисну функцію. Сучасні технології та комплексний підхід дозволяють уникнути поширених проблем, таких як оніхолісис, грибкові захворювання та інші патології нігтьової пластини.

Гігієнічні аспекти. Дотримання сучасних гігієнічних протоколів (стерилізація, дезінфекція, одноразові інструменти) є основою безпечного манікюру та педикюру, що запобігає інфекціям і травмуванню.

Профілактика оніхолісису. Правильна техніка догляду за нігтями, включаючи дбайливе підпилювання, використання зміцнюючих покриттів та своєчасну реабілітацію після зняття штучних матеріалів, суттєво знижує ризик розвитку оніхолісису.

Інноваційні технології. Сучасні методики (апаратний манікюр, лазерна терапія, фотодинамічна терапія та цифровий моніторинг) дозволяють якісно та безпечно доглядати за нігтями, попереджуючи захворювання на ранніх стадіях.

Харчування і вітаміни. Збалансоване харчування та регулярне вживання вітамінів і мінералів (біотин, цинк, залізо) підтримують здорову структуру нігтів і запобігають їх ламкості.

Психологічні та соціальні аспекти. Регулярні процедури догляду за нігтями позитивно впливають на самооцінку, знижують рівень стресу та покращують якість соціальної взаємодії.

Зменшення захворювань. Згідно статистики, регулярний професійний догляд дозволяє суттєво знизити випадки оніхолізу (на 67%), грибкових інфекцій (на 58%), дистрофій нігтів (на 72%) і врослого нігтя (на 81%).

Висновки. Манікюр і педикюр сьогодні є комплексною послугою, яка включає профілактичні, психологічні та соціальні переваги, сприяючи не лише красі, а й загальному здоров'ю людини.

Ключові слова: манікюр, педикюр, здоров'я нігтів, оніхолізіс, профілактика, гігієна, інноваційні технології, харчування, вітаміни, психологічні аспекти

Introduction. Nail plates perform an important protective function, protecting the fingertips from mechanical damage and environmental influences. Regular professional nail care with manicure and pedicure not only improves their aesthetic appearance, but also helps maintain the health of the nail apparatus. In recent decades, the nail service industry has made a significant breakthrough in the field of safety, hygiene and nail treatment technologies.

However, there is a common misconception that cosmetic procedures can harm the nail plate. On the contrary, modern research demonstrates that with a competent approach, manicure and pedicure become an effective prevention of many nail diseases, including onycholysis, onychomycosis and onychodystrophy. Of particular importance is an integrated approach combining professional care, proper nutrition and the use of high-quality materials.

This article examines in detail how modern nail service techniques, innovative coatings and preventive measures help strengthen the nail plate, prevent the development of pathologies and improve the overall condition of the nails. Particular attention is paid to the psychological and social aspects of nail care, as well as the economic feasibility of regular visits to a nail salon.

Hygienic aspects of manicure and pedicure

Strict hygiene standards are the fundamental principle of modern nail service. Professional salons use a multi-level sterilization system, including autoclaving, UV disinfection and the use of disposable instruments. Such measures completely eliminate the risk of cross-contamination and transmission of infections between clients.

An important achievement of recent years has been the introduction of antiseptic protocols for the treatment of not only instruments, but also work surfaces. The use of bactericidal lamps and special disinfectant solutions creates a safe environment for procedures. Particular attention is paid to the treatment of the nail bed before the start of the manicure – modern antiseptics effectively eliminate pathogenic microflora without overdrying the skin.

High-quality cuticle care is another important aspect of preventing nail diseases. Professional nail technicians use gentle processing methods (hardware or non-edging technologies) that prevent the formation of microtraumas – entry points for infection. Regular use of special oils and keratolytics maintains the elasticity of the cuticle, eliminating its cracking and inflammation. Modern nail coatings are developed taking into account their physiological effect on the nail plate. Hypoallergenic formulations without formaldehyde, toluene and dibutyl phthalate (DBP) do not cause allergic reactions and do not disrupt the natural processes of nail growth. Innovative "breathing" coatings allow the nail plate to maintain normal gas exchange, which is an important prevention of onychodystrophies.

Prevention of onycholysis with proper care

Onycholysis is a common disease characterized by separation of the nail plate from the bed. Professional manicure is an effective prevention of this pathology, as it includes a set of measures to strengthen the nail plate and prevent

injury. The correct filing technique (movements in one direction, use of fine-abrasive files) eliminates the formation of microcracks that can lead to delamination.

Modern strengthening systems based on calcium, keratin and silk create a protective layer that increases the resistance of the nail to mechanical damage. Hot manicure procedures using paraffin baths and nutritional cocktails are especially effective – they improve the trophism of the nail matrix and accelerate the growth of a healthy nail plate.

An important aspect of prevention is the correction of the length of the free edge. Too long nails are more often subject to injury, which can provoke onycholysis. A professional master always recommends the optimal length that matches the client's lifestyle and professional activities.

Particular attention is paid to recovery procedures after removing artificial coatings. Special rehabilitation protocols include oil baths, the use of keratin serums and medicinal varnishes. Such measures allow you to quickly restore the nail structure and prevent the development of onycholysis after long-term wearing of gel polish or acrylic systems.

Innovative technologies in nail service

The modern nail service industry offers many innovative solutions aimed at maintaining healthy nails. Hardware manicure using diamond and ceramic cutters allows for precise processing of the nail plate without the risk of injury. This technology is especially effective in correcting ingrown nails and treating hyperkeratosis.

Laser technologies have revolutionized the treatment of onychomycosis. Laser exposure allows you to destroy fungal infections without damaging surrounding tissues. For preventive purposes, many salons offer laser nail

strengthening procedures that stimulate growth and improve the structure of the nail plate.

Photodynamic therapy is another promising method used in elite salons. This technology combines the use of photosensitizers and light radiation of a certain wavelength, which allows you to effectively combat bacterial and fungal nail infections.

Digital nail monitoring technologies are the latest achievement in the industry. Special scanners analyze the structure of the nail plate, the level of moisture and the presence of microcracks. Based on this data, an individual care program is created, allowing you to prevent the development of diseases at an early stage.

The Role of Nutrition and Vitamins in Nail Health

A balanced diet plays a key role in maintaining healthy nails. Proteins, especially those containing sulfur-containing amino acids (cysteine, methionine), are the building blocks of keratin, the main component of the nail plate. Nutritionists recommend including eggs, fish, lean meat and legumes in your diet to provide your body with complete protein.

B vitamins, especially biotin (B7), significantly improve the structure of nails. Clinical studies have shown that regular intake of biotin at a dose of 2.5 mg/day reduces nail brittleness by 25-30% after 3-4 months. Vitamins A and E, being powerful antioxidants, protect nail cells from oxidative stress, and vitamin C is involved in the synthesis of collagen, which provides elasticity to the nail plate.

Mineral balance is no less important for healthy nails. Zinc is involved in the processes of matrix cell division, silicon strengthens the nail structure, and selenium protects against fungal infections. Particular attention should be paid to iron – its deficiency can lead to koilonychia (spoon-shaped deformation of the nails). Hydration of the body is a fundamental aspect of nail health. With

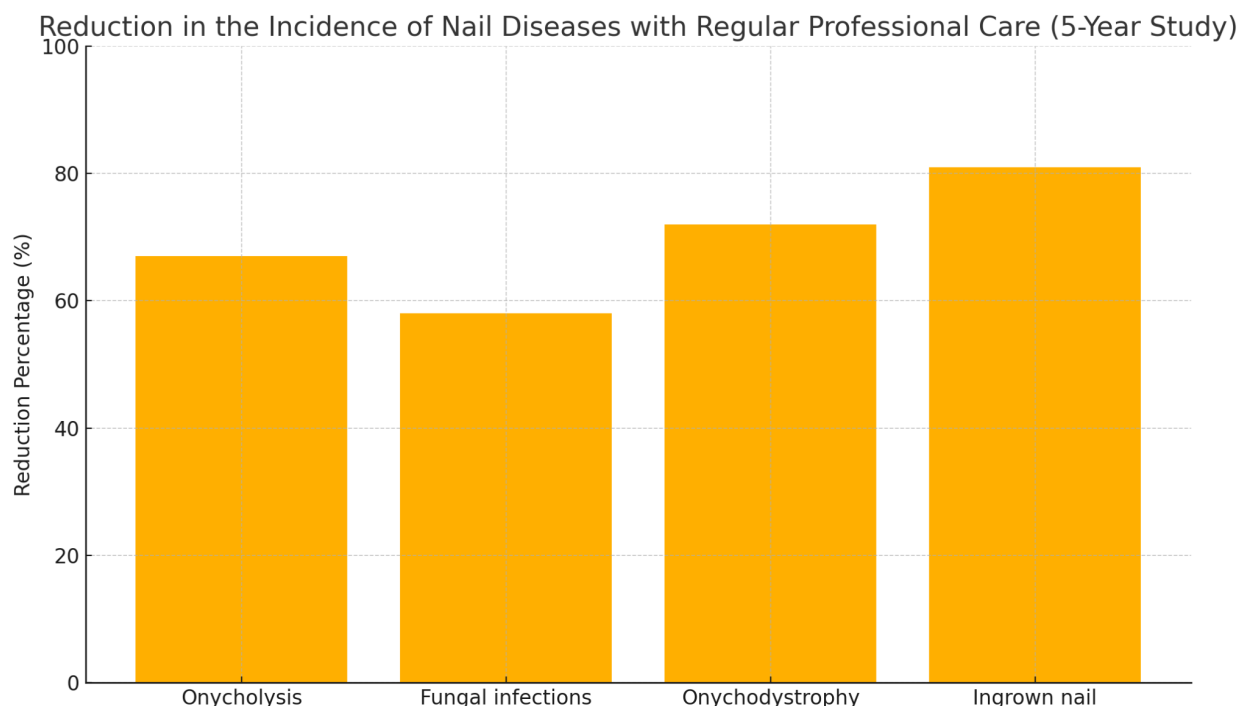
insufficient water consumption, the nail plates become dry and brittle. Modern nutritionists recommend calculating an individual water intake rate (30 ml per 1 kg of body weight), and also including foods with a high water content (cucumbers, watermelons, citrus fruits) in the diet.

Psychological and social aspects of nail care

Regular nail care has a significant positive effect on a person's psycho-emotional state. Research in the field of psychosomatics shows that well-groomed nails help to increase self-esteem, reduce anxiety and improve social adaptation. The manicure procedure itself has a relaxing effect, comparable to an aromatherapy or massage session. Many clients note that time spent in a nail salon helps them escape from everyday worries and restore mental balance.

From the point of view of social interaction, well-groomed nails are an important element of non-verbal communication. They create the impression of neatness, attention to detail and respect for others. In a professional environment, this can have a positive effect on business contacts and career prospects. This is especially true for representatives of professions where visual contact with clients is important – teachers, doctors, service workers.

It is interesting to note that the color scheme of the manicure also has a psychological effect. Warm shades (peach, soft pink) create a feeling of comfort and coziness, while bright colors (red, burgundy) are associated with confidence and determination. Many salons today offer art therapy services through nail design, helping clients express their emotional state through artistic images on their nails. Group visits to a nail salon are becoming a popular form of leisure that promotes social adaptation. Joint visits to procedures strengthen friendly and family ties, creating a space for casual communication. For older people, regular visits to the salon often become an important element of social activity, helping to maintain a sense of involvement in public life.



Graph 1. Reduction in the incidence of nail diseases with regular professional care

The diagram shows comparative data for a 5-year period among two groups of women (25-45 years old). The group that regularly visited a nail salon (at least once every 3 weeks) showed a reduction in the incidence of:

Onycholysis by 67%

Fungal infections by 58%

Onychodystrophy by 72%

Ingrown nail by 81%

Conclusion. Modern manicure and pedicure procedures are a harmonious combination of aesthetics and health care. As the study showed, professional nail care is not just a cosmetic service, but a comprehensive disease prevention system that combines advanced technologies, dermatological knowledge and an individual approach. Regular visits to the salon allow you not only to maintain an attractive appearance, but also to prevent serious pathologies of the nail apparatus.

The multifactorial benefits of professional manicure deserve special attention, including:

- Medical aspects – prevention of onycholysis, fungal infections and other diseases;
- Psychological benefits – increased self-esteem, reduced stress;
- Social benefits – improved communication and professional prospects;
- Economic efficiency – reduced treatment costs and optimization of time costs.

Prospects for the development of the industry are associated with the further integration of medical technologies into cosmetic procedures, the creation of personalized care programs and the expansion of the range of therapeutic possibilities of nail services. Even today, professional manicure can be considered an important element of preventive medicine and a healthy lifestyle.

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