

LET FOOD BE THY MEDICINE

20 ANTI-AGING SMOOTHIES

FOR ENERGY & VITALITY







TABLE OF CONTENTS

| I. Introduction: What are Anti-aging Foods and Why Should You Care? | 03 |
|---|-----------|
| II. Understanding Anti-aging Foods and Herbs | 07 |
| III. 20 Anti-aging Smoothie Recipes | 58 |
| "Green Goddess" Smoothie | 59 |
| "Berry Blast" Smoothie | 60 |
| "Golden Sunrise" Smoothie | 61 |
| "Superfood Boost" Smoothie | 62 |
| "Coco-Nutty" Smoothie | 63 |
| "Purple Power" Smoothie | 64 |
| "Tropical Trio" Smoothie | 65 |
| "Chocolate Dream" Smoothie | 66 |
| "Berry Beet" Smoothie | 67 |
| "Spiced Chai" Smoothie | 68 |
| "Minty Fresh" Smoothie | 69 |
| "Gingersnap" Smoothie | 70 |
| "Protein Powerhouse" Smoothie | 71 |
| "Cranberry Cooler" Smoothie | 72 |
| "Sweet Potato Pie" Smoothie | 73 |
| "Peachy Keen" Smoothie | 74 |
| "Vanilla Berry" Smoothie | 75 |
| "Papaya Paradise" Smoothie | 76 |
| "Herbal Pomegranate Blast" Smoothie | 77 |
| "Superfood MCT" Smoothie | 78 |
| Bonus: "Ayurvedic Fountain of Youth" Smoothie | 79 |
| IV References | 80 |



INTRODUCTION

No matter what stage of life you're in, it's never too late to start supporting your body and setting it up for a healthy and graceful aging process, because like it or not, we're all going to get "old." But did you know, you can actually affect how old you feel at what age by the dietary choices you make today? While genetics undoubtedly play a role in the aging process, research has consistently demonstrated the profound impact of nutrition on promoting healthy aging and preventing age-related diseases.

Causes of unhealthy aging include: mitochondrial or cellular dysfunction, oxidative stress, hormonal imbalances, insufficient nutrition, chronic inflammation and stress, gut microbiome imbalances, and compromised processes in the body, such as digestion and detoxification. So foods and herbs that support healthy aging are those that support the body against these issues.

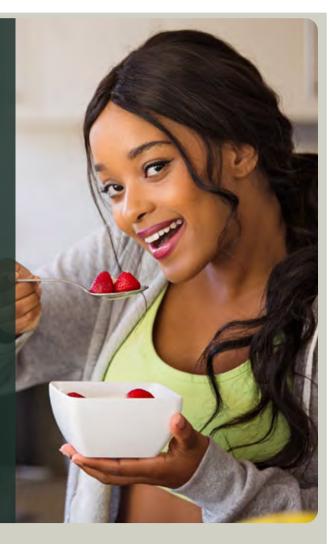
This ebook aims to illuminate the critical connection between nutrition and healthy aging. By understanding how our dietary choices influence the aging process, we can make informed decisions to optimize our health, vitality, and longevity.





And making healthy, supportive dietary choices doesn't have to be a big "to do," requiring hours of thought and preparation. It can be as simple as throwing a bunch of aging-supportive foods into a blender. In recent years, smoothies have gained popularity as a convenient and versatile way to incorporate a wide array of nutrients into your daily diet. They offer an excellent opportunity to pack your meals with myriad anti-aging ingredients that support your overall health and well-being. Whether you're looking to boost your energy levels, enhance your skin's cognitive radiance, support function, smoothies provide a delicious and efficient way to achieve these goals.

One of the key benefits of smoothies is their ability to retain the nutritional integrity of their ingredients. When ingredients are blended, they are minimally processed, thus allowing for the preservation of essential vitamins, minerals, and antioxidants. This means that the anti-aging properties of ingredients such as berries, leafy greens, and herbs remain intact, providing a potent dose of supportive compounds.



Smoothies also offer a convenient, versatile and easy hack for combining a variety of anti-aging ingredients into a single glass. You can easily incorporate a wide range of fruits, vegetables, superfoods, and herbs into smoothie recipes. For instance, by adding antioxidant-rich berries like blueberries or strawberries, nutrient-dense leafy greens like spinach or kale, and anti-inflammatory spices like turmeric, you can create a powerful aging-supportive elixir that nourishes your body from within. Plus, you can customize your smoothies according to your specific dietary needs and preferences. Experiment with different combinations of ingredients to find the flavors and textures you enjoy. With a bit of creativity, you can craft smoothies that are not only beneficial for healthy aging, but also a delightful addition to your daily routine.

Another advantage of smoothies is their ability to support optimal digestion and nutrient absorption. Smoothies allow for increased nutrient bioavailability, ensuring that your body can readily absorb and utilize the anti-aging compounds present in the ingredients. Blending fruits and vegetables breaks down their cellular structure, making it easier for your body to access the nutrients they have to offer. This can be particularly beneficial for individuals with compromised digestion or those who struggle to consume adequate amounts of whole fruits and vegetables.



It's worth mentioning that when it comes to healthy aging and longevity, we're not the biggest fans of animal milk. This is because animal milk can accelerate aging in various ways. For starters, animal milk stimulates pro-aging growth pathways. Milk is made to help calves grow quickly, hence milk contains many substances to stimulate growth. However, growth stimulation also accelerates aging. Too much growth stimulation makes cells work harder, so they wear out faster, and leads to more protein production and less protein breakdown. Accumulation of proteins and stimulation of protein production are two of the hallmarks of aging. It's well-known that these mechanisms accelerate aging in animals, increase their risk of age-related diseases, and shorten their lifespan. The opposite is also true. Less stimulation of these pro-growth, pro-aging pathways animals younger for longer, reduces their risk of age-related diseases, and extends their lifespan.

Moreover, milk contains galactose, a milk sugar that accelerates aging. In fact, scientists use galactose to accelerate aging in laboratory animals. The doses of galactose scientists give to animals is comparable to humans drinking several glasses of milk per day. Milk can also increase insulin resistance, or increase the production of insulin drastically. One study found that young children can be made insulin-resistant after just one week of drinking lots of milk (Hoppe C, 2005). Another study found that just drinking one glass of milk with a healthy meal increases insulin production threefold. High insulin peaks in the blood can lead to type 2 diabetes. In fact, this form of diabetes is caused by insulin resistance: our cells become numb to the regular high insulin peaks caused by unhealthy meals. Stimulation of insulin receptors also accelerates aging.







For these reasons, we recommend using coconut or nut milk as a base for your smoothies. Go as pure as you can, and watch out for added sugars, stabilizers and flavoring. Your nut milk should just be nuts and water. You can even try making your own nut milk at home! Some of our favorites include: almond, macadamia, hazelnut and cashew milks.

In summary, an increasing number of studies suggest that diet plays an important role in regulating aging processes and modulates the development of the most important age-related diseases. Our bodies rely on various nutrients to support the natural aging process. Some nutrients may help slow signs of aging by promoting healthy skin, supporting the cardiovascular and nervous systems, supporting good digestion, promoting good oral and eye health, and more! Adding nutrient-dense foods to your diet can help you look and feel your best. In general, aging-supportive foods are those:

That contain healthy sources of protein

That contain healthy fats

That are rich in antioxidants

Lucky for us, nature provides us with so many aging-supportive plants and foods, including but not limited to: turmeric, maca, cinnamon, nutmeg, berries, spinach, kale, seaweed, fermented foods, nuts, avocados, bananas, cucumbers, sweet potatoes, cacao, vanilla and more! In the next section, we'll delve into a few of our favorite anti-aging foods and the science behind their magic. Here's to nourishing your body from the inside out!





UNDERSTANDING ANTI-AGING FOODS AND HERBS

Vitamins and minerals are two of the main types of nutrients that your body needs to stay healthy. There are 13 essential vitamins — vitamins A, C, D, E, K, and the B vitamins (thiamine, riboflavin, niacin, pantothenic acid, biotin, B6, B12, and folate). Vitamins have different jobs to help keep the body working properly. Some vitamins help you resist infections and keep your nerves healthy, while others may help your body get energy from food or help your blood clot properly.

Also, Omega-3s and Omega-6s help quell inflammation and skin aging. These fatty acids are also important for healthy hormones as we age. Nuts and seeds are excellent sources of healthy fats and are rich in vitamins E and C. Antioxidants are also extremely supportive for healthy aging. Antioxidants may prevent or delay some types of cell damage by eliminating free radicals from the body. Berries, fruits and veggies tend to be high in these miraculous helpers. While numerous foods can support healthy aging, depending on one's bio-individual needs, the foods below may be a good place to start, so let's dive into some of our favorite anti-aging heavy hitters and the science behind their wondrous revitalizing effects!











SWEET POTATO

Sweet potatoes are rich in beta-carotene, which is converted to vitamin A in the body. Vitamin A is a powerful antioxidant that helps to protect the skin from free radicals, reducing signs of aging and promoting a youthful appearance. Free radicals are unstable atoms that can damage your cells, causing disease and aging. Vitamin A not only heals you on the inside, but its healing effects are felt and seen on the outside with glowing, healthy skin. Sweet potatoes can also be hydrating for your skin. One study found that the water content of sweet potato treated skin was 45.63% higher than that of the placebo group (Kim, 2011).

Furthermore, the high fiber content in sweet potatoes aids in digestion and supports a healthy gut. A healthy gut is essential for nutrient absorption and overall well-being, which can also contribute to a more youthful and vibrant appearance. A 2020 study found evidence of purple sweet potato's anti-aging effects, indicating that it could be developed for use in effective anti-aging products (Han, 2020). To recap, sweet potatoes can hydrate your skin and contribute to a more youthful appearance, protect the body from free radicals, aid in digestion, nutrient absorption, and help support a healthy gut. Now isn't that sweet?



2 CINNAMON

Cinnamon is loaded with antioxidants that help fight oxidative stress and reduce inflammation in the body. Oxidative stress and inflammation are two major factors that contribute to aging. Cinnamon can also help to regulate blood sugar levels by improving insulin sensitivity. Stable blood sugar levels prevent glycation, (a process that can damage collagen and elastin), leading to premature aging of the skin. Thus cinnamon can help to keep your skin looking young and vibrant.

One study found that cinnamon extract is useful in anti-aging treatments of the skin because cinnamon extract facilitates collagen biosynthesis. These wondrous antiaging effects of cinnamon are owed in large part to cinnamaldehyde, a major active component in promoting the expression of collagen (Takasao, 2012).

In addition to being an antioxidant and anti-inflammatory, cinnamon has also been reported to be an antidiabetic, antimicrobial, anticancer, lipid-lowering, cardiovascular-disease-lowering compound, and even to have activities against neurological disorders, such as Parkinson's and Alzheimer's diseases. This is due to the novel A2 receptor cinnamophilin, which one study reported to offer protection against brain damage. The effects were found to have a considerable effect (by 34–43%) on abridged brain infarction and further enhance neurobehavioral outcomes (Lee E-J, 2009).







Peaches are packed with vitamin C, a potent antioxidant that helps protect the skin from oxidative damage caused by free radicals. Vitamin C also promotes collagen production, improving skin elasticity and reducing the appearance of wrinkles and fine lines. It's even used topically in many skincare products for these reasons.

Research shows that peach-derived ceramides are functional natural products with various physiological effects that improve water retention and skin permeability functions. Ceramides are essentially the glue that holds our skin cells together to keep our skin barrier intact and healthy. A healthy skin barrier helps seal in moisture and seal out harmful elements. One study isolated peach-derived glucosylceramide and evaluated its effects on moisture and permeability of the skin. They observed improvements in water retention functions of skin, suppression of trans-epidermal water loss, and improvements in skin texture (Koikeda, 2017).

Furthermore, peaches contain natural sugars and fiber, which can provide a healthier alternative to processed sugars. Excessive consumption of processed sugars can lead to inflammation and accelerate the aging process, so you definitely want to avoid them! With all these anti-aging benefits, adding peaches to your smoothies will leave you feeling peachy keen.



4 GREEN TEA & MATCHA

Green tea is rich in catechins, a type of antioxidant that helps protect the body from damage caused by free radicals. Catechins have anti-inflammatory and anti-aging properties, helping to reduce the risk of chronic diseases and signs of aging. One study found that green tea is able to delay collagen aging by an antioxidant mechanism (Rutter, 2003).



Furthermore, the polyphenols in green tea can help to improve brain function and promote mental clarity. Cognitive health is essential for overall well-being as well as maintaining a youthful mindset. Research shows that people who drink tea regularly may have biologically younger cells than non-tea drinkers (Chan, 2010). Another study found that the consumption of green tea can be beneficial against Leukocyte telomere length or LTL shortening, which might impact biological aging (Sohn, 2023). A telomere is a compound structure at the end of a chromosome. Shorter telomeres have been associated with increased incidence of diseases and poor survival. While further studies are required to confirm these findings, the results are promising. Even more encouraging is that the average difference in the telomere length between tea drinkers and non-tea drinkers corresponds to "approximately a difference of 5 years of life," according to researchers.

Powdered green tea, or matcha, is also rich in antioxidants and has gained popularity in recent years for its numerous health benefits, including its potent anti-aging properties. Matcha has been used in Southeast Asia and Korea for centuries because it was believed to be a precious medicine that provided a long life. Coined "the elixir of immortality" by the Chinese, matcha has even more antioxidants than pomegranates and blueberries! Antioxidants slow down the aging process by preventing oxidation, inhibiting mutation of DNA and helping to restore damaged DNA. Matcha is a potent source of catechins, the antioxidants that help protect the body against oxidative stress and reduce inflammation. More specifically, matcha contains a catechin called EGCG (epigallocatechin gallate), which has been shown to have strong anti-aging effects by protecting against DNA damage and promoting cell regeneration and even joint health (Adcocks, 2002).



Furthermore, the high levels of chlorophyll in matcha help to detoxify the body by removing harmful toxins and heavy metals, which can contribute to aging and cellular damage. Matcha also contains L-theanine, an amino acid that promotes relaxation and reduces stress. Chronic stress can accelerate the aging process, so incorporating stress-reducing ingredients like matcha into your diet can have big anti-aging benefits, including protection against oxidative damage, promotion of healthy skin, support for eye health, and detoxification of the body.

One study found that consuming matcha with a high-fat diet resulted in decreased weight gain velocity and food intake, improved serum glucose and lipid profile, reduced inflammatory cytokines and improved the harmful effects of oxidative stress (Sokary, 2022).

As always, it's important to be wary of the source. Ceremonial Grade matcha is the finest grade of green tea available. It's a potent superfood, and essentially a more concentrated form of green tea as it provides all the nutrients from the entire leaf. One serving of matcha is equivalent to about 10 cups of steeped green tea. Unlike food grade matcha, ceremonial grade matcha is higher in antioxidants and provides a much smoother and richer taste. So, to be sure you're reaping all the amazing anti-aging benefits of matcha, make sure you're buying the good stuff!





5 VANILLA

There's a reason why vanilla bean is so widely used across skincare products, eye creams and moisturizers-besides its alluring, warming aroma. Vanilla contains about 200 compounds that possess antioxidant properties, which help protect the body against oxidative stress and protect your skin from damage caused by environmental pollutants Antioxidants combat free radicals, preventing cellular damage and reducing the signs of aging. That's right, vanilla can reduce the visible signs of aging by improving collagen production, and stimulating cell repair, regeneration and renewal. And, vanilla helps to slow down signs of aging like fine lines, wrinkles and age spots due to its abundance of B-vitamins like niacin, thiamin, Vitamin B6 and pantothenic acid, which play an important role in the maintenance of healthy skin.

One study investigated the beneficial effects of a combination containing bakuchiol and vanilla tahitensis extract to prevent skin photoaging for naturally aged skin. The study found that radiance was significantly improved by 29% on average, and concluded that the treatment demonstrated anti-aging efficacy and might provide a substantial benefit in the daily care of naturally aged skin in women (Bacqueville, 2020).

Vanilla also possesses many anti-aging benefits due to its compound vanillin. Research shows that vanillin has several beneficial properties, including antioxidant, anticancer, anti-inflammatory and neuroprotective.



Other evidence suggests that vanillin may have anticancer properties, though research is currently limited to cell and animal studies (Li, 2021). Vanillin was also found to protect against inflammation-related cell damage (Costantini, 2021).

Furthermore, according to some rodent studies, vanillin may benefit brain health and protect against neurodegenerative diseases. A 2021 study investigated the neuroprotective effects of vanillic acid among mice injected with a neurotoxin, or substance that can harm the nervous system. It found that vanillic acid injections protected against nerve cell inflammation, reduced markers related to Alzheimer's disease, and lessened memory impairment caused by the neurotoxin (Ullah, 2020).

And if all that wasn't enough, vanilla has also been associated with stress reduction and relaxation. Chronic stress can accelerate aging, so incorporating stress-reducing ingredients like vanilla into your diet can have anti-aging benefits. Plus, it's so easy to add vanilla to any smoothie of your choice!



6 SPINACH

Spinach is a leafy green vegetable that is packed with nutrients and antioxidants, making it an excellent addition to an aging-supportive diet. It is rich in vitamins A, C, and E, which are potent antioxidants that help protect the skin from free radicals, promote collagen production, and reduce the appearance of fine lines and wrinkles. Spinach also supports healthy methylation, and it contains high levels of chlorophyll, an alkalizing and cleansing property important for cell health and energy.

One study observed how successful red spinach extract was in increasing collagen, elasticity, hydration, sebum, and pigment in the skin of rats. Skin moisture levels before and after treatment showed a significant difference of 64.84%; skin collagen levels changed significantly by 56.25%;



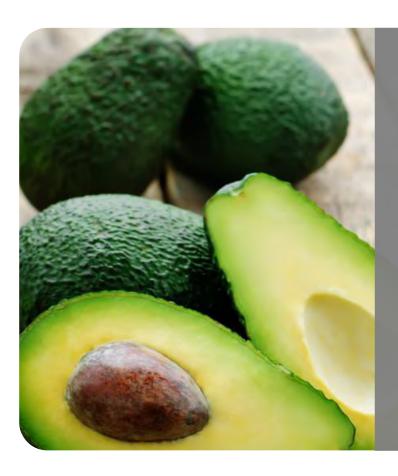
skin elasticity was increased by 46.30%; skin pigmentation levels changed significantly by 35.97%; and there was a significant reduction in sebum level by 40%. The study concluded that red spinach exhibited effective anti-aging action (Amelia, 2021). Another study found that the phytochemicals present in spinach may be beneficial in slowing age-related cognitive behavioral deficits and may have some benefit in combating neurodegenerative disease (Joseph, 1998).

Spinach also contains lutein and zeaxanthin, two antioxidants that have been shown to protect the eyes from macular degeneration, a common eye condition associated with aging. Furthermore, the high fiber content in spinach promotes healthy digestion and supports the body's natural detoxification processes, helping to remove toxins and waste that can contribute to premature aging.

Spinach is also a good source of folate, which plays a role in DNA synthesis and repair, helping to maintain the integrity of cells and promote healthy aging. As you can see, the anti-aging benefits of spinach are numerous!



7 AVOCADO



Avocado is a nutrient-dense fruit known for its numerous health benefits, including its anti-aging properties. Did you know that avocados contain over 20 different nutrients and vitamins? Among them are vitamin K, zinc, selenium, potassium, copper, folate, vitamin <u>B5</u> and <u>B6.</u> Avocados also contain antioxidants, such as vitamin E and vitamin C, which help to protect the skin from free radicals and environmental damage, preventing premature aging. One recent study investigated whether or not avocados could reduce skin aging. Their findings suggest that daily oral avocado consumption may lead to enhanced elasticity and firmness of the facial skin in healthy women (Henning, 2022).

Avocados are rich in healthy monounsaturated fats, which help moisturize the skin and improve its elasticity, reducing the appearance of wrinkles and promoting a more youthful complexion. Monounsaturated fats, along with vitamin E, are also anti-inflammatory. Both are linked to a lower risk of joint damage, particularly in older age. Studies have also shown that diets rich in the vitamins and minerals found in avocados can have a positive effect on arthritis complications, such pain, stiffness and inflammation. Monounsaturated fatty acids also help to promote healthy blood lipid profiles. There are eight preliminary clinical studies showing that avocado consumption helps support cardiovascular health. Exploratory studies also

suggest that avocados may support weight management and healthy aging (Dreher, 2013).

Moreover, the high levels of fiber and healthy fats in avocado promote healthy digestion and support nutrient absorption, ensuring that the body receives the essential vitamins and minerals necessary for healthy aging. This renders the avocado the perfect accompaniment to other anti-aging allies in smoothies. Plus, eating just one avocado a day has been shown to lower levels of "bad" LDL cholesterol (Li, 2019). High cholesterol can be a huge factor in heart disease, so incorporating avocados into your diet is a healthy way to support the future you.



Avocados also contain carotenoids, such as lutein and zeaxanthin, which have been shown to support eye health and protect against age-related eye diseases. Lutein filters harmful blue light, thus helping to maintain the healthy cells within your eyes. In summary, avocados can improve skin elasticity, moisturize the skin, have anti-inflammatory effects including lowering the risk of joint damage, support cardiovascular health, lower cholesterol, support weight management, promote healthy digestion and make nutrients from themselves and other foods more bioavailable—talk about an all star lineup of antiaging effects!

8 CHIA SEEDS

Chia seeds are tiny black seeds that come from the Salvia hispanica plant and have gained popularity in recent years due to their nutritional value and health benefits, including their anti-aging properties. Chia seeds are rich in antioxidants, including flavonoids and phenolic compounds, which help protect the body against free radicals and oxidative stress. By neutralizing free radicals, these antioxidants help prevent cellular damage and reduce the signs of aging.

The high omega-3 fatty acid content in chia seeds, particularly alpha-linolenic acid (ALA), contributes to their anti-aging effects. Omega-3 fatty acids are known for their anti-inflammatory properties, helping to reduce inflammation throughout the body. minimizing By inflammation, chia seeds can help to maintain healthy skin and delay the aging process. Studies



show that chia seeds have antidiabetic effects, and have positive effects on cardiovascular disease and hypertension (Melo, 2019).

Did you know that the gel-like consistency that chia seeds develop when soaked in liquid helps to keep the body hydrated and maintain moisture in the skin? Proper hydration is essential for healthy skin, as it helps maintain elasticity and suppleness, reducing the appearance of wrinkles and promoting a more youthful complexion. Furthermore, chia seeds are an excellent source of dietary fiber which aids in digestion and supports healthy bowel movements. A healthy digestive system is crucial for the efficient absorption of nutrients, elimination of toxins, and overall well-being. It also contributes to a more youthful appearance.







Chia seeds also have a low glycemic index, which means that they're digested and absorbed slowly, resulting in a steady release of energy. This can help to regulate blood sugar levels and prevent spikes and crashes that can contribute to premature aging and chronic diseases. Plus, chia seeds are rich in essential minerals such as calcium, magnesium, and phosphorus, which are vital for maintaining strong bones and preventing age-related bone loss. Strong bones contribute to overall health and can help maintain an active and vibrant lifestyle as you age. The high protein content in chia seeds makes them a valuable addition to any anti-aging smoothie. After all, protein is essential for cell regeneration and repair, which promotes healthy skin, hair, and nails.

As you can see, including chia seeds in your diet can provide a range of anti-aging benefits, including protection against oxidative stress, reduced inflammation, improved digestion, enhanced hydration, support for bone health, antidiabetic effects, and support for cardiovascular health.



9 BLUEBERRIES

Blueberries are packed with antioxidants and have gained recognition for their numerous health benefits, including their anti-aging properties. Blueberries are rich in anthocyanins, a type of antioxidant that gives them their deep blue color. Anthocyanins help protect the body against oxidative stress and free radical damage and have anti-inflammatory effects. Chronic inflammation is associated with accelerated aging and the development of chronic diseases. By reducing inflammation, blueberries help promote healthier aging and protect against age-related ailments. The proanthocyanidins, anthocyanins, flavonols in blueberries are also beneficial for bone protection.



Blueberries are rich in vitamins A and E, two antioxidants that help to protect the skin from damage caused by free radicals. These vitamins also support skin health and contribute to a more youthful appearance. Plus, blueberries are a good source of vitamin C, another powerful antioxidant that plays a crucial role in collagen synthesis. Collagen is a protein that provides structure and elasticity to the skin. Vitamin C helps maintain the integrity of collagen, thus reducing the appearance of wrinkles and promoting a more youthful complexion.

Furthermore, the high fiber content and low glycemic index in blueberries support healthy digestion and help regulate blood sugar levels. This is beneficial for maintaining stable energy levels and preventing sugar-related inflammation, which can contribute to premature aging. Stable blood sugar levels are also essential for preventing glycation, a process where excess sugar molecules bind to proteins in the body, leading to the formation of advanced glycation end products or AGEs. AGEs can contribute to skin aging and the development of chronic diseases. Studies have shown that blueberries exhibit anti-diabetic properties and protection of pancreatic β-cells from glucose-induced oxidative stress. Clinical studies have even demonstrated that blueberries improved sensitivity insulin-resistant insulin in subjects (Skrovankova, 2015).



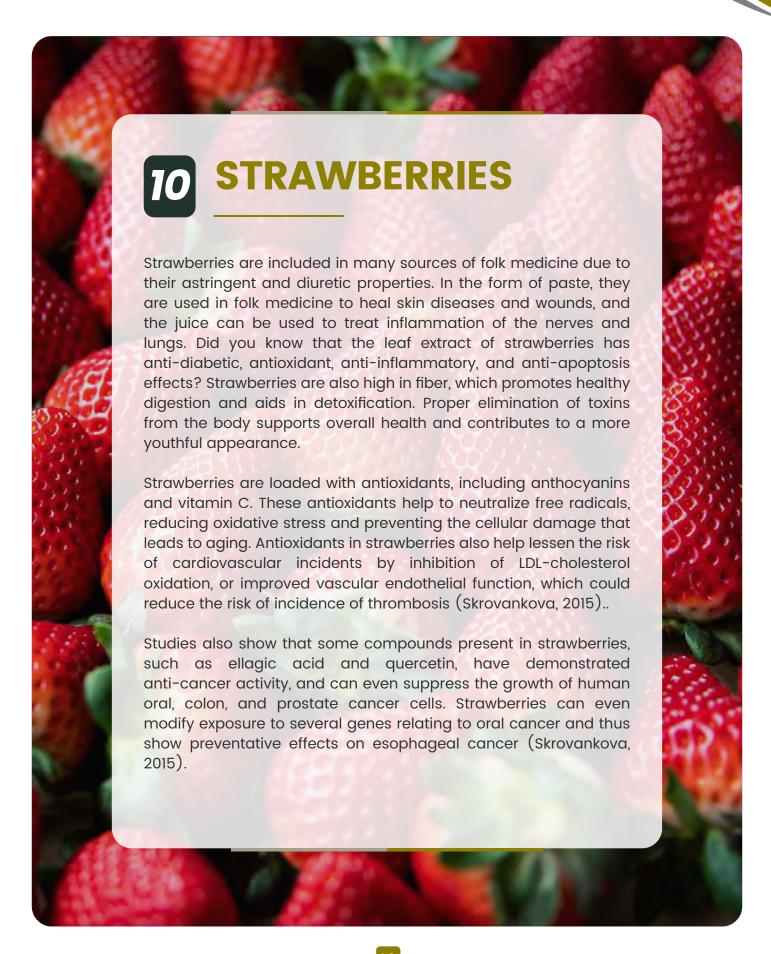
Lastly, the natural compounds in blueberries, such as resveratrol, have been linked to healthy aging. That's because resveratrol activates genes that promote longevity and protect against age-related diseases. Researchers have found that the bioactive compounds in berries are responsible for their various health benefits, including prevention of inflammation disorders, cardiovascular diseases, or protective effects to lower the risk of various cancers (Skrovankova, 2015).

Blueberries have also been reported to have a pharmacological impact against ophthalmologic disorders since they improve blood and oxygen delivery to the eye and scavenge free radicals, which contribute to cataract and macular degeneration. Blueberries could also be used for decreasing blood pressure, decreasing blood cholesterol and, therefore, lowering cardiovascular risk and atherosclerosis prevention (Skrovankova, 2015).

As you can see, including blueberries in your diet can provide a range of anti-aging benefits, including antioxidant protection, reduced inflammation, improved skin health, support for bone health, enhanced digestion, lower blood pressure and cardiovascular risk, and support for your overall well-being as you age. These little berries pack a big, anti-aging punch!









11

TURMERIC

Turmeric is a vibrant yellow spice belonging to the ginger family, widely grown in southern and southwestern Asia. It contains the compound curcumin, which is known for its potent anti-inflammatory, antioxidant and anticancer properties. Turmeric has been shown to inhibit the activity of certain enzymes and molecules that promote inflammation in the body.



Turmeric may also help maintain brain health and cognitive function, and has been studied for its potential to protect against age-related cognitive decline and neurodegenerative diseases like Alzheimer's.

Curcumin has also been found to possess antidiabetic, antibacterial, antiprotozoal, antiviral, antifibrotic, immunomodulatory, and antifungal properties (Abd El-Hack, 2021). Curcumin helps combat oxidative stress and free radicals. By neutralizing free radicals, curcumin helps protect against premature aging and reduces the appearance of wrinkles and fine lines. Curcumin has also been found to promote collagen production, improving skin elasticity and reducing the signs of aging.

Various studies have examined the effects of curcumin on skin health, including its potential for treating the following skin conditions: acne, alopecia, atopic dermatitis, facial photoaging, oral lichen planus, pruritus, psoriasis, radiodermatitis, and vitiligo. Ten different studies noted significant improvement in skin disease severity in the turmeric/curcumin treatment groups. Overall, there is early evidence that turmeric/curcumin products, both oral and topical, may provide therapeutic benefits for skin health (Vaughn, 2016).

Curcumin may even help to inhibit the growth of cancer cells, and plays an important role in the prevention and treatment of various illnesses, ranging from cancer to autoimmune, neurological, cardiovascular and diabetic diseases (Betül, 2017). As you can see, turmeric is a powerful anti-aging ally!





Known as the "King of fruits," mango has a delicious taste and high nutritional value. Mango has been cultivated in India for 4,000 years, where ~ 55% of today's global crop is produced. In India, the whole mango tree, including the stem, bark, leaves, flowers, and fruit, has been widely used as an ancient traditional medicine to treat various diseases and discomforts. Mango consists of three main parts: pulp, peel, and kernel. The pulp is the most widely consumed part and is the source of a variety of amino acids and functional compounds such as pectin, vitamins, anthocyanins, and polyphenols. The phytochemicals in mangoes, such as mangiferin and quercetin, have been studied for their anti-inflammatory and anticancer effects, which can help promote healthy aging. One recent study demonstrated that mangiferin potently inhibits the progression of human epithelial ovarian cancer (Lebaka, 2021).

The peel contains functional compounds like protocatechuic acids, mangiferin and β -carotene, which are known for their antimicrobial, anti-diabetic, anti-inflammatory, and anti-carcinogenic properties. Owing to its high fiber content, mango peel has been used in a variety of food supplements to enhance their functional properties. Various bioactive constituents in mango peels possess antioxidant and free-radical-scavenging properties. The mango kernel has higher antioxidant and polyphenolic contents than the pulp and peel, and is used for oil extraction (Lebaka, 2021). Mango seed oil contains different phytochemicals and has been used in the production of mango butter and seed flour, which are used in functional foods.



Mangoes offer several anti-aging benefits! Mangoes are rich in vitamins A and C-powerful antioxidants and immune boosters that help combat free radicals and protect against oxidative stress. These antioxidants promote healthy skin and reduce the signs of aging, such as wrinkles and age spots. The high water content in mangoes also helps to keep the skin hydrated and moisturized, promoting a more youthful, bright appearance and preventing dryness and dullness of the skin. One study documented that the intake of 85 g of mangos in 16 weeks reduced facial wrinkles in fair-skinned, postmenopausal women (Lebaka, 2021).

Did you know that the consumption of mango on a regular basis could fulfill the recommended dietary intake of vitamins C and A? Vitamin C is required for collagen regeneration, scurvy prevention, and iron absorption (Lebaka, 2021). Vitamin A offers vision benefits and beneficial effects



against cancer and cardiovascular diseases; and the consumption of one mango provides 10-12% of the recommended daily amount of retinol (Lebaka, 2021). Mango consumption is thus one of the best ways to prevent vitamin A deficiency!

Mangoes contain dietary fiber, which supports healthy digestion and helps remove toxins and waste from the body. A healthy digestive system contributes to overall well-being and can enhance the body's natural detoxification processes. Mango intake has been shown to decrease inflammatory biomarkers and improve the intestinal microbiota in patients with inflammatory bowel disease (Lebaka, 2021). Mangoes also contain enzymes that aid in digestion and improve nutrient absorption, ensuring that the body receives the necessary vitamins, minerals, and antioxidants for healthy aging.

As you can see, the benefits of consuming mango are endless, and not just limited to the pulp. The proper use of mango peel and seed in food not only improves the economy, but also reduces the environmental impacts of food waste. Looking for mango supplements or functional foods that contain mango seed oil or skin are a great way to improve your health and reduce your environmental impact!



13 GINGER

Ginger is a spicy root known for its unique flavor and medicinal properties. It contains several bioactive compounds that contribute to its anti-aging benefits. Ginger possesses potent antioxidant properties which can help reduce inflammation and prevent cellular damage. Ginger has been used for centuries for its anti-inflammatory effects. Chronic inflammation is associated with accelerated aging and the development of chronic diseases. By reducing inflammation, ginger can help support healthier aging. Studies show that the compounds 6-shoagol, zingerone, and 8-shoagol in ginger reduce some of the main symptoms of inflammatory diseases like arthritis and lupus. Pure 6-gingerol, the major component in ginger rhizomes, has shown anti-inflammatory, analgesic, and cardiotonic effects (Ballester, 2022).

The antioxidant, antitumoral, antilipemic, antibacterial, and anti-inflammatory actions of ginger are attributed to zingerone. Ginger-derived terpenes are known to avoid inflammatory processes and bacterial growth, have an antioxidant effect, help to prevent high blood sugar levels, act as painkillers or protectors of gastric tissue, and exert neuroprotective and anticarcinogenic properties! Ginger could even be an alternative treatment for psoriasis since it is able to inhibit the inflammatory responses of this disease. (Ballester, 2022).

Ginger also promotes healthy digestion by stimulating the production of digestive enzymes, reducing bloating, and supporting regular bowel movements. A healthy digestive system is crucial for nutrient absorption and detoxification, which can also contribute to a youthful appearance.

Cancer prevention is another important aspect of healthy aging. Gingerol, a bioactive compound found in ginger, has been studied for its potential to inhibit the growth of cancer cells and reduce the risk of certain types of cancer. Studies show supplementation ginger protection against cancer, especially in the early stages; it also seems to reduce the symptoms of aggressive treatments such as chemotherapy (Ballester, 2022). Ginger also cardioprotective effects, which can be attributed cardiotonic. anti-hypertensive, anti-hyperlipidemia, and anti-platelet effects (Fakhri, 2021).



As you can see, incorporating turmeric, mango, and ginger into your diet can provide a range of anti-aging benefits, including antioxidant protection, reduced inflammation, improved skin health, enhanced digestion, and potential cancer prevention.





Açaí berries are small, dark purple fruits native to the Amazon rainforest. They are known for their exceptional antioxidant content. which contributes to their anti-aging properties. The health-promoting and disease-preventing properties of this plant are attributed to numerous bioactive compounds present in the leaf, pulp, fruit, skin, and seeds. Açaí berries are rich in anthocyanins, a type of antioxidant that helps protect the body against oxidative stress and free radical damage. By neutralizing free radicals, açaí berries help reduce cellular damage and prevent premature aging. The high levels of vitamins C and E in açaí berries further enhance their antioxidant power. These vitamins promote collagen production, improve skin elasticity, and reduce the appearance of wrinkles, contributing to a more youthful complexion.



Furthermore, açaí berries contain omega-3 fatty acids, which have anti-inflammatory properties. By reducing inflammation, açaí berries help prevent chronic diseases and support healthier aging. Açaí berries are also packed with fiber, which promotes healthy digestion and supports the body's natural detoxification processes. Efficient elimination of toxins can contribute to overall well-being and a more youthful appearance.

Did you know that açaí berries have also been studied for their potential benefits in supporting heart health? Maintaining cardiovascular health is crucial for healthy aging and longevity. Both in vitro and in vivo studies have shown that açaí possesses antioxidant and anti-inflammatory properties and exerts cardioprotective, gastroprotective, hepatoprotective, neuroprotective, renoprotective, antilipidemic, antidiabetic, and antineoplastic activities.

Moreover, clinical trials have suggested that açaí can protect against metabolic stress induced by oxidation, inflammation, vascular abnormalities, and physical exertion (Laurindo, 2023). Don't let their small size fool you, açaí berries pack a potent anti-aging punch!



15 KALE

Kale is a nutrient-dense leafy green vegetable that is highly regarded for its health benefits, including, you guessed it—its anti-aging properties. Kale is rich in antioxidants, such as vitamins A, C, and E, as well as flavonoids and carotenoids. These antioxidants help combat oxidative stress, protect against free radicals, and reduce the signs of aging.



The high vitamin C content in kale promotes collagen synthesis, which supports skin health and elasticity. This can help reduce the appearance of wrinkles and fine lines.

One study looked at the effect of carotenoids in kale on the collagen elastin aging index in the skin of 29 healthy females between the ages of 40 and 56. The results showed significantly increased values for the cutaneous carotenoids and the collagen elastin aging index of the dermis, thus demonstrating that a natural carotenoid-rich extract could prevent the aging-related collagen degradation in the dermis (Meinke, 2017).

Kale also contains lutein and zeaxanthin, two antioxidants that are beneficial for eye health. These compounds protect against age-related macular degeneration and help maintain healthy vision as you age. Plus, the fiber content in kale supports healthy digestion and aids in detoxification, helping to remove waste and toxins from the body that can contribute to aging and overall health. Did you know that kale is also an excellent source of vitamin K, which plays a role in maintaining strong bones and preventing age-related bone loss?

Furthermore, the phytochemicals in kale prevent oxidative stress, induce detoxification enzymes, stimulate the immune system, decrease the risk of cancers, inhibit malignant transformation and carcinogenic mutations, as well as, reduce proliferation of cancer cells. Kale also contains a lot of valuable metabolites, which are effective in chemoprevention of cancer, as documented by numerous studies.

Due to the presence of polyphenols and the sulfur-organic compounds, kale also exerts antimutagenic action, and inhibits DNA methylation and cancer development (Kapusta-Duch, 2012).



16 HEMP SEEDS:

Hemp seeds are derived from the Cannabis sativa plant, but they do not contain the psychoactive compound THC. They however contain many anti-aging properties. Hemp seeds are a complete protein source, meaning they provide all essential amino acids. Protein is essential for cell regeneration and repair, promoting healthy skin, hair, and nails. Hemp seeds are also rich in essential fatty acids, including omega-3 and omega-6 fatty acids. These fatty acids have anti-inflammatory effects, which can support healthy aging. The gamma-linolenic acid (GLA) present in hemp seeds has also been studied for its potential to reduce skin inflammation and improve various skin conditions, including dryness, eczema, and acne.

One study examined the anti-aging effects of hempseed oil, protein, and ligananamide on old mice and found that all of them showed obvious effects. Another study investigated the effect of hemp seed extracts on mice with experimental Alzheimer's disease and found that the hemp seed extracts alleviated learning and memory, as well as improved brain tissue changes in mice with dementia. The results showed that treatment significantly improved their cognitive function. Researchers also found that the phenylpropanamide compounds in hemp seed have significant anti-neuroinflammatory activities. The study concluded that hemp seed extract possesses anti-neuroinflammatory effective activity. making it worth noting as a functional food (Zhou, 2018).



also Hemp seeds are packed antioxidants, including vitamin E, which helps protect the body against free radicals and stress. oxidative **Antioxidants** promote healthy aging and can reduce the signs of aging, such as wrinkles and age spots. Furthermore, the high fiber content in hemp seeds supports healthy digestion and aids in the removal of toxins from the body, contributing to overall well-being and a more youthful appearance.

Incorporating acai, kale, and hemp seeds into your diet can provide a range of anti-aging benefits, including antioxidant protection, reduced inflammation, improved skin health, enhanced digestion, and support for overall well-being as you age.





17 COCONUT MILK:

Coconut milk is a creamy, dairy-free, milk alternative derived from the flesh of mature coconuts. It offers several potential anti-aging benefits. Coconut milk contains medium-chain triglycerides or MCTs, which are healthy fats that can be easily digested and converted into energy. These fats provide nourishment and support for healthy skin, helping to maintain a youthful appearance. The high lauric acid content in coconut milk also contributes to its anti-aging properties. Lauric acid has antimicrobial properties that can help combat skin infections and promote a healthy complexion.

Coconut milk is rich in antioxidants, such as vitamin C and vitamin E, which promote healthy skin and reduce the signs of aging, such as wrinkles and age spots. One study found that the phenolic compounds in coconut milk provide protection against oxidative damage on lipids and inhibit oxidative damage of both proteins and DNA (Karunasiri, 2020). Plus, the natural fatty acids present in coconut milk help to moisturize and hydrate the skin, preventing dryness and helping to maintain a youthful glow. Coconut milk also contains minerals like copper and selenium, which play a role in collagen synthesis. Collagen is essential for maintaining the skin's elasticity and firmness, helping to reduce the appearance of wrinkles and sagging skin. So consuming coconut milk is very useful for attaining a glowing, youthful complexion!





18 BANANA:

Bananas are a nutritious fruit that offer various anti-aging benefits due to their rich nutrient profile. Bananas contain several bioactive compounds, such as phenolics, carotenoids, flavonoids, biogenic amines and phytosterols, which have high antioxidant potential and have shown antitumor activity (Borges, 2014). They are also highly desirable in the diet as they exert many positive effects on human health and well-being. In the past, bananas were effectively used in the treatment of various diseases, including reducing the risk of many chronic degenerative disorders.



Bananas are high in antioxidants, including dopamine and vitamin C, which help prevent cellular damage and reduce the signs of aging. The vitamin C present in bananas promotes collagen synthesis, supporting skin health and elasticity and thus reducing the appearance of wrinkles and fine lines. Bananas also contain vitamin A, which is essential for maintaining healthy skin and preventing dryness and flakiness. Furthermore, the high potassium content in bananas supports healthy hydration and helps maintain proper fluid balance in the body, which results in well-hydrated skin that appears more youthful and supple.

Bananas also contain a good amount of dietary fiber, which aids in digestion and helps eliminate toxins from the body. A healthy digestive system contributes to overall well-being and can promote healthier aging. Banana peel contains ascorbic acid, carotene, and cyanidin, which are pivotal in removing inflammatory products, protecting protease inhibitors from oxidative damage, and preventing fibroblast degradation. Banana peel also contains anti-inflammatory agents such as trigonelline, which inhibits bacterial enzymes and the production of proinflammatory signaling (Savitri, 2022).

Bananas can also be used to treat skin conditions. Hyperpigmentation refers to the overproduction of melanin in the skin, which can lead to aesthetic variations such as melasma, freckles, ephelides, and lentigo. One study looked at the ability of banana peel extracts to inhibit melanogenesis in animals and found that the cellular melanin content decreased after treatment. The findings demonstrated that bananas contain an effective agent for hyperpigmentation inhibitors (Phacharapiyangkul, 2019). Of course, humans don't eat the peels, but they can be applied topically or consumed in the form of a supplement or powder. Protecting your skin is one of the many ways you can support yourself in aging with grace. Plus, bananas are one of best foundational ingredients to include in a smoothie of any kind!



19

ALMONDS:



Almonds are nutrient-dense nuts that offer several anti-aging properties due to their rich content of beneficial compounds. The use of almonds as a health-promoting food dates back a long time. The ancient Greeks, Persians, Chinese and Indians habitually consumed them for medical purposes. And they were onto something... Almonds are a great source of vitamin E, which promotes healthy skin and reduces signs of aging, such as wrinkles and Almonds also spots. contain monounsaturated fatty acids, such as oleic acid, which help to maintain the skin's moisture and promote a more youthful appearance. Plus, almonds contain minerals like zinc, which promotes collagen synthesis and helps maintain the skin's elasticity.

Almonds are also rich in polyphenols, which are antioxidants that have anti-inflammatory effects. By reducing inflammation, almonds contribute to healthier aging and help prevent chronic diseases. One study investigated the anti-inflammatory potential of almonds and found that the anti-inflammatory effects of almonds are likely mainly attributed to the high MUFA content as well as the magnesium, arginine and phytochemicals found in almonds (Rajaram, 2010).

Another study looked at the antioxidant activity of almonds on 30 young habitual smokers with at least a five-year smoking history. After the intervention period, DNA damage was significantly reduced (by 23%). Researchers concluded that these beneficial effects should be attributed to the high content of antioxidant

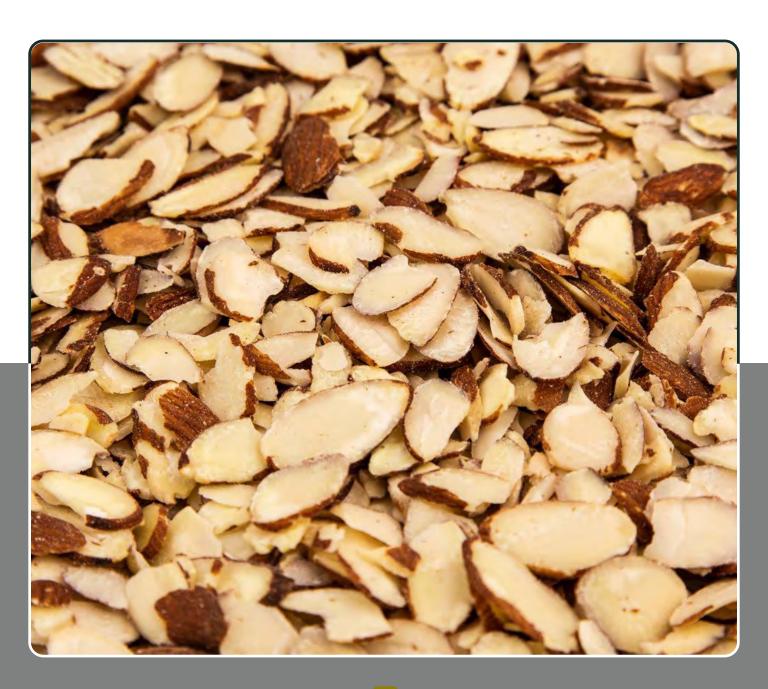
compounds in almonds, mainly present in the skin (Jia, 2006). These results suggest that almond consumption may contribute to protection against oxidative stress and related consequences among smokers.

Clinical studies have even verified the effects almonds protective of against diabetes, obesity, metabolic syndrome and cardiovascular diseases, as well as the prebiotic potential of almonds. One randomized controlled trial reported the association between almond consumption and the reduction of both total cholesterol and LDL. Furthermore, various studies suggest that regular consumption of almonds can achieve a reduction in cardiovascular risk in susceptible subjects (Barreca, 2020).



Furthermore, the high fiber content in almonds supports healthy digestion and aids in the removal of toxins from the body. A healthy digestive system can contribute to a more youthful appearance and overall well-being. Plus, almonds are a good source of protein, which is essential for cell repair and regeneration, and in turn, supporting healthy skin, hair, and nails.

As you can see, incorporating coconut milk, bananas, and almonds into your diet can provide a range of anti-aging benefits, including antioxidant protection, improved skin health, enhanced hydration, healthy digestion, and support for overall well-being as you age. And, they make for a delicious combo!





20 PINEAPPLE:

Pineapple is a tropical fruit known for its sweet taste and unique combination of enzymes, vitamins, and antioxidants that contribute to its anti-aging properties. In particular, pineapple contains an enzyme called bromelain, which has been studied for its anti-inflammatory effects. By reducing inflammation, bromelain helps protect you against age-related diseases and promotes healthier aging. One study showed that bromelain administered orally to mice caused both a decrease in the incidence and severity of spontaneous colitis and colonic inflammation. The anti-inflammatory properties of bromelain in chronic inflammation of the intestine have also been confirmed during studies using human cells from endoscopic colon biopsies from patients with ulcerative colitis and Crohn's disease (Hale, 2005).

Furthermore, studies have examined the possible use of bromelain in treating cardiovascular diseases, blood coagulation and fibrinolysis disorders, infectious diseases, inflammation-associated diseases, and many types of cancer. It is even supposed that the anti-viral, anti-inflammatory, cardioprotective and anticoagulatory activity of bromelain may be a complementary therapy for COVID-19 and post-COVID-19 patients (Hikisz, 2021).

Studies suggest that bromelain is an attractive compound for treating several cardiovascular diseases since it reduces platelet clumping and blood viscosity. Due to its excellent fibrinolytic properties, bromelain causes the dissolution of atherosclerotic plaque with high efficiency, thereby reducing the risk of atherosclerotic disease (Hikisz, 2021). Bromelain was also found to have effective anticancer activity against breast cancer cells.



Bromelain not only inhibited tumor cell proliferation and colony formation, but also influenced several critical biochemical processes, ultimately leading to their death by autophagy (Fouz, 2014).

Beyond bromelain, pineapple also contains vitamin C, which is essential for collagen synthesis, helps to maintain the skin's elasticity, and reduces the appearance of wrinkles and fine lines. The high vitamin C content in pineapple is beneficial for skin health and healthy aging. Pineapple is rich in antioxidants, including flavonoids and vitamin A, which help combat oxidative stress and free radicals. These antioxidants contribute to a more youthful complexion and protect against cellular damage. Furthermore, the natural acids present in pineapple, such as citric acid and malic acid, can help exfoliate the skin gently. Regular exfoliation can promote cell turnover, improve skin texture, and reduce the appearance of dullness and aging signs.

Lastly, pineapple also contains dietary fiber, which supports healthy digestion and aids in the elimination of toxins from the body. A healthy digestive system is crucial for overall well-being and can also contribute to a more youthful appearance. As you can see, the anti-aging effects of pineapple are numerous!





27 MINT:

Mint is an aromatic herb known for its refreshing flavor and smell. It offers several potential anti-aging benefits. For starters, mint contains a variety of antioxidants, such as rosmarinic acid and flavonoids. These antioxidants help protect against oxidative stress and free radicals, reducing cellular damage and the signs of aging. Plus, the menthol compound found in mint has a refreshing and invigorating effect on the skin. It can help to improve blood circulation, providing a healthy glow and supporting the skin's natural rejuvenation process.

The cooling properties of mint can also help soothe and calm the skin. Mint is commonly used in skincare products due to its ability to relieve skin irritation, redness, and inflammation, promoting a more youthful complexion. Studies even show that mint essential oil is an effective alternative treatment of irritable bowel syndrome



in humans, due to its anti-inflammatory abilities (Parham, 2020). Mint also has natural astringent properties, which can help tighten the skin and minimize the appearance of pores. This can contribute to a smoother and more youthful complexion.

Mint also has antimicrobial properties that can help combat skin infections and contribute to a clearer complexion. Studies have examined the antioxidant and antimicrobial properties of mint extract and found that mint oil shows strong antimicrobial ability against different bacteria including S. aureus, S. epidermidis, E. coli, Bacillus cereus, Enterococcus faecalis, and Cronobacter sakazakii (Talei, 2017). It even shows inhibitory activity against HSV-1 and HIV viruses (Anwar, 2019).

By keeping the skin clean and free from bacteria, mint promotes overall skin health and thus is a wonderful plant to consume for a supportive aging process. Indeed, mint is just as invigorating as it feels!







Cucumber is a hydrating and cooling vegetable that offers numerous anti-aging benefits due to its high water content and beneficial nutrients. Cucumber is rich in antioxidants, such as vitamin C and beta-carotene, which help protect against free radicals and oxidative stress. These antioxidants contribute to a more youthful complexion and help reduce the signs of aging. One study found that cucumber juice exhibits good antioxidant activity, and shows strong anti-hyaluronidase and anti-elastase activities, concluding that cucumber could be used as an anti-wrinkle product in cosmetics due to its high ascorbic acid content (Nema, 2011).

Plus, the high water content in cucumber helps keep the skin hydrated, promoting a plump and youthful appearance. Proper hydration is essential for maintaining skin elasticity and preventing dryness and fine lines. Cucumber also contains silica, a mineral that supports the formation of connective tissue, including collagen. Collagen is crucial for maintaining skin firmness and reducing the appearance of wrinkles. Furthermore, the natural astringent properties of cucumber help tighten the skin and minimize the appearance of pores. This can give the skin a smoother and more refined texture, enhancing its youthful appearance.



Cucumber also has a cooling and soothing effect on the skin, making it beneficial for calming skin irritation, redness, and inflammation. It can even help reduce puffiness and under-eye circles, giving a refreshed and revitalized look. Cucumber also has a mild skin-lightening effect, which can help reduce the appearance of dark spots and uneven skin tone, promoting a more even and youthful complexion. But cucumber's potent anti-aging aren't all esthetic. Studies even indicate that intake of cucumbers reduces hypertension. hyperlipidemia, skin infections, and improves the health of the cardiovascular and nervous (Naureen, 2022). Healthy cardiovascular and nervous systems are indeed important for healthy aging.

Did you know that cucumber also contains many compounds with anti-cancer properties? The methanol and acetone extracts in cucumber have demonstrated



cytotoxicity against cancer cell lines. Plus, the ethanol extract of cucumber leaves is rich in alkaloids, tannins, proteins, amino acids, steroids, terpenoids and saponins; and was also shown to inhibit the growth of cancer cell lines. One study reported significant anticancer activity and, according to the authors, the triterpenoids in the extract were responsible (Swaminathan).

Incorporating mint and cucumber into your skincare routine or consuming them in your diet can provide a range of anti-aging benefits, including antioxidant protection, skin soothing and cooling effects, hydration, improved circulation, anti-cancer effects, and support for a more youthful and revitalized appearance.



23 CACAO:

Cacao, the raw form of chocolate, is derived from the seeds of the cacao tree. It's rich in antioxidants and offers several potential anti-aging benefits. Cacao is one of the highest food sources of antioxidants, particularly of flavonoids. The flavonoids found in cacao, such as epicatechin, have been associated with various health benefits. including improved blood circulation and heart health. Proper blood flow promotes oxygen and nutrient delivery to the skin, supporting a healthy complexion. Cacao also contains minerals such as magnesium, iron, and zinc, which are essential for overall health and well-being. These minerals contribute to maintaining healthy skin, reducing inflammation, and supporting the body's natural rejuvenation processes.



Did you know that cacao is also a natural mood booster and can help reduce stress? Chronic stress can accelerate aging, so cacao's ability to promote relaxation and enhance mood indirectly supports healthier aging. Cacao also contains certain compounds that have been linked to a potential increase in collagen production, which is essential for maintaining skin elasticity and reducing the appearance of wrinkles and sagging skin.

Cacao also contains many biologically active components, such as catechins, procyanidins and theobromine, together with added sucrose and lipids. All of these can directly or indirectly affect the cardiovascular system by multiple mechanisms. Intervention studies have suggested that cocoa improves blood pressure, platelet aggregation and endothelial function. The health-promoting benefits of theobromine are so remarkable that chocolate has been explored as a functional food. The health benefits of theobromine include oral health, and one interesting study proved a consistent and remarkable protection of tooth enamel surface by theobromine (Kargul, 2012). These results open the way to supplementing toothpaste and/or mouthwash with theobromine. Healthy gums and teeth of course support the aging process as the mouth is directly connected to the gut.





Another study showed that dietary cacao ameliorated obesity-related inflammation and played a role in the increase of beneficial gut microbes (Lactobacilli) and the decrease of less beneficial ones (Clostridia) (Gu, 2013) (Redovniković, 2009). Researchers have also revisited data showing that cacao modifies intestinal flora in the same way that prebiotics and probiotics do (Hayek, 2013). Since gut health determines the entire picture of your health, nurturing a healthy gut is the basic foundation for creating a supported and healthy aging process for yourself.

Cacao also contains caffeine. Researchers have found that caffeine consumption resulted in a reduction in the incidence of Parkinson's and Alzheimer's diseases (Costa, 2010) (Maia, 2002). People that consume caffeine during the middle stages of their lives are less prone to suffering from neurological diseases when they get older. This hypothesis fits with the main role of methylxanthines, which results in higher neuronal activity in the brain, thereby enabling a longer life for these cells. The higher neuronal activity may be attributed to an increase in cerebral oxygen consumption. As you can see, the benefits to consuming cacao for healthy aging are numerous; and it's so easy to incorporate into a smoothie!



24 SPIRULINA:

Spirulina is a blue-green algae that is rich in nutrients and offers several potential anti-aging benefits. Spirulina is loaded with antioxidants, such as phycocyanin and beta-carotene. These antioxidants contribute to healthier aging by reducing cellular damage and promoting overall well-being. The nutrient profile of spirulina includes vitamins and minerals like vitamin B12, iron, and magnesium, which support overall health and well-being, and contribute to a more youthful and energized lifestyle.

The high protein content in spirulina provides essential amino acids necessary for cell repair and regeneration. Protein supports healthy skin, hair, and nails, contributing to a more youthful and vibrant appearance. Spirulina is also a natural source of chlorophyll, a green pigment with potential detoxifying effects. Chlorophyll helps eliminate toxins from the body, supporting liver health and aiding in the removal of harmful substances that can contribute to premature aging. Furthermore, spirulina contains gamma-linolenic acid (GLA), an omega-6 fatty acid with anti-inflammatory properties. Inflammation plays a role in the aging process, so reducing inflammation can help promote healthier aging.

Spirulina microalgae also contains a plethora of molecules which provide benefits for brain health. Numerous evidence highlights the antioxidant, anti-inflammatory, and neuroprotective mechanisms of spirulina. Preliminary clinical studies have also suggested that spirulina can help to reduce mental fatigue, protect the vascular wall of brain vessels from endothelial damage and regulate internal pressure, thus contributing to the prevention and/or mitigating of cerebrovascular conditions (Sorrenti, 2021).

When included in the diet, seaweeds like spirulina first interact with the microbiome in the gastrointestinal tract. In particular, the influence of the intestinal microbiota on the nervous system can explain the neuroprotective role of spirulina. Disruptions of microbial communities have been implicated in several neurological disorders, and the use of probiotic and prebiotic compounds, such as those in the spirulina, can preserve gut microbiota homeostasis and prevent the development of brain disorders (Westfall, 2017). In a model of Alzheimer's disease, treatment with spirulina was suggested to prevent loss of memory (Hwang,2011). The anti-inflammatory antioxidant properties of spirulina have also been studied in Parkinson's disease models.





Furthermore, beneficial effects of spirulina have also been found on blood glucose, lipids, and blood pressure levels. Researchers examined the antioxidant capacity, immunomodulatory and lipid-lowering effects of spirulina in healthy elderly subjects and found that spirulina has favorable effects on the lipid profile, the immune system, and the antioxidant capacity (Park, 2008). Spirulina has also been shown to increase people's ability to resist mental and physical fatigue. One study found that spirulina supplementation produced a small but significant increase in exercise stamina and improved cognitive performance (Johnson, 2016). In another trial, it was observed that spirulina supplementation was associated with significant reductions in total cholesterol, triglyceride, and LDL cholesterol levels and an increase in HDL cholesterol, with a decrease in the Body Mass Index (Hernández-Lepe, 2019). Another study found that patients with hypertension showed a significant reduction in systolic blood pressure and body mass index, and an improvement of endothelial function (Miczke, 2016). Blood pressure regulation by spirulina microalgae has been associated with stroke prevention.

As you can see, the anti-aging effects of spirulina are innumerable! And lucky for you, this superfood is so easy to consume and add to any of your favorite smoothies.





25 PAPAYA:

Papaya is a tropical fruit rich in nutrients and that offer enzymes several potential anti-aging benefits. Papaya is a great source of antioxidants, including vitamin C, vitamin E, and beta-carotene. These antioxidants help neutralize free radicals, reducing oxidative stress and cellular damage that contribute to aging. Papaya contains enzyme called also an chymopapain, which has been shown to anti-inflammatory have effects. Inflammation is associated with various age-related conditions. reducing inflammation can support healthier aging.

The high water content in papaya helps to keep the skin hydrated, promoting a plump and youthful appearance. Proper hydration is crucial for maintaining skin elasticity and preventing dryness and fine lines. Plus, the enzyme papain found in papaya has exfoliating properties, which can help to remove dead skin cells and promote a brighter, more youthful complexion. Regular exfoliation with papain supports skin cell turnover and can reduce the appearance of fine lines and wrinkles.

Furthermore, papaya is rich in fiber, which supports healthy digestion and aids in the elimination of toxins from the body. Proper digestion and toxin removal contribute to overall well-being and can indirectly promote healthier aging. And the presence of various vitamins and minerals in papaya, such as vitamin A, folate, and potassium, supports overall health and contributes to a more youthful and vibrant lifestyle.

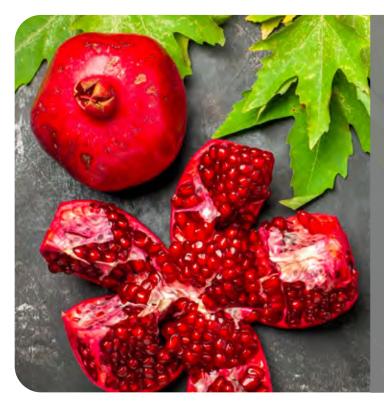


Both the pulp and the other parts of the plant (leaves and seeds) present antioxidant hypoglycemic, anti-hypertensive, and hypolipidemic actions, which, in turn, can contribute to the prevention and treatment of obesity and associated metabolic disorders. Studies show that the nutrients present in papaya have beneficial effects the cardiovascular system, protecting against cardiovascular illnesses and preventing harm caused by free radicals. It has also been reported that papaya aids in the treatment of diabetes mellitus and in the reduction of cholesterol levels. Other studies show that an abstract obtained from papaya leaves inhibits the proliferation of strains of solid tumor cells, suggesting an anti-tumoral action of papaya (Santana, 2019).



26

POMEGRANATE:



Pomegranate is a fruit known for its vibrant color and delicious taste. It offers several potential anti-aging benefits due to its high content of antioxidants and beneficial compounds. Pomegranates are packed with polyphenols, including punicalagins and anthocyanins, which are potent antioxidants that help protect against free radicals and oxidative stress.

The high vitamin C content in pomegranate supports collagen synthesis, which is essential for maintaining skin elasticity and reducing the appearance of fine lines and wrinkles. Pomegranate contains ellagic acid, a compound that has been studied for its potential anti-aging effects.

Ellagic acid may help protect against skin damage caused by UV rays and promote a more youthful and radiant complexion.

Pomegranate also has anti-inflammatory properties that can help reduce inflammation in the body. Chronic inflammation is associated with various age-related diseases, so reducing inflammation can support healthier aging. Furthermore, the presence of punicalagins in pomegranate has been linked to potential cardiovascular benefits. Maintaining heart health is important for overall well-being and contributes to healthier aging. Pomegranate is also a good source of dietary fiber, which supports healthy digestion and aids in the elimination of toxins from the body. Proper digestion and toxin removal contribute to overall well-being and can indirectly promote healthier aging.

Studies show that pomegranate can be used to prevent or treat metabolic syndrome risk factors, and can be beneficial for reducing body weight, blood pressure, glycemia, triglycerides, total cholesterol, and LDL cholesterol. Moreover, it can improve insulin resistance (Laurindo, 2022). Researchers also evaluated the effects of pomegranate juice on reducing cardiovascular risk factors in women diagnosed with PCOS. The results showed that pomegranate intervention improved metabolic, oxidative, hemodynamic, and inflammatory characteristics of treated women (Esmaeilinezhad, 2020).







Another study explored the effects of supplementation with a pomegranate extract on physical function and cardiovascular risk factors of hemodialysis patients, and found that treatment with pomegranate reduced SBP and DBP and increased antioxidant capacities (Wu, 2015).

As you can see, incorporating papaya and pomegranate into your diet or skincare routine can provide a range of anti-aging benefits, including antioxidant protection, reduced inflammation, improved skin health, hydration, and support for overall well-being as you age.





MCT (medium-chain triglyceride) oil has gained popularity in recent years, not only for its potential weight management benefits, but also for its potential anti-aging properties. The anti-aging properties of MCT oil include, but are not limited to: cellular energy, brain health, antioxidant properties, skin health, and weight management.

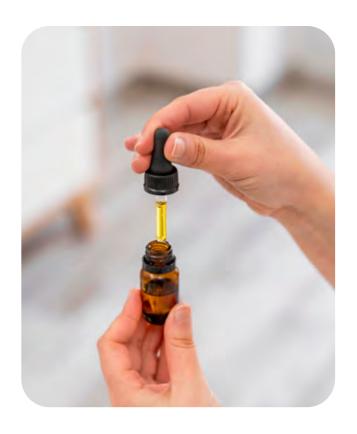
MCT oil is rapidly metabolized by the liver, producing ketones that serve as an alternative energy source for the body. Ketones provide a more efficient fuel for cells compared to glucose, helping to optimize cellular function. By providing a readily available energy source, MCT oil may support overall cellular health and longevity. Plus, the brain relies heavily on energy for optimal function. MCT oil's ability to generate ketones makes it great for brain health. Ketones can cross the blood-brain barrier and act as a source of fuel for brain cells, potentially enhancing cognitive function and protecting against age-related cognitive decline.

MCT oil also exhibits antioxidant properties, helping to combat oxidative stress in the body. Oxidative stress is a key contributor to the aging process, leading to cellular damage and the development of chronic diseases. By reducing oxidative stress, MCT oil may help protect against age-related damage and promote healthier aging. Furthemore, the health and appearance of the skin are closely tied to aging. MCT oil's moisturizing properties can support skin hydration and elasticity, reducing the appearance of fine lines and wrinkles. Additionally, its anti-inflammatory properties may calm skin irritation and redness, contributing to a more youthful complexion.



Maintaining a healthy weight is also an important aspect of healthy aging. MCT oil has been studied for its potential to promote weight loss and weight management. By increasing feelings of fullness and boosting calorie expenditure, MCT oil may help in maintaining a healthy body weight, which can positively impact overall health and longevity.

Researchers have explored the effects of MCT oil on Alzheimer's patients. Recently, type 2 diabetes (T2D) has been reported to be strongly associated with Alzheimer's disease (AD). This is partly due to insulin resistance in the brain; cerebral glucose and insulin metabolism are impaired in Alzheimer's disease. Ketones provide alternative energy. To promote ketone metabolism, MCT oil and a ketogenic diet could be introduced as an alternative source of energy in the brain of AD patients. Researchers found that MCT oil can be an effective source of ketone



as well as maintaining mitochondrial function (Takeishi, 2021). Another study, the longest MCT-AD study to date, found that 80% of MCT oil subjects had stabilization or improvement in cognition (Juby, 2022).

MCT oil is so easy to add to any smoothie of any kind as you won't even taste it, but you'll certainly feel a satiating burst of energy!



28 NUTMEG:

Nutmeg is a spice derived from the seeds of the Myristica fragrans tree and offers several potential anti-aging benefits. Nutmeg is rich in antioxidants, including plant compounds like myristicin, elemicin, and eugenol. These antioxidants help protect against oxidative stress and free radicals, reducing cellular damage and supporting healthier aging. The anti-inflammatory properties of nutmeg can help reduce inflammation in the body, which is linked to various age-related diseases and conditions. By reducing inflammation, nutmeg contributes to overall well-being and healthier aging.



Nutmeg contains minerals such as manganese, copper, and iron, which are essential for enzyme function and support overall health. These minerals contribute to maintaining healthy skin, reducing oxidative stress, and supporting the body's natural rejuvenation processes. Nutmeg is also known for its potential cognitive benefits, including improving memory and concentration. Cognitive health is an important aspect of healthy aging, and nutmeg's ability to support brain function indirectly promotes healthier aging. Nutmeg also has antibacterial and antifungal properties that may help maintain a healthy balance of microorganisms on the skin, promoting clearer and more youthful-looking skin.

Thanks to the natural organic compound myristicin, which is present in nutmeg oil, nutmeg has the ability to increase the activity of the detoxifying system and thus demonstrates potential cancer chemoprevention effects (Zheng, 1992). This finding has been replicated by other studies. Furthermore, myrislignan, a neolignan in nutmeg, showed potent protective activity against liver toxicity, demonstrating that nutmeg alleviates liver injury (Yang, 2018).

This potent anti-aging spice is an easy add to any smoothie of your choice!







Ashwagandha also has potential benefits for promoting hormonal balance. It can help regulate cortisol levels, support thyroid function, and promote reproductive health, which can contribute to overall well-being and healthier aging. One study evaluated the efficacy and safety of ashwagandha root extract in hypothyroid patients and found that after eight weeks, ashwagandha treatment effectively normalized the serum thyroid indices. This study suggests that treatment with ashwagandha may be beneficial for normalizing thyroid indices in hypothyroid patients (Sharma, 2018).

Ashwagandha is another easy add to any smoothie as you won't taste it once it's blended with all of your ingredients. Buy it in the powder form and add it to any anti-aging concoction of your choice!





30 MACA:

Maca is a root vegetable native to the Andean regions of Peru, where it has been used as a traditional medicine for over 2,000 years. It's commonly consumed as a powder and is known for its adaptogenic properties and potential anti-aging benefits. Maca is considered an adaptogen, which means it helps the body adapt to stress and restore balance. Chronic stress can accelerate aging, so maca's ability to support stress adaptation can indirectly promote healthier aging.



Maca is rich in antioxidants, including polyphenols and flavonoids, which help protect against oxidative stress and free radical damage. Antioxidants contribute to overall well-being and can slow down the aging process. Maca is also a natural source of various vitamins and minerals, including vitamin C, vitamin E, and zinc. These nutrients support skin health, protect against environmental damage, and promote collagen synthesis, reducing the signs of aging.

Maca has been studied for its potential to improve hormonal balance and support reproductive health in both men and women. Balanced hormones are essential for healthy aging and overall well-being. Some studies also suggest that maca may help enhance energy levels and improve cognitive function, which can contribute to a more vibrant and youthful lifestyle. One animal study investigated whether maca could improve cognitive function. Researchers found that maca improved cognitive function, motor coordination, and endurance capacity. Their findings suggest that macacan improve mitochondrial function and upregulate autophagy-related proteins and thus may be an effective functional food for slowing down age-related cognitive decline (Guo, 2016).

Maca also contains unique compounds called macamides, which have been associated with potential antioxidant and anti-inflammatory effects. These properties can contribute to healthier aging and support the body's natural defense mechanisms. In a randomized double-blind study on 95 patients with osteoarthritis, a combination of cat's claw and maca was administered twice a day for eight weeks and compared. Treatment was found to substantially improve pain, stiffness, and functioning in the patients (Mehta, 2007).

Incorporating maca into your diet can provide a range of anti-aging benefits, including anti-inflammatory effects, antioxidant protection, improved skin health, enhanced energy levels, hormonal balance, and support for overall well-being as you age. Plus, you can buy it as a powder, which makes this anti-aging ally an easy and quick addition to any smoothie.



37 FLAX SEEDS:

Flax seeds are rich in essential nutrients and offer numerous health benefits, including anti-aging properties. Flax seeds are an excellent source of omega-3 fatty acids, specifically alpha-linolenic acid (ALA). Omega-3 fatty acids have anti-inflammatory effects, which can help reduce inflammation in the body and support healthier aging. Compared to a younger population, older individuals have higher concentrations of proinflammatory oxylipins, which could explain higher levels of inflammation in the older demographic. Dietary supplementation of flaxseed has been shown to correct the balance of pro- and anti-inflammatory oxylipins and thus may exert a healthy effect on aging (Caligiuri, 2014).

Furthermore, the lignans present in flax seeds are a type of phytoestrogen that acts as an antioxidant. Because of this, they can help alleviate certain menopausal symptoms and support hormonal balance during the aging process. They also help to protect against free radicals and oxidative stress, contributing to a more youthful appearance. In a study of 140 postmenopausal women, menopausal symptoms decreased and the quality of life increased in women who ingested a flaxseed supplemented diet (Cetisli, 2015). Postmenopausal women also have an increased risk for osteoporosis. In a short six week study, a slightly lower bone resorption marker was observed in postmenopausal women receiving flaxseed (Arjmandi, 1998). In an animal model, flaxseed supplementation resulted in an additional benefit when combined with estrogen therapy. Flax oil, rich in ALA, showed a positive effect on bone health, particularly in pathological conditions such as obesity and kidney disease (Kim, 2011).

Flax seeds are also a good source of dietary fiber, which promotes healthy digestion and aids in the elimination of toxins from the body. A healthy digestive system can contribute to overall well-being and help prevent age-related health issues. Flax seeds also contain vitamin E, an antioxidant that helps protect against skin damage caused by free radicals. Vitamin E supports healthy skin and reduces the signs of aging, such as wrinkles and age spots. Plus, the mucilage content in flax seeds helps provide hydration to the skin, promoting a more youthful and supple complexion. One 12 week study on healthy females with sensitive skin reported a positive improvement in skin properties with the ingestion of flaxseed oil.







A significant decrease was noted in skin sensitivity, transepidermal water loss, skin roughness and scaling, with an increase in skin hydration and smoothness (Neukam, 2011). ALA was identified as the main bioactive responsible for these effects on skin and aging.

In summary, flax seeds provide a rich source of omega-3 fatty acids, alpha linolenic acid, the lignan secoisolariciresinol diglucoside and fiber, which possess anti-inflammatory, anti-oxidative and lipid modulating effects. Studies have investigated the capacity of flax seeds to help with cardiovascular diseases, cancer, gastro-intestinal health and brain development and function, as well as hormonal status in menopausal women. Studies found that in humans exhibiting symptoms of cardiovascular disease, dietary flax seeds displayed powerfully protective effects, decreasing both systolic and diastolic blood pressure in patients with peripheral arterial disease, so much so as to predict a 50% decrease in the incidence of myocardial infarctions and strokes (Rodriguez-Leyva D., 2013).

Incorporating flax seeds into your diet can provide a range of anti-aging benefits, including antioxidant protection, reduced inflammation, improved digestion, hormonal balance, and support for overall well-being as you age.



32

CRANBERRIES

Cranberries exhibit various health benefits including anti-aging effects. Cranberries are perhaps most well known for their ability to prevent and treat urinary tract infections; an achieved effect which is by proanthocyanidins in cranberries which can prevent the adhering of Escherichia coli to cells in the urinary tract. Due to this fact, cranberries could also be used to treat stomach ulcers. The health of the urinary tract as well as the stomach are both important for healthy aging.



Another health effect of cranberries is the prevention and reduction of cardiovascular disease risks and protection against lipoprotein oxidation. One study demonstrated that cranberry juice can reduce not only the oxidation of LDL, but also its mobility and thus, reduce one of the significant critical steps in the atherosclerotic process, which is oxidation of LDL cholesterol. In addition, cranberry extract could significantly elevate synthesis of hepatic LDL receptors (Skrovankova, 2015).

Plus, berries are great dietary sources of bioactive compounds like phenolic acids, flavonoids-flavonols, anthocyanins, tannins, and ascorbic acid. These compounds may act as strong antioxidants and thus could help in the prevention of inflammation disorders and cardiovascular diseases, or even have protective effects to lower the risk of various cancers. In the last decade, research has examined the anti-cancer, anti-mutagenic, and anti-tumorigenic activity of cranberries. Some of these biological effects have been linked to the phenolics (Skrovankova, 2015). One study found that after a single serving of cranberry juice, the plasma antioxidant level significantly increased (Skrovankova, 2015).



33

CARDAMOM



Cardamom is a spice consisting of whole or ground dried fruits, or seeds, of Elettaria cardamomum, an herbaceous perennial plant of the ginger family. The seeds have a warm, slightly pungent, and highly aromatic flavor. Due to cardamom's medicinal benefits, it has been traditionally used in Ayurveda and Chinese medicine, as well as in the Unani system as a powerful remedy for gastrointestinal problems. According to one study, the extracted volatile oils from cardamom have positive effects gastrointestinal disorders. Cardamom is also quite effective in stimulating the secretion of bile acid in the stomach which results in better digestion. Good digestion is important for the overall picture of your health.

Cardamom possesses many anti-aging effects. The immense antioxidants present in cardamom help to remove toxins from the body and cleanse the body from within. When toxins are eliminated from our body, our skin clear becomes and glowing. Green cardamom is very effective at improving the glow of the skin. Plus, the manganese content of cardamom helps to produce certain enzymes that fight free radicals and protect our body from damage. When the body is free from toxins, immunity and metabolism are also improved and you can feel more energetic, so you won't just look younger, you'll feel younger too.

Various researchers have found that cardamom is good for cardiovascular health. Cardamom consumption can lead to a

controlled heartbeat as well as control of hypertension. The hepatic and cardiac antioxidant enzymes found in cardamom can help control the cholesterol level in your body. Cardamom is also packed with potassium. An adequate amount potassium is very important to regulate our heart rate and keep blood pressure under control. Furthermore, cardamom can also prevent platelet aggregation and inflammation and reduce the risk of blood clots and strokes. One study found that cardamom significantly decreased insulin concluded that sensitivity and cardamom supplementation may have a protective effect on HDL in pre-diabetic subjects (Fatemeh, 2017).



Several animal studies have shown that cardamom can prevent, delay and even reverse cancer formation. The anti-inflammatory benefits of cardamom help to decrease general inflammation, which prevents the growth of cancer cells. Plus the phytochemicals in cardamom are well known to fight cancer. It even prevents the growth of hormones responsible for breast, ovarian, and prostate cancer. Studies have also shown that cardamom is very effective for treating colon cancer.

Furthermore, cardamom is diuretic in nature, which means it positively affects the frequency and amount of urination. Urination is a natural way to detoxify our body. What's more, cardamom can also remove the calcium and urea that accumulates in the kidneys. Cardamom can be used to treat a wide variety of kidney, bladder, and urinary problems like



kidney stones, nephritis, burning or painful urination, frequent urges to urinate, and urinary tract infections.

Cardamom has also been shown to protect the brain. One study examined the effect of cardamom oil on neurotoxicity. Cardamom oil treatment showed significant improvement in behavioral parameters and reduction in oxidative stress in the brain as well as inhibition of neuronal damage and plaque formation. The study showed that cardamom oil has a neuroprotective effect which may be useful in the management of Alzheimer's disease (Auti, 2019).





With this orange, crunchy power food, you'll get a large dose of vitamin A and a host of other powerful health benefits including beautiful skin, cancer prevention, and anti-aging. It's pretty well known that carrots can improve vision. Carrots are rich in beta-carotene, which is converted into vitamin A in the liver. Vitamin A is transformed in the retina, to rhodopsin, a purple pigment necessary for night vision. Beta-carotene has also been shown to protect against macular degeneration and senile cataracts. One study found that people who eat the most beta-carotene had 40% lower risk of macular degeneration than those who consumed little. Plus, the high level of beta-carotene acts as an antioxidant and helps to slow down the aging of cells.

Carrots can also be useful for cancer prevention. Various studies have shown that carrots reduce the risk of lung cancer, breast cancer and colon cancer. Researchers just discovered falcarinol and falcarindiol which they feel cause the anticancer properties. Falcarinol is a natural pesticide produced by the carrot that protects its roots from fungal diseases. Carrots are one of the only common sources of this miraculous compound.

Eating carrots, and even using them topically, can also help you achieve healthy, glowing skin from both the inside and outside. The vitamin A and antioxidants in carrots help protect the skin from sun damage.





Deficiencies of vitamin A cause dryness to the skin, hair and nails. Vitamin A prevents premature wrinkling, acne, dry skin, pigmentation, blemishes, and uneven skin tone. Carrots can be used as an inexpensive and very convenient facial mask. Vitamin A can also help cleanse the body. This is because it assists the liver in flushing out toxins from the body and reduces the bile and fat in the liver. Plus, the fibers present in carrots help to clean out the colon and hasten waste movement.

Did you know that carrots can also be used for the prevention of heart disease? Studies show that diets high in carotenoids are associated with a lower risk of heart disease. Carrots not only have beta-carotene, but also alpha-carotene and lutein. The regular consumption of carrots also reduces cholesterol levels because the soluble fibers in carrots bind with bile acids. What's more, carrots can even support healthy teeth and gums! Carrots clean your teeth and mouth by scraping off plaque and food particles just like toothbrushes or toothpaste would. Carrots stimulate the gums and also trigger a lot of saliva, which, being alkaline, keeps the acid-forming, cavity-forming bacteria in check. Plus, the minerals in carrots prevent tooth damage. Since the mouth sets the stage for the gut, good oral hygiene improves the overall picture of your health and sets you up for a healthier, more supported aging process.

Carrots have also been shown to prevent stroke. One Harvard University study found that people who ate more than six carrots a week were less likely to suffer from a stroke than those who ate only one carrot a month or less. Another study examined the potential of carrot seeds to prevent neurodegenerative illnesses and provide brain protection against accelerated aging. The results showed that carrot seeds can serve as potential protective agents against the accelerated aging parameters, which may be due to their antioxidant and anti-inflammatory activities (Mohamed, 2019).



35 BEETS

Beets, also known as beetroot, are vibrant, nutrient-rich root vegetables that offer a range of health benefits, including potential anti-aging properties. Beets are packed with essential vitamins, minerals, and dietary fiber. They are a good source of folate, manganese, potassium, and vitamin C, all of which play important roles in various bodily functions. A nutrient-rich diet is vital for overall health and can support healthy aging.

Beets are rich in antioxidants, including betalains, which give them their deep red color. These antioxidants help neutralize harmful free radicals in the body, reducing oxidative stress and preventing cellular damage. By combating oxidative stress, beets can contribute to healthy aging and reduce the risk of chronic diseases associated with aging. A number of studies report that beetroot, in the form of a juice supplement, protects against oxidative damage to DNA, lipid and protein structures (Pietrzkowski, 2010), (Ballin, 2014), (Simon, 1999).

Beets contain betaine, a compound known for its anti-inflammatory properties. By reducing inflammation, beets may help protect against age-related inflammation and associated diseases like cardiovascular disease. arthritis. neurodegenerative disorders. Furthermore, beets are rich in fiber and contain compounds that support liver function, and therefore contribute to the elimination of toxins from the body.



A healthy detoxification process is essential for overall health and can help reduce the burden of toxic substances that can contribute to premature aging.

Beets are also a natural source of dietary nitrates, which the body converts into nitric oxide. Nitric oxide helps relax and dilate blood vessels, resulting in improved blood flow and reduced blood pressure. Maintaining healthy blood pressure is important for cardiovascular health, which is closely linked to healthy aging. Nitrates also improve blood flow to the brain. By enhancing blood circulation and oxygen supply, beets may support cognitive function and help reduce the risk of age-related cognitive decline. Beetroot is considered even complementary a treatment for hypertension because of its high content of inorganic NO3. Researchers looked at various studies on beetroot juice supplementation and its effects on blood pressure. Overall, they found that blood pressure was significantly lower in the beetroot juice-supplemented groups than in the control groups (Bahadoran, 2017).



III. SUMMARY & SMOOTHIE RECIPES

With an average life expectancy of 76.1 years, many of us are living into our 80s, if not our 90s. Given that we are living longer, we want to improve our quality of life, and our health is fundamental to that. Engaging in practices that support the health of our bodies and minds helps to promote healthy aging and increased vitality. While aging is a natural, biological process, we have the potential to exert a powerful influence over it with nutrition and lifestyle factors.

Studies show that the development of cardiovascular and cerebrovascular diseases, neurodegenerative diseases, cognitive impairment and dementia can be slowed down or prevented by certain diets with anti-aging action. The protective effects of diets, at least in part, may be mediated by their beneficial macro- (protein, fat, carbohydrate) and micronutrient (vitamins, minerals) composition. Certain diets, such as the Mediterranean diet, may play a significant role in healthy aging by preventing the onset of certain diseases and by improving the aging process itself (Fekete, 2022).

By nourishing your body with foods rich in Omega-3s, healthy fats, proteins, antioxidants, and vitamins, you're setting yourself up for the most healthy and graceful aging process. Because so many of these foods are raw fruits, nuts, and vegetables, as well as spices and herbs, a great way to get these foods into your daily diet is by whipping them up in a smoothie. Incorporating smoothies into your daily routine provides a convenient and delicious way to consume a wide array of anti-aging ingredients!

Smoothies offer a nutrient-dense and easily digestible option that supports overall health, promotes youthful vitality, and combats the negative effects of aging. By regularly enjoying smoothies packed with a variety of anti-aging ingredients, you can enhance your body's ability to fight oxidative stress, boost cellular regeneration, and maintain a vibrant, youthful glow.

And, you don't have to look any further; we've made it even easier for you by providing you with 20 delicious, anti-aging smoothie recipes. Try giving yourself a 20 day challenge to taste them all, or start with the few that sound the most appealing to you and go from there. We cover a wide array of flavor profiles and ingredients, so there's sure to be something for everyone! From light and refreshing to decadent and creamy, you can't go wrong with any of these recipes; we hope you enjoy them!

*Please note, if you enjoy a little more sweetness in your smoothies, you can add a teaspoon of sweetener to finish off any recipe! Additionally, our recipes create a nice base, but feel free to add any extra ingredients as you see fit! You can even try to get as many anti-aging ingredients in one glass as you can.





This smoothie is the perfect morning energy booster and provides many anti-aging benefits. It's loaded with antioxidants, fiber, and healthy fats that will keep you feeling satiated and satisfied throughout the day. Matcha is packed with antioxidants and can help reduce inflammation in the body; spinach is an excellent source of iron and fiber; and avocados are rich in healthy fats and potassium. Enjoy!

Ingredients:

- 1 cup unsweetened plant-based milk
- 1 cup fresh spinach
- ▶ 1/2 avocado
- 1 tsp matcha powder
- 1 tsp spirulina powder
- ▶ 1/2 banana

Instructions:





This smoothie is a powerhouse of antioxidants, fiber, and vitamins that can help slow down the aging process. Blueberries and strawberries are packed with antioxidants that protect against free radicals and help to reduce inflammation. Chia seeds are rich in omega-3 fatty acids and fiber, which can help lower cholesterol levels and regulate blood sugar. Plus, a berry smoothie is a crowd pleaser!

Ingredients:

- 1 cup unsweetened plant-based milk
- 1/2 cup blueberries
- ▶ 1/2 cup strawberries
- ▶ 1/2 banana
- 1 tbsp chia seeds
- ▶ 1 tsp maca powder (optional)

Instructions:





This smoothie is a great way to start the day with a boost of anti-inflammatory and antioxidant properties. Turmeric contains curcumin, which has anti-inflammatory properties, while ginger is a natural anti-inflammatory and digestive aid, and mango is a great source of vitamin C and fiber. Start your day looking and feeling your best with this Golden Sunrise smoothie!

Ingredients:

- 1 cup unsweetened plant-based milk
- 1/2 cup frozen mango
- ▶ 1 tsp turmeric
- 1 tsp grated ginger
- ▶ 1/2 banana

Instructions:





This smoothie is loaded with superfoods that provide a boost of vitamins, minerals, and antioxidants. Acai berries are rich in antioxidants that can help protect against cell damage, while kale is a great source of vitamin K and other nutrients, and hemp seeds are an excellent source of protein, fiber, and healthy fats. Enjoy!

Ingredients:

- 1 cup unsweetened plant-based milk
- 1/2 cup frozen acai berries
- 1 cup kale
- ▶ 1/2 banana
- 1 tbsp hemp seeds

Instructions:





This smoothie is a delicious and nutritious treat that provides healthy fats, protein, and fiber. Coconut milk is a great source of medium-chain triglycerides, which can help boost metabolism and aid in weight loss. Bananas are high in potassium and fiber, while almonds provide protein and healthy fats.

Ingredients:

- 1 cup unsweetened coconut milk
- ▶ 1/2 banana
- 1 tbsp almond butter
- 1 tbsp shredded coconut
- ▶ 1 tbsp ground flax seeds

Instructions:





This smoothie is packed with antioxidants, vitamins, and minerals that can help promote healthy skin and slow down the aging process. Blueberries are a great source of antioxidants, while beets contain vitamins and minerals that can help improve blood flow and lower blood pressure. Plus, ginger is a natural anti-inflammatory and can help improve digestion. This smoothie is sure to have you looking and feeling your best.

Ingredients:

- 1 cup unsweetened plant-based milk
- 1/2 cup blueberries
- ▶ 1/2 cooked beet
- 1 tsp grated ginger
- ▶ 1/2 banana

Instructions:





This smoothie is a refreshing and hydrating drink that provides a variety of vitamins and minerals. Pineapple and mango are both great sources of vitamin C and antioxidants, while coconut water is a natural electrolyte and can help promote hydration.

Ingredients:

- 1 cup coconut water
- 1/2 cup frozen pineapple
- ▶ 1/2 cup frozen mango
- ▶ 1/2 banana

Instructions:





This smoothie is a healthy and satisfying way to indulge your chocolate cravings. Cacao is a great source of antioxidants and can help improve mood and cognitive function. Bananas are high in potassium and fiber, while almond butter provides protein and healthy fats.

Ingredients:

- 1 cup unsweetened plant-based milk
- 1 tbsp cacao powder
- ▶ 1/2 banana
- 1 tbsp almond butter
- 1 tbsp ground flax seeds

Instructions:





This smoothie is a great way to incorporate beets into your diet and provides a variety of antioxidants and vitamins. Beets are a good source of folate, fiber, and other nutrients that can help improve heart health and lower blood pressure. Blueberries and strawberries are both great sources of antioxidants that can protect against cell damage and reduce inflammation.

Ingredients:

- 1 cup unsweetened plant-based milk
- 1/2 cooked beet
- ▶ 1/2 cup blueberries
- ▶ 1/2 cup strawberries
- ▶ 1/2 banana

Instructions:





This smoothie is a great way to start your day with a warm and spicy flavor. The combination of cinnamon, ginger, and cardamom provides a variety of antioxidants and anti-inflammatory compounds that can help reduce inflammation and boost immunity.

Ingredients:

- 1 cup unsweetened plant-based milk
- ▶ 1/2 banana
- ▶ 1/2 tsp cinnamon
- ▶ 1/2 tsp ginger
- ▶ 1/4 tsp cardamom

Instructions:





This smoothie is a refreshing and hydrating drink that provides a variety of vitamins and minerals. Spinach is a good source of iron and folate, while peppermint can help improve digestion and reduce inflammation.

Ingredients:

- 1 cup unsweetened plant-based milk
- ▶ 1/2 banana
- ▶ 1/2 cup baby spinach
- ▶ 1/4 cup fresh mint leaves
- 1 tsp maca powder (optional)

Instructions:





This smoothie is a warming and spicy drink that provides a variety of vitamins and minerals. Ginger can help improve digestion and reduce inflammation, while cinnamon can help regulate blood sugar levels. Carrots are a good source of beta-carotene and other antioxidants that can protect against cell damage.

Ingredients:

- 1 cup unsweetened plant-based milk
- 1/2 banana
- 1/2 tsp ginger
- ▶ 1/2 tsp cinnamon
- ▶ 1/2 cup chopped carrots

Instructions:





This smoothie is a high-protein drink that can help you stay full and satisfied. Hemp seeds and chia seeds are both great sources of plant-based protein and healthy fats, while almond butter provides additional protein and healthy fats.

Ingredients:

- 1 cup unsweetened plant-based milk
- 1/2 banana
- ▶ 1 tbsp hemp seeds
- 1 tbsp chia seeds
- 1 tbsp almond butter
- ▶ 1 tsp maca powder (optional)

Instructions:





This smoothie is a refreshing and hydrating drink that provides a variety of vitamins and minerals. Cranberries and pomegranate are both great sources of antioxidants and can help improve heart health and lower inflammation.

Ingredients:

- 1 cup unsweetened plant-based milk
- ▶ 1/2 cup frozen cranberries
- ▶ 1/4 cup pomegranate juice
- ▶ 1/2 banana

Instructions:





This smoothie is a delicious and healthy way to indulge your sweet tooth. Sweet potatoes are a great source of beta-carotene and fiber, while cinnamon can help regulate blood sugar levels and provide anti-inflammatory benefits.

Ingredients:

- 1 cup unsweetened plant-based milk
- 1/2 cup cooked and mashed sweet potato
- ▶ 1/2 banana
- 1 tsp cinnamon
- 1 tsp nutmeg
- ▶ 1/2 tsp vanilla extract
- 1 tsp maca powder

Instructions:

Add all ingredients to a blender & blend until smooth.





This smoothie is a refreshing and energizing drink that provides a variety of vitamins and antioxidants. Peaches are a great source of vitamin C and fiber, while green tea contains catechins that can help improve brain function and reduce the risk of chronic diseases.

Ingredients:

- 1 cup unsweetened green tea, chilled
- ▶ 1/2 cup frozen peaches
- ▶ 1/2 banana
- ½ avocado
- 1 tsp maca powder (optional)

Instructions:

Add all ingredients to a blender & blend until smooth.





This smoothie is a sweet and creamy drink that provides a variety of antioxidants and anti-in-flammatory compounds. Berries are a great source of vitamin C and fiber, while vanilla can provide a natural sweet flavor and potential health benefits.

Ingredients:

- 1 cup unsweetened plant-based milk
- ▶ 1/2 cup mixed frozen berries
- ▶ 1/2 banana
- ▶ 1/2 tsp vanilla extract
- 1 tsp maca powder

Instructions:

Add all ingredients to a blender & blend until smooth.





Enjoy the refreshing and tropical flavors of this dairy-free papaya smoothie! It's a great way to incorporate the anti-aging properties of papaya into your diet while enjoying a delicious and healthy treat.

Ingredients:

- 1 cup ripe papaya, peeled, seeded, and diced
- 1 frozen banana
- ▶ 1/2 cup coconut water
- 1/2 cup unsweetened plant-based milk
- 1 tablespoon lime juice
- A handful of ice cubes

- Place all the ingredients in a blender.
- Blend on high speed until smooth and creamy.
- Taste the smoothie and adjust the sweetness by adding your sweetener of choice.
- If the smoothie is too thick, you can add more coconut water or almond milk to reach your desired consistency.
- Pour the smoothie into a glass and serve immediately.
- You can garnish with a sprig of mint or a slice of lime, if desired.





This dairy-free pomegranate and herb smoothie offers a unique blend of flavors and incorporates the antioxidant properties of pomegranate with the refreshing qualities of mint and basil. Enjoy this revitalizing and nutritious smoothie as a delightful way to start your day or as a refreshing snack!

Ingredients:

- 1 cup pomegranate seeds
- 1/2 cup fresh mint leaves
- ▶ 1/2 cup fresh basil leaves
- ▶ 1 tablespoon fresh lemon juice
- ▶ 1 cup unsweetened coconut water
- A handful of ice cubes

- In a blender, combine the pomegranate seeds, mint leaves, basil leaves, and lemon juice.
- Blend on high speed until the ingredients are well combined and the herbs are finely chopped.
- Add the coconut water and ice cubes to the blender.
- Blend again until the mixture is smooth and creamy.
- Taste the smoothie and adjust the sweetness or tanginess by adding sweetener or lemon juice, if desired.
- If the smoothie is too thick, you can add more coconut water to achieve your desired consistency.
- Pour the smoothie into a glass and garnish with a sprig of fresh mint or a few pomegranate seeds, if desired.





This superfood MCT smoothie is packed with healthy fats, antioxidants, and essential nutrients. The combination of MCT oil and coconut milk provides a dose of nourishing fats that can support brain health and increase energy levels. The mixed berries offer a burst of antioxidants to fight free radicals and promote youthful skin. Chia seeds contribute fiber, omega-3 fatty acids, and a subtle crunch to the smoothie. Additionally, the optional spinach adds an extra dose of vitamins, minerals, and phytonutrients.

Remember, you can customize this smoothie recipe according to your preferences. Feel free to add or substitute ingredients to suit your taste and nutritional goals. Enjoy this dairy-free superfood smoothie as a delicious and nutritious way to start your day or as a refreshing snack to fuel your body with essential nutrients.

Ingredients:

- 1 medium-sized ripe banana
- 1 cup frozen mixed berries (such as blueberries, raspberries, and strawberries)
- 1 tablespoon MCT oil
- 1 cup unsweetened plant-based milk
- 1 tablespoon chia seeds
- 2 tsp cacao nibs
- A handful of spinach leaves (optional, for extra nutrition)
- Ice cubes (optional, for desired consistency)

- Peel the banana and place it in a blender.
- Add the frozen mixed berries, MCT oil, coconut milk, chia seeds and cacao nibs.
- If desired, add the spinach leaves for an additional nutritional boost.
- Blend all the ingredients on high speed until smooth and creamy.
- If the smoothie is too thick, add a few ice cubes and blend again until desired consistency is reached.
- Taste the smoothie and adjust the sweetness by adding sweetener of choice.
- Pour the smoothie into a glass and enjoy it immediately.





In addition to all the usual suspects we've already covered in the previous recipes, this smoothie adds a trio of herbs from Ayurveda known for their potential anti-aging benefits. Ashwagandha is an adaptogen well known for its ability to reduce stress and improve overall energy. Saffron is well known for its potential to enhance mood, improve memory and reduce oxidative stress. And finally, Shatavari is known for its rejuvenation qualities and its ability to support female reproductive health, balance hormones, and promote overall vitality.

Ingredients:

- 1 cup unsweetened plant-based milk
- 1 ripe banana
- 1/2 cup frozen berries (such as blueberries, strawberries, or raspberries)
- 1 tbsp almond butter
- 1 tsp ashwagandha powder
- Pinch of saffron threads
- 1 tsp shatavari powder
- lce cubes (optional, for desired consistency)

- Place all the ingredients in a blender.
- Blend on high speed until smooth and well-combined.
- If the smoothie is too thick, add a few ice cubes and blend again until desired consistency is reached. Enjoy!



IV. REFERENCES:

- Hoppe C, Mølgaard C, Vaag A, Barkholt V, Michaelsen KF. High intakes of milk, but not meat, increase s-insulin and insulin resistance in 8-year-old boys. Eur J Clin Nutr. 2005 Mar;59(3):393-8. doi: 10.1038/sj.ejcn.1602086. PMID: 15578035.
- Fekete M, Szarvas Z, Fazekas-Pongor V, Feher A, Csipo T, Forrai J, Dosa N, Peterfi A, Lehoczki A, Tarantini S, Varga JT. Nutrition Strategies Promoting Healthy Aging: From Improvement of Cardiovascular and Brain Health to Prevention of Age-Associated Diseases. Nutrients. 2022 Dec 22;15(1):47. doi: 10.3390/nu15010047. PMID: 36615705; PMCID: PMC9824801.
- Han Y, Guo Y, Cui SW, Li H, Shan Y, Wang H. Purple Sweet Potato Extract extends lifespan by activating autophagy pathway in male Drosophila melanogaster. Exp Gerontol. 2021 Feb;144:111190. doi: 10.1016/j.exger.2020.111190. Epub 2020 Dec 7. PMID: 33301922.
- Takasao N, Tsuji-Naito K, Ishikura S, Tamura A, Akagawa M. Cinnamon extract promotes type I collagen biosynthesis via activation of IGF-I signaling in human dermal fibroblasts. J Agric Food Chem. 2012 Feb 8;60(5):1193-200. doi: 10.1021/jf2043357. Epub 2012 Jan 27. PMID: 22233457.
- Koikeda T, Tokudome Y, Okayasu M, Kobayashi Y, Kuroda K, Yamakawa J, Niu K, Masuda K, Saito M. Effects of Peach (Prunus persica)-Derived Glucosylceramide on the Human Skin. Curr Med Chem. 2017 Apr;17(1):56-70. doi: 10.2174/1871522217666170906155435. Epub 2017 Apr. PMCID: PMC5740493.
- Rutter K, Sell DR, Fraser N, Obrenovich M, Zito M, Starke-Reed P, Monnier VM. Green tea extract suppresses the age-related increase in collagen crosslinking and fluorescent products in C57BL/6 mice. Int J Vitam Nutr Res. 2003 Nov;73(6):453-60. doi: 10.1024/0300-9831.73.6.453. PMID: 14743550; PMCID: PMC3561737.
- Sohn, I., Shin, C. & Baik, I. Associations of green tea, coffee, and soft drink consumption with longitudinal changes in leukocyte telomere length. Sci Rep 13, 492 (2023).
- Sokary S, Al-Asmakh M, Zakaria Z, Bawadi H. The therapeutic potential of matcha tea: A critical review on human and animal studies. Curr Res Food Sci. 2022 Nov 23;6:100396. doi: 10.1016/j.crfs.2022.11.015. PMID: 36582446; PMCID: PMC9792400.
- Chan R, Woo J, Suen E, Leung J, Tang N. Chinese tea consumption is associated with longer telomere length in elderly Chinese men. Br J Nutr. 2010 Jan;103(1):107-13. doi: 10.1017/S0007114509991383. Epub 2009 Aug 12. PMID: 19671205.
- Adcocks C, Collin P, Buttle DJ. Catechins from green tea (Camellia sinensis) inhibit bovine and human cartilage proteoglycan and type II collagen degradation in vitro. J Nutr. 2002 Mar;132(3):341-6. doi: 10.1093/jn/132.3.341. PMID: 11880552.



- Bacqueville D, Maret A, Noizet M, Duprat L, Coutanceau C, Georgescu V, Bessou-Touya S, Duplan H. Efficacy of a Dermocosmetic Serum Combining Bakuchiol and Vanilla Tahitensis Extract to Prevent Skin Photoaging in vitro and to Improve Clinical Outcomes for Naturally Aged Skin. Clin Cosmet Investig Dermatol. 2020 May 13;13:359-370. doi: 10.2147/CCID.S235880. PMID: 32494181; PMCID: PMC7231787.
- Al-Baqami NM, Hamza RZ. Synergistic antioxidant capacities of vanillin and chitosan nanoparticles against reactive oxygen species, hepatotoxicity, and genotoxicity induced by aging in male Wistar rats. Hum Exp Toxicol. 2021 Jan;40(1):183-202. doi: 10.1177/0960327120943267. Epub 2020 Aug 28. PMID: 32857622.
- Li G, Kong B, Tong Q, Li Y, Chen L, Zeng J, Yu H, Xie X, Zhang J. Vanillin downregulates NNMT and attenuates NNMT related resistance to 5 fluorouracil via ROS induced cell apoptosis in colorectal cancer cells. Oncol Rep. 2021 Jun;45(6):110. doi: 10.3892/or.2021.8061. Epub 2021 Apr 28. PMID: 33907844; PMCID: PMC8082342.
- Costantini E, Sinjari B, Falasca K, Reale M, Caputi S, Jagarlapodii S, Murmura G. Assessment of the Vanillin Anti-Inflammatory and Regenerative Potentials in Inflamed Primary Human Gingival Fibroblast. Mediators Inflamm. 2021 May 4;2021:5562340. doi: 10.1155/2021/5562340.
 PMID: 34035660; PMCID: PMC8116147.
- Ullah R, Ikram M, Park TJ, Ahmad R, Saeed K, Alam SI, Rehman IU, Khan A, Khan I, Jo MG, Kim MO. Vanillic Acid, a Bioactive Phenolic Compound, Counteracts LPS-Induced Neurotoxicity by Regulating c-Jun N-Terminal Kinase in Mouse Brain. Int J Mol Sci. 2020 Dec 31;22(1):361. doi: 10.3390/ijms22010361. PMID: 33396372; PMCID: PMC7795830.
- Dhanalakshmi C, Manivasagam T, Nataraj J, Justin Thenmozhi A, Essa MM. Neurosupportive Role of Vanillin, a Natural Phenolic Compound, on Rotenone Induced Neurotoxicity in SH-SY5Y Neuroblastoma Cells. Evid Based Complement Alternat Med. 2015;2015:626028. doi: 10.1155/2015/626028. Epub 2015 Nov 17. PMID: 26664453; PMCID: PMC4664805.
- Joseph JA, Shukitt-Hale B, Denisova NA, Prior RL, Cao G, Martin A, Taglialatela G, Bickford PC. Long-term dietary strawberry, spinach, or vitamin E supplementation retards the onset of age-related neuronal signal-transduction and cognitive behavioral deficits. J Neurosci. 1998 Oct 1;18(19):8047-55. doi: 10.1523/JNEUROSCI.18-19-08047.1998. PMID: 9742171; PMCID: PMC6792999.
- Melo D , Machado TB , Oliveira MBPP . Chia seeds: an ancient grain trending in modern human diets. Food Funct. 2019 Jun 19;10(6):3068-3089. doi: 10.1039/c9fo00239a. PMID: 31086922.
- Skrovankova S, Sumczynski D, Mlcek J, Jurikova T, Sochor J. Bioactive Compounds and Antioxidant Activity in Different Types of Berries. Int J Mol Sci. 2015 Oct 16;16(10):24673-706. doi: 10.3390/ijms161024673. PMID: 26501271; PMCID: PMC4632771.
- Betül Kocaadam & Nevin Şanlier (2017) Curcumin, an active component of turmeric (Curcuma longa), and its effects on health, Critical Reviews in Food Science and Nutrition, 57:13, 2889-2895, DOI: 10.1080/10408398.2015.1077195



- Vaughn AR, Branum A, Sivamani RK. Effects of Turmeric (Curcuma longa) on Skin Health: A
 Systematic Review of the Clinical Evidence. Phytother Res. 2016 Aug;30(8):1243-64. doi:
 10.1002/ptr.5640. Epub 2016 May 23. PMID: 27213821.
- Abd El-Hack ME, El-Saadony MT, Swelum AA, Arif M, Abo Ghanima MM, Shukry M, Noreldin A, Taha AE, El-Tarabily KA. Curcumin, the active substance of turmeric: its effects on health and ways to improve its bioavailability. J Sci Food Agric. 2021 Nov;101(14):5747-5762. doi: 10.1002/jsfa.11372. Epub 2021 Jul 14. PMID: 34143894.
- Lebaka VR, Wee YJ, Ye W, Korivi M. Nutritional Composition and Bioactive Compounds in Three Different Parts of Mango Fruit. Int J Environ Res Public Health. 2021 Jan 16;18(2):741. doi: 10.3390/ijerph18020741. PMID: 33467139; PMCID: PMC7830918.
- Fakhri S, Patra JK, Das SK, Das G, Majnooni MB, Farzaei MH. Ginger and Heart Health: From Mechanisms to Therapeutics. Curr Mol Pharmacol. 2021;14(6):943-959. doi: 10.2174/1874467213666201209105005. PMID: 33297926.
- Ballester P, Cerdá B, Arcusa R, Marhuenda J, Yamedjeu K, Zafrilla P. Effect of Ginger on Inflammatory Diseases. Molecules. 2022 Oct 25;27(21):7223. doi: 10.3390/molecules27217223. PMID: 36364048; PMCID: PMC9654013.
- Laurindo LF, Barbalho SM, Araújo AC, Guiguer EL, Mondal A, Bachtel G, Bishayee A. Açaí (Euterpe oleracea Mart.) in Health and Disease: A Critical Review. Nutrients. 2023 Feb 16;15(4):989. doi: 10.3390/nu15040989. PMID: 36839349; PMCID: PMC9965320.
- Kapusta-Duch J, Kopeć A, Piatkowska E, Borczak B, Leszczyńska T. The beneficial effects of Brassica vegetables on human health. Rocz Panstw Zakl Hig. 2012;63(4):389-95. PMID: 23631258.
- Meinke MC, Nowbary CK, Schanzer S, Vollert H, Lademann J, Darvin ME. Influences of Orally Taken Carotenoid-Rich Curly Kale Extract on Collagen I/Elastin Index of the Skin. Nutrients. 2017 Jul 19;9(7):775. doi: 10.3390/nu9070775. PMID: 28753935; PMCID: PMC5537889.
- Zhou Y, Wang S, Ji J, Lou H, Fan P. Hemp (Cannabis sativa L.) Seed Phenylpropionamides Composition and Effects on Memory Dysfunction and Biomarkers of Neuroinflammation Induced by Lipopolysaccharide in Mice. ACS Omega. 2018 Nov 30;3(11):15988-15995. doi: 10.1021/acsomega.8b02250. Epub 2018 Nov 27. PMID: 30556022; PMCID: PMC6288804.
- Karunasiri AN, Gunawardane M, Senanayake CM, Jayathilaka N, Seneviratne KN. Antioxidant and Nutritional Properties of Domestic and Commercial Coconut Milk Preparations. Int J Food Sci. 2020 Aug 1;2020:3489605. doi: 10.1155/2020/3489605. PMID: 32832538; PMCID: PMC7422486.
- Carandang, E. (2008). Health benefits of virgin coconut oil. Indian Coconut Journal Cochin, 38(9), 8-12.



- Wang, L. L., & Johnson, E. A. (1992). Inhibition of Listeria monocytogenes by fatty acids and monoglycerides. Applied and Environmental Microbiology, 58(2), 624–9.
- Craig-Schmidt, M., White, M. T., Teer, P., Johnson, J., & Lane, H. W. (1993). Menhaden, coconut, and corn oils and mammary tumor incidence in BALB/c virgin female mice treated with DMBA. Nutrition and Cancer, 20(2), 99–106.
- Nevin, K., & Rajamohan, T. (2008). Influence of virgin coconut oil on blood coagulation factors, lipid levels and LDL oxidation in cholesterol fed Sprague-Dawley rats. The European e-Journal of Clinical Nutrition and Metabolism, 3(1), 1–8.
- Otuechere, C. A., Madarikan, G., Simisola, T., Bankole, O., & Osho, A. (2014). Virgin coconut oil protects against liver damage in albino rats challenged with the anti-folate combination, trimethoprim-sulfamethoxazole. Journal of Basic and Clinical Physiology and Pharmacology, 25(2), 249–53.
- Arunima, S., & Rajamohan, T. (2014). Influence of virgin coconut oil-enriched diet on the transcriptional regulation of fatty acid synthesis and oxidation in rats-a comparative study. British Journal of Nutrition, 111(10), 1782–90.
- Savitri D, Djawad K, Hatta M, Wahyuni S, Bukhari A. Active compounds in kepok banana peel as anti-inflammatory in acne vulgaris: Review article. Ann Med Surg (Lond). 2022 Nov 12;84:104868. doi: 10.1016/j.amsu.2022.104868. PMID: 36582904; PMCID: PMC9793233.
- Phacharapiyangkul N, Thirapanmethee K, Sa-Ngiamsuntorn K, Panich U, Lee CH, Chomnawang MT. Effect of Sucrier Banana Peel Extracts on Inhibition of Melanogenesis through the ERK Signaling Pathway. Int J Med Sci. 2019 Apr 25;16(4):602-606. doi: 10.7150/ijms.32137. PMID: 31171912; PMCID: PMC6535666.
- Barreca D, Nabavi SM, Sureda A, Rasekhian M, Raciti R, Silva AS, Annunziata G, Arnone A, Tenore GC, Süntar İ, Mandalari G. Almonds (Prunus DulcisMill. D. A. Webb): A Source of Nutrients and Health-Promoting Compounds. Nutrients. 2020 Mar 1;12(3):672. doi: 10.3390/nu12030672. PMID: 32121549; PMCID: PMC7146189.
- Rajaram S., Connell K.M., Sabate J. Effect of almond-enriched high-monounsaturated fat diet on selected markers of inflammation: A randomised, controlled, crossover study. Br. J. Nutr. 2010;103:907-912. doi: 10.1017/S0007114509992480.
- Jia X., Li N., Zhang W., Zhang X., Lapsley K., Huang G., Blumberg J., Ma G., Chen J. A pilot study on the effects of almond consumption on DNA damage and oxidative stress in smokers. Nutr. Cancer. 2006;54:179–183. doi: 10.1207/s15327914nc5402_4.
- Hikisz P, Bernasinska-Slomczewska J. Beneficial Properties of Bromelain. Nutrients. 2021 Nov 29;13(12):4313. doi: 10.3390/nu13124313. PMID: 34959865; PMCID: PMC8709142.



- Parham S, Kharazi AZ, Bakhsheshi-Rad HR, Nur H, Ismail AF, Sharif S, RamaKrishna S, Berto F. Antioxidant, Antimicrobial and Antiviral Properties of Herbal Materials. Antioxidants (Basel). 2020 Dec 21;9(12):1309. doi: 10.3390/antiox9121309. PMID: 33371338; PMCID: PMC7767362.
- Franco R, Oñatibia-Astibia A, Martínez-Pinilla E. Health benefits of methylxanthines in cacao and chocolate. Nutrients. 2013 Oct 18;5(10):4159-73. doi: 10.3390/nu5104159. PMID: 24145871; PMCID: PMC3820066.
- Sorrenti V, Castagna DA, Fortinguerra S, Buriani A, Scapagnini G, Willcox DC. Spirulina Microalgae and Brain Health: A Scoping Review of Experimental and Clinical Evidence. Mar Drugs. 2021 May 22;19(6):293. doi: 10.3390/md19060293. PMID: 34067317; PMCID: PMC8224803.
- Santana LF, Inada AC, Espirito Santo BLSD, Filiú WFO, Pott A, Alves FM, Guimarães RCA, Freitas KC, Hiane PA. Nutraceutical Potential of Carica papayain Metabolic Syndrome. Nutrients. 2019 Jul 16;11(7):1608. doi: 10.3390/nu11071608. PMID: 31315213; PMCID: PMC6682863.
- Laurindo LF, Barbalho SM, Marquess AR, Grecco AIS, Goulart RA, Tofano RJ, Bishayee A.
 Pomegranate (Punica granatum L.) and Metabolic Syndrome Risk Factors and Outcomes: A Systematic Review of Clinical Studies. Nutrients. 2022 Apr 16;14(8):1665. doi: 10.3390/nu14081665. PMID: 35458227; PMCID: PMC9032502.
- Esmaeilinezhad Z., Barati-Boldaji R., Brett N.R., de Zepetnek J.O.T., Bellissimo N., Babajafari S., Sohrabi Z. The effect of synbiotics pomegranate juice on cardiovascular risk factors in PCOS patients: A randomized, triple-blinded, controlled trial. J. Endocrinol. Investig. 2020;43:539–548. doi: 10.1007/s40618-019-01139-x
- Wu P.T., Fitschen P.J., Kistler B.M., Jeong J.H., Chung H.R., Aviram M., Phillips S.A., Fernhall B., Wilund K.R. Effects of Pomegranate Extract Supplementation on Cardiovascular Risk Factors and Physical Function in Hemodialysis Patients. J. Med. Food. 2015;18:941–949. doi: 10.1089/jmf.2014.0103.
- Takeishi J, Tatewaki Y, Nakase T, Takano Y, Tomita N, Yamamoto S, Mutoh T, Taki Y. Alzheimer's Disease and Type 2 Diabetes Mellitus: The Use of MCT Oil and a Ketogenic Diet. Int J Mol Sci. 2021 Nov 15;22(22):12310. doi: 10.3390/ijms222212310. PMID: 34830192; PMCID: PMC8624628.
- Vázquez-Fresno R, Rosana ARR, Sajed T, Onookome-Okome T, Wishart NA, Wishart DS. Herbs and Spices-Biomarkers of Intake Based on Human Intervention Studies - A Systematic Review. Genes Nutr. 2019 May 22;14:18. doi: 10.1186/s12263-019-0636-8. PMID: 31143299; PMCID: PMC6532192.
- Yang XN, Liu XM, Fang JH, Zhu X, Yang XW, Xiao XR, Huang JF, Gonzalez FJ, Li F. PPARα Mediates the Hepatoprotective Effects of Nutmeg. J Proteome Res. 2018 May 4;17(5):1887-1897. doi: 10.1021/acs.jproteome.7b00901. Epub 2018 Apr 25. PMID: 29664296; PMCID: PMC6628927.
- Choudhary D, Bhattacharyya S, Bose S. Efficacy and Safety of Ashwagandha (Withania somnifera (L.) Dunal) Root Extract in Improving Memory and Cognitive Functions. J Diet Suppl. 2017 Nov 2;14(6):599-612. doi: 10.1080/19390211.2017.1284970. Epub 2017 Feb 21. PMID: 28471731.



- Sharma AK, Basu I, Singh S. Efficacy and Safety of Ashwagandha Root Extract in Subclinical Hypothyroid Patients: A Double-Blind, Randomized Placebo-Controlled Trial. J Altern Complement Med. 2018 Mar;24(3):243-248. doi: 10.1089/acm.2017.0183. Epub 2017 Aug 22. PMID: 28829155.
- Kim D.-S., Jeon B.-K., Mun Y.-J., Kim Y.-M., Lee Y.-E., Woo W.-H. Effect of Dioscorea Aimadoimo on Anti-Aging and Skin Moisture Capacity. J. Physiol. Pathol. Korean Med. 2011;25:425–430.
- Amelia, Girsang E., Nasution A.N., Ginting C.N. Anti-Aging Effectiveness of Red Spinach Extract
 Ointment (Amaranthus tricolor L.) Against Collagen, Elasticity, Hydration, Sebum, and Pigment
 Levels in Wistar Rats; Proceedings of the 2021 IEEE International Conference on Health,
 Instrumentation & Measurement, and Natural Sciences (InHeNce); Medan, Indonesia. 14–16 July
 2021; Medan, Indonesia: IEEE; 2021. pp. 1–6.
- Mark L. Dreher & Adrienne J. Davenport (2013) Hass Avocado Composition and Potential Health Effects, Critical Reviews in Food Science and Nutrition, 53:7, 738-750, DOI: 10.1080/10408398.2011.556759
- Li Wang, Ling Tao, Lei Hao, Todd H Stanley, Kuan-Hsun Huang, Joshua D Lambert, Penny M Kris-Etherton. A Moderate-Fat Diet with One Avocado per Day Increases Plasma Antioxidants and Decreases the Oxidation of Small, Dense LDL in Adults with Overweight and Obesity: A Randomized Controlled Trial. The Journal of Nutrition, 2019; DOI: 10.1093/jn/nxz231
- Fouz N., Amid A., Hashim Y.Z.H.-Y. Gene Expression Analysis in MCF-7 Breast Cancer Cells Treated with Recombinant Bromelain. Appl. Biochem. Biotechnol. 2014;173:1618–1639. doi: 10.1007/s12010-014-0947-6.
- Hale L.P., Greer P.K., Trinh C.T., Gottfried M.R. Treatment with oral bromelain decreases colonic inflammation in the IL-10-deficient murine model of inflammatory bowel disease. Clin. Immunol. 2005;116:135-142. doi: 10.1016/j.clim.2005.04.011.
- Džamić A.M., Soković M.D., Ristić M.S., Novaković M., Grujić-Jovanović S., Tešević V., Marin P.D. Antifungal and antioxidant activity of Mentha longifolia (L.) Hudson (Lamiaceae) essential oil. Bot Serb. 2010;34:57–61.
- Talei G.R., Mohammadi M., Bahmani M., Kopaei M.R. Synergistic effect of Carum copticum and Mentha piperita essential oils with ciprofloxacin, vancomycin, and gentamicin on Gram-negative and Gram-positive bacteria. Int. J. Pharm. Investig. 2017;7:82.
- Anwar F., Abbas A., Mehmood T., Gilani A.H., Rehman N.U. Mentha: A genus rich in vital nutra-pharmaceuticals—A review. Phytother. Res. 2019;33:2548-2570. doi: 10.1002/ptr.6423.
- Costa J., Lunet N., Santos C., Santos J., Vaz-Carneiro A. Caffeine exposure and the risk of Parkinson's disease: A systematic review and meta-analysis of observational studies. J. Alzheimer's Dis. 2010;20:S221–S238.



- Maia L., de Mendonca A. Does caffeine intake protect from Alzheimer's disease? Eur. J. Neurol. 2002;9:377–382. doi: 10.1046/j.1468-1331.2002.00421.x.
- Gu Y., Yu S., Lambert J.D. Dietary cocoa ameliorates obesity-related inflammation in high fat-fed mice. Eur. J. Nutr. 2013 doi: 10.1007/s00394-013-0510-1.
- Redovniković I.R., Delonga K., Mazor S., Dragović-Uzelac V., Caric M., Vorkapic- Furac J. Polyphenolic content and composition, and antioxidative activity of different cocoa liquors. Czech J. Food Sci. 2009;27:330–337.
- Hayek N. Chocolate, gut microbiota, and human health. Front. Pharmacol. 2013;4 doi: 10.3389/fphar.2013.00011.
- Kargul B., Ozcan M., Peker S., Nakamoto T., Simmons W.B., Falster A.U. Evaluation of human enamel surfaces treated with theobromine: A pilot study. Oral Health Prev. Dent. 2012;10:275–282.
- Westfall S., Lomis N., Kahouli I., Dia S.Y., Singh S.P., Prakash S. Microbiome, probiotics and neurodegenerative diseases: Deciphering the gut brain axis. Cell. Mol. Life Sci. 2017;74:3769–3787. doi: 10.1007/s00018-017-2550-9.
- Hwang J.-H., Lee I.-T., Jeng K.-C., Wang M.-F., Hou R.C.-W., Wu S.-M., Chan Y.-C. Spirulina
 prevents memory dysfunction, reduces oxidative stress damage and augments antioxidant
 activity in senescence-accelerated mice. J. Nutr. Sci. Vitaminol. 2011;57:186–191. doi:
 10.3177/jnsv.57.186
- Pabon M.M., Jernberg J.N., Morganti J., Contreras J., Hudson C.E., Klein R.L., Bickford P.C. A Spirulina-Enhanced diet provides neuroprotection in an α-synuclein model of Parkinson's disease. PLoS ONE. 2012;7:e45256. doi: 10.1371/journal.pone.0045256.
- Park H.J., Lee Y.J., Ryu H.K., Kim M.H., Chung H.W., Kim W.Y. A randomized double-blind, placebo-controlled study to establish the effects of spirulina in elderly Koreans. Ann. Nutr. Metab. 2008;52:322–328. doi: 10.1159/000151486.
- Johnson M., Hassinger L., Davis J., Devor S.T., Disilvestro R.A. A randomized, double blind, placebo controlled study of spirulina supplementation on indices of mental and physical fatigue in men. Int. J. Food Sci. Nutr. 2016;67:203–206. doi: 10.3109/09637486.2016.1144719.
- Hernández-Lepe M.A., Wall-Medrano A., López-Díaz J.A., Juárez-Oropeza M.A., Luqueño-Bocardo O.I., Hernández-Torres R.P., Ramos-Jiménez A. Hypolipidemic effect of Arthrospira (Spirulina) maxima supplementation and a systematic physical exercise program in overweight and obese men: A double-blind, randomized, and crossover controlled trial. Mar. Drugs. 2019;17:270. doi: 10.3390/md17050270.



- Miczke A., Szulinska M., Hansdorfer-Korzon R., Kregielska-Narozna M., Suliburska J., Walkowiak J., Bogdanski P. Effects of spirulina consumption on body weight, blood pressure, and endothelial function in overweight hypertensive Caucasians: A double-blind, placebo-controlled, randomized trial. Eur. Rev. Med. Pharm. Sci. 2016;20:150-156.
- Zheng GQ, Kenney PM, Zhang J, Lam LK. Inhibition of benzo[a]pyrene-induced tumorigenesis by myristicin, a volatile aroma constituent of parsley leaf oil. Carcinogenesis. 1992;1310:1921–1923. doi: 10.1093/carcin/13.10.1921.
- Cetisli N.E., Saruhan A., Kivcak B. The effects of flaxseed on menopausal symptoms and quality of life. Holist. Nurs. Pract. 2015;29:151–157
- Arjmandi B., Juma S., Lucas E., Wei L., Venkatesh S., Khan D. Flaxseed supplementation positively
 influences bone metabolism in postmenopausal women. JANA. 1998;1:27–32.
- Kim Y., Ilich J.Z. Implications of dietary α-linolenic acid in bone health. Nutrition. 2011;27:1101–1107. doi: 10.1016/j.nut.2011.05.012.
- Neukam K., De Spirt S., Stahl W., Bejot M., Maurette J.M., Tronnier H., Heinrich U. Supplementation of flaxseed oil diminishes skin sensitivity and improves skin barrier function and condition. Skin Pharmacol. Physiol. 2011;24:67–74. doi: 10.1159/000321442.
- Caligiuri S.P.B., Aukema H.M., Ravandi A., Pierce G.N. Elevated levels of pro-inflammatory oxylipins in older subjects are normalized by flaxseed consumption. Exp. Gerontol. 2014;59:51–57. doi: 10.1016/j.exger.2014.04.005.
- Rodriguez-Leyva D., Weighell W., Edel A.L., La Vallee R., Dibrov E., Pinneker R., Maddaford T.G., Ramjiawan B., Aliani M., Guzman R., et al. Potent anti-hypertensive action of dietary flaxseed in hypertensive patients. Hypertension. 2013;62:1081–1089. doi: 10.1161/HYPERTENSIONAHA.113.02094.
- Swaminathan G, Sundaram RS, Mamatha M, Vaijayanthimala P. Evaluation of in vitro anticancer activity of Cucumis sativus Linn leaves. IJRPP 2015;4:223-9.
- Naureen Z, Dhuli K, Donato K, Aquilanti B, Velluti V, Matera G, Iaconelli A, Bertelli M. Foods of the Mediterranean diet: citrus, cucumber and grape. J Prev Med Hyg. 2022 Oct 17;63(2 Suppl 3):E21-E27. Doi: 10.15167/2421-4248/jpmh2022.63.2S3.2743. PMID: 36479487; PMCID: PMC9710412.
- Nema N.K., Maity N., Sarkar B., Mukherjee P.K. Cucumis Sativus Fruit-Potential Antioxidant, Anti-Hyaluronidase, and Anti-Elastase Agent. Arch. Dermatol. Res. 2011;303:247-252. doi: 10.1007/s00403-010-1103-y.
- Fatemeh Y, Siassi F, Rahimi A, Koohdani F, Doostan F, Qorbani M, Sotoudeh G. The effect of cardamom supplementation on serum lipids, glycemic indices and blood pressure in overweight and obese pre-diabetic women: a randomized controlled trial. J Diabetes Metab Disord. 2017 Sep 29;16:40. doi: 10.1186/s40200-017-0320-8. PMID: 29026804; PMCID: PMC5623966.



- Auti ST, Kulkarni YA. Neuroprotective Effect of Cardamom Oil Against Aluminum Induced Neurotoxicity in Rats. Front Neurol. 2019 Apr 30;10:399. doi: 10.3389/fneur.2019.00399. PMID: 31114535; PMCID: PMC6502995.
- Mohamed D.A., Fouda K., Hamed I.M., Abdelgayed S.S. Protective Effect of Kumquat Fruits and Carrot Seeds Extracts against Brain Aging in Rats. J. Herbmed Pharmacol. 2019;8:287–294. doi: 10.15171/jhp.2019.42.
- Bahadoran Z, Mirmiran P, Kabir A, Azizi F, Ghasemi A. The Nitrate-Independent Blood Pressure-Lowering Effect of Beetroot Juice: A Systematic Review and Meta-Analysis. Adv Nutr. 2017 Nov 15;8(6):830-838. doi: 10.3945/an.117.016717. Erratum in: Adv Nutr. 2018 May 1;9(3):274. PMID: 29141968; PMCID: PMC5683004.
- Pietrzkowski Z., Nemzer B., Spórna A., Stalica P., Tresher W., Keller R., Jiminez R., Michalowski T., Wybraniec S. Influence of betalin-rich extracts on reduction of discomfort associated with osteoarthritis. New. Med. 2010;1:12–17.
- Ballin NZ, Sørensen AT. Coumarin content in cinnamon containing food products on the Danish market. Food Control. 2014;38:198–203. doi: 10.1016/j.foodcont.2013.10.014.
- Simon JE, M.R. Morales, W.B. Phippen, R.F. Vieira, and Z. Hao. Basil: A Source of Aroma Compounds and a Popular Culinaryand Ornamental Herb. 1999. https://www.hort.purdue.edu/newcrop/proceedings1999/v4-499.html. Accessed June 2016.
- Guo SS, Gao XF, Gu YR, Wan ZX, Lu AM, Qin ZH, Luo L. Preservation of Cognitive Function by Lepidium meyenii (Maca) Is Associated with Improvement of Mitochondrial Activity and Upregulation of Autophagy-Related Proteins in Middle-Aged Mouse Cortex. Evid Based Complement Alternat Med. 2016;2016:4394261. doi: 10.1155/2016/4394261. Epub 2016 Aug 28. PMID: 27648102; PMCID: PMC5018343.
- Mehta K, Gala J, Bhasale S, et al. Comparison of glucosamine sulfate and a polyherbal supplement for the relief of osteoarthritis of the knee: a randomized controlled trial [ISRCTN25438351] BMC Complementary and Alternative Medicine. 2007;7, article no. 34
- Juby AG, Blackburn TE, Mager DR. Use of medium chain triglyceride (MCT) oil in subjects with Alzheimer's disease: A randomized, double-blind, placebo-controlled, crossover study, with an open-label extension. Alzheimers Dement (N Y). 2022 Mar 14;8(1):e12259. doi: 10.1002/trc2.12259. PMID: 35310527; PMCID: PMC8919247.

HEAUNG & KITCHEN

LET FOOD BE THY MEDICINE

© The Sacred Science, LLC