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A Review on Concept of Anti-Ageing and Its Mechanism

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ABSTRACT

Anti-ageing products, also known as "cosmeceuticals," are among the most costly and contentious cosmetics available. Anti-aging is the theory that medical or quasi-medical principles can interfere in the aging process to delay, interrupt, or even reverse it. Anti-aging creams are cosmeceutical skincare products that are mostly moisturizer-based and aim to make the user appear younger by masking or preventing signs of skin aging. The aims of biomedical anti-aging differ, but they all have one thing in common: painless functionality and long-lasting results. A few signs of aging include wrinkled skin, greying hair, and macular degeneration. Although these changes cannot be avoided, they can be delayed with the use of antibiotics, natural kitchen products, or Ayurvedic herbs. Dermatologists generally believe that healthy skincare practices are a safer and more efficient alternative to anti-Ageing creams. Oxidative stress, glycation, telomere shortening, side reactions, mutations, protein aggregation, and other factors all contribute to aging. If you miss your younger self's radiant glow, a chemical peel might be right for you.

INTRODUCTION:

To counter traditional images of deterioration and decrepitude, anti-aging has emerged as a common movement. Ageing activity, mobility, and lifestyle choice. Recent anti-aging movement critics have interpreted the biomedical sector involved with the movement as reflecting a critical change from biomedicine as a profession concerned with healing bodies to biomedicine as a profession concerned with improving bodies. [1] Antioxidants and cell regulators are the two major classes of agents that can be used as anti-aging cream ingredients. Vitamins, polyphenols, and flavonoids are antioxidants that inhibit collagen degradation by lowering the concentration of FR in the tissues. Retinols, peptides, and growth factors (GF) are cell regulators that have direct effects on collagen metabolism and affect collagen output. [2]

AGEING

Aging is characterized as a decline or loss (a "de-tuning") of adaptation as one grows older, induced by a time-progressive decline of Hamilton's natural selection powers. "An organism's age-specific fitness components continue to deteriorate due to internal physiological degeneration." Aging is a series of processes that gradually shorten the period until an individual's physical or mental capacity is permanently lost. [3,4] "Ageing is the gradual accumulation of changes over time that are correlated with or responsible for the ever-increasing vulnerability to disease and death that follows advancing age," according to Harman, and "the amount of the deleterious free radical reactions going on continuously in the cells and tissues constitutes the aging process or is a major contributor to it." Consider aging to be "what happens to our bodies over time." [5] This term includes all aspects of human aging, as opposed to symptoms of aging that appear later in life, such as grey hair and wrinkles. Cellular aging is the result of genetic abnormalities causing a progressive decline in cellular function and viability. Exogenous factors cause an accumulation of cellular and molecular damage.

The body is responsible for some of the ageing process. Consider the children's development and the onset of puberty in adolescents. Other forms of aging, such as skin damage caused by sun exposure, develop over time. As a consequence, aging is a result of both physical changes and the effects of how we care for ourselves. The term "old age" refers to the idea of the human lifespan. It has repercussions after reproductive age. The average lifespan is approaching 80 years. Humans have a maximum lifespan of about 110 years. We age as a

result of the aging of our body's cells. Many chronic diseases are linked to aging. [5, 6] In other words, aging is the product of the passage of time on the human body, and it happens on many levels:

- **Cellular aging:** The number of times a cell replicates determines its age. Owing to shortened telomeres, a cell can only replicate about 50 times until the genetic material can no longer be replicated accurately. The further free radicals and other factors kill cells, the more cells are needed to replicate.
- **Hormonal aging:** Hormonal aging is a term used to describe the process of the body's hormones play an important role in aging, especially during childhood development and adolescent maturation. Hormone levels change over one's life. Acne and larger pores accompany puberty. Hormonal changes cause dry skin and menopause as we get older.
- **Accumulated damage:** Much of the damage has accumulated on the outside. Toxins, the sun, unhealthy foods, pollution, and smoking all have negative effects on the body. External factors can cause tissue damage over time, causing the body's ability to sustain and rebuild cells, tissues, and organs to deteriorate.
- **Metabolic aging:** Metabolic aging is a term that refers to the process of the body's cells are actively converting food into energy as you go about your day, which creates by-products that can be harmful. Over time, the process of metabolizing and generating energy causes damage to the body. Some researchers suggest that slowing down the metabolic process by activities like calorie restriction can help humans age more slowly. [9]

CAUSES OF AGEING

Aging is the result of several factors causing damage to an organism's molecules, cells, organs, and other structures and functions. In other words, we view and characterize aging as the progressive damage to these mechanisms and functions. This damage results in the emergence of pathological disorders and, as a result, death.

1. **Collagen breakdown:** Collagen makes up 75% of the dry weight of the skin. The colour of the skin is influenced by both quantity and consistency. Slowing the decomposition and degradation of collagen fibers is vital to skin youth.
2. **Photo defense:** Premature skin aging, skin damage, and skin cancer are almost all caused by repeated exposure to ultraviolet light (UV radiation) from the sun. The sun is carcinogenic

and skin-dam Ageing. Over the years, even a few minutes of sun exposure every day will cause visible changes in the skin. "Photoaging happens over years. Something very significant occurs as the amount of time spent in the sun increases. Like an ape, the skin never forgets. It loses the ability to fix itself with each insult, and the damage mounts. Repeated ultraviolet (UV) exposure breaks down collagen and impairs the synthesis of new collagen, according to scientific studies. Our elastic is also attacked by the light. Sun-damaged skin stops regenerating much faster than skin that has been covered from UV rays. Unprotected sun exposure causes the skin to become loose, wrinkled, and leathery much faster." Wrinkles can multiply and grow in size as a result of this process.

3. **Oxidation:** Free radicals are highly reactive small molecules that can destroy almost every molecule in the body, including the essential cellular structures found in the body's largest organ – the skin. This type of free radical damage results in the production of even more free radicals, which cause havoc on the skin's hypodermis, dermis, and epidermis layers. Internal antioxidants are present in our bodies, but they are insufficient to protect our skin from irreversible harm.

4. **Inflammation:** The skin's first line of defense against invaders such as bacteria and viruses is inflammation. Inflammation also aids tissue regeneration and protects skin cells from the harmful effects of everyday chemicals and contaminants. Excessive (chronic) inflammation is one of the most common themes in early-onset skin aging, and although it is beneficial in the short term, it is one of the most common themes in early-onset skin aging. Skin sensitivity, redness, and discomfort are all subtle symptoms.

5. **Gyration:** Sugar, unfortunately, accelerates the aging process. Gyration is a process that causes skin proteins (such as collagen and elastin) to lose their ability to function normally, and it is now widely recognized as a factor in skin aging. Excess glucose molecules in the body bind to collagen and elastic fibers in the skin, causing glycation. Chemical bridges may be formed between proteins as a result of this cross-linking. Glycated fibers may become hard, less elastic, and less regenerative, resulting in damage such as skin laxity, cracking, and thinning. [8]

THE DIFFERENT TYPES OF SKIN AGEING

Formulating successful anti-Ageing products necessitates a comprehensive understanding of customer cognitive and emotional needs, formulation chemistry, and, most importantly, skin

ageing biology. The marker for facial ageing is perceived age. The texture and colour of the skin, as well as the form of the face, are all affected by aging. Complex muscular networks monitor facial skin movement, allowing for functions such as feeding, breathing, vision, and voice, as well as social behaviors that convey emotions such as facial expressions. These gestures are also responsible for some of the signs of facial ageing.

Intrinsic aging: Intrinsic skin aging is a gradual process characterized by clinical characteristics such as smooth, thin, dry, and less elastic skin with fine wrinkles that do not appear until an older age. Epidermal and dermal atrophy, a decreased number of fibroblasts, fewer collagens, and more matrix metalloproteinase are all signs of intrinsically aged skin (MMPs). Its structurally altered dermal-epidermal junction (DEJ) can play a role in skin fragility and nutrient transfer between the dermal and epidermal layers.

Extrinsic aging: Extrinsic aging causes deep and coarse wrinkles, mottled hyperpigmentation, and decreased skin elasticity due to prolonged exposure to solar ultraviolet irradiation (photo-aging) and smoking. The accumulation of lifelong sun exposure on the face is responsible for 80% of the symptoms of facial skin aging, such as premature aging and skin cancer. Although photo Ageing causes atrophy and abnormal keratinocyte maturation in the epidermis, dermal changes include the accumulation of elastic material (solar elastosis) and the loss of elastic fiber integrity. These changes cause skin elasticity to deteriorate, resulting in wrinkles.

smoking hastens the aging process by degrading elastic fibers and inducing a substantial rise in facial wrinkles. And opposed to non-smokers, smokers' wrinkles are deeper and narrower. This wrinkle pattern is known as "smoker's face," and it is often followed by gaunt features and atrophic, dull, irregular skin color. Pursing the lips and squinting when inhaling smoke can also result in distinctly contoured crow's feet and pronounced peri-oral lines.

Hormonal and catabolic aging: The skin is a hormone-dependent organ, and as hormonal secretions decrease during menopause, skin aging accelerates. With a decrease in skin quality, menopause tends to be a turning point in life. 6 Estrogen, in particular, has a significant impact on the skin, promoting the development of extracellular matrix and preventing the loss of collagen, skin thickness, hydration, and epidermal barrier function. 7 The major symptom of postmenopausal aging is increased sagging, rather than coarse wrinkles. 8 Catabolic aging exacerbates the effects of a particular chronic condition, such as diabetes, hypothyroidism, cancer, or infection, on older skin. [9]

METHODS FOR REDUCING PREMATURE SKIN AGEING

Our skin ages due to a variety of factors. Some things we have no control over, while others we can affect. The normal ageing mechanism is one thing we can't alter. It is very necessary. We all develop visible lines on our faces over time. Our faces naturally lose some of their youthful fullness as we age. Our skin seems to be getting thinner and drier. When these changes occur is primarily determined by our genes. Intrinsic aging is the medical term for this form of aging.

Another form of aging that affects our skin can be influenced. Our lifestyle choices and the world we live in will cause our skin to age prematurely. Extrinsic aging is the medical term for this form of aging. We can slow the effects of this type of aging on our skin by taking some preventive measures.

There are 11 ways to slow down the aging process of your skin.

Our skin ages prematurely as a result of exposure to the sun. Other things we do will cause our skin to age faster than it will naturally. Dermatologists offer their patients the following advice to help them avoid premature skin aging.

1. Use sunscreen every day to protect the skin from the sun. Sun protection is important when you're at the beach or running errands. Find shade, cover up with clothes, and use a broad-spectrum, SPF 30 (or higher), and water-resistant sunscreen to protect your skin. Every day, apply sunscreen to all exposed skin that is not protected by clothing.
2. Instead of getting a tan, use a self-tanner. Your skin ages prematurely every time you get a tan. This is valid when you tan outside, in a tanning bed, or with other indoor tanning equipment. Both emit harmful UV rays that hasten the aging of your skin.
3. If you smoke, give it up. Smoking accelerates the rate at which skin ages. It induces wrinkles and a sallow, dull appearance.
4. Avoid making the same facial gestures over and over. When you make a facial expression, the muscles under your skin contract. These lines become permanent if you contract the same muscles continuously for a long period. Squinting lines can be reduced by wearing sunglasses.

5. Eat a well-balanced, organic diet. According to the findings of a few studies, eating a lot of fresh fruits and vegetables will help prevent damage that causes premature skin aging. According to a study, a diet high in sugar or other processed carbohydrates will hasten the aging process.

6.Reduce the amount of alcohol you consume. The skin is irritated by alcohol. It dehydrates the skin and hurts it over time. This can make us appear to be older.

7.Exercise every week. According to the findings of a few studies, moderate exercise will improve circulation and strengthen the immune system. As a result, the skin can tend to be more youthful.

8. Gently cleanse the skin. Scrubbing your skin clean can irritate. Irritating the skin accelerates the aging process. Gentle washing removes pollen, makeup, and other impurities from the skin without irritating.

9. Wash your face twice a day, particularly if you've been sweating profusely. Perspiration irritates the skin, particularly when wearing a hat or helmet, so you should wash your skin as soon as possible after sweating.

10. Use a facial moisturizer regularly. Moisturizer holds water in our skin, making it look more youthful.

11. Stop using stinging or burning skincare items. It means the skin is irritated when it burns or stings. It can make your skin look older if you irritate it. [10]

AGE-RELATED MECHANISMS

Aging is a complex biological phenomenon characterized by functional degradation of tissues and organs, systemic degeneration, and decreased adaptability and resistance. It can be divided into pathological and physiological aging.

- 1) Damage to DNA
- 2) Senescence of cells
- 3) Defective protein homeostasis
- 4) Deregulated nutrient sensing

Cellular senescence: After a fixed number of cell divisions, cells leave the cell cycle and become arrested in a terminally non-dividing state.

1)Telomere attrition

2)Activation of tumor suppressor genes.

Telomeres: Telomeres are short DNA sequences that repeat themselves. Both ends of linear chromosomes contain this gene.

Functions include:

Ensures that the chromosome ends are replicated fully.

Prevents chromosome ends from degrading and fusing.

Telomerase: Telomerase is an RNA and protein-based complex.

Maintains telomere period.

Nucleotides are added to the ends of the chromosome.

Germ cells have it, stem cells have it at a low degree, and somatic cells don't have it.

Telomerase activity can be reactivated by cancer cells, allowing them to proliferate indefinitely.

Activating tumor suppressor genes

CDKN2A locus

P16 or INK4a is a protein that is encoded by this gene.

P16 regulates a portion of the cell cycle (regulates progression from G1 to S phase of the cell cycle)

Defective protein homeostasis

Normal protein homeostasis is maintained by:

Chaperons keep proteins folded properly and maintain normal protein homeostasis.

Misfolded protein degradation:

- autophagy-lysosome system
- ubiquitin-proteasome system

Deregulated nutrient sensing

Eating less extends one's existence.

The caloric restriction will help you live longer

Role of sirtuins in nutrient sensing

Role of insulin-like growth factor 1 pathway

Many types of cells produce insulin-like growth factor 1 as a result of growth hormone secretion from the pituitary gland.

IGF1 imitates insulin's intracellular signaling.

Acts on a variety of downstream targets, including AKT, mTOR (mammalian target of Rapamycin), and others.

Role of sirtuins in nutrient sensing

NDA –dependent protein deacetylases.

Increases longevity of cells.

Caloric restriction increases longevity by Decreasing signaling intensity if IGF1 pathway

Increasing sirtuins (activates DNA repair enzymes, adapts the cell to caloric restriction)

Treatment of Ageing in aspects of herbal [11-14]

ASPECTS OF HERBAL TREATMENT FOR AGEING

Anti-aging Herbs

Aging is an unavoidable process that entails physical, psychological, mental, and social changes in a person. Ayurveda is regarded as the science of living following nature's laws. It is a kind of natural health and healing wisdom that dates back thousands of years. The three doshas of a human - vata dosha, Kapha dosha, and pitta dosha - are treated in Ayurvedic medicine. It assumes that keeping a perfect balance between these three things is the key to remaining youthful and healthy.

Aging is the process of cells degenerating as you get older. Ayurveda recommends herbs that can assist with aging symptoms by regenerating body cells. The majority of herbs contain antioxidants that prevent the body from producing cell-dam Ageing free radicals. Ram N Kumar, an Ayurveda expert from NirogStreet, says "Ayurveda's Rasayana (rejuvenation) branch explicitly addresses aging and its consequences. Rasayana significantly slows down the speed and effect of aging, as it is a degenerative and palliative period and operation. People over the age of 35 are recommended to undergo Rasayana care."

Here are some of Ram N Kumar's recommended herbs to use in your diet to slow down the aging process.

1) Guduchi

Guduchi, or Giloy, is known for its anti-inflammatory properties, which help to rejuvenate our skin tissues and relieve inflamed skin conditions. Guduchi is known for fostering mental clarity and improving our immune system.

2) Guggulu

Guggulu is a powerful and potent herb derived from the Mukul Myrrh flowering tree. Its anti-inflammatory properties aid in the treatment of a variety of diseases and help to prevent the formation of free radicals in the body.

3) Brahmi

Brahmi, also known as Bacopa, is a memory enhancer that is particularly beneficial to those suffering from age-related memory loss. It is thought to have brain-refreshing properties.

4) Amalaki

Amalaki, also known as Amla, is high in Vitamin C and antioxidants, which help the body combat disease. It also protects against age-related macular degeneration and cataracts.

5) Turmeric

Turmeric's curcumin compound has been shown to have potent anti-aging properties. It contains anti-inflammatory and antioxidant properties that help to hold diseases at bay.

6) Ginseng

Ginseng is high in phytochemicals, which help to stimulate and activate the metabolism of the skin. These phytochemicals also aid in the removal of free radicals that build up on your skin as a result of pollution and sunlight exposure.

7) Gotu-kola

Gotu kola is high in flavonoids, which have antioxidant properties and protect the skin and body, making it an effective anti-aging plant.

8) Ashwagandha

Ashwagandha promotes rapid cell regeneration and rejuvenation, which helps to delay the onset of signs of aging, especially in the skin.

9) Fructus lycii

Traditional Chinese herbal medicine recognizes Fructus lycii, the dried fruit of *Lycium barbarum* L., a member of the Solanaceae family. F. lycii is known in Chinese as Gouqizi, with zi referring to "bean" or "berry." The common English name for the plant is "Wolfberry," while the name "Goji berry" is commonly used in the health food industry for the plant's berries. For approximately 2,000 years, F. lycii has been used in traditional Chinese medicine. F. lycii, on the other hand, is often related in Chinese folklore to Shennong, China's legendary First Emperor, mythical father of agriculture, and herbalist who lived about 2,800 BC. Wolfberries were praised in ancient Chinese medical texts for improving the eyes, liver, and kidneys, as well as the "Qi" or life force. Spirit Farmer's Herbal described F. lycii's benefits as ranging from essential essence replenishment to strengthening and restoring major organs. The Spirit Farmer's Herbal represented it as a superior herb. [15]

Medicinal chemistry: F. lycii bioactive components Polysaccharides

The key bioactive ingredient in F. lycii might be polysaccharides called *Lycium barbarum* polysaccharides (LBPs) or *Lycium barbarum* Glycopeptide, according to findings from several research groups (LbGp). Five glycoconjugates (LbGp1 to LbGp5) were obtained by separating and purifying F. lycii, and their physical and chemical properties, such as

molecular weight, saccharine content, monosaccharide composition, amino acid composition, and element analysis, were investigated.

F. lycii includes a broad variety of antioxidant carotenoids, including β -carotene, zeaxanthin, and lutein. *F. lycii* is a Chinese herb that may help with aging and age-related diseases. Polysaccharides, carotenoids, and flavonoids are the key ingredients responsible for their potent effect. Polysaccharides, carotenoids, and flavonoids found in *F. lycii* may scavenge free radicals that accumulate with age and ameliorate the harmful effects of oxidative damage on tissues. Second, polysaccharides in *F. lycii* are a powerful immunostimulatory that can boost both cellular and humoral immunity, which declines with age, implying that LBP can be used as an adjuvant in the biotherapy of cancer. Third, because of its neuroprotective properties, *F. lycii* may be used as a new treatment for aging-related neurodegenerative diseases including Alzheimer's disease and glaucoma-related RGC loss.

Chemical treatment of aging chemical peels, dermabrasion

For moderate to serious facial sun damage, ultrasound energy devices or laser resurfacing may be a choice. Botulinum toxin or fillers, such as hyaluronic acid injections, your fat, and Gore-Tex implants, can be used to treat deeper facial lines. Treatments containing retinoids, vitamin C, and alpha-hydroxy acids may be sufficient for early signs of aging. For mild to serious facial sun damage, chemical peels, dermabrasion, ultrasound energy devices, or laser resurfacing may be a choice. Botulinum toxin or fillers, such as hyaluronic acid injections, your fat, and Gore-Tex implants, can be used to treat deeper facial lines.

Some people choose cosmetic surgery such as a facelift, brow raise, or eyelid surgery. It's entirely up to you whether or not you do either of these kinds of stuff and how much you do. Schedule a meeting with a surgeon to explore your priorities, choices, prices, risks, and benefits if you're thinking about it. Lancer caviar lime acid peel is best for wrinkles since it contains a 10% concentration of glycolic acid, which not only exfoliates but also stimulates collagen production, the protein responsible for firm, youthful skin.

The best non-surgical facial treatments to look younger

You can't seem to get rid of the obvious signs of aging on your face? Nonsurgical cosmetic treatments that don't require surgery will help you regain your youthful glow. We at Innova Dermatology aspire to make you feel good not just on the inside, but also on the outside! We

have a range of therapies and packages to help you enhance your aging signs, skin tone, and overall appearance.

Here are a few choices to make you look as young on the outside as you feel on the inside.

Botox

Perhaps the best known non-invasive treatment to fight off aging, botox requires a small painless injection that relaxes the muscle tension that creates wrinkles. It's a fairly straightforward process and will have you looking younger in as little as a couple of days. Although the impact does fade with time, you'll only need to visit two or three times a year to maintain the look. A little botox will go a long way to keeping your face and neck appear smoother, healthier, and wrinkle-free.

Botox can take anywhere from 2 to 14 days to fully grow and can last up to 6 months. Following surgery, patients are free to resume all daily activities. Swelling, bruising, bleeding, and scratching at the injection site are all common side effects of injectable drugs. Most side effects resolve themselves naturally within 24 hours.

Juvederm and other cosmetic fillers



Drooping, sagging, and wrinkles are caused by substantial volume loss in the face as we age. Facial fillers will help replace this amount, giving you a more youthful and refreshed appearance while still reducing wrinkles and lines on your face. Fillers are inserted into key areas to add bulk, which fills in sags and smoothes wrinkles. This is great for perking up your cheeks and plumping up your lips.

A Juvederm injection usually takes less than an hour, has minimal side effects, and provides immediate and long-lasting results—up to two years in some cases. Consider what you could do if you had an additional two years of youth. Other cosmetic fillers, in addition to Juvederm, are formulated to create collagen around your eyes and lips, reducing eye bags and giving your smile a fuller, plumper appearance.

Chemical peels

A chemical peel is a treatment that improves and smoothes the skin's texture. The peel gently exfoliates the top layer of the skin, revealing entirely fresh, untouched skin underneath. Even-toned, smooth, tightened and refreshed skin is the result. Peels are commonly applied to the

face, but they may also be applied to the neck, chest, and hands. Acne scars, irregular pigmentation, rough skin, wrinkles, fine lines, and sunspots/damage may all be treated with chemical peels.

Although patients will return to normal activities immediately after treatment, the skin is sensitive and should be makeup-free and shielded from the sun for at least 2-4 days. After 48 hours, the majority of patients undergo peeling, which lasts 2-5 days.

You don't have to succumb to the passage of time. You don't have to be young to have youthful looks. Allow your appearance to show your joy and charm if you have an active, vibrant soul. [16]

NATURAL REMEDIES FOR WRINKLES

Aloe vera

Aloe vera has a wide range of medicinal properties. According to a 2008 report, taking a daily gel aloe supplement for 90 days decreased the appearance of wrinkles substantially.

Scientists discovered that applying aloe gel to the skin minimized the development of wrinkles while also adding collagen and hydrating the skin in another study trusted Source.

Banana mask

Bananas are high in natural oils and vitamins, which can help to improve skin health.

Experts advise applying banana paste to the skin as follows: To make a smooth paste, mash a quarter of a banana. Put a thin layer of the banana paste on your skin and allow it to sit for 15 to 20 minutes before rinsing it off with warm water.

Superfoods

Superfoods are foods that are high in nutrients that are good for your wellbeing. Many superfoods have been shown to reduce wrinkles and improve overall health. Scientists Trusted Source studied the diets of older Dutch men and women and discovered that men who ate healthily had fewer wrinkles. In the same research, women who consumed more fruit had fewer wrinkles than those who ate more meat and junk foods.

Many superfoods, such as those in the following list, may help reduce the appearance of wrinkles: artichokes, Avocadoes, chia seeds, cinnamon, egg whites, ginger, miso, oatmeal, salmon, sardines, sweet potatoes, tomatoes, walnuts.

Egg whites

While egg whites can help to improve the appearance of the skin slightly, the thin membrane that separates the white from the shell is much more effective.

In one study Trusted Source, using a cream made with egg membrane led to a major reduction in wrinkle depth and increased development of collagen, which makes skin smoother and stretchy.

Eggs should not be used to treat wrinkles if you are allergic to them.

Essential oils

Wrinkles can be reduced by applying small quantities of essential oils combined with a carrier oil to them. Essential oils are often used in complex combinations to treat the skin without causing discomfort when diluted with a carrier oil.

When used in various combinations with a carrier, the following essential oils can help improve the appearance of wrinkles: argan, carrot seed, clary sage, Frankincense, Geranium, grapeseed, Helichrysum, jojoba, lavender, Neroli, Pomegranate, Rose, rosemary, sandalwood, ylang-ylang.

Essential oils, which are highly concentrated, can cause sensitivity in some people. Perform a patch test before using an essential oil:

Wait 24 hours after applying a small amount to the inside of your wrist. If you feel redness, burning, or stinging, don't use it.

When applying essential oils, always use a carrier oil.

Massage

Many people use massage to avoid wrinkles and reduce their appearance. The use of a handheld facial massage system has been found to help prevent wrinkles by growing proteins that keep the skin smooth.

According to experts, a regular facial massage with your fingertips for three to five minutes may have the same effects on the skin. It can also help to relieve tension, which can cause wrinkles.

Facial massage services are available at several spas and massage salons. Apply strong pressure to either side of your face with your fingers and move them in circular strokes to give yourself a facial massage at home.

Olive oil

Olive oil consumption can prevent the skin from developing more wrinkles, according to research. Olive oil and its byproducts, such as the stems and leaves, contain compounds that can boost collagen production in the skin.

In a 2001 study Trusted Source, people who ate a diet low in olive oil were less susceptible to wrinkles than people who ate a diet higher in meat, dairy, and butter.

Researchers discovered that vegetables like broccoli and tomatoes, as well as legumes like lentils and beans, may have a similar anti-wrinkle effect.

Both of these ingredients are safe to eat as part of a balanced diet for the majority of people.

Topical vitamin C

Vitamin C is an essential antioxidant that aids in the production of collagen in the skin. Many fruits and vegetables, including rosehips, chili peppers, guava, and kale, contain it naturally.

Applying a topical vitamin C gel to the skin may help reduce the appearance of wrinkles and other signs of sun damage.

In a small 2008 trial, ten people applied a vitamin C gel to one side of their face and a non-added-ingredients gel to the other.

On the side of their faces treated with vitamin C gel, everyone in the sample showed less wrinkling and signs of sun damage. The vitamin C gel hydrated the skin, increased collagen production, and decreased inflammation.

Minerals

Minerals, including vitamins, are micronutrients contained in foods that your body requires in small quantities. Minerals in the skin aid in the filtering of sunlight, the promotion of healing, and the prevention of injury.

Zinc and selenium are two minerals that are particularly beneficial to the skin. A topical cream containing zinc and selenium can help protect the skin from sun damage that causes wrinkles by blocking some UV radiation.

Selenium-rich dietary supplements can have the same protective effects. If you eat a balanced diet, however, you're likely to get enough zinc and selenium.

Zinc can be found in oysters, beans, Almonds, Oatmeal, Peas, Cheese.

Foods containing higher amounts of selenium include sunflower seeds, yogurt, spinach, oatmeal, bananas.

Too much zinc and selenium may be harmful to your health, so consult your doctor before supplementing your diet.

Probiotics and yogurt

Probiotics, such as those present in yogurt or marketed as supplements, have been shown in studies to reduce the appearance of wrinkles and improve the overall health of the skin.

In a Trusted Source animal research, older mice fed probiotic yogurt had cleaner skin and fur than mice who weren't. Researchers have discovered that adding probiotics to the skin makes it stronger against stressors like sunlight in human studies.

Silk or copper-oxide pillowcases

It can be as simple as sleeping with the right pillowcase to prevent and reduce the appearance of wrinkles. Silk is protein-rich and hypoallergenic, making it gentle on the skin. Fine lines in the skin can be reduced by using a copper-oxide pillowcase.

Medical treatment

If you're worried about your skin's appearance, you should seek care from a dermatologist (a doctor who specializes in skin conditions).

Your skin will be physically examined by the dermatologist. They'll almost certainly inquire about your wellbeing and lifestyle habits, such as whether you spend a lot of time in the sun or smoke.

A dermatologist may suggest the following wrinkle treatments:

- OTC wrinkle creams
- Prescription topical vitamin A retinoids
- Prescription topical antioxidants and collagen
- Skin resurfacing with lasers
- Therapies with a light source and radiofrequency
- Peeling agent
- Microdermabrasion or dermabrasion
- Botox injections
- Dermal (soft-tissue) fillers
- Strategies for tightening the muscle, such as ultherapy
- Facelift surgery [17]

ADVANTAGES OF AGEING

These benefits are split into two categories: those that support society and those that benefit the older person.

Advantages for Society

- 1) A greater number of people who follow the law
- 2) An increase in political participation
- 3) Increased involvement in non-profit organizations
- 4) More capable employees

5) An improved visual perception

Advantages for the individual

- 1) A decrease in criminal victimization
- 2) Revenue from supplementary security income
- 3) Fewer mishaps
- 4) Other pensions and social security
- 5) Affordable taxes
- 6) Impossibility of child-rearing
- 7) Medicare
- 8) Reduced rates and free services
- 9) Worker's freedom [18]

DISADVANTAGES OF AGEING

- 1) Decreased participation rates (amount of people in the workforce)
- 2) An increase in the number of people who are dependent on others (ratio of older people to younger people)
- 3) An increase in the fiscal deficit
- 4) The generation gap and its consequences
- 5) Social problems related to an aging population
- 6) Immigration and baby boomers are factors in population aging. [19]

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