

# Beautiful Inside Out Wellness Guide





## **FOREWORD BY B&WSSC**

Beauty and Wellness Sector Skill Council (B&WSSC) aims to focus on establishing an effective & efficient ecosystem for developing & imparting skills in the Beauty & Wellness industry to enhance the employability of the Indian workforce globally.

The unprecedented growth of Beauty & Wellness industry has created a huge demand for skilled & multi-skilled professional in the country. This Wellness Guide titled, "Beautiful Inside Out" highlights the role & importance of balanced nutrition for beautiful & healthy skin, hair & body, thus exploring a holistic approach to beauty.

Through this booklet, you will embark on a transformative journey - one that celebrates the intricate harmony between inner well-being and outer radiance. In a world that often places undue emphasis on external appearances, it's crucial to remember that true beauty is not just skin deep. It is a reflection of our inner vitality, our health, and our connection to the world around us.

This booklet is the roadmap to radiant health and beauty from inside out as beauty & wellness are the 2 sides of a same coin, so being healthy & looking good compliment each other. Finding balance, reducing stress, and nurturing the emotional well-being is the mantra for a 360\* wellness.



DR. BLOSSOM KOCHHAR Chairperson, B&WSSC



MS. MONICA BAHL CEO, B&WSSC

## FOREWORD

It is my pleasure to introduce this book to you. This book expertly explores the connection between our health, appearance and inner well-being and provides readers with valuable insights and practical tips for achieving true beauty and holistic wellness. The foods we eat can have a significant impact on the appearance and overall health of our skin and hair, and this book is a valuable resource for understanding the connection between nutrition and skin & hair health.

The author delves into the importance of nourishing our bodies with healthy food, regular exercise, and proper sleep, as well as the role that stress management and positive thinking plays in promoting overall wellness. The book offers a holistic approach to skincare and beauty, emphasizing the importance of taking care of our bodies



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from inside out. Whether you are dealing with a specific skin or hair concern, or simply looking to maintain a healthy appearance, this book will provide valuable information and guidance. I believe this book will be an invaluable resource for anyone looking to improve health and well- being, with the right knowledge and approach, we can all achieve holistic wellness with beautiful radiant skin & strong, healthy hair.

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## THE SECRET OF WELLNESS – BE BEAUTIFUL WITHIN

Beauty and Wellness are two sides of the same coin. Being well can help one look beautiful and that itself can add to the overall wellness. Current research suggests that activities involved in maintaining beauty, also positively influence our physical and emotional well-being. Wellness is all about knowing the right things to do to promote overall health. Good health brings forth the inner beauty to the outer surface. There are external factors which contribute towards one's attractiveness & these are potentially under ones control. Taking care of ones health not only makes one feel good but also brings out the inner beauty to the surface.





## PARADIGM SHIFT FROM BEING BEAUTIFUL TO BEAUTIFUL WELL-BEING

Beauty, health and well-being are all interrelated. One is not possible without other. It is difficult to feel good about your physical appearance when you are experiencing health challenges. Looking beautiful and attractive is not about born with sharp features or being a certain size or shape, it's more about being healthy, fit, mentally strong, peaceful and comfortable in one's own skin-"Look and Feel Good". Cosmetics can surely make one look beautiful, but they cannot make one feel well. In fact, healthy skin is the most important determinant of human appearance and wellness, as well as the feeling of self-worth and mental well-being.

Skin is the largest organ of the body. It is a window into a person's inner health and general well-being, as it can carry clues about the health of other organs. Changes in the skin texture, colour, feel, discoloration, or new growth, could be the result of an underlying health problem. Dry and dull skin could be a sign of an underactive thyroid, itchy skin often signals allergies. Hormonal changes and imbalances also influence our appearance, eg. Excess male hormone; testosterone in case of PCOS, can cause





acne as well as high progesterone levels during pregnancy and changes in hormones during puberty can also cause acne. Changes in oestrogen progesterone and levels during menopause can lead to post-menopausal Reduced acne. levels of testosterone on the other hand may result in hair thinning.

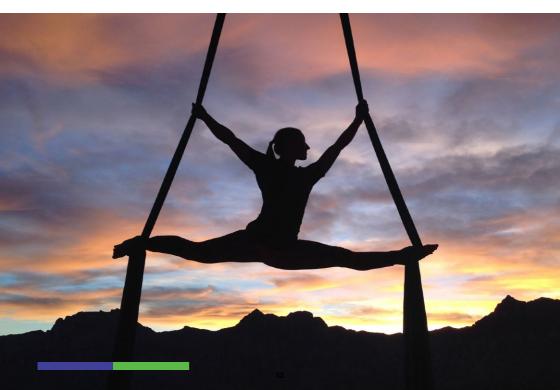
Holistic wellness views skin, hair and nails in the same light as bones, muscles and other organs as all are an integral part of our well-being. By taking good care of our body, we can positively affect our appearance and well-being too. Focusing on a few simple things daily can make a massive difference on the external look and feel.

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## 360° WELLNESS

360° wellness is a holistic integration of all aspects of life, integrating mind, body and spirit for a peaceful and purposeful life, happiness and well-being. It is an approach to health that views all aspects of an individual's life and how they interact with the environment. Attention must be given to all the dimensions, as neglecting any one over time will adversely affect the others and ultimately will have an effect on one's health, well-being, and quality of life. Wellness is a daily choice, a way of life, and a process of change and growth. Wellness is always within your reach, irrespective of external circumstances

Making the right choices for health and well-being can sometimes be challenging. behaviour Human with respect to achieving wellness is influenced by 2 main factors: self-discipline and habit formation. Self-discipline is our ability to direct our behaviour so that we can meet certain standards and achieve our goals. Habits are key to wellness. For better or worse, habits very much influence health, well-being, and quality of life. If you are striving to improve these, you need to think about habits, because if you change your habits for the better, you change your life for the for the good.





## **MAKING THE RIGHT CHOICES**

One can't alter the genes, or even much of the environment one lives in, but the lifestyle choices that one make can have an influence on physical appearance and overall well-being. With a balanced schedule that includes eating right, being active, proper sleep schedule, the body will find its balance, which is exuded outward with clear skin, boosted energy, improved mood, clear thinking and a happier & confident self. Healthy habit formation requires practice and routine. After three weeks, engaging in a new behaviour begins to feel natural.



### **HEALTHY EATING**

The right kind of food is the most important single factor in promoting good health and prevention of disease. It helps to achieve and maintain weight, live longer, boost immunity, strengthen bones, support muscles, keep skin, hair and nails healthy and lower the risk of diseases. Eating a healthy and balanced diet gives more energy, boosts the mood and makes one feel great. The cornerstone of a healthy diet is to replace processed food with natural food whenever possible, as it can make a huge difference to the way one think, look, and feel.



#### **HEALTHY EATING GUIDELINES:**

- Eat small frequent meals, including healthy snacks in between.
- Eat the right number of calories appropriate as per age, gender and regular physical activity.
- Eat a wide variety of healthy foods in appropriate amounts to make sure one is getting all the nutrients needed for staying healthy.
- There should be a balance of protein, fat, carbohydrates, fiber, vitamins, and minerals in the diet.
- Choose from a variety of low-fat sources of protein - including eggs, toned milk & milk products, beans, pulses, poultry without skin, seafood, lean meats, unsalted nuts, seeds, and soy products.
- Eat whole-grain, high-fibre cereals and reduce refined or processed cereals.
   Go for whole wheat flour, whole wheat bread and millets like ragi, jowar & bajra.

- Eat more fruits and vegetables as these are loaded with vitamins, minerals, antioxidants, and fiber. Go for a wide variety of colours like dark green, yellow, orange and red as each contains a different nutritional composition. Prefer fresh, seasonal & locally available vegetables and fruits.
- Restrict or eliminate "junk food" foods that contain refined wheat flour, solid fats or trans fats, added sugars and salt.
- Use 2-3 tsp of oil for cooking every day. Preferably use a combination of oils.
- Use healthier cooking methods like grilling and steaming instead of frying or roasting with oil or fat.
- Include fermented food in your diet like curd, idli, dosa, dhokla, kanji as they feed the body with good microorganisms that boost digestive health and immunity.
- Embrace a variety of herbs and spices instead of salt.
- Consume 10-12 glasses of water every day.
- Restrict or eliminate sugar-added drinks that are high in calories and contain few or no nutrient such as cold drink, aerated drinks and juices.
- Alcoholic beverages, if consumed should be taken in moderation.
- · Eat slowly and chew food thoroughly.
- Be mindful of what one eating and drinking. Try not to watch TV or a mobile while eating.



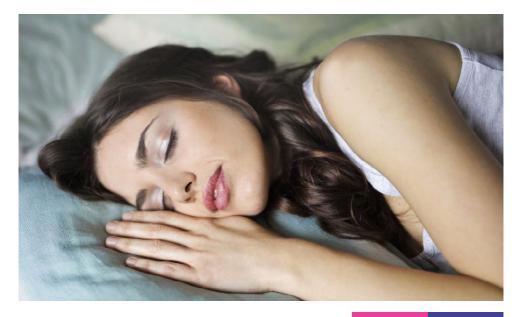
### HEALTHY LIFESTYLE HABITS

#### ADEQUATE SLEEP

Disturbed sleep at night generally leads to a foggy mind the next morning, where one struggles to cope with the daily routine. Inadequate sleep leads to a feeling of anxiety, poor concentration, muscle fatigue, dull skin, and blood-shot eyes. The amount of sleep each person needs varies, but adults generally need around seven to nine hours of sleep each night.

Sleep deprivation has disastrous effect on the body and looks. The immune system weakens, the risk of high blood pressure and heart problems increases, the body's ability to metabolize sugar declines and may lead to weight gain and increased risk of diabetes. With chronic sleep deprivation, our eyes are more prone to dehydration and blood circulation in the facial area is weakened resulting in red, puffy eyes, increased number of wrinkles around the eyes and dark circles under eye. The continuous frown of tired face becomes permanent, causing even more wrinkles and sagging. Sleep deprivation is also associated with fine lines, uneven pigmentation, reduced elasticity and dull appearance.

A good sleep is probably the most powerful rejuvenating cosmetic procedure available to improve our health and appearance.



#### TIPS TO SLEEP BETTER

- Create a sleep routine and stick to it every night.
- Try to avoid large meals, heavy snacking, or alcohol 2-3 hours prior bed time.
- If one is sensitive to caffeine, then try to avoid drinking caffeinated beverages 4-6 hours before bed time.
- To avoid waking up at night, try drinking more fluids during the morning and afternoon and limiting the fluids from dinner time onwards.
- A cup of warm milk at bed time with a multi grain cookie or toast will lead to a good night sleep. Tryptophan, is an amino acid present in milk and complex

carbohydrate present in cookie / toast helps to increase the level of sleep hormone (serotonin).

- A quiet, dark, relaxing environment in the bedroom by dimming the lights and turning off all electronic devices such as phone, television etc. enhances sleep quality.
- Calming bedtime rituals such as practicing deep breathing exercises, doing light yoga stretches, or listening to soothing relaxing music.
- For uninterrupted sleep , read a book, until you feel tired enough to fall asleep.
- Regular exercise can also promote good night's sleep.





## **REGULAR PHYSICAL ACTIVITY**

Normally considered as a way to lose weight, physical activity plays a key role in the well-being of the body. Being physically active improves brain health, reduce the risk of lifestyle diseases, strengthens bones and muscles and improves the ability to do daily activities. By increasing blood flow, exercise helps nourish skin cells and remove toxins and thus makes the skin look healthier and more attractive.



#### TIPS TO KEEP MOVING

- Plan exercise into your day. Set aside a specific time in your schedule to exercise everyday.
- If you do not get enough time to do 30 min of physical activity at a stretch, split it into 2 or 3 sessions.
- Set short-term goals and reward yourself on achieving them. Treat yourself to new clothes, books etc.
- Turn sit time into fit time. Try to combine exercise with a sedentary activity that you already do. For example, perform basic exercises like squats, walking, sit-ups while watching TV or during commercials.
- Reduce the screen time and replace it with activities like household chores, playing with the kids, or taking a stroll.

- If you lack motivation, connect with a friend or family member with a similar goal.
- If you have a desk job, consider taking breaks from sedentary time, by getting

up and walking for 5 minutes each hour, walking while talking on phone, using stairs instead of elevators and doing desk exercises.

### **TYPES OF EXERCISE**

**AEROBIC EXERCISES** - These activities burn calories and improve one's heart and lung fitness. Examples: walking, jogging, dancing, bicycling, swimming.

**STRENGTH TRAINING** - These activities maintain or increase muscle strength, endurance, and power. Examples: free weights, resistance elastic bands etc.

**STRETCHING -** These increase elasticity and range of motion around a joint. Examples: Yoga, Tai Chi etc.

**BALANCE TRAINING** - These activities improve body control and stability & help to prevent falls and other injuries. Examples: standing on one foot, walking heel-to-toe in a perfectly straight line, standing on a balance board.





## **STRESS MANAGEMENT**



## **GRACE UNDER PRESSURE**

Stress is a common human condition and everyone experiences it at some point in their lives. When stress becomes chronic, it can have serious consequences on the health. It affects not just the mental state but the entire body, including the health of the hair, skin and nails.

Stress can cause new skin issues to develop or existing skin issues to flare up. When someone feels stressed, the body releases stress hormones like cortisol and adrenaline. Also, psychological conditions cause increased internal inflammation. When the body perceives a threat, the immune system sends out a response to handle it – that response is inflammation. Usually, inflammation helps protect and heal the body from microbes and wounds, but a body under stress causes the immune system to overreact and send out an inflammatory response.

### EFFECT OF STRESS ON SKIN & HAIR

- The stress hormone cortisol increases oil production in the skin glands, leading to clogged pores and acne breakouts.
- Stress impacts the immune system, causing the skin to be more reactive and sensitive, and triggers rashes, hives and redness.
- It can also make it harder for skin problems to heal.
- It exacerbates existing inflammatory skin conditions like eczema, psoriasis and rosacea.
- Stress caused by sleep deprivation increases signs of aging such as fine lines, reduced elasticity and uneven pigmentation. The loss of skin elasticity may also contribute to swelling or puffiness beneath your eyelids.
- Stress reduces elasticity of the



skin and may contribute to wrinkle formation. Formation of tension lines over forehead, eyes and mouth are a common outcome of stress.

- Stress may lead to greying of hair. It can also disrupt hair's growing cycle and lead to a condition called Telogen effluvium which causes larger than normal amount of hair to fall out.
- Stress may also make people nervous or anxious and pricking at scabs or acne, or scratching the skin, this further leads to redness or breakouts.

#### THE LINK BETWEEN STRESS AND NUTRIENT DEPLETION IN THE BODY

During stress, the body's demand for energy increases and more nutrients are required. However, stress makes the body crave for foods that are high in sugar and fats and lacking in essential nutrients. These comfort foods temporarily reduce stress by triggering chemical reactions that can improve the mood. They provide a small burst of energy with spike in blood sugar levels followed by reduced blood sugar levels that can make a person exhausted and cranky. This, in time, inflicts a greater stress on the body and induce a state of nutrient depletion.



### MANAGEMENT OF STRESS THROUGH NUTRIENTS

Stress is a common problem that we all have to deal with in our lives. The foods we eat can be utilized as a tool to overcome or reduce the effect of stress on the body. When under stress, it is important to consume all important nutrients in order for the body to cope and function effectively.

#### THESE INCLUDE

**COMPLEX CARBOHYDRATES** - whole grains, vegetables and fruits boost levels of serotonin, a chemical in the brain that makes us calm. Serotonin is considered to be the brain's natural "feel good" chemical and appetite suppressant. Complex carbohydrates take longer time to digest, stabilize blood sugar level and keep someone calm for longer period of time.

**PROTEINS** – Proteins are made of amino acids. The amino acid tryptophan is needed for serotonin production in brain. So, it is advised to include chicken, cauliflower, broccoli, milk, cheese, egg, soyabean, bananas which are rich sources of tryptophan. As carbohydrates makes tryptophan more available in the brain, eat healthy carbohydrate along with them.

**FOLIC ACID** - It elevates mood, reduces stress & anxiety and improves mental sharpness.

**VITAMIN B6** - It is required for the production of serotonin, a neurotransmitter that regulates mood, and GABA, a neurotransmitter that acts as a calming agent.

**VITAMIN B12** - It helps to produce both GABA and norepinephrine, a neurotransmitter that helps in maintaining a positive mood.

**VITAMIN C** - It is an antioxidant that neutralizes free radicals and protects the body against cell damage. Stress depletes vitamin C levels in the body. It is required to metabolize phenylalanine and tyrosine effectively. Increase in vitamin C improves body's ability to cope with the stress response.

**MAGNESIUM** - It helps in the production of GABA and dopamine- neurotransmitters that stimulate pleasure centre in the brain.

### **STRESS-BUSTING FOODS**

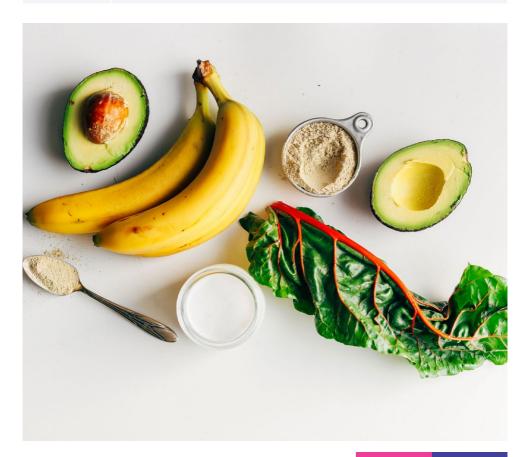
Foods can elicit an emotional response when eaten. Certain foods boost levels of serotonin while other foods can cut levels of cortisol and adrenaline, the stress hormones that take a toll on the body over time.

#### SOME STRESS BUSTING FOODS ARE

FOOD	STRESS PROTECTION VALUE
Walnuts	An excellent source of omega 3 essential fatty acids which improves mood. It also contains vitamin B6, tryptophan, protein and folic acid which contribute to stress relief.
Berries	Rich in vitamin C and antioxidants. It helps to combat stress by lowering cortisol levels and has been linked to sharper cognition.
Broccoli	One of the good mood foods is broccoli which has stress relieving vitamin B6. It also contains folic acid which is important in fighting depression.
Fatty Fish	Like mackerel, salmon, tuna sardines also contain omega 3 fatty acids which can prevent surges in stress hormones & boost the levels of serotonin, a neurotransmitter for good mood. It also has stress fighters like B6 and B12. These are important for the optimum functioning of the brain and enhance memory and mood.
Dark Chocolate	Lowers blood pressure, contains magnesium which relaxes muscles. Chocolate's serotonin elevating activity helps to modify mood in a positive way. Chocolate also contains amino acid gamma- aminobutyric acid (GABA) that reduces anxiety.
Green Tea	Packed with L-theanine, it increases the brain's output of relaxation- inducing alpha waves and reduces output of tension-making beta waves.
Flax seeds	Rich in Omega 3 fatty acids it is a good brain food.
Oranges	Rich in vitamin C, it lowers blood pressure and stress hormone cortisol, while strengthening immunity. It also contains folic acid which helps to relieve stress.
Spinach	Being a rich source of magnesium, it helps to lower stress level by keeping a person calm and by preventing blood pressure from spiking. Spinach is loaded with vitamin C, hence lowers blood pressure and stress hormone cortisol.



FOOD	STRESS PROTECTION VALUE
Avocado	Rich in potassium and healthy fats they reduce stress and anxiety, boost concentration and improve mood.
Almonds	Almonds are rich in vitamin E to bolster the immune and B vitamin which makes one more resilient during stress.
Banana:	Has a combination of vitamins B6, A and C, fiber, tryptophan, potassium, phosphorus and iron and has great mood lifting power.
Eggs	Rich in high-quality protein and omega 3 fatty acids, vitamin B12, vitamins B2, B5, vitamin D & tryptophan hence considered a good stress busting food.



### HEALTHY EATING TIPS TO FOLLOW WHILE UNDER STRESS

Eating a healthy balanced diet can support a healthy immune system and provide the extra energy needed to cope with stressful events.

- Eat regularly and try not to skip meals. Eating 3 balanced meals a day which include all the food groups (fruits, vegetables, whole grains, low fat dairy products and lean proteins), will keep one fueled throughout the hectic day.
- Keep healthy snacks around. Good options include nuts, seeds, fruit, yogurt, roasted makhana etc. One or two snacks during the day will help one stay energized between meals.
- Reduce refined carbohydrates and sugar. The temporary "highs" provided by refined carbohydrate and sugary foods often end in with a crash in mood and energy. Reduce potato chips, namkeens, soft drinks, cookies, sweets, pastries and other high sugar snacks in your diet to feel more relaxed.
- Cut back on caffeine. Drinking too many caffeinated beverages (coffee, energy drinks, soda) can cause anxiety, irritability, sleeplessness, and headaches. Drink more water to keep hydrated-the recommended 8-10 glasses a day.

- Limit Alcohol: Alcohol interrupts your sleep cycle, contributing to depression and fatigue. Excessive consumption can increase anxiety by preventing your body from detoxifying harmful chemicals and bringing hormonal levels into balance.
- Practice mindful eating. When someone "stress-eats" they tend to eat quickly without noticing what or how much they are eating which can lead to weight gain. Mindful eating practices counteract stress by encouraging deep breaths, making thoughtful food choices, focusing attention on the meal and chewing food slowly and thoroughly.





### **PRESCRIPTION FOR STRESS MANAGEMENT**

To maximize the ability to cope with stress try the following

- ADOPT A POSITIVE MINDSET Being more positive about any situation will reduce the amount of stress inflicted upon the body. Avoid complaining, criticizing and gossiping.
- LEARN HOW TO SAY "NO" Know your limits. Don't over commit yourself. Taking on more than one can handle is a recipe for stress.
- MANAGE YOUR TIME BETTER- Poor time management can cause a lot of stress. Planning ahead can reduce the stress.
- SCHEDULE TIME FOR REST- Leisure activities or hobbies that bring joy like gardening, reading, enjoying music, getting a massage, taking a warm bath, playing a musical instrument, playing with a pet and cooking a favourite recipe are examples of welcome stress relievers.
- GET ENOUGH SLEEP- Proper sleep

gives body the time it needs to rest and heal and good sleep improves mood, energy levels and cognition. Get at least 7-8 hours of uninterrupted sleep every night.

- **DE-STRESS WITH EXERCISE** -Exercise can help to lower levels of stress as it releases feel-good hormones that improves the energy, mood and outlook. Engage in at least 30 min of moderate intensity exercise 3-5 days each week.
- SOCIALIZE AND CONNECT WITH OTHERS - Talking with family or friends helps to de-stress by simply sharing thoughts and feelings.
- HAVE GOOD SENSE OF HUMOUR
   Humour provides a psychological distance from the current state and enables to replace negative appraisals with more positive ones



- PRACTICE WORK-LIFE BALANCE A periodic escape from the pressures of work can do wonders to reduce stress & increase productivity
- RELAXATION EXERCISES relaxation techniques like deep breathing, meditation, yoga, etc. can reduce stress. These requires practice over time in order to see results.
- DEEP ABDOMINAL BREATHING -This technique is designed to slow one's breathing and regulate oxygen intake. It involves sitting in a comfortable chair or lying down and taking slow, deep breaths with the intention of breathing so that the air expands the abdomen more than the chest. This significantly reduces perceived stress.
- MEDITATION EXERCISES Combine focusing on a specific object or sensation (such as breathing) while disengaging from other distracters and regulating internal experiences (i.e., emotions, thoughts) through nonjudgemental acceptance. Research suggests that meditation is negatively correlated with perceived stress and decreases in serum cortisol levels.
- VISUALIZATION OR IMAGERY -It's is a powerful method of stress reduction and can be combined with deep breathing. The general idea behind positive visualization is to use imagination to create a situation in the mind that is relaxing and calming - like taking a "mini holiday."





## **KNOW YOUR SKIN TYPE**



It is important to know the skin type. This will help to choose the foods to eat as well as products to be used on skin. Labelling on most products indicates the suitability for the skin type, thus one must know to read the cosmetic labels correctly.

### THE SKIN CAN BE OF THE FOLLOWING TYPES

**NORMAL SKIN** – This skin is neither overly dry nor overly oily but has an even tone and is smooth to touch.

**DRY SKIN** - This skin does not have enough sebum or moisture and can become tight, itchy, red, and flaky. Often due to lack of moisture, it becomes leathery in appearance with maturity. Factors that contribute to dry skin include constant exposure to low humidity, air conditioning, and heating in office & home and certain chemicals in skin-care products. **OILY SKIN** - This skin looks shiny and coarse due to over-active sebaceous glands that produce extra oil.

Oily skin may not be necessarily oily all the time and may depict shiny patches on the nose, forehead, or chin during midday. This skin type also shows enlarged pores and a thick texture and is prone to acne.

**COMBINATION SKIN** - This skin is a mixture of dry and oily skin types. Such skin is oily in the T-zone area (the forehead, nose and chin) and dry on the cheeks.

**SENSITIVE SKIN** - This skin is thin, easily irritated, prone to redness and inflammation and could be painful to touch. It may develop pustules, bumps, become inflamed, flush, and have weakened capillaries that cause thread veins.

### **BEAUTY FROM WITHIN**

#### SKIN

There is a strong relationship between inner health and outer beauty. Glowing, radiant, luminous healthy skin depends on something more than just good genes and effective rande of products. Whatever one eats is as important as what they apply on skin. Key to naturally glowing flawless skin and hair often starts with a healthy diet, none other than a kitchen itself. When one gives the body the right nutrients, it helps to stay healthy, active, and attractive.

Human skin is continually changing. The condition of the skin largely depends on the individual's overall state of health. The healthy nutrients from foods one eats every day nourish the skin from within and hydrate it, making it smooth, supple, and radiant.





### NUTRIENTS FOR HEALTHY SKIN

#### GOOD QUALITY PROTEINS

Key building blocks of skin tissuecollagen, elastin and keratin are all proteins. Collagen and elastin provide smoothness and elasticity while keratin keeps the skin firm. Protein is also essential for healing and repairing damaged skin. The thin outer membrane of our skin acts as a barrier to prevent moisture from escaping. Natural Moisturizing Factor (NMF), a protein, present in the outer layer which helps to keep skin moist. Lack of complete proteins in the diet can result in dry, flaky skin, loss of skin tone and signs of premature ageing such as fine lines and sagging skin.

Sources of healthy proteins are milk and milk products, egg, lean meat, chicken, fish, pulses legumes and nuts.

#### ESSENTIAL FATTY ACIDS (EFA)

Healthy skin needs essential fats. Omega-6 (N-6) and omega-3 (N-3), the Essential Fatty Acids (EFAs) are crucial to skin function and its appearance. These cannot be synthesized in the body, so one needs to obtain them through the diet. These fats support cell membranes and help maintain the skin's natural oil barrier, critical for keeping skin hydrated, moisturized, plump, and smooth. EFA deficiency can cause dry wrinkled skin, poor wound healing & increased susceptibility to infection. Omega-6, found in foods such as vegetable oils, meat, cereals, poultry and seeds helps cells to function, but high consumption has an inflammatory effect. Omega-3, found in foods such as oily fish, eggs, walnut, certain seeds, canola oil, mustard oil& soybean oil has an antiinflammatory effect. It's important to get the right balance of these EFA.. The ideal ratio of omega-6: omega-3 is 4:1. Our diets are generally rich in omega-6 fatty acids but deficient in omega-3 fatty acids.

To increase omega-3 fatty acids, consume fish like mackerel, sardines, tuna and salmon. Those who do not consume fish should have a higher intake of omega-3 from plant sources like walnut, flax seeds, chi a seeds, wheat germ, green leafy vegetables, fenugreek seeds, mustard seeds and pulses.



#### ANTIOXIDANTS

Antioxidants help to fight free radicals in the body. Free radicals are unstable molecules that can damage the cells in the body. They are responsible for breaking down skin's collagen, resulting in loss of skin tone and signs of ageing such as fine lines and wrinkles. Free radicals are produced in the body as a by-product of body's metabolism and environmental sources such as air pollution, smoking, alcohol, pesticides, UV radiation etc. Antioxidants protect collagen and elastin that maintain skin's elasticity, and boost the circulation to the tiny blood vessels near the skin's surface, enhancing our skin's natural radiance.

Vitamin A, C and E, flavonoids, zinc and selenium are effective antioxidants that slow down damage to the skin.



#### VITAMIN A

- · Yellow and orange coloured vegetables, fruits &green leafy vegetables.
- Carrot, mango, papaya, sweet potato, yellow capsicum, pineapple, pumpkin, corn, spinach, broccoli, melon apricot &lettuce.
- · Provides natural protection against the sun.
- · Stimulates the cell that keeps the skin firm and healthy.
- · Helps maintain skin health and appearance.





#### **FLAVONOIDS**

- · Green tea, soybean, onion, citrus fruits, cherries, red cabbage and dark chocolate.
- Reduces collagen degradation.
- Decreases fine wrinkles.
- · Improves skin elasticity.
- · Helps in collagen synthesis.
- · Enhances skin density and elasticity.
- · Boosts immunity.

#### VITAMIN C

- Strawberries, blueberries, oranges, kiwis, papaya, potatoes, broccoli, kiwi, and sweet potatoes.
- · Increases collagen production for healthy, firm and supple skin.
- · Helps skin to repair itself.
- · Protects against sun damage.
- · Decreases risk of dry skin.
- · Improves skin appearance.

#### ZINC

- · Nuts and seeds, asparagus, quinoa, oats, spinach, lentils and wholegrains.
- Reduces inflammation.
- · Slows aging process.
- · Protects against sun damage.
- · Aids in skin healing after an injury.

#### VITAMIN E

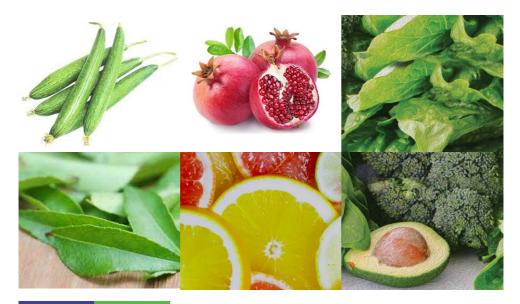
- · Nuts like almond, pine nuts, sunflower seeds, vegetables oils and avocados.
- · Have antioxidant and anti-inflammatory properties.
- Protects against sun damage.
- · Works with vitamin C to strengthen cell walls.

#### SELENIUM

- · Brazil nuts, fish, chicken, eggs, organ meat, brown rice and sunflower seeds.
- · Protects skin from UV rays.
- Protects against skin cancer, sun damage and age spots.
- · Increases immunity.
- · Delays aging.

Consumption of selected foods which are rich in vitamins and polyphenols, abundant in mono- and poly-unsaturated fats, as well as polyphenols can improve skin health.

### PLANT-BASED FOODS FOR SKIN HEALTH: A NARRATIVE REVIEW: VIVIEN W. FAM ETAL. JOURNAL OF THE ACADEMY OF NUTRITION AND DIETETICS MARCH 2022 VOLUME 122 NUMBER 3.





### EATING AS PER SKIN TYPE



#### I. OILY SKIN

Eat foods rich in zinc for skin repair; omega 3 foods to balance sebum; and nutrient-dense antioxidant foods to help keep skin clear. Avoid processed, fried and sugary foods.

#### **II. DRY SKIN**

Eat foods rich in essential fatty acids, vitamins A, D, E, & zinc. Vitamin A and E rich foods repair and replenish damaged skin cells, while healthy fats and essential fatty acids have an anti inflammatory action that reduces redness and helps to restore sebum. Avoid



coffee, aerated drinks, fried foods, processed meats & alcohol.



#### **III. COMBINATION SKIN**

Eat protein rich foods that repair and renew skin. Foods high in anti-inflammatory essential fatty acids, zinc, and natural pro and prebiotics help to balance sebum and restore vitality. Avoid processed & fried foods, excessive dairy products, wheat, and sugar as they can increase sebum production.

#### **IV. SENSITIVE SKIN**

Eat antioxidant quercetin rich foods (onions, apples, grapes, berries, broccoli, citrus fruits, cherries & green tea) and essential fatty acids that calm irritated skin.





#### V. MATURE SKIN

Skin thins as people age. It becomes dry and less supple as sebum, collagen and elastin production reduces. Eat foods rich in essential fatty acids; complete proteins and antioxidant rich foods to protect skin against UV rays and boost circulation.

## **SKIN PROBLEMS AND REMEDIES**

Diet and nutrition have a significant impact on overall appearance. Severe protein and calorie deficiency, is associated with skin lesions and light hair colour, especially in children. Vitamin B-3 (niacin) deficiency, leads to flaky skin and dermatitis. Other B vitamin deficiencies can cause skin rashes or cracks in the corners of the mouth. In some cases, dietary interventions may influence the course of the skin disease, as in acne. In others, dietary change may serve as one aspect of prevention, such as in aging of the skin.

### ACNE

Acne is an extremely common skin condition, characterised by blackheads, whiteheads and sore, red spots that appear on the skin. It occurs when the oil-producing glands (sebum) in the skin become particularly sensitive to male hormone(testosterone), and this sensitivity overworks the glands, producing excess



oil which traps bacteria in the pores. Insulin hormone increases sebum production, making acne worse. Acne is a complex interaction between bacterial colonization, hormones, and inflammation.

#### FOODS THAT WORSEN ACNE

- Foods with a high glycaemic index, such as sugar, white bread, white rice, pasta, sweets, chocolates, soft drinks, industrial baked goods made from maida, fast foods, processed cereals etc are rapidly absorbed, leading to higher serum glucose levels and corresponding elevated levels of insulin.
- Dairy products may increase sex hormones, which increase sebum production, leading to an increase in acne. Whey protein supplements suggested to people who do intense workouts in gyms, may also flare acne.
- Increased intake of omega-6 fatty acids have an inflammatory effect, resulting in acne flare-ups.
- Intake of dietary supplements like Vitamin B6 and B12 by a person



without any deficiency of these, can actually trigger acne and exacerbate existing acne.

## FOODS THAT HELP TO HEAL AND PREVENT ACNE

- Diet which has a beneficial effect on acne is free of processed food, refined cereals, dairy products, refined sugar and refined oil, and rich in whole cereals, pulses, legumes, unprocessed fresh fruits, vegetables, lean meats, fish and sea food.
- Foods rich in omega-3 fats like fish, walnuts, flaxseeds, chia seeds, canola oil and green leafy vegetables are beneficial as they reduce inflammation.
- Turmeric has an active ingredient curcumin, which reduces inflammation and can be helpful. As turmeric is fat soluble, cooking it with oil or adding it to milk can help absorb more curcumin. Freshly ground black pepper contains a compound piperine that also helps to increase the absorption of curcumin.
- Probiotics and Prebiotics also help in prevention and treatment of acne.
   Probiotics are live, good bacteria that can be eaten using fermented foods like idli, dosa, dhokla, curd, kanji.
- Prebiotics are a type of plant fibre that human body cannot digest, but serve as food for good bacteria. Onion, garlic, oats, wheat, barley, apple with skin, under ripe banana and flaxseeds are good source of prebiotics.

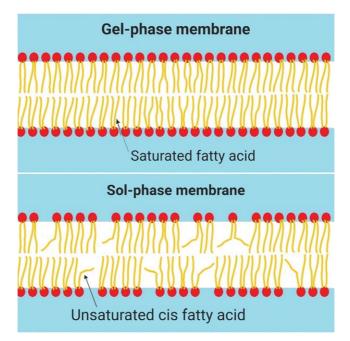
- People with acne may have a significant deficiency of vitamin D and zinc.
   Supplementing diet in Vitamin D and zinc may help to reduce inflammatory eruptions.
- Antioxidant-rich foods promote clear skin. Complete proteins and fibre-rich foods support good gut flora & reduce breakouts. Sulphur and zinc rich foods speed up skin repair and reduce scarring

# SKIN DRYNESS AND DULLNESS

Ironically, dry skin does not mean a lack of moisture. The studies that have compared the water content of dry skin to normal or oily skin don't seem to find a statistically significant difference in moisture content.

The skin's barrier is made up of different types of fats like cholesterol & fatty acids. These maintain fluidity and flexibility in the cell wall and lock the moisture keeping the skin hydrated, soft and supple. When the skin doesn't have enough of these fats, water can easily escape through the barrier, resulting in dehydrated skin.

The type of fatty acids found in the structure of the cell membrane can affect its fluidity, its stability and its functions. If the membrane is composed mostly of saturated fatty acids, which have a straight rigid chain, the membrane becomes rigid while a membrane formed by unsaturated fatty acids will be more flexible.



Different fluidity of cell membranes depending on the saturation of fatty acids: saturated fatty acids forming viscous membrane (up), unsaturated fatty acids forming fluid membrane (down).

For complete wellbeing all three types of fats i.e., saturated fats, mono unsaturated fats and poly unsaturated fats are needed in the diet. The essential fatty acids are most essential for skin wellness.

Dry skin feels rough, tight, uneven & dull and may have patches of red, flaky or itchy skin that crack easily.

Although anyone can develop dry skin, the condition is more prone in the over 65 years age group, those who live in dry, cold climates & those who bathe or shower or wash their hands very frequently. Central heating and air conditioning also reduce humidity and dry the skin. Dry skin is also common in people with essential fatty acid, vitamin A, C, D or E deficiency & hypothyroidism. Consuming certain foods and drinks containing alcohol, caffeine and excessive salt may also contribute to dry skin.





## HOW TO HYDRATE SKIN

- Drink enough water. As the weather gets cold, include warm water with lemon or herbal tea.
- Drinking more water is good but doesn't always help improve dry skin.
- Eating food items rich in essential fats, protein and vitamins help to hydrate the skin from within, which gets reflected as moisturized skin externally.
- Essential fats provide the framework necessary for well-moisturized skin. Include fatty fish, avocado, nuts like walnut, almonds, seeds such as flaxseed, chia seed, sunflower seeds in your diet.
- As the skin is made up of protein, include protein rich foods like lean meat, milk and milk products, egg, pulses and legumes to maintain its structure.
- Consume foods that are high in vitamins A, C, D, E and zinc.

Include fruits and vegetables high in water content such as watermelon, musk melon,cucumber,tomato,apples,lettuce, peach, spinach etc.

## OTHER MEASURES TO PREVENT DRY SKIN

- · Limit coffee and alcohol intake.
- · Limit or avoid smoking.
- Protect skin from the sun, wind and cold.
- · Reduce your stress levels.

- Limit showers to 5 to 10 minutes and use lukewarm water.
- Use a humidifier to add moisture to home's air.

# **HYPERPIGMENTATION**

Skin hyperpigmentation is a condition in which patches of skin become darker in colour than the normal surrounding skin. It is due to the excessive production of skin pigment (melanin) in the skin.

It is caused by internal and external conditions, such as: hormone imbalance, hormonal changes during pregnancy and breastfeeding, birth control pills, high blood sugar, thyroid disorder, deficiency of folic acid, vitamin B12, vitamin A, niacin, sun exposure and sun damage. Hormone related hyperpigmentation generally fade away naturally as soon as the reason for hormonal imbalance is taken care.



## DIET TO REDUCE HYPERPIGMENTATION

- Eat foods high in iron and folic acid.
- Eat foods rich in antioxidants like vitamin C, E, A, beta-carotene, lycopene, selenium.
- Citrus fruits like amla, orange, strawberry, lemons, bell peppers, green chillies and potato are rich in vitamin C.
- Foods with beta-carotene like sweet potatoes, pumpkin, mango, papaya carrots and dark green vegetables.
- Seafood, whole grains, lentils, chickpeas, kidney beans, cashews, almonds, brazil nuts, sunflower seeds, milk, yogurt, cottage cheese are rich in selenium.
- Lycopene-rich fruits and vegetables are tomatoes, carrots, and butternut squash.
- Avoid junk food, processed food, artificial sweeteners, flavour enhancers, food colouring, and chemical additives. Instead eat natural fresh foods like fruits, vegetables, whole grains, beans, legumes, nuts, seeds, meats, fish, eggs, herbs, spices, etc.
- Avoid drinking aerated beverages, packaged fruit juices, energy drinks, sugary beverages and alcohol. Instead have plain herbal tea, infused water, or a freshly pressed vegetable juice.

### LIFESTYLE FACTORS

 Protect your skin from sun by wearing protective clothing (wide brimmed hat, and long-sleeved shirts).

- Stay indoors during strong peak sun hours.
- · Apply sunscreen while going out.
- Drink lots of water.
- Avoid alcohol.
- Practice yoga and meditation.
- Use home remedies.

# HOME REMEDIES FOR PIGMENTATION

- Apply pure aloe vera gel to pigmented areas before bedtime and rinse using warm water the next morning.
- Combine equal parts of apple cider vinegar and water, apply on the dark patches, leave on for 2 to 3 minutes and then rinse using lukewarm water.
- Mix small amounts of turmeric, honey, and curd and apply to the face. Keep it for 15 minutes and then wash it off with water.
- Steep a green tea bag in boiled water for 3 to 5 minutes, remove the tea bag from the water and let cool, rub it over dark patches.
- Soak a cotton ball in milk and rub it over darkened skin patches. Let it sit for a few minutes, and then rinse the area.



IF HYPERPIGMENTATION DOES NOT RESPOND TO THESE HOME REMEDIES, CONSULT A DERMATOLOGIST WHO MAY PERFORM TREATMENTS LIKE CHEMICAL PEELS, MICRODERMABRASION AND LASER TREATMENT. THESE PROCESSES HELP RESURFACE THE SKIN AND REPLACE THE DAMAGED CELLS, WHICH MAY REDUCE HYPERPIGMENTATION.

# **PREMATURE AGING**

Aging is inevitable, but premature aging is when the signs of aging occur early . For most people, fine lines and wrinkles begin to show up by their early 30s, but this can occur even earlier for those experiencing premature aging. Common visible signs of premature aging include fine lines, wrinkles, hair loss or greying hair, dryness, loss of skin tone, sagging skin, hyperpigmentation, sunken cheeks and age spots.

# **CAUSES**

A range of environmental and lifestyle factors are responsible for premature aging. Overexposure to sun, smoking, alcohol addiction, unhealthy diet that is rich in sugar & refined carbohydrates, environmental pollutants, poor sleep quality, excessive stress and lack of physical activity.



# LIFESTYLE BEHAVIOURS TO AVOID PREMATURE AGING

- Protect skin from sun damage.
- Eat a healthy diet rich in antioxidants and essential fatty acids. Include fruits, vegetables, legumes, lean proteins, nuts and seeds. Avoid eating too much sugar or refined carbohydrates.
- Stay hydrated as dehydration can make wrinkles show up faster.
- Give up smoking.
- · Limit alcohol intake.

- Engage in regular physical activity as it improves circulation, boosts immunity and keeps skin healthier.
- Improve the quality and quantity of sleep. Follow a proper sleep regime.
- Lower stress levels by practicing healthy stress management techniques.
- Avoid repetitive facial expressions as repeatedly contracting the same muscles for many years, can make the lines permanent.
- Apply a facial moisturizer each morning and before bed to keep the skin hydrated. Dry skin can make wrinkles appear worse.

# DAILY SKIN CARE REGIME

A good skin care regimen is a must for healthy skin. Skin sheds cells throughout the day, so it's important to keep skin glowing and in good condition. Before formulating any skincare routine, one must first need to understand skin type and based on that, need to figure out the suitable regime. One must focus on major skin concerns to treat them most effectively.



An appropriate and effective routine can help prevent acne, treat wrinkles, reduce the appearance of fine lines, dark spots, and sun damage and help keep the skin looking at its best. When the skin looks better, one feels better and gains selfconfidence.

The skin contains circadian clock genes, which play a role in the regulation of the circadian rhythm. The skin undergoes circadian rhythm changes as follows:

 Highest skin protection, skin thickness and sebum production during the day time - skin works in protective mode.



 Highest skin permeability, skin penetration, blood flow to the skin and DNA repair at night - skin works in reparative mode.

Hence, the time of application of products is important based on their function. It is also essential to understand the order in which skin care products need to be applied since each product is formulated differently, to address different concerns. The day time skincare routine should focus on protecting your skin while the night-time regimen should focus on restoring and rejuvenating and addressing specific needs of the skin.

# DAYTIME REGIME

During the day, the skin is more susceptible to harmful sun rays and pollution even indoors.

CLEANSING - Skin cleansers remove dirt. sebum, microorganisms and exfoliated skin cells. An ideal cleanser should not irritate, damage or disrupt the skin & the moisture skin barrier. Besides maintaining clean and healthy skin, cleansers reduce the risk of clogged pores, help improve skin tone and allow other skincare and beauty products to work more effectively. Use a gentle cleanser for the skin. Apply the cleanser on the face gently, using fingers to rub the cleanser in a circular motion on the cheeks and rinse well. Use lukewarm or cold water to wash face. Avoid rinsing with hot water as it removes natural oils and causes skin to become dehydrated.

**TONING -** Toners removes residual soap, moisturizer, and oil that lingers on the skin even after cleansing. Applying a toner after cleansing the skin preps it for moisturizers and other products that follow. Toners make the skin smooth, calm and replenish nutrients to the skin.

**EXFOLIATION** - is а process of eliminating dead cells, reducing the chances of black and whiteheads on face. Use of exfoliator is optional and can be used after a cleanser but before a moisturizer. Chemical exfoliants use certain ingredients to chemically loosen the bonds between dead skin cells and the new cells underneath. Physical exfoliants use scrubbing particles that manually loosen these bonds to exfoliate the surface of the skin. After applying exfoliator, move fingers in smaller, tighter circles for not more than a minute. Rinse and gently pat dry. Do a patch test before using the product in case skin is sensitive. It should be used once or twice a week. Opt for a gentle exfoliator rich in vitamins E & B5 as it keeps the skin soft, healthy and hydrated at all times.

**MOISTURIZING** - Moisturizers prevent the skin from drying out, leaving skin hydrated and smooth. They are most effective when applied while the skin is slightly damp to seal in moisture. During summer, opt for a light moisturiser unless your skin is excessively dry. For oily skin, choose an oil-free or gel product.

**SUNSCREEN** - Should be the last step in a daytime skincare routine. It should be applied daily. It protect against UVA and UVB rays. UV exposure causes wrinkles, uneven skin tone, loss of firmness and aging signs. Choose one that provides broad spectrum protection and has an SPF of at least 30. Ideally, a gel-based sunscreen is good for all skin types and must be used daily and reapplied every 2-3 hours or after washing the face.

# **NIGHT TIME REGIME**

At night, the skin recovers and repairs itself from the day's damage. The night time skin care regime should be all about cleansing, treating and nourishing the skin.

**CLEANSING** - At night, after a full day of exposure and damage, cleanse the skin to remove make up, dirt, grime and pollution on the skin surface. In case, the cleanser is not able to remove the heavy make-up, wash first with an oil-based cleanser followed by a water-based cleanser or mi cellar water on a cotton pad to remove anything left behind. Do not use wipes to clean the skin as they contain skin unfriendly ingredients to keep them wet and prolong their shelf-life. They leave a film on the face which can irritate, clog pores and block absorption of skincare products.



**TREATING** - After cleansing, use targeted skin care treatment products such as antiageing serum, retinal cream, exfoliating treatment or prescription medicine based on the skin concern. Serum is a product with a concentrated amount of focused ingredients to tackle certain skin issues. Use a serum on problem areas of the skin like an anti acne or oil-control serum. Based on the skin's needs, use a formula that contains retinoids or a hydrating or firming serum.



**MOISTURISING** - Moisturisers are a must to end the day as they help to lock in all the goodness applied to the skin, while ensuring hydration.

# CHANGE IN SKINCARE ROUTINE WITH WEATHER

SELF-DISCIPLINE & CONSISTENCY ARE KEY WHEN IT COMES TO SKINCARE, SO MAKE SURE TO CREATE AND MAINTAIN A ROUTINE THAT WILL BE ABLE TO FOLLOW DAILY TO WAKE UP WITH BEAUTIFUL,GLOWING SKIN.

In winter, the cold weather and heat from the radiator make the skin dry. Shift to an intense moisturizing cleanser to supplement the daily moisturizer. In summer, if the skin becomes oily, shift to an oil-free cleanser.



# **GRACEFUL AGING**

Changes in the skin as we age are inevitable. Aging gracefully means approaching the advancing years with a healthy and holistic point of view. One can positively influence the journey of aging by understanding the various factors that influence it. This understanding is pivotal to the success of any anti-aging measure that someone may choose to adopt.



Skin aging is a natural and continuous process. During this course, skin structure, function and appearance are affected. With aging, the skin becomes thin, its turnover rate slows down and the pigment responsible for skin colour, water, fat content, collagen and elastin in the skin reduces, healing of wounds, production of sweat, and creation of sebum are compromised. Youthful skin is characterized by its unblemished, evenly pigmented, smooth, and pink appearance while aging skin is characterized by the appearance of fine wrinkles, the loss of elasticity, age spots, and the loss of skin tone.

# FACTORS THAT INFLUENCE AGING CAN BE BOTH INTRINSIC (INTERNAL) AS WELL AS EXTRINSIC (EXTERNAL) FACTORS.

Intrinsic skin aging occurs with advancing age and affects skin in the same pattern as it affects other internal organs. It appears after a certain age and is characterized by dry, dull, thin skin which lacks elasticity and fine wrinkles. It occurs due to accumulation of free radicals formed naturally in the body during normal metabolism.

Inextrinsic aging, the skin suffers additional free radical damage from environmental factors and/ or someone's own lifestyle choices. These environmental stressors not only accelerate skin aging but are responsible for skin damage, leading to rough texture, significant loss of elasticity, deep wrinkles and hyper-pigmentation.

# EXTERNAL TRIGGERS THAT INFLUENCE AGING

 SUNLIGHT - The free radicals produced by the UV rays, due to over exposure, damage the skin cells, impair collagen production, destroy elastin and destroys the skin's ability to regenerate and repair. With time, changes such as dark spots, dryness and freckles, appear on the skin.

- CIGARETTE SMOKING Smoking significantly damages collagen and results in premature ageing of the skin. It can change skin cuticle thickness, accelerate skin pigmentation, wrinkle formation and results in a sallow, sagging skin.
- **EXCESSIVE ALCOHOL** It dehydrates the skin, contributing to a dull and aged look.
- STRESS During stress high amounts of stress hormone (cortisol) is produced which breaks down the skin's collagen and elastin. Chronic stress can also increase inflammation accelerating the formation of wrinkles.
- UNHEALTHY DIET Eating too much processed foods, that are usually high in refined carbohydrates, added sugar, and harmful fats, can promote chronic inflammation that speeds up aging. Ingestion of sugar rich foods promotes cross-linking of collagen fibres resulting in increased stiffness and reduced elasticity.
- **POLLUTION** Prolonged or repetitive exposure to high levels of air pollutants weakens the barrier function of the skin, allowing unwanted substances to penetrate the skin and cause premature skin aging, pigmentation spots and even acne.



 SLEEP DEPRIVATION - Long term poor sleep quality is associated with reduced skin barrier function and features like hanging eyelids, red, swollen eyes, dark circles under the eyes, paler skin, more wrinkles/fine lines, and droopy corners of the mouth.



 PREVENTION- The best and most effective way to work against extrinsic skin aging effects. A balanced nutritious diet, including anti-oxidative rich foods, physical fitness, lifestyle changes, right attitude, stress management and appropriate skin care are the best defence against aging skin.

#### SIMPLE WAYS TO RESIST AGING

By cutting down or avoiding the following, one can help the skin to look younger for a longer time.

 LIMIT TIME IN THE SUN - Avoid being out in the sun during peak times when the sun's rays are strongest. A good sunscreen is an active part of wrinkle management. Sunscreens with SPF 30 may be adequate for daily use. Apply the sunscreen twenty minutes before stepping out in the sun and re-apply it after every 2 hours, after sweating or after swimming. If one is sensitive to sunlight wear protective clothing and use accessories such as gloves, hats or and umbrellas while stepping out.

- The SPF on sunscreen stands for sun protection factor, a relative measurement for the amount of time the sunscreen will protect one from UV rays.
- **DO NOT SMOKE** and avoid being with those who do, as even passive smoking has negative effects on the skin.
- **LIMIT ALCOHOL INTAKE.** If having a few alcoholic drinks, make sure to hydrate with water between drinks.
- DO REGULAR PHYSICAL ACTIVITY - One of the most important ways to fight aging is with exercise. Simple exercises such as walking or swimming, if done for 30-60 minutes for at least six days a week, can go a long way to keep the skin youthful. Exercise improves blood circulation and boosts immunity. Increased blood flow through the body helps to bring oxygen and nutrients to the skin and take away waste products. Regular exercise keeps the body in shape, increases muscle mass, protect bones, improves the ability to do daily activities, reduces stress and improves mood.

 BEAT THE STRESS - Stress affects overall health and well-being It is important to identify the cause and work towards reducing the stress. Steer clear of negative thoughts and practice relaxation techniques like deep breathing and meditation to be stress free.



 GET GOOD SLEEP - Body needs sleep to rejuvenate and recover from the damages imposed during the day. So, getting a good night's sleep is a priority.

Laugh to stay young! It is well known that humour heals and rejuvenates.

Besides oral supplementation and lifestyle changes, mindful and synergistic usage of topical solutions is the most effective way to improve skin aging. A daily skin care routine using appropriate products helps to increase skin regeneration, elasticity, smoothness and thus temporarily change the skin condition.

#### SUPER FOODS TO FIGHT AGING

A balanced diet rich in antioxidant vitamins A, C, E and healthy fats are the key to improve skin elasticity, hydration and visible signs of fine lines and wrinkle.  RAINBOW OF YOUTH - Organically grown bright coloured fresh fruits and vegetables are a great choice for keeping the skin youthful. Green leafy vegetables, peppers, broccoli, citrus fruits, berries, carrots, papaya, tomatoes, pomegranate and avocados are packed with antioxidants and nutrients that fight wrinkle-causing free radicals.

- Eat a handful of raw assorted nuts, including walnuts, almonds and peanuts every day. Eat foods rich in omega-3 fatty acids, such as flax seeds, chia seeds and fatty fish for a glowing and youthful skin.
- Substitute refined carbohydrates like maida, white bread, rice in the diet with complex carbohydrates like whole wheat, brown rice, whole wheat bread, jowar, bajra and ragi.
- Foods such as whole grain cereals, eggs, garlic and sea foods contain selenium that helps in firming skin tissues.
- Other beneficial foods to include are herbs and spices, such as oregano, cinnamon, cloves, ginger, and garlic.
- Green tea is great for metabolism and also an age resilient. It contains antioxidants called catechins that help fight the long-term effects of sun damage, such as sun spots and skin thickening. Ideally, one should drink at least two cups of freshly brewed green tea a day. One can also apply green tea topically as a facial mist or freeze green tea into ice cubes and use them



as a toner.

- Avoid highly processed foods, sugary beverages, fried foods.
- Relish meal and eat it slowly by chewing it well. Take at least 20 minutes to finish a meal. This will ease digestion, lower stress and will make sure that the food we eat works in our favour.

## A FEW ANTI - AGING INGREDIENTS FROM THE KITCHEN TO BE NATURALLY AND YOUTHFULLY RADIANT

- Milk can be used as a cleanser and moisturizer for dry skin.
- Curd rich in lactic acid, rejuvenates the skin and makes it smooth by peeling off dead cells. It helps to lighten age spots and makes skin tone even.
- Lemon juice mixed with cream/ curd is rich in vitamin C, which destroys free radicals and promotes collagen synthesis. It is a lightening agent and promotes peeling.
- Egg white helps to tighten the skin, make it firmer and reduce wrinkles.
- Aloe vera moisturizes, firms skin tissue and reduces wrinkles.
- Almond oil, rich in vitamin E can be used for facial massage.
- Besan or gram flour is a good exfoliant and when used as a paste, made with water or milk, acts as an excellent deep pore cleanser.
- · Potato has skin renewal properties.

Rubbing potato peel on the skin can improve its elasticity. Potato slices also helps in reducing dark circles under the eye.

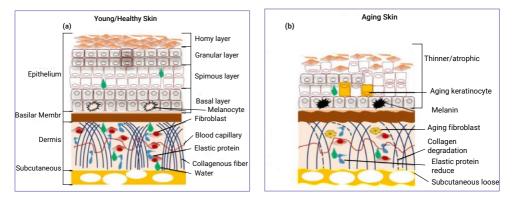
- Cucumber has very good anti-aging properties and is extremely good for under eye dark circles.
- Coffee powder mixed with honey is an excellent body scrub.
- Rose water is a wonderful toner and also has healing properties.
- Tomato juice has amazing astringent properties that is effective on oily skin.
- Gram flour, turmeric powder and few drops of lemon juice, mixed with either yogurt, milk, rose water or plain water may be used as a face pack for a great, younger-looking skin.



In case one plans to use a commercial anti-aging skin care product, look for ingredients like retinoids (stimulates cell turnover & collagen production), hyaluronic acid (traps moisture in skin), vitamin C (neutralizes damage, stimulates collagen production & lightens dark spots), vitamin E (reverses damage and rejuvenates skin), peptides (stimulates collagen production), ceramides (strengthens skin's barrier to keep moisture in and pollutants out), glycolic acid (exfoliates dead cells and fight wrinkles), and lactic acid (exfoliates & increases skin moisture).

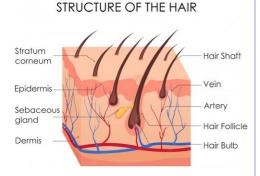
The way one ages is in its own hands as a lot of symptoms of aging are a result of improper diet and lifestyle.

# IT IS QUITE POSSIBLE TO RESET THE AGING CLOCK. ALL IT TAKES IS PAYING ATTENTION TO THE WAY OF EATING, THINKING AND TAKING CARE OF THE BODY





# HAIR



Healthy hair reflects the personality, affects how people perceive and is also a sign of excellent health. Hair can be straight, wavy or curly, blonde, black, brown, grey or white and its natural variations are an important component of body image. It is one of the few physical characteristics that can change and manipulate as per the wish and fashion. Shiny hair with a smooth texture that detangles easily, resists breakage and has clean-cut ends is perceived to be healthy. There are no nerve endings in the hair, which makes getting a haircut painless.

Several internal and external factors can affect hair health and growth, including age, hormonal changes, diet, sun exposure, illness, medication, heat styling, the products and hair tools used, stress, etc.

# NUTRIENTS FOR HEALTHY HAIR

Diet plays an important role in hair health. The type of foods one eats has an impact on the growth, strength, and volume of the hair. Since hair grows from the roots, so the key to healthy hair growth, lies in improving the health of the scalp and hair follicles. Certain proteins, fats, vitamins and minerals are especially important for strong, healthy hair.

Proteins are the building block of hair, promote growth & strength of hair. Insufficient intake can slow their growth making them dry, brittle and weak. Include lean meat such as fish & chicken, eggs, pulses, legumes, milk & milk products, nuts and seeds.

**VITAMIN A** - Supports the secretion of sebum, which provides a natural conditioner for a healthy scalp. Without sebum, people may experience an itchy scalp and dry hair. Not taking enough vitamin A, results in dry hair while taking large amounts (> 50,000 IU per day) can cause hair loss. Include carrot, mango, papaya, sweet potato, yellow capsicum, pineapple, pumpkin, corn, spinach, broccoli, melon apricot and lettuce. **VITAMIN B** - B complex preserves hair strength, texture, and function & prevents thinning and hair loss. Include dark leafy greens, gluten-free whole grains, sweet potatoes, legumes, fish & eggs.

**VITAMIN C** - Essential for forming collagen, the structural protein that holds the hair together. Insufficient intake makes the hair dry, brittle, lacking lustre. Include orange, other citrus fruits like mausmi, strawberries, blueberries, kiwis, papaya and potatoes, broccoli, amla, guava and sweet potatoes.

**VITAMIN E** - Improves blood circulation and promote hair growth. Include: Nuts like almond, pine-nuts, sunflower seeds, vegetables oils and avocados.

**IRON** - The roots of hair need adequate nutrients and oxygen. Deficiency of iron results in dull, brittle and fragile hair, slow or halted hair growth, as well as shedding. Include red meat, poultry, fish, egg, pulses, soya beans, tofu, spinach, quinoa, nuts and pumpkin seeds. Vitamin C - rich fruits like amla, guava and citrus fruits improve iron absorption from plant foods.



# COMMONLY EXPERIENCED HAIR PROBLEMS AND REMEDY

### DULL, BRITTLE AND FRIZZY HAIR



Hair becomes dry and frizzy when the scalp doesn't make enough oil to moisturize the hair. Causes include poor diet including a lack of healthy fats, dry scalp, aging, environmental conditions including dry, hot climate, frequent sun and wind exposure, and frequent exposure to chlorinated or salty water. Excessive use of hair dryer, hot curlers, hair dyes, tight braids, and hair straightening products, and chemical-laden cosmetics may also cause dry and brittle hair.

#### TREATMENT

 Eat healthy proteins to strengthen hair, healthy fats and a range of colourful fruit and vegetables for antioxidants



and vitamin A and C, which boost sebum production to condition hair.

- Wash your hair less often using a mild shampoo. Apply a moisturizing conditioner.
- Gently massage scalp with oil.
- Trim split ends as they contribute to frizzy look and feel. Removing them can make hair feel smoother.
- To protect hair from sun damage, wear a wide-brimmed hat while going outside.

### PREMATURE GREYING OF HAIR



As greying of hair is perceived as a sign of old age, premature greying of hair may have significant adverse effects on the appearance and self-esteem of the individual. Reasons for premature greying of hair include: heredity, deficiency of vitamins like 8-6, 8-12, biotin, vitamin D or E and essential minerals like iron, copper & zinc, illness such as thyroid disorder, anemia and mental stress. Lifestyle choices like smoking, faulty diet, excessive use of hair dyes and hair products can also cause premature greying of hair. Free radical formation due to exposure to UV rays and pollution may also be the causative factor.

The treatment for premature greying is to address the root cause. If genetics or aging is the cause, nothing can present the process. However, treating/control of the underlying medical condition could allow colour pigmentation to return. When vitamin & mineral deficiencies are the cause, correcting these may reverse the problem or stop it from worsening. A diet rich in antioxidants like fresh fruits and vegetables, green tea, nuts, seeds and fish can reduce oxidative stress. Judicious use of appropriate hair products and appropriate lifestyle changes can prevent premature greying.

## HAIR COLORANTS FOR RESTORATION OF HAIR COLOUR



Hair colours can be synthetic or natural, temporary permanent. Synthetic or hair dyes available in the market may contribute to premature greying and may cause allergic reactions, inflammation, and hair loss. Natural hair dyes prepared from amla, henna are hypoallergenic and nontoxic and offer an alternative to slow down hair-whitening without harming the body or causing further hair pigment damage. There is a risk of damage to the hair shah due to oxidation with permanent hair dyes while temporary hair dyes do not penetrate the cuticle and wash out with shampoo.

### AGING HAIR

The condition of the hair depends on heredity, condition of the scalp, hair care, styling habits, external factors, hair damage, nutritional and overall health status. As with age, our hair undergoes changes in colour, growth and distribution. In mid 30's, hair density begins to decrease and sebum production in scalp reduces resulting in dry scalp and hair. By the age of 50, half of the average person's hair becomes grey. The lighter-coloured hair makes hair more susceptible to UV damage that can cause hair damage and scalp irritation. These changes can be exacerbated by environmental and lifestyle factors like humidity, stress, air pollution, smoking, or hair dye.

#### NATURAL REMEDIES



- Curry leaves combined with hair oil and applied to the scalp can slow premature greying of hair.
- Amla powder mixed with coconut oil and applied directly to the scalp helps in reversing premature greying by promoting pigmentation as it is rich in antioxidants and anti-aging properties.
- Black tea can make hair dark, shiny and soft. It can be used by steeping 3 to 5 tea bags in 2 cups of boiling water, cooling and adding to clean, wet hair. Tea can also be mixed with conditioner, left in the hair for 1 hour, and then rinsed out.
- Ridge gourd is known for restoring hair pigment and stimulating the roots of the hair. Regular massaging of ridge gourd oil can prevent hair from turning white. To prepare ridge gourd oil, cut it into small pieces and dry in light sun. After that soak the dried pieces in coconut oil for 3-4 days. Boil the coconut oil with soaked ridge gourd for 10 min and use.



Hair loss is more prevalent in older adults, but anyone can experience it, including children. It is typical to lose between 50 and 100 hairs a day. With about 100,000 hairs on your head, that small loss isn't noticeable. New hair normally replaces the lost hair, but this doesn't always happen. Hair loss can develop gradually over years or happen abruptly. Depending on the underlying cause, it may be temporary or permanent.



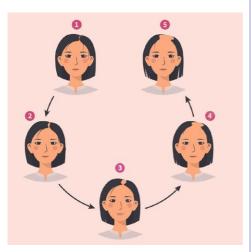
A hair growth cycle consists of three phases. During the anagen phase, hair grows actively. This phase may last for years. During the catagen phase, hair stops growing and separates from its follicle, which is the structure beneath the skin that holds the hair in place. The catagen phase lasts about 1 0 days. During the telogen phase, the follicle rests for two or three months, and then the hair falls out. The next anagen phase begins as a new hair grows in the same follicle.

If this cycle is disrupted, or if a hair follicle is damaged, hair may begin to fall out more quickly than it is regenerated, leading to symptoms such as a receding hairline, hair falling out in patches, or overall thinning.

# THERE ARE A FEW MAIN TYPES OF HAIR LOSS, EACH WITH DIFFERENT UNDERLYING CAUSE

- Hair may gradually becomes thin with age. More hair follicles go into the resting phase, and the remaining hair become shorter and fewer in number.
- · Hair loss could be due to heredity and can affect both men and women. In men, this condition is called male pattern hair loss. It is characterized by a receding hairline and gradual disappearance of hair from the crown and frontal scalp. It starts above the temples and continues around the perimeter and the top of the head, often leaving a ring of hair along the bottom of the scalp. In women it is called female pattern hair loss. In women, the hair slowly become thins all over the scalp, but the hairline usually doesn't recede. Many women experience this type of hair loss as a natural part of aging or during menopause.
- Sometimes there is sudden hair loss in a previously normal scalp. It occurs because of changes in the growth cycle of hair. After a precipitating event, such as a severe illness, surgery or severe sudden emotional stress, the hair suddenly stops growing and goes into the resting phase causing hair shedding. It can also happen due to hormonal changes during pregnancy, childbirth, menopause. Other causes include thyroid imbalance or abnormal levels of male hormones, starting or stopping

birth control pills, iron deficiency, medications such as blood thinner. The hair returns when the underlying condition is treated.



- Other causes of hair loss include deficiency of niacin, vitamin D, iron, zinc and biotin, restrictive diets, rapid weight loss and certain hair care practices, such as wearing tight ponytails or weaves.
- Over-supplementing vitamins A, E and selenium i.e., exceeding the recommended daily limit can lead to their toxicity and hair loss.

#### TREATMENT

Treatment for hair loss depends on the cause.

- Treatment/control of the underlying medical cause, if any.
- When hair loss is related to a medication, stopping the drug usually prevents further hair loss, and the hair

will eventually grow back.

 Resolve nutritional deficiencies, if any. Eat a balanced diet rich in proteins, vitamins, minerals and antioxidants to promote hair growth and strengthen hair roots. Biotin rich foods / supplement may be beneficial. Supplementing the diet with low levels of vitamin D can improve symptoms. In case of low iron levels, supplementation is recommended along with appropriate vitamin C intake.

Tips to prevent hair damage that may cause hair loss. Although one can't reverse natural hair loss, one can protect hair from damage that may eventually lead to hair thinning by following these guidelines.

- **BE NATURAL** Leave the hair in its natural colour and texture. In case someone opt for chemical treatment, it is advised to give hair time to recover in between treatments. Don't style the hair with tight braids.
- CHOOSE PRODUCTS WISELY Use

   a basic shampoo designed for the
   particular hair type. When curling the
   hair, choose less-damaging sponge
   rollers. Also, brush using a moderately
   stiff, natural-bristle brush, which is less
   likely to tear the hair.
- BRUSH PROPERLY Using a proper brush, apply full strokes from the scalp to the tips of the hair to distribute the hair's natural oil. Be gentle, and avoid brushing the hair when wet, when it is especially fragile. It is best to use a wide-toothed comb on wet hair.



#### CHANGES IN HAIR WITH AGE



As one grows older, hair inevitably changes. Life events, such as pregnancy and illness, can change hair texture and volume, and from 40s onwards, hair starts to thin and to lose its natural colour.

**IN OUR 20S** - Collagen production is high, which keeps hair strong and gives it structure, and hair appears to be thick, glossy, and healthy. Sometimes, though, one may still be battling with oily hair from adolescence in this decade, which can be a problem for finer hair.

**IN OUR 30S** - Hormones may change subtly, which can affect hair. Growth hormone starts to fall in the 30s, which can make hair weak. If pregnant, higher estrogen levels keep hair in an extended growth phase so it looks thick and glossy, but when estrogen returns to normal after childbirth there may be a period of greater hair loss as the hair that wasn't shed in pregnancy is lost.

Hair is often becomes thinner and has a different texture in our 40s. One looses approximately 100 hairs every day, and as the rate of regrowth slows, this can impact hair volume. Collagen production decreases, which further weakens the hair, and hair may start to lose colour and turn increasingly grey. Grey hair tends to

have a coarser texture and can look dull and frizzy.

**IN OUR 50'S -** As oil glands shrink over time, hair becomes dry and more brittle, and colour of hair becomes progressively more grey. For some, thyroid problems can lead to changes in hair texture and growth, thinning of hair and slow regrowth. Collagen continues to decline, which can weaken the hair shaft and make hair more brittle.

**60+ HAIR CONTINUES TO THIN** - Each strand becomes smaller in diameter - and become finer in 60s. The rate of regrowth slows and hair follicles start to rest, which means there can be less scalp coverage. Hair increasingly loses elasticity, which can make it harder to manage and style. Grey hair may be extensive now and can gradually become white.



## GROOMING & LIFESTYLE PRACTICE FOR AGING HAIR

- Use a mild shampoo and reduce the frequency of shampooing
- as daily shampooing strips the hair of its protective sebum covering, drying

out the hair and causing breakage. Manipulate the hair as little as possible -Combing, brushing, curling, and braiding can cause permanent hair damage.

- Avoid combing wet hair. Gently detangle hair after shampooing with the fingers. Comb the hair gently when dry and with a wide tooth comb to prevent breakage.
- Limit the amount of chemical hair treatments like hair straightening, permanent hair curling, and hair dyeing.
- Air dry hair and avoid heated appliances

   If hair dryer needs to be used, keep the nozzle blowing out hot air at least 12 inches from the hair, allowing the air to cool prior to touching the hair.
- Wear hat/scarf while going out to prevent further UV damage to the hair/scalp.
- Stop smoking or limit passive smoking.



# NAILS



Nails are extensions of the skin that protect the fingers, toes and improve the visual appearance of the hands and feet. Nail colour, lustre, size, shape, thickness, and the health of surrounding skin all add to healthy and beautiful nails.

### **HEALTHY NAILS**

- · Are uniform in size and shape.
- Are smooth and shiny in appearance.
- Have white small half-moon shape at the base of the nail.
- Have white nail-free margin the part of the nail that grows past the fingertip.

Adequate dietary intake of vitamins and minerals is important to support proper nail health, growth and appearance. If someone has a vitamin or mineral deficiency, it can show up as dry, cracked, brittle, and irregularly shaped nails.

# NUTRIENTS IMPORTANT FOR NAIL HEALTH

**PROTEIN** - Nails are made up of proteins called keratin which gives nails their strength and resilience. So, it's essential to include plenty of high-quality proteins in the diet each day. These include milk & milk products, beans and pulses, fish, lean meat, eggs, nuts and seeds.

**ZINC** - Zinc is especially important for areas where cells grow and divide rapidly, such as in the nails. A steady supply of zinc is needed to promote the healthy growth of nails. An inadequate intake of this mineral often shows up first in the nails, causing nails to become dry and brittle, and characteristic white spots may appear. Rich sources of dietary zinc include poultry, fish, seafood eggs, soy, chickpeas, almonds, cashew nuts, pumpkin and sesame seeds. **OMEGA - 3 FATTY ACIDS -** These help to lubricate and moisturize the nails, giving them a shiny appearance. A lack of omega-3 fatty acids could contribute to dry and brittle nails. Fatty fish like salmon, trout, mackerel, tuna and sardines, walnuts, soy, eggs, chia seeds, flaxseeds, dark leafy green vegetables are rich source of omega - 3 fatty acids.

**BIOTIN** - Biotin is a B complex vitamin which promotes healthy cell growth and aids in the metabolism of proteinbuilding amino acids that are essential for nail growth. Biotin-rich foods help to strengthen brittle fingernails. Rich sources include such as liver, egg yolk, dairy products, yeast, salmon, avocado, sweet potato, nuts, seeds and cauliflower.

**OTHER B VITAMINS** - Other B vitamins important for nail health include Vitamin B 12 and folate. Both vitamin B 12 and fol ate play a role in red blood cell production and oxygen transportation to nail cells. Vitamin B 12 deficiency can result in darkening of nails. Folate deficiency results in discoloration of nails and also rigid and brittle nails. Folate can be found in dark green vegetables, citrus fruits, beans, peas, lentils, nuts, seeds and avocado. Vitamin B 12 is primarily found in animal foods, such as meat, poultry, fish, eggs and dairy.

**VITAMIN C** - Vitamin C helps to provide strength and integrity to nails. A deficiency in vitamin C can result in brittle nails, as well as slowed nail growth. Vitamin C is abundant in many fruits and vegetables, including oranges, strawberries, bell peppers, broccoli, and dark leafy vegetables like kale.

**IRON** - Iron helps to carry oxygen to every cell in the body- including the nails. Iron deficiency or anemia can lead to "spoonshaped nails," in which the nails become thin and have a spoon-shaped convexity. In addition, it can cause the nails to become dry, brittle, and fragile. The body absorbs the iron found in animal foods, such as chicken, fish and eggs, better than that in plant foods like dark green leafy vegetables, peanuts, seeds, beans and other fortified foods. Eating a food rich in vitamin C together with a plant-based iron food source improves absorption.



# COMMON NAIL PROBLEMS

**BRITTLE NAILS** - Rough, splitting nails that may also crack easily are one of the most common nail problems. Common causes are repeated wetting and drying the nails, extended contact with detergent or cleaning products, frequent use of nail polish and remover, aging, hypothyroidism, deficiency of iron, zinc or omega - 3 fats.



### TREATMENT

- Eat more protein. As nails are made up of keratin protein, eating adequate protein is important for boosting keratin production and maintaining strong nails.
- Include iron rich foods in the diet if you have iron deficiency. Combine iron rich foods with vitamin C rich foods for better iron absorption.
- Include zinc and omega 3 rich foods
- Include biotin rich foods or a biotin supplement can help to thicken and strengthen nails.

## **OTHER NAIL CARE TIPS**

- Moisturize the nails.
- Wear rubber gloves when washing up or using cleaning products.



- Use less nail polish and nail polish remover.
- Keep the nails short.

HORIZONTALDEPRESSIONSONNAILS OR BEAU'S LINES - Beau's linesare grooves that run horizontally acrossthe fingernails. The ridges keep growingas the nail grows. It is caused by proteinor zinc deficiency.

## TREATMENT

Include protein and zinc rich foods in the diet.



**PALE FINGERNAILS** - This condition is associated with low levels of iron in the body.

### TREATMENT

 Include iron and vitamin C rich foods in the diet.

#### LONGITUDINAL GROOVES ON NAILS

- This abnormality produces grooves that run from the nail bed to the edge, giving the surface an uneven finish and lack of lustre. Common causes include aging and low levels of vitamin B12.

### TREATMENT



• Include vitamin B12 rich foods in the diet.

## CHANGES IN NAILS AS WE AGE

As we age, our nails tend to become brittle, dull, dense, and thick due to a diminished blood supply to the nails. Brittle nails are soft, dry, weak, break easily and do not grow long.

#### HOME TREATMENT

- Avoid unnecessary wetting of hands and long-term exposure to water or chemicals that make the nails brittle.
- Avoid excessive nail polish remover use and use acetate over acetone.
- Wear nail polish which acts as a barrier for chemical contact with nail.
- Avoid repetitive trauma to the fingernails or toenails due to activities such as typing or walking in tight shoes.





# WATER – THE ELIXIR OF LIFE



Keeping hydrated is crucial for health and well-being. Every system in our body needs water to survive. About 60% of our body' weight is water. Water plays a vital role in digestion, blood circulation and skin health, as well as helping the body absorb nutrients and eliminate toxins.

Lack of water in the body can cause tissue dehydration and functional disorders (such as aging and inflammation). Skin is no exception, and the appearance of the skin on lips and limb is a direct reflection of the body's moisture status. So how much water every day is good for the skin? Studies show that it is better to have more water and drinking more than 2 L of water per day significantly affects skin physiology and promotes superficial and deep hydration of the skin. However, the effects of drinking less water is clearly visible on the skin.

Drinking adequate water each day is necessary to maintain skin integrity and improve its appearance. Not drinking enough water can have a negative impact on hair, nails and skin. When dehydrated, the skin can become more vulnerable to skin disorders and premature wrinkling.

Our body loses water throughout the day through breath, sweat, urine and bowel movement. So, it's important to replenish it. The amount of water needed each day varies depending on body size, climate, activity level, state of health, level of sweat etc.

## RECOMMENDED WATER INTAKE /DAY

- Adult man 32-58 ml / kg body mass.
- Adult woman 27-52 ml / kg body mass.
- Elderly 33ml /kg body mass.

An adult woman weighing 60 kg would need to drink 1.6 - 3.1 lt (8 - 16 glasses) water everyday.

#### SOURCES

The biologic requirement for water may be met with plain water, beverages or through foods with high water content such as many fruits and vegetables. Water is the perfect zero-calorie drink for quenching thirst and rehydrating the body. Other healthy low-calorie beverages include buttermilk, clear soup, vegetable & fruit juice, coconut water, milk shake, sattu, aam-panna, smoothies, herbal infusions and tea.

## HOW WILL YOU KNOW THAT YOU ARE HAVING ENOUGH WATER?

Urinating infrequently or in small amounts, or if urine is dark yellow in colour, these are the indications that the body is lacking water. When adequately hydrated, urine should be a pale, straw-yellow colour.

# TIPS TO IMPROVE HYDRATION LEVELS

- Drink plain water often.
- Body is mildly dehydrated after sleep, so make sure to drink a glass of water as first thing in the morning.
- If someone tends to forget, set a schedule or calendar reminder few times throughout the day to be energized and keep the skin nourished, which in turn helps to reduce the appearance of fine lines.
- Drink before getting thirsty as thirst is a

sign that body is already dehydrated.

- · Carry a water bottle everywhere.
- Add fruit or vegetables, such as lemons, berries, orange cucumber slices or mint leaves to enhance the flavour of plain water. One can even add ice cubes made from fresh fruit to a glass of water.
- Combine ice and fruit in a blender to create a slushy, cool and refreshing drink.
- Eat fruits and vegetables with high water content like watermelon, musk melon, apricot, orange, peach, pineapple, plum, cucumber, iceberg lettuce, tomato, zucchini, broccoli, green cabbage, cauliflower, eggplant and spinach. Include fresh fruits instead of fruit juices to benefit from fibre and nutrients while avoiding the extra sugar found in fruit juice. Hydrate before, during and after exercise.
- Limit tea and coffee. Caffeinated drinks contain water, and can contribute to daily fluid intake, but they have a mild diuretic effect and cause body to produce urine, which can lead to dehydration.
- Limit alcohol as it is a diuretic that causes kidneys to produce large quantities of urine, depleting the body of skin-nourishing nutrients and drying out skin.



# WATER EXTRACTS FOR HYDRATION AS WELL AS OTHER SPECIFIC BENEFITS

EXTRACT	METHOD OF PREPARATION	HEALTH BENEFITS
Carom (Ajwain) Water (1tsp- 2.5 gm)	Boil 1 cup water + 1 tsp ajwain. Simmer for 10 mins. Strain.	Prevents wrinkles, fine line, spots & dark circles.
Coriander Water	Soak 1 tsp seeds in 1 glass water overnight. Strain.	Relieves water retention, protects skin from aging and sun damage, promotes hair regrowth and delays the premature greying of the hair
Fennel Water	Boil 1 cup water + 1 tsp fennel seeds. Simmer for 5 mins. Strain.	Improves skin tone, is anti-aging & prevents skin infections.
Moringa Water	Add 1 tsp of dried and ground moringa leaves to a glass of hot water, steep for 4-5 mins and drink.	Boosts collagen production, diminishes the formation of fine lines, increases skin youthfulness, helps fight acne breakouts. Promotes hair growth and maintenance, prevents dandruff and dry hair.

# TEA



Tea is an important source of fluid, rich in antioxidants and polyphenols. Black, green and white tea, all come from the leaves of the tea bush (Camellia Sinensis). The level of fermentation determines the colour - white tea has highest level of antioxidants, followed by green and black tea. Regular consumption of white and green tea delays skin aging and promotes youthful and healthy skin.

#### HERBAL INFUSIONS

These are made from dried herbs, spices, flowers, fruit, seeds, roots or leaves of plants.

#### HOW TO PREPARE

- Use 1 tsp of dried herb or 2 tsp of fresh herb
- Pour boiling water over the herb
- · Cover & infuse for 5 mins
- Strain before drinking

ТҮРЕ	HEALTH BENEFITS	
Rosemary Leaf	Prevents UV induced damage to the skin & helps treat acne.	
Dried Lemon Peel Infusion	Enhances the glow and softness of skin, beneficial for dry or scaly skin to regain its smoothness and softness, lightens and brightens the skin & removes dead skin.	
Camomile	Delays aging, helps to fight acne and breakouts.	



#### JUICE

JUICE

Tender

### **HEALTH BENEFITS**

Regular consumption Coconut Water dryness, prevents skin improves skin elasticity and makes your skin glow.

Gooseberry Improves the appearance (Amla) Juice of skin, prevents aging, enriches hair growth.

Aloe Vera Juice Reduces acne and delays the appearance of wrinkles.

Carrot & fight skin Helps to **Beetroot Juice** & pigmentation, acne revitalize your skin.

Turmeric Milk Rich antioxidants, in it retards the ageing process. Its antibacterial property helps to keep the skin free of acne.

Bittergourd Improves the appearance (Karela) Juice\* of skin, reduces wrinkles.

Cucumber And Spinach Juice

Helps to combat skin controls pigmentation, acne and slows down the skin ageing process.







# **SELF - LOVE & SELF - CARE**



Self-love is a state of self-appreciation and putting one's physical, emotional and mental well-being first. Selflove motivates to make healthy choices in life. Holding a high selfesteem makes one likely to choose things that nurture well-being and serve well. Self-love is taking care of one's own needs and not sacrificing one's well-being for others. Follow healthy habits and routines, not for the sake of getting it done but because self-care is the highest form of self- respect. Investing in oneself self is not selfish instead it makes one grow into a beautiful and contented human being.



# CLEAN TO CONSCIOUS MOTION IN BEAUTIFUL WELL-BEING

It is crucial to understand what goes into the products and take steps towards Safe, Clean and Responsible beauty. The skin absorbs anything between 10-80% of what is applied to it and hence the components in products that it comes in contact with, go directly into the bloodstream. What one applies to the skin should be good enough to put inside the body, as even in tiny amounts these chemicals can have an adverse, impact on the skin and even long-term health. Make a habit of reading the label on each cosmetic product before buying.

SOME COMMON INGREDIENTS FOUND IN BEAUTY PRODUCTS AND THEIR HARMFUL SIDE EFFECTS ARE GIVEN BELOW, SO THAT ONE CAN CHOSE PRODUCTS WISELY.

# COMMONLY USED INGREDIENTS IN BEAUTY PRODUCTS

#### PARABEN

**FOUND IN** - Moisturizers, face & skin cleansers, shampoo, conditioner, sunscreen, toothpaste, makeup products.

**PRODUCT LABEL** - Look for methyl, ethyl, propyl, butyl paraben.

**HEALTH EFFECTS** Linked to cancer, hormonal imbalance, reproductive disorder, neurological problem, skin irritation.

#### FORMALDEHYDE

# USED AS A PRESERVATIVE & IS AN IMPURITY RELEASED BY A NUMBER OF COSMETIC PRESERVATIVES

**FOUND IN** - Nail polish, eyelash glue as Formaldehyde. Shampoo, conditioner, styling gel/lotion, body wash & moisturizer as DMDM hydantoin.Conditioner, styling gel, foundation, moisturizer as Diazolidinyl Urea. Eye shadow, facial powder, blush, foundation, body wash, mascara, baby & adult shampoo, conditioner as Uaternium-15

**PRODUCT LABEL** - Formaldehyde & Formaldehyde Releasing Preservatives include DMDM hydantoin, diazolidinyl urea, Quaterniu m-15, bronopol, imidzaolodinyl urea, formalin, formic aldehyde, merthaldehyde & methanal.

**HEALTH EFFECTS** May cause cancer, asthma, neurological problem, allergic skin reaction and eye irritation.

### ANTIMICROBIALS

## KILLS OR SLOWS THE GROWTH OF BACTERIA

#### TRICLOSAN

**FOUNDIN** - Antibacterial soap, toothpaste (to prevent gingivitis), deodorant, face & body wash, cosmetics, mouthwash, and other consumer products.

PRODUCT LABEL - Triclosan.

**HEALTH EFFECTS** Thyroid disorder, hormonal imbalance and emergence of bacteria resistant to antibacterial products.

#### **FRAGRANCE / PARFUM**

ADDED TO COSMETICS AND PERSONAL CARE PRODUCTS. USUALLY MADE UP OF A BLEND OF CHEMICALS.

CAN HIDE MANY CHEMICALS AS THE COMPOSITION DOES NOT HAVE TO BE DISCLOSED ON THE LABEL.

#### PHTHALATES

**FOUND IN** – Fragrance, nail polish and moisturizers (helps chemicals absorb into the skin).

**PRODUCT LABEL** - Look for phthalate, dibutyl phthalate (DBP), diethylhexyl phthalates, Dimethyl phthalate (DMP).

**HEALTH EFFECTS** May cause headache, dizziness, diabetes, asthma, allergies, hormonal disorders.

#### SYNTHETIC MUSKS

FOUND IN - Fragrance

**PRODUCT LABEL** - Synthetic musk or musk.

**HEALTH EFFECTS** Can cause an allergic reaction, migraine, asthma and hormonal problems.

# PH BALANCE

pH of skin is below 7. Typically, basic solutions are used to clean the skin.

#### TRIETHANOLAMINE (TEA)

## USED AND WORKS WELL AT REMOVING MAKE UP.

**FOUND IN** - Mascara, shampoo, face cleanser, face moisturizer, skin lotion, and other pH balanced products.

**PRODUCT LABEL** - Triethanolamine **HEALTH EFFECTS** Linked to allergic skin reactions; reduces immunity, respiratory toxicant, skin or sense organ toxicant.



# SODIUM LAURYL SULFATE



- LATHER Causes soaps to foam up.
- PENETRATION ENHANCER
   Makes it easier for other chemicals to absorb through the skin, meaning more chemicals will enter the body.

**FOUND IN** - Bubble bath (thickens & lathers), toothpaste, shampoo, saving cream, and other cleaners that remove oil.

**PRODUCT LABEL** - Sodium dodecyl sulfate (SDSor NaDS), sodium lau rilsulfate or sodium lauryl sulfate (SLS).

SODIUM LAURETH SULFATE FOUND IN - Products that lather.

**PRODUCT LABEL** - Sodium laureth sulfate or sodium lauryl ether sulfate.

**HEALTH EFFECTS** Both Sodium lauryl sulfate and Sodium laureth sulfate linked to skin & eye irritation. These are easily absorbed into the body, building up in the brain, heart, lungs and liver, leading to long term health problems. It may disrupt the immune system, eye muscle and causes skin allergic reactions. May also cause cataract.

# **PROPYLENE GLYCOL**

- · Commonly used as a skin conditioner.
- Is also used as a fragrance ingredient, solvent and humectant (provides moisture).
- · Penetration enhancer.

**FOUND IN** - Conditioner, styling gel/lotion, shampoo, hair colour, moisturizer, foundation, anti-aging, mascara, body wash, facial cleanser, hair spray & eye liner.

**PRODUCT LABEL** - Propyleneglycol, 1,2-propanediol, methylethyl glycol, 1,2- propylene glycol.

**HEALTH EFFECTS** May cause skin irritation and early aging of skin cells resulting in development of wrinkles at young age, kidney failure, liver damage and dermatitis.



# **COAL TAR**

- A by-product of the distillation of coal to produce coke or gas.
- Active ingredient in OTC product.

**FOUND IN** - Prescription & nonprescription preparations to treat skin conditions, such as cleansing bars, gels, lotions, shampoos, and other topical solutions; ointments prescribed for psoriasis; shampoos to treat dandruff; ointments to treat eczema; hair dye.

**PRODUCT LABEL** - Tar, coal; coal tar solution; carbo-cort; coal tar solution usp; coal tar, aerosol; crude coal tar; estar; impervotar; KC 261; lavatar; picis carbonis; aminophenol; diaminobenzene; phenylenediamine.

HEALTH EFFECTSLinkedtoskinirritation,cancer,hormonalimbalance,reproductivedisorders,neurological problem.





# **ANTIPERSPIRANT & DEODORANT**

## ALUMINIUM COMPOUNDS

Slow the flow of sweat.

PRODUCT LABEL - Listed as Aluminium Zirconium Tetrachlorohydrex

HEALTH EFFECTS May cause Alzheimer's disease and breast cancer.



# NAIL POLISH

May contain the **"TOXIC TRIO"**: Dibutyl phthalate (DBP), Yoluene, and Formaldehyde.

## DIBUTYL PHTHALATE (DBP)

• Adds flexibility, moisturizing, helps dissolve other ingredients.

### **HEALTH EFFECTS**

Reproductive disorder.

## TOLUENE

· Helps suspend colour.

 Forms a smooth finish.
 HEALTHEFFECTS Can cause headaches, dizziness, fatigue, reproductive disorder.

FORMALDEHYDE FOUND IN - Nail hardeners.

**HEALTH EFFECTS** May irritate the eyes, nose, and throat; cause skin irritation, cancer.

May contain other ingredients such as.

#### XYLENE

**HEALTH EFFECTS** Can cause headache, dizziness, skin and eye irritation, kidney and liver impairment.

### METHYL ETHYL KETONE

HEALTH EFFECTS Vapours irritate eyes, nose & throat.

#### ACETONE

**HEALTH EFFECTS** Vapours irritate eyes, nose, and throat. Very persistent in air.

METHYL METHACRYLATE HEALTH EFFECTS Vapours irritate eyes, nose, and throat; irritates skin.

## ETHYL METHACRYLATE

**HEALTH EFFECTS** Vapours irritate eyes and respiratory system, irritates skin.

**BENZYL ACETATE HEALTH EFFECTS** Irritating to skin, eyes, and respiratory tract.

## ALPHA AND BETA HYDROXY ACIDS AHA

Cause exfoliation.

**FOUND IN** - Moisturizers, toners, cleansers, masks, and age-spot removers, products marketed to "reduce the signs of aging".

FDA received 114 reports of adverse effects from 1992 - 2004; more serious reactions most often with products that cause the greatest degree of exfoliation, such as "skin peelers".

**BHAS** - Reduce the appearance of fine lines and wrinkles and improve overall skin texture without the occasional irritation associated with use of AHAs.

**PRODUCT LABEL** - Salicylic acid (or salicylate, sodium salicylate, willow extract), beta hydroxybutanoic acid, tropic acid, or trethocanic acid.

**HEALTH EFFECTS** Can make people more susceptible to the damaging effects of the sun, including sunburn and skin cancer.





## FEW NATURAL ALTERNATIVES TO REPLACE THE TOXIC CHEMICALS



### COCONUT OIL

- Works as a skin moisturizer. Its ability to penetrate the skin deep into the hair shaft allows it to condition and moisturize the skin for long periods of time.
- Contains vitamin E, an antioxidant that helps to slow the formation of wrinkles.

### COFFEE

 Brew an espresso or other strong coffee. Let it cool down to lukewarm. Apply on dry hair & leave for 30 minutes. Then rinse thoroughly with tepid water. This will add sparkling highlights to black or dark brown hair.

### HENNA

 Can be used to dye the hair. Combining it with sesame oil and curry leaves, or with beetroot juice, or adding it into a mix of curd, or lemon juice and tea will produce a temporary dye.

#### TURMERIC

• Turmeric mixed with some curd or mash ripe papaya fruit can be used on the face as a rejuvenating face pack.

### ALOE VERA

Aloe vera can be used as a skin moisturizer.

### GARLIC AND SANDALWOOD OIL

• Pimples can be relieved by rubbing the peeled garlic clove on them. Sandalwood oil, mixed with some almond oil, not only serves as a pimple relief, but it can also serve as a skin moisturizer.

### **POMEGRANATE SEEDS**

 A scrub consisting of crushed pomegranate seeds with milk cream or sugar and olive oil can aid in restoring the beautiful pink shade the lips are naturally supposed to have.

### **APPROPRIATE DRESSING**



First impressions are made within five minutes of meeting someone and help shape all future impressions. People are first judged by their physical attributes and clothing is an important part of it. Dressing to impress, no matter what the occasion reflects inner drive, self-worth and character. It is a gesture of self-love and self-care.

All of us are not blessed with celestial figures, but what we can do to give our natural beauty an instant boost is by dressing according to our body type. Dressing well and looking good plays a powerful role in boosting self-esteem. It allows one to gain confidence which is an important aspect of communication. To elicit positive response from others one must be well-dressed, well-groomed and act positively. On days when one is feeling low, wearing vibrant colours can be helpful in lifting the spirits.

When deciding how to dress, determine what message one would like to project, suitable for one's personal and professional role as well as the occasion. In addition, one should ensure that he/she is comfortable, feel great, and is confident about the way one looks.

Style of dressing up says a lot about one's personality. Studies say, people who often love to overdress are the ones who like to seek more attention or receive compliments from others, while those people who attend events underdressed



are the ones who do not care much about their appearance.

Professional, one needs to dress with decorum and style. A suitable clothing selection for a particular job is influenced by the job requirements, colour, design, fit and comfort. Factors such as garment style, garment fit, nature of job and guidelines for dress code are important considerations while selecting the appropriate outfit for a particular job. Besides one's clothing choices, grooming and body language also play a crucial role for successful work life. When one looks good, one feels good and performs well.

Planning an outfit for the day, helps one to be organized, as he / she needs to think through the activities and obligations that one would be indulging in that day.

Appropriate dressing is much more than just putting on the right clothes. One should also be well groomed. Chipped nail polish and dirty shoes depict laziness and that one does not care about his/ her appearance. Excellent grooming is the element of dressing that is noticed and judged first. Ensure that the hair is clean and well groomed, clothes are clean, well ironed and fit well, shoes are clean, nails are trimmed, hands are well-manicured and one should smell nice.

Clothes are how we present ourselves and can be a fun way to show one's personality. So, make sure one is wearing the right attire, at the right times and in the right situations.



## **3 MANTRA'S**

WHAT YOU PUT IN AND ON YOUR BODY, MAKES YOU FEEL AND LOOK GOOD.

# MAINTAINING THE BEST LOOK SHOULD NOT BE DIFFICULT.

# ONE SHOULD APPROACH BEAUTY, DIET, AND FASHION AS SELF-CARE, A FORM OF SELF-RESPECT.





### **APPENDIX** – 1

NUTRIENT	FOOD SOURCES
Vitamin A (Retinol)	Retinol is found in liver, egg yolk, butter, whole milk, and cheese.
Vitamin A (Beta Carotene)	Sweet potato, carrots, pumpkin, bell peppers spinach, corn, fenugreek leaves, mustard leaves, lettuce, bathua, mint, broccoli, musk melon, pineapple, mangoes, papaya, orange, watermelon, apricot & peach.
Vitamin B 1 (Thiamin)	Organ meat, fish, whole grain cereals, leafy green vegetables, asparagus, eggplant, fruits, legumes (beans and lentils), nuts, soy-milk.
Vitamin B 2 (Riboflavin)	Eggs, meat, poultry milk, yogurt, cheeses, whole grain cereals, dark green leafy vegetables, dried apricots and papaya.
Vitamin B 3 (Niacin)	Fish, meat, milk, eggs, whole grain cereals, legumes, fruits (avocados, figs, dates, prunes), and nuts.
Vitamin B 5 (Pantothenic Acid)	Chicken, egg yolk, milk, fish, whole grain cereals, potatoes, tomatoes, broccoli, mushrooms.
Vitamin B 6 (Pyridoxine)	Chicken, salmon, tuna, walnut, peanut, chickpeas, maize and whole grain cereals, green leafy vegetables, bananas & potatoes.
Vitamin B 7 (Biotin)	Egg yolk, dairy products, whole grains, organ meat, fish, peanut, almond, walnut, soy-bean, mushroom, sunflower seeds, banana, sweet potatoes, avocado, broccoli & cauliflower.

NUTRIENT	FOOD SOURCES
Vitamin B -9 (Folate)	Dark green leafy vegetables, beans, lentils, peas, asparagus, wheat germ, mint leaves, spinach, broccoli, mango, orange, papaya, banana, strawberries, avocado, peanuts walnuts, flax seeds, sunflower seeds & til seeds.
Vitamin B 12 (Cobalamin)	Milk & milk products, chicken, eggs, fish {herring, sardines, salmon, trout), meat, button mushrooms, dried shittake mushrooms, nori (in sushi) & nutritional yeast.
Vitamin C	Amla, guava, lemon, kiwi, orange, mausmi, papaya, lemon, strawberries, pineapple, potato, sweet potato, capsicum, bell peppers, broccoli, green chillies, tomatoes, cauliflower, cabbage & lettuce.
Vitamin D	Egg yolks, mushroom, tofu, cheese, milk, curd, soymilk, salmon, sardines, canned light tuna, herring & mackerel.
Vitamin E	Edible vegetable oils, sunflower seeds, pumpkin seeds, almonds, pine nuts, peanuts, walnuts pistachios, cashew nuts, egg yolk, avocado & olives.
Vitamin K	Green leafy vegetables (parsley, spinach and salad greens), cabbage, and vegetables oils (soybean, canola, olive).
Calcium	Milk and milk products, methi leaves, spinach, ragi, bengal gram {whole), rajmah, soybean, chia seeds, almonds, dry coconut, sunflower seeds, poppy seed, sesame seeds & moringa.
Magnesium	Whole wheat flour, quinoa, brown rice, spinach, broccoli, white chana, whole moong, peanut, pumpkin seeds, sunflower seeds, chia seeds, flax seeds, almonds, cashew nut & prunes.



#### NUTRIENT FO

#### FOOD SOURCES

Iron	Red meats, fish, poultry, eggs, bajra, jowar, ragi, wheat germ, oats, quinoa, roasted Bengal gram, chickpea, lobia, moth, masoor, rajmah, soybean, tofu, mint, mustard, spinach, pistachio, almonds, peanuts, pumpkin seeds, sunflower seeds, chia seeds, sesame seeds, dried apricots & dates.
Zinc	Red meats, shellfish, quinoa, legumes, beans, oats, mushroom, asparagus, spinach, pumpkin seeds, sesame seeds, flax seeds, sunflower seeds, chia seeds, alfa-alfa sprouts, peanut, cashew & almonds.
Selenium	Fish, chicken, eggs, organ meat, whole grains, lentils,

Selenium Fish, chicken, eggs, organ meat, whole grains, lentils, chickpeas, kidney beans, cashews, almonds, sunflower seeds, milk, yogurt & cottage cheese.

Sulphur Garlic, onion, broccoli, cauliflower, cabbage, kale, and radish.

Potassium Bananas, oranges, melon, apricots, prunes, raisins, and dates, spinach, broccoli, potatoes, sweet potatoes, mushrooms, peas, cucumbers, zucchini, pumpkins & leafy greens.

Chromium Egg yolk, whole grains, Whole cereals, green beans, broccoli and nuts.

Phosphorus Meat, fish, poultry, eggs, milk and sunflower seeds.

Copper Seafood, nuts, whole grains, seeds and legumes, and organ meats.

MUFAOlive oil, groundnut oil, sesame oil, rice bran oil, mustard<br/>oil, almonds, peanuts, sunflower seeds, pumpkin seeds,<br/>egg yolk, fatty fish, avocado.

NUTRIENT	FOOD SOURCES
Omega - 6 Fatty Acids	Corn oil, sunflower oil, safflower oil, canola oil, soybean oil, mustard oil, fish, poultry, pine nut, chia seeds, flax seeds.
Omega - 3 Fatty Acids	Fish such as mackerel, salmon, tuna, sardines, oysters, canola oil, mustard oil, soybean oil, walnut, flax seeds, chia seeds, wheat germ, egg, green leafy vegetables, fenugreek seeds, mustard seeds, legumes, bajra & soybeans.
Choline	Milk, eggs and peanuts.



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