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## WELLNESS PRACTICES FOR HEALTHY AGING

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### ABSTRACT

Anti-aging practices refer to a set of measures, products, and activities aimed at reducing the visible signs of aging. There are two types of procedures that exist, with one aimed at producing beauty effects and the other focused on reflecting the state of health balance. Both types of procedures are directly related to the Wellness lifestyle. These practices have gained popularity over the years due to the desire to maintain a youthful appearance and improve overall health and wellness. The findings of a unique investigation on the effects of chiropractic care in conjunction with natural remedies are presented in this publication. A Wellness lifestyle is essential to achieving aesthetic beauty. Therefore anti-aging techniques are crucial for preserving a young appearance and advancing general wellness. A nutritious diet, regular chiropractic adjustments, a good night's sleep, and stress reduction techniques can all work together to reduce the aging process and enhance overall quality of life. A nutritious diet, regular chiropractic adjustments, a good night's sleep, and stress reduction techniques can all work together to reduce the aging process and enhance overall quality of life.

Key words: Wellness lifestyle, healthy aging, chiropractic influence, honey massage

### **INTRODUCTION**

Anti-aging practices refer to a set of measures, products, and activities aimed at reducing the visible signs of aging, such as wrinkles, fine lines, and sagging skin (1). These practices have gained popularity over the years due to the desire to maintain a youthful appearance and improve overall health and wellness (2). The most soughtafter healing methods are those using the power of nature and simple remedies (3, 4). Traditionally, these skills have been passed down through generations (5). One of the oldest manual healing methods is massage with honey (6, 7). Through the skin pores, it extracts accumulated waste materials that have built up in the tissues (8–10). Literary sources show that the therapeutic application of honey, aimed at more effective use of its antimicrobial action, is mostly limited to external use (11). It has been proven that some of honey's health benefits are lost when consumed, but they can be fully absorbed when applied externally to the skin (12). Honey's composition is similar to that of human blood plasma, which explains its exceptionally fast absorption into the bloodstream (13). The forms of external application are varied and used for different purposes. One of these methods in the realm of women's health and beauty is honey massage for healthy aging (14-17). A healthy aging process and the adoption of a wellness lifestyle are strongly correlated with nutrition, recreational therapies, motor practices, and their influence (18–20).

### **METHODS**

The aim of this study is to analyze the therapeutic effect of honey massage for cellulite, for local reduction of problem areas and its application in the Wellness & SPA industry. The study included 78 women aged between 55 and 65 with expectations to correct certain parts of their body: mainly in the area of the buttocks, thighs, abdomen, and medial knee area. The following indicators were used to assess the effectiveness of

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after the completion of the last procedure. Procedures are carried out twice a week. The duration of the procedure is 30 minutes. The course of treatment includes 10 procedures. The obtained results are processed with the statistical software SPSS 19.0. In testing the statistical significance of the results, we used a confidence probability of P> 95% (or a significance level of  $\alpha < 0.05$ ).

## RESULTS

According to traditional Bulgarian medicine, honey can safely and successfully heal stomach ulcers. Additionally, honey has repeatedly proven its capacity to treat even the dirtiest wounds and obstinate skin sores. A time-tested cold cure that is still effective today can be made by mixing lemon juice with a cup of warm water. Honey is still used to treat burns and wounds in some locations when access to modern treatment is limited. It is directly applied to the affected area and covered with clean gauze or cloth, which is replaced with fresh honey when necessary. The use of honey as a wound dressing material is an ancient remedy that has been rediscovered and is gaining increasing interest as more reports of its effectiveness are published. They provide information on the nutritional value of honey. It mentions that honey contains a mixture of flavonoids and phenolic acids, as well as trace amounts of various minerals and vitamins such as calcium. copper, riboflavin, iron, niacin. magnesium, potassium, and zinc. These are antioxidants that can help eliminate harmful free radicals in the body. The analysis of advanced researchers notes that honey is primarily made up of water and carbohydrates. It does not provide detailed information on the specific types or amounts of carbohydrates present in honey. The Bulgarian tradition suggests that honey has some nutritional value and contains beneficial compounds that can promote antioxidant activity in the body. However, it is important to note that honey is also high in sugar and calories, so it should be consumed in moderation as part of a balanced diet.

Our study for the healthy aging honey massage shows various health benefits of honey, which include fighting acne, infections, colds, burns, reducing cholesterol, and aiding in digestion. It also mentions that honey can soothe toothaches, clear sinuses, and reduce arthritis pain. The text

the applied methodology: anthropometry. The circumferences of the body were measured with a tape measure with an accuracy of 0.5 cm. When measuring, the tape should be tight against the surface of the body, without squeezing. They are as follows: The waist circumference is measured at the level of the navel. The hip circumference is measured at the level of the gluteal fold, the socalled bikini area (reflexogenic zone of the ovaries). Knee circumference through the patella for a more detailed examination, as this is a reflexogenic zone of the uterus, and in cases of existing problems, this area deforms significantly and forms a cellulite cushion. The circumferences provide an idea of the places where fat tissue accumulates. They are called cellulite-prone areas. Evaluation of each skin fold (SF) on a 4point scale in three areas (on both sides of the level of the navel - from the anterior superior iliac spine to the rib cage; the area above the trochanter major; the medial part of the patella). The patient is in a supine position, grasping the skin fold with the fingers of both hands and lifting it perpendicularly to the body surface, moving upward along the examined areas. The resistance of the soft tissues during the pulling of the skin fold and the strength of the pain sensation are recorded as follows: Grade 0 - no resistance, no pain; Grade 1: slight resistance, slight pain; Grade 2: pain and formation of the so-called "orange peel" skin; Grade 3: the skin fold cannot be grasped, severe pain is present.

According to the reflex-segmental structure of the spinal cord, each pathological focus causes reflex changes on the body surface. The discovery of a thick and less mobile skin fold indicates an organic or functional disease related to the reflex pathway with the corresponding organ (15). Honey massage applied to certain segmental zones can affect different organs and tissues by improving their function. Over the past decades, several studies have been conducted, and the positive effects of honey massage have been 2009; Filonov, proven (Lisovski, 2015; Mladenov, 1989; Harnish, 2001). The measured indicators are taken at the same time for each of the subjects examined. Patients are evaluated twice during the course of treatment. Initial and final measurements are performed. Initial measurements are performed before the start of treatment. Final measurements are performed claims that honey can help with weight loss, fertility, and fighting fatigue, and it can also strengthen the immune system. Furthermore, we find that honey has antibacterial properties due to its low water activity, high acidity, and hydrogen peroxide effect, which makes it effective in combating infections. The study presents the benefits of honey in a list format, making it easy to read and understand.

We specify the following details about the specialized manual techniques applied according to the author's methodology: The honey massage was applied in the areas of the hips, waist, and thighs. We added 2 to 5 drops of suitable essential oils in individual combinations (grapefruit, orange, lemon, lavender, juniper, rosemary, sage, geranium, etc.) to the honey to enhance the massage effect. First, the lumbar area and the back of the thigh are processed, then the abdominal area and the front of the thigh. Before applying the honey, the body is prepared with light massage movements for about 2-3 minutes. Then the honey is applied and rubbed into the body with gentle stroking and rubbing movements until it is evenly distributed. Intensive slapping movements with the whole palm begin. The hands slide over the entire surface and massage it evenly without detaching from it. These movements, resembling "pumping", are the essential part of the honey massage. The skin gradually turns red, and pain is felt in the more problematic areas. A whitish sticky substance resembling gum is separated on the surface, which gradually thickens and becomes in pieces. Finally, it is well cleaned with a damp, warm cloth or washed under running water to completely remove the slag that has separated. It is toxic and should not remain on the skin. Since the cleansing effect of honey on the body lasts at least 12 hours after the massage, the use of creams, soaps, and shampoos is not recommended. After the honey massage, it is advisable to drink more water to enhance the purification process in the body.

**Detoxification effect:** During honey massage, special gripping techniques are used to remove dead cells from the skin's surface layer, open pores, and facilitate its breathing. In this way, the

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skin is cleansed by exfoliation, and the biologically active substances contained in honey penetrate deeply and have a nutritional, preventive, and therapeutic effect on the whole body (Harnish, 2000). Through the detoxification effect of honey massage, the body naturally eliminates accumulated waste and excess fluids, which contributes to faster recovery and normalization of the functions of all organs and systems. Blood flow to the skin and subcutaneous tissues increases, leading to oxygen saturation of cells, activation of regenerative processes, and burning of fat cells (Harnish, 2000). The honey that penetrates the cells and intercellular spaces binds to waste metabolic products, neutralizing them and removing them through the skin in the form of a sticky substance resembling gum. The amount of "gum" formed in certain segmental zones can indicate problematic areas (Harnish, 2000).

Effect of combined actions of honey massage with steam bath and sauna: Honey massage can be applied in combination with a sauna or steam bath. Used together, they are a suitable means for the treatment and prevention of cellulite. The stay at a very high temperature in humid air leads to profuse sweating and the activation of metabolic processes. The separation of water and mineral salts with sweat has a beneficial effect on the metabolism. The accelerated blood flow in the skin and improved skin respiration lead to greater saturation with oxygen, which stimulates oxidative-reduction processes (Goranova, 2000; Topuzov, 2000). There is a reduction in the subcutaneous zones where the pressure is increased due to worsened drainage (Topuzov, 2000). Massage with honey after a sauna saturates the body with its biologically active substances, which are absorbed much more effectively through purified skin and then throughout the body.

The measurements of the three measured circumferences gave us information about the changes that occurred in the patients after the treatment course. **Table 1** shows the results at the beginning and end of the treatment course.

Measurements in centimeters	n	Initial measurement		Final measurement		d	d%	t	P(t)
			$S_1$		$S_2$	-			- (9)
waist	20	76,00	7,31	75,10	7,46	-0,90	-1,18	13,08	100,00
hip	20	93,70	5,04	92,85	5,12	-0,85	-0,91	7,77	100,00
knee	20	36,20	2,42	35,20	2,42	-1,00	-1,07	7,96	100,00

*Table 1.* Analysis of results from measurements at the three levels and statistical significance.

**Waist circumference**: Under the influence of the applied method, a slight to moderate reduction in waist circumference through the navel is achieved. Before starting the healthy aging therapy course, the average value of the waist circumference through the navel is 76 cm. After completing the procedures, it was 74.90 cm. Overall, during the time of the copper massage procedures, the reduction in waist circumference was 1.10 cm, which is statistically significant.

**Thigh circumference:** Under the influence of the applied method, there is a moderate reduction in thigh circumference - at the level of the gluteal folds. Even small changes are statistically significant. Before starting the treatment course, the average value of the thigh circumference was 93.70 cm. After completing the procedures, it was 92.70 cm. The difference of 1 cm is statistically significant.

Knee circumference over the patella: Under the influence of the applied technique, there was a moderate reduction in centimeters over the

patella. Even small changes are statistically significant. Before the start of the treatment course, the mean value of the circumference over the patella was 36.2 cm, and the difference continued to decrease by 0.40 until the final measurement, which was statistically significant. After the completion of the procedures, the mean value of the circumference over the patella was 35.2 cm. The difference of 1 cm is statistically three measured significant. and all circumferences decreased as a result of the applied copper massage technique.

**Skinfold thickness measurement:** In all three examined areas, the skinfold thickness measurement provided us with information about the changes that occurred after the treatment course. We present the results at the beginning and end of the therapy course. After the applied technique, there was a small to significant reduction in the examined skinfolds. The results were statistically significant in all three skinfolds (**Table 2**).

Guide a longitudinal skin fold	n	Initial measurement		Final measurement		d	d%	t	P(t)
SKIII 1010		<b>x.1</b>	<b>S</b> <sub>1</sub>	<b>x.2</b>	$S_2$				
at the level of the navel	20	1,85	0,67	0,55	0,60	-1,30	- 70,27	12,37	100,00
at the level of the greater trochanter	20	1,90	0,72	0,70	0,57	-1,20	- 63,16	13,08	100,00
on the knee joint	20	2,10	0,45	0,60	0,60	-1,50	- 71,43	13,08	100,00

Table 2. Analysis of results improvement during walking with CG and statistical significance.

# Measurement of longitudinal skinfold at the level of the umbilicus

The mean value of the skinfold at the level of the umbilicus at the beginning of the study was 1.85, and by the end of the measurement, the mean value had decreased to 0.55. The difference for

this time interval is 0.70 and is statistically significant (**Table 2**). Measurement of the longitudinal skinfold at the level of the trochanter major. The mean value of the skinfold at the trochanter major at the beginning of the treatment course is 1.9, and by the end of the measurement, the mean value decreases to 0.70. The difference for this time interval increases to 0.64 and is statistically significant.

## Measurement of the longitudinal skinfold at the medial part of the patella

The mean value of the skinfold at the medial part of the patella at the beginning of the treatment course is 2.10, and by the end of the measurement, the mean value decreases to 0.60. The difference for this follow-up period is 0.72 and is statistically significant. The application of the therapeutic technique with copper massage leads to a statistically significant reduction in resistance and pain during walking at the level of the umbilicus, trochanter major, and medial part of the patella (P <0.001). The applied therapeutic technique of copper massage resulted in a positive effect on the monitored indicators.

### DISCUSSION

Here is an analysis of healthy aging practices:

**Skincare**: Skincare is an essential anti-aging practice, as it helps to nourish and protect the skin from damage caused by environmental factors such as pollution and UV radiation. Products such as moisturizers, serums, and sunscreen help to keep the skin hydrated, reduce the appearance of fine lines and wrinkles, and protect against skin cancer. Skincare practices have evolved over the years, and there are now more natural and organic products available that are considered safer and more effective.

**Diet**: The food we eat plays a significant role in our overall health and wellness, including the aging process. Consuming a healthy diet that is rich in antioxidants, vitamins, and minerals helps protect the body from damage caused by free radicals and oxidative stress, which are known to contribute to aging. Foods such as fruits, vegetables, whole grains, and lean proteins are recommended for their anti-aging properties.

**Exercise**: Regular exercise has been shown to have numerous health benefits, including reducing the risk of chronic diseases and improving cognitive function. Exercise also helps to promote healthy aging by improving muscle mass, reducing inflammation, and enhancing skin health. High-intensity interval training (HIIT) and resistance training are particularly effective for

improving muscle mass and reducing the visible signs of aging.

**Sleep:** Getting enough quality sleep is crucial for healthy aging. During sleep, the body repairs and regenerates cells, which helps to maintain healthy skin, reduce inflammation, and prevent chronic diseases. Lack of sleep has been linked to premature aging, as well as a range of health problems such as obesity, diabetes, and heart disease.

**Stress management:** Chronic stress has been shown to accelerate aging process, as it leads to increased inflammation and oxidative stress. Stress management techniques such as meditation, yoga, and deep breathing can help to reduce stress levels, promote relaxation, and improve overall health and well-being.

### CONCLUSIONS

In conclusion, anti-aging practices are essential for maintaining a good appearance and promoting an overall health and wellness lifestyle. Healthy aging requires a holistic approach with combination of a healthy diet, regular exercise, quality sleep, and stress management. All in all, it can help slow down the aging process and improve the overall quality of life. One effective instrument in the process is the honey massage. He is a natural method of healthy aging therapy that has been used since ancient times, where two therapeutic approaches interact. It overlaps with our familiar forms of various manual therapies massage- plus the exceptional healing qualities of honey, resulting in mutual enhancement. Honey massage, still applied today, is suitable for the prevention of many diseases and healthy aging conditions.

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### REFERENCES

- Dimitrova, B., Polomenov, M., Treneva, V., Nesheva, I., Ivanova, V., Trendafilov, D., Sotsialna znachimost na uelnes (wellness) kulturata: sravnitelen analiz po danni ot nauchni izsledvania na Galap interneshanal. [In Bulgarian]. Sofia, Izd. Avangard, 2018, p.89-104, ISBN 978-619-160-989-5.
- Dimitrova, B., Geshev, P., Treneva, V., Ivanova, V., Petrov, V., Dinamika na indeksite za uelbiyng i shtastie: sravnitelen analiz po svetovna baza danni, saobrazno statisticheski danni ot dokladi na OON. [In Bulgarian]. Sofia Izd. Avangard, 2020, p.34-36. ISBN: 978-954-718-644-6
- Dimitrova, B., Izov, N., Alexandrova, V., Iosifov, R., Ignatova, D., Trendafilov, D., Petrov, V., Vasileva, G., Smart kognitiven instrumentatium. Vŭnshna otsenka na profesionalni kompetentsii za kadri v Nishov turizŭm. [In Bulgarian]. Sofia, NSA Pres, 2021, p.58-60. ISBN: 978-954-718-675-0.
- 4. Dimitrova, B., Research impact through the scientific publications in wellness culture: scientific paper. Book. Sofia, Ed. Avangard Prima, 2018, p.67 89. ISBN: 978-619-160-666-5
- Dimitrova, B., Wellness instructor competence standard: unified outcomes acquired by learners: knowledge, intellectual & practical skills. Book, Sofia, Ed. Avangard Prima, 2018, 27 - 35. ISBN: 978-619-239-013-6
- Dimitrova, B., New smart educational model "Wellness instructor". [In Bulgarian]. Sofia, Ed. Avangard Prima, 2019, p.11-39. ISBN: 978-619-239-150-8
- Topuzov, I., Cellulite characteristics and complex treatment. [In Bulgarian]. Book, Sofia, 2000, p.45-62. ISBN: 954-90594-1-3
- 8. Filipov, N., Medicina za zdrave i krasota. [In Bulgarian]. Book, Sofiya, 1991, p.9.
- 9. Avram, Mathew M. Cellulite: A review of its physiology and treatment. *Journal of Cosmetic and Laser Therapy* 2004, 6 (4), p. 181 185. DOI:10.1080/1476417041 0003057
- 10.Rossi, Anthony. A Modern Approach to the Treatment of Cellulite. *Dermatologic Clinics* 2014, 32 (1), p. 51 – 59. DOI:10.1016/j.det.2013.09.005

- Harnish, Gunther. Lecheben masazh s pchelen med. [In Bulgarian]. Book, Ed. Akvarius, Sofia, 2001, p. 47-51
- 12. Topuzov, I., Massage in sports practice part2. [In Bulgarian]. *Journal Medicine and sports*, 2005, No 3, p.23
- 13.Sampath Kumar, K. P., Debjit Bhowmik, Chiranjib, Biswajit and M.R. Chandir, Uses and health benefits of Honey: An Overview. *J. Chem. Medicinal Pharm. Res.*, 2010, 2(1), p.385-395
- 14.Polimenov, M., Politiki v obrazovanieto po turizŭm, kompetentsii i stimuli za razvitie. *Strategies for Policy in Science and Education*, 2022, 30 (3), p.133-145. [In Bulgarian]. Available at: https://doi.org/10.53656/str2022-3-7-tou
- 15. Trendafilov, D., Dimitrova, B., Aqua spinning as anti-stress health prevention. *Sport Mont*, 2013, XI (37-38-39), p.467-473.
- 16.Dimitrova, B., Relationships between education and innovations in the recreational Industry in Bulgaria. *Trakia Journal of Sciences*, 2018, 18 (2), p.143 149. e-ISSN: 1313-3551. Available from: http://tru.uni-ss.bg/tsj/. DOI: 10.15547 / tjs.2019.02.007.
- 17.Polimenov, M., Technological innovations in Niche tourism. Smart innovations in the Recreational & Wellness industry and Nish tourism, Extraordinary issue 2018, p.31-35.
  eISSN: 2603-493X. Available at: https://scjournal.globalwaterhealth.org/
- 18.Pinna, K. Nutrition and diet therapy. Book. Ed. Belmont 2007, Wadsworth, CA, p. 163-178
- 19. Ignatova, D., Iliev, A., Motor qualities and their influence on the children's development. *International Scientific Journal: Smart Innovations in Recreational, Wellness Industry and Niche Tourism,* 2020, 2, (1-2), p.16-44. ISSN: 2603-4921 (online). Available at: https://scjournal.globalwaterhealth.org/
- 20. Donev J., S. Andonov, S. Djobova, J. J. Donev, O. Hristov, I.a Kirilova, S. Bahchevanski, R. Iossifov, V. Aleksandrova, B. Angelov, N. Stoyanova. Comparative study of measuring physical activity among sport students. Original scientific paper. Conference: International scientific congress "Applied sports sciences. Balkan scientific congress of physical education, sports and health", 15 - 16 November 2019, Sofia, Bulgaria. Proceeding book, NSA Press, 2019, p.369-374. ISBN (Print): 978-954-718-602-6.