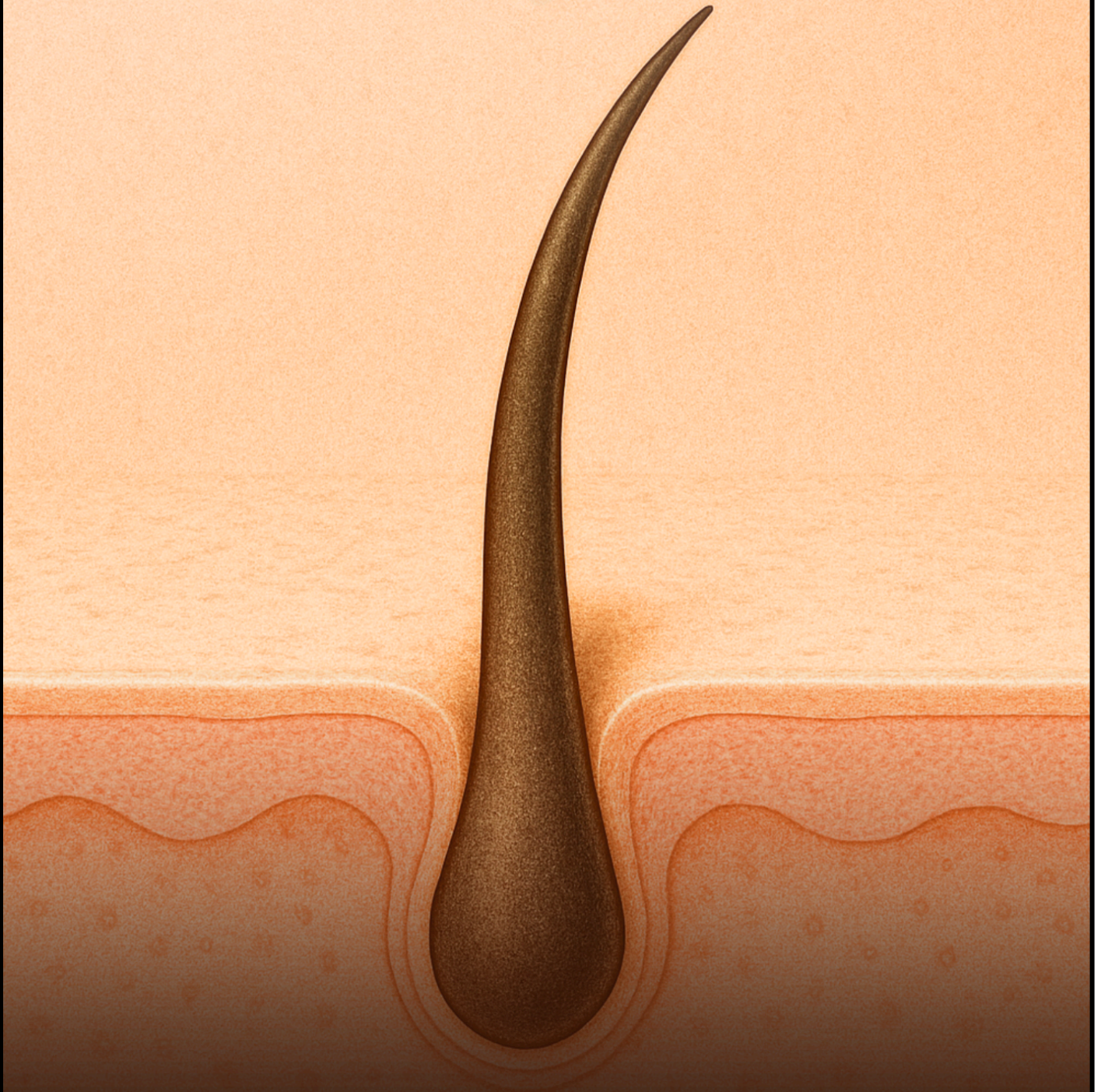


HAIR GUIDE

CARE & GROWTH



ABHIJEET BHANSALI

ABOUT THE WRITER

Hi there, welcome to this informational guide.

My name is Abhijeet Bhansali and I am the founder and host of the YouTube channel Bearded Chokra. I am a certified Functional Nutritionist as well, working full time as a health coach. I completed my Master's degree in Biotechnology and tried getting a good job with my newborn beard in 2015, but it didn't work out & hence I decided to do something on my own for the youth of India.

I wanted to share my experiences and my journey of growing a beard and facing hair fall after losing a lot of weight and maintaining a good skin but I just could not imagine myself wasting half of my energy and life stuck in traffic & that's when the idea of a YouTube channel was born, which I could operate and grow right from my own home.

Over the past 9 years, I have created 570+ videos on the channel and tried my best to grow, learn and help as many people as I can. Along with educational content, I also create product reviews which are honest, unbiased and in depth so that the viewer gets a complete idea of what the product is all about.

Over the years, I have tried some techniques/medical treatments to keep the hair, skin and beard healthy and have also tried many diet/nutritional plans to maintain healthy hair and this book is a compilation of some of the knowledge I have gathered through my experiences.

This book will change how you look at hair. It is something more than just an accessory for your personality/looks.

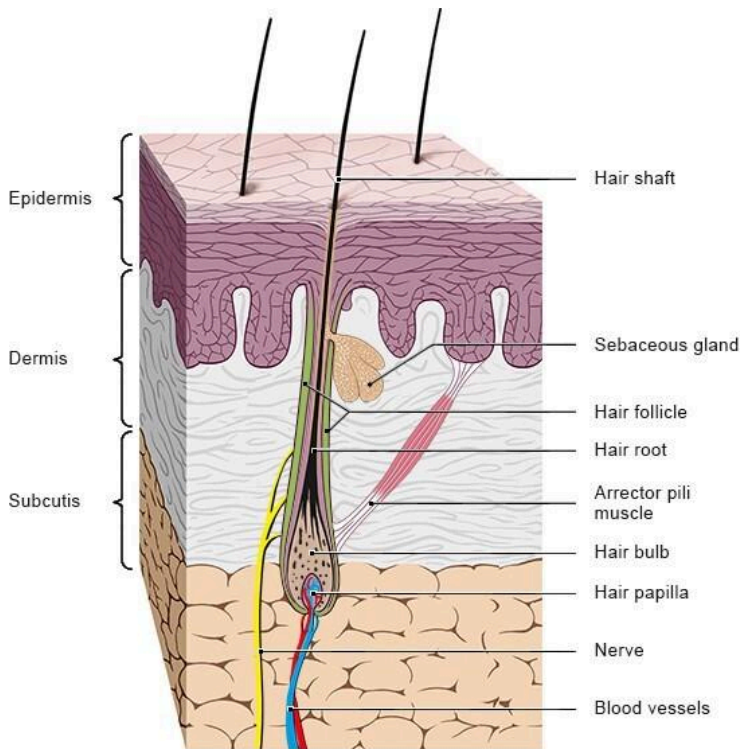
Implement the fundamentals shared in this book, and your hair, skin, nails and most importantly your body will thank you.

Hope you have a pleasant & eye-opening read! :)

TABLE OF CONTENTS

What is Hair?	4
Types Of Hair Loss	5-6
Factors That Cause Hair Loss	7-9
Factors That Help Hair Growth	10-13
Special Ingredients That Promote Hair Growth	14-16
Essential Tests	17-18
Easy DIYs To Increase Hair Growth	19-22
Simple Tips To Maintain Healthy Hair	23-24
Nutritional Blueprint and Diet plan	25-26
References	27-28

WHAT IS HAIR?



Hair is present all over our body excluding some areas like the palms of our hands, soles of our feet, lips etc. For the scope of this book we will stick to the hair present on our head. However, most of these structural characteristics may be shared with the hair from other regions of the body as well. [Structure of Hair](#)

We all know that the hair strand is made up of certain amino acids or in simpler terms keratin. But there is much more to the hair than just keratin. Each hair strand has 3 major layers; the cuticle, the cortex which houses many microfibrils and the medulla. The hair strand is formed by the keratinization of stem cells which give the hair its strength, flexibility and structure. Another component of the hair strand is the

melanocytes, which are responsible for the color of the hair. The number of melanocytes decreases as we age and the hair strand gets filled with air, hence resulting in grey or white hair.

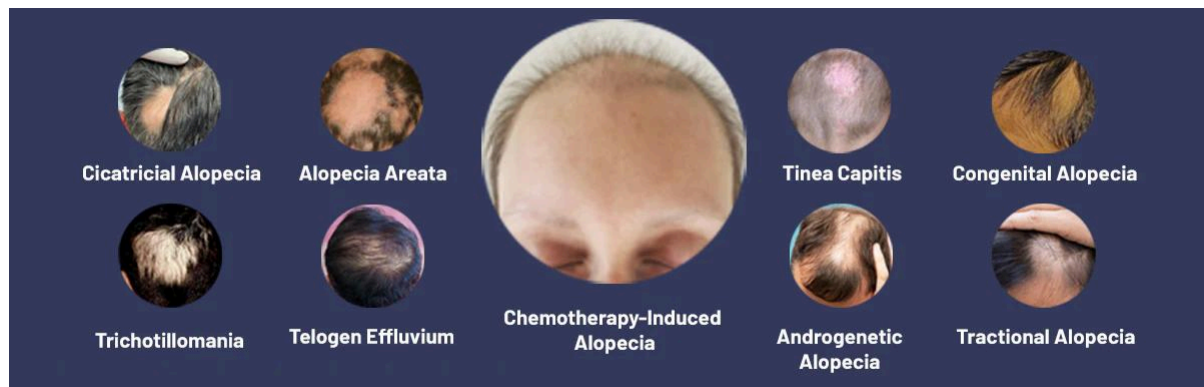
What supports this hair shaft that we see on the top of our scalp is a very interesting organ called the hair root which is surrounded by the hair follicle. The hair bulb is the base where the entire process of hair making occurs. There is a blood supply and neuronal connection to the hair follicle as well, which signals the brain when the hair moves. What keeps the hair nourished is the blood supply from the hair papilla and the sebum released by the sebaceous glands, which lubricate the hair and the skin.

The function of the hair follicle is governed by a yin-yang phenomena of a positive and negative feedback mechanism. There are a few factors that promote the growth and optimal function of the hair follicle, while there are some factors that diminish its functionality.


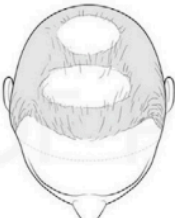
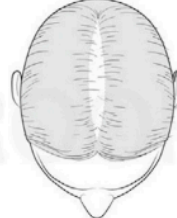

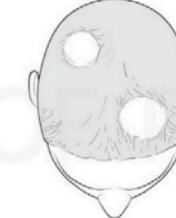

FUN FACT :

- The hair follicle is the only organ in mammals that cyclically and repeatedly transits from an active growth phase (anagen) to a resting phase (telogen), through rapid phases of tissue regression (catagen) and regeneration (neogen).
- Hair is not just for styling and good looks, it is present all over the body to protect us from external factors such as the sun, dirt and germs.

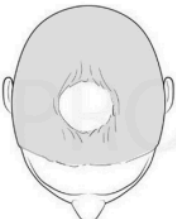

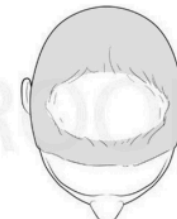



TYPES OF HAIR LOSS



Nonscarring Alopecias

TRACTION ALOPECIA	MALE PATTERN HAIR LOSS	FEMALE PATTERN HAIR LOSS	TELOGEN EFFLUVIUM	ALOPECIA AREATA	TINEA CAPITIS
Alopecia occurs along the hairline, along the front-temporal scalp from excessive tension on the hair follicle. Can transition to a cicatricial alopecia if tension is prolonged and repeating.	Alopecia occurs in the frontotemporal region and in the scalp vertex.	Alopecia occurs along the central part and presents as widening of the central part.	Presents as diffuse shedding across the entire scalp.	Alopecia can occur as a patchy alopecia of the scalp with multiple patches or a single patch that enlarges peripherally over time. Alopecia can also expand to include the entire scalp and the eyebrows (Alopecia totalis). Alopecia can also expand to other hair-bearing areas of the body, like the arms, legs, groin and underarms (Alopecia Universalis).	Alopecia can occur as a diffuse patchy alopecia with a fine scale present on the scalp. Alopecia can also occur as an erythematous patch or nodule with pustules.
					

Scarring Alopecias

CCCA (CENTRAL CENTRIFUGAL CICATRICAL ALOPECIA)	FRONTAL FIBROSING ALOPECIA	DISCOID LUPUS ERYTHEMATOSUS	LICHEN PLANOPILARIS	DISSECTING CELLULITIS	ACNE KELOIDALIS NUCHAE
Occurs centrally and spreads peripherally and symmetrically.	Alopecic band occurring along the front-temporal region and often includes the eyebrows. Can present with the pseudo fringe sign, which is when some hair is retained along the original hairline.	Erythematous alopecic patch with follicular hyperkeratosis and areas of hyper- and hypo-pigmentation occurring on the scalp. Patients can also have lesions located on the face and ears.	Can occur in a patchy, diffuse or patterned form. Patchy - alopecia occurs in small patches and merge to form larger alopecic patches. Diffuse - alopecia generally starts at the crown. Patterned - blend of androgenetic alopecia and diffuse LPP.	Alopecia occurring most commonly on the vertex and occiput that results from multiple firm to fluctuant inflammatory nodules, abscesses and plaques on the scalp, with an overlying patch of alopecia.	Papules, pustules and keloid masses occurring in the occiput and nuchal region.
					

The types of hair loss seen in men and women is different in terms of the pattern of hair loss/balding, however there is one similarity and that is the improper functioning of certain hormones and signalling factors in the body itself.

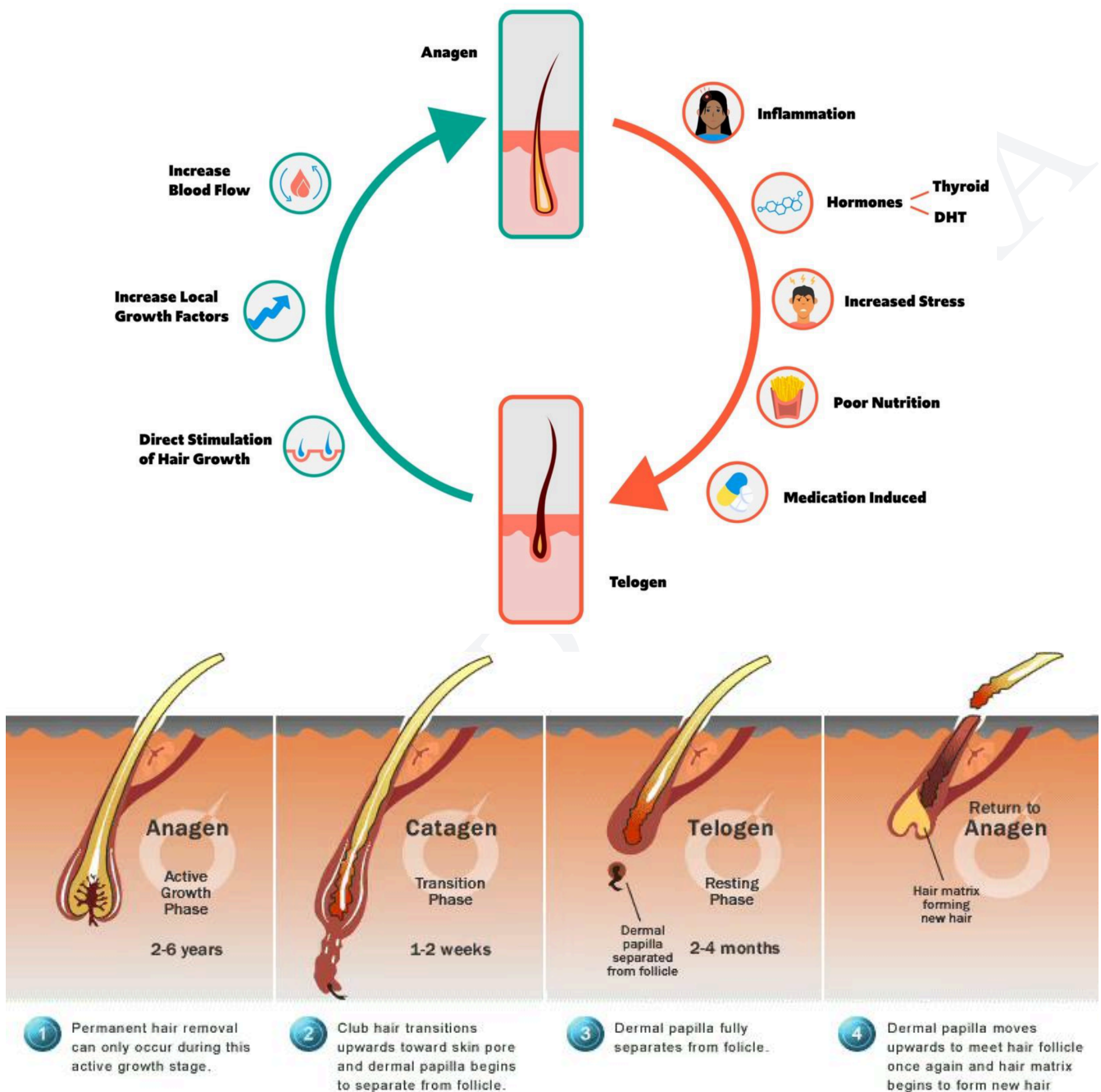
Hair loss (alopecia) that is nonscarring is the most common form of hair loss and can include patterned, diffuse, or focal hair loss.		
Patterned hair loss	Diffuse hair loss	Focal hair loss
Progressive, symmetric thinning of hair (front, top, sides of scalp)	Loss of hair evenly across the scalp (more than 200 scalp hairs per day)	Loss of hair in patches on scalp and sometimes face and body
		
COMMON CAUSES		
Androgenetic alopecia <ul style="list-style-type: none"> ► Hereditary condition caused by exposure to male sex hormone dihydrotestosterone ► Hairline thinning can occur in both sexes ► Pronounced hairline recession is primarily seen in men 	Telogen effluvium <ul style="list-style-type: none"> ► Can occur after acute event or stressors: <ul style="list-style-type: none"> • Severe illness • Thyroid disease • Pregnancy • Malnutrition or rapid weight loss • Iron-deficiency anemia or vitamin D deficiency 	Alopecia areata <ul style="list-style-type: none"> ► Autoimmune disorder that often develops in childhood ► Can affect individuals of any age, sex, and race

1. **Androgenetic Alopecia** - This is one of the most common type of hair loss which is seen in both male and females. In the males, it is observed that hair loss begins at the frontal hair-line and the crown and results in receding hair. In females, the hairline remains intact but the hair loss is seen at the crown/vertex region with the diffusion beginning from the centre to the sides. This is caused by the effect of Dihydrotestosterone on the hair follicles, leading to their miniaturization. In women, this might be linked to other hormones leading to female pattern hair loss.
2. **Alopecia Areata** - In this case a circular patch of hair is lost and can be seen in both males and females. This hair loss can be seen in the scalp and beard. Alopecia areata is caused due to the auto-immune destruction of hair follicles.
3. **Telogen Effluvium** - This type of hair loss is usually characterised by diffuse hair loss from the scalp, not pertaining to any specific area. This may or may not have a preceding stress event.
4. **Anagen Effluvium** - This is usually characterized by breakage of hair during the growth phase or anagen. It is usually caused due to radiation therapy like chemotherapy. The hair structure is damaged the most in this case.
5. **Traction Alopecia** - This is most commonly observed in people who have long hair and is particularly observed due to certain hairstyles involving tying of hair in a tight ponytail. Hair loss in this case is seen in the hairline region and the areas which are under high tension from the pulling of hair.

Apart from the above-mentioned most commonly observed types of hair loss, there are a few which may not be so common and are usually related to some sort of fungal infection, auto-immune disease, reaction to certain chemicals/ products, injury etc.

FACTORS THAT CAUSE HAIR LOSS

We will now go through the basic factors that lead to an hindrance in the proper functioning of the hair follicle and in turn cause excessive hair loss, or balding.



- 1. Improper Nutrition** - With the growing popularity of fast food, junk food, cold-drinks, packaged and processed food, the majority is facing the unfortunate side effects of consuming all these non-nutritious foods. These foods are filled with hidden forms of sugar, sweeteners, gluten and GMO ingredients all of which are harmful to the body, especially the gut health; not to mention the various colors, preservatives and other chemicals which are used to keep them looking fresh for a very very long time. Gut health is of utmost importance to us because a majority of our nutrient absorption happens through the intestine with the help of millions of gut bacteria which help assimilate these micro-nutrients from our food. Consuming an improper diet leads to the decline in these helpful bacteria and causes the excessive growth of bad bacteria in our gut which leads to a

lot of skin, hair and hormonal issues. Apart from damaging our gut, these foods are also very hard to digest for the body because of its immense processing and some ingredients in these foods and drinks also damage the kidney and the liver due to their toxicity. Improper nutrition also stems from the number of unnecessary meals we consume in the name of snacks and binge eating along with late night meals, which put immense pressure on our digestive system, leading to poor nutrient absorption and hormonal issues. Another less commonly spoken about issue is the weak stomach acid which is a result of improper eating which leads to poor nutrient absorption and assimilation.

Internal Factors	External Factors
Iron, calcium deficiency	Smoking, Hookah, Passive smoking,
Vit. A, C, E, D deficiency	Tobacco, Pan, Beetle nut, Tea
Overuse of Vit. & Supplements	Alcohol
Thyroid hypo or hyper	Hard water areas,
Side effect of medications	Stress, Lifestyle,
Metabolic disease, diabetes, gout	Lack of sleep,
Siborrhoeic scalp	Exposure to excess heat or cold
Prolonged illness	Dryness of the Scalp
Crash Dieting	Exposure to Dust, Pollution,
Poor fluid intake	Continuous Air Conditioning
Fat free Diet,	Exposure to chemical fumes
High Protein Diet	Mining areas, Construction work
Derangement of liver function	Pressurised Airline Cabins
Derangement of Kidney function	Over use of Hair Products
Post Pregnancy Hair loss	Blow drying

2. Improper Sleep - Well, we all know that we must have a good night's sleep, but our current lifestyle calls for long working hours, late night parties, excessive usage of phones and devices with blue-light emitting screens and improper eating patterns which cause poor sleep cycles and quality. A poor sleep can lead to weak hormonal function, poor recovery & metabolism, low energy levels, increased stress and skin and hair problems.

3. Uncontrolled Stress - We all deal with stress differently and our stress is triggered by different things too. No matter what causes you to stress out, the outcome is just that your body is suffering. When your body/mind is stressed, it is

usually linked to uncontrolled emotions and this leads to something as minor as imbalanced hormones and can also cause something more serious like auto-immune diseases. Stress also causes inflammation in many organs of the body and one such organ of our interest is the hair follicle. Inflammation in the hair follicle causes it to function poorly and may also lead to its complete cessation.

- Poor Lifestyle** - The current modern lifestyle requires us to be seated for long hours in most cases in front of computer screens in an air-conditioned room. This causes very little physical activity for a majority of the people. The air conditioned work environment means that we are indoors and away from sunlight causing various issues with our hormones, especially our vitamin D levels; which is a major regulator of testosterone in our body. A majorly sedentary lifestyle with poor posture leads to poor blood circulation and this affects the hair as well. With less blood reaching the hair follicle, the hair is deprived of nutrition and this causes it to fall out excessively.
- Addictions** - This again stems from the stress or social obligations. In today's time, a lot of people have fallen for the trap of nervous stimulants or depressants such as cigarettes, alcohol or other drug abuse and even excess consumption of coffee or tea. Addiction to nervous stimulants or depressants leads to many hormonal changes in the body and the major effect it has on the body is

depletion of nutrients, especially the micro-nutrients. Most of these addictions lead to an excessive depletion in water soluble vitamins like vitamin B complex and vitamin C along with depletion in magnesium, zinc and iron to name a few. This depletion of nutrients, coupled with the stress & inflammation these addictions cause on the body, causes the hair follicle to function poorly and leads to hair loss.

6. **Poor Product Choice** - Most of us tend to buy products for our hair, skin and health based on the brand value, marketing or packaging. This is where many people make a mistake because most of these heavily marketed products are filled with chemicals that are bad for your skin and hair in the long run. Ingredients like sulphates (used in improper formulations), parabens, formaldehyde releasing preservatives, alcohols, synthetic colors, synthetic perfumes, etc are very damaging to the hair and skin and in some cases might trigger hair loss. This poor choice also applies to food items which have many synthetic chemicals in them to increase their shelf life and look & feel.
7. **Poor Scalp Hygiene & Dandruff** - Not maintaining a good scalp hygiene can lead to many issues like clogged pores, excessive accumulation of dead skin and/or sebum and even fungal infections to just name a few. One such very common fungal infection is dandruff which may be dry or oily and it is a significant cause of hair loss since it damages not only the hair shaft but also the skin surrounding it, which makes the entire structure weak and incapable of holding healthy hair. Dry dandruff is usually seen with excessive flaking and small white patches of skin being released from the scalp whereas the oily form of dandruff is where it gets mixed with the sebum to form small globules. When the scalp is unable to breathe properly, it won't be able to grow healthy hair and also the sebum production and cell cycle is affected.
8. **Hormonal Imbalances** - This topic is very vast and will need a separate book on itself, however we must understand that hormones are a signal that our body uses to judge how each organ and cell must function. When the signal is weak, absent or in excess it leads to various issues in the body. The most important hormones linked to our hair are the Thyroid hormones, Insulin, Testosterone, Dihydrotestosterone, Cortisol, Estrogen and to an extent the Adrenal Hormones. The thyroid and adrenal hormones play a role in the cell proliferation and cell function, whereas excess localized DHT causes inflammation and miniaturization of the hair follicles. Cortisol has a few effects on the hair follicle such as compromised adrenal function and inflammation of the follicle itself. Many men and women face the issue of hormonal imbalance, with more common cases seen in women with regards to thyroid, estrogen and testosterone imbalance, leading to PCOS or hypothyroidism; which results in excessive hair loss. Insulin is probably the most overlooked hormone for hair loss, but it is the insulin resistance that leads to deficiencies in many nutrients which in turn lead to hair loss.
9. **Excessive Styling & Blow Drying** - This is relevant especially in the youngsters of today's generation, where most of the boys and girls are using too many harsh products directly on their scalp and using chemical straighteners, colors and using excessive heat on the hair in the form of curling irons, blow dryers, straighteners etc. Excessive heat causes structural damage to the hair shaft and the chemicals in styling products and colors/dyes cause damage to the scalp and hair shaft in the long run by interfering with the hair growth cycle and/or causing inflammation.
10. **Acute/ Chronic Illness** - An episode of a certain infection or illness in the body can also change the body's priorities as far as utilization of nutrients is concerned. Also, people consume antibiotics for multiple reasons, but one thing that an antibiotic does is that it disturbs the balance of the gut microbiome. This leads to an increase in the bad/pathogenic bacteria and a huge dip in the good bacteria which are also responsible for nutrient assimilation. Even radiation therapies cause hair loss as they disturb the cell proliferation of hair cells.

FACTORS THAT HELP HAIR GROWTH

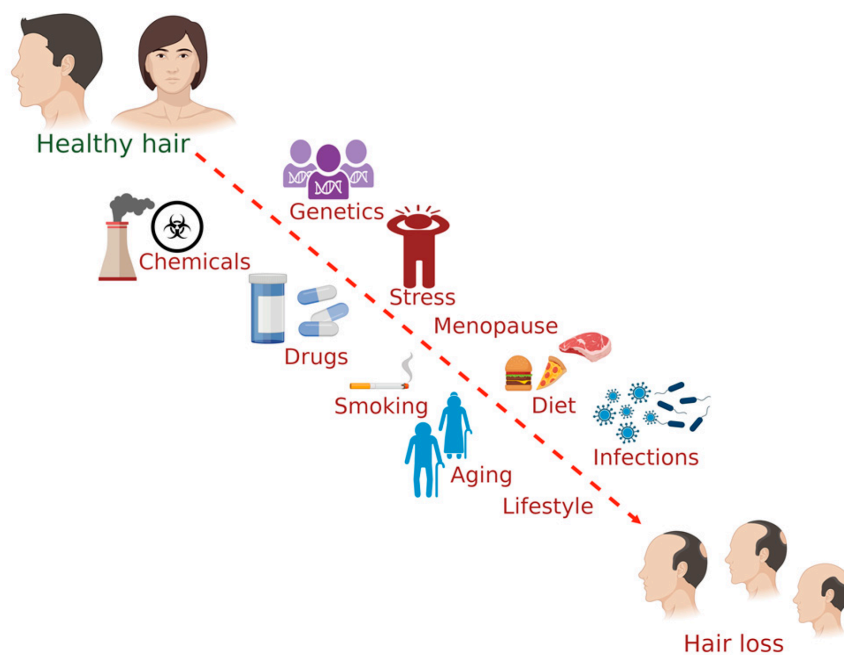
Now that we know the major reasons why one loses hair, we will also see the solution to those problems in a very simple way. The key to finding the reason for your hair loss is to be aware of your lifestyle and what is happening to your body as a result of it. We must realise that hair grows from the inside of our body towards the outside & topical treatments while effective need to be secondary and one must focus on fixing the nutrition and lifestyle aspects first.

1. **Proper Nutrition & Supplementation** - We now know that processed, packaged, junk and high sugar foods cause hair loss and hence the basic solution is to eliminate these things from the diet. Just by reducing the above mentioned foods, we can greatly improve our gut health and in turn slow down the hair loss. Also, by eliminating these foods and incorporating healthy nutritious foods, we can heal the hair follicles in the early stages. The body needs many vitamins, minerals and macronutrients however, there are a few nutrients which are extremely important in maintaining healthy hair and promoting hair growth.
 - a. **Protein** - We all know that hair is made out of a protein called Keratin and hence having a diet which is rich in good quality protein is essential. You do not need to have excess amounts of protein. Having a diverse vegetarian meal as a source of protein is much better for the body in the long run. However, low protein diets or malabsorption of protein by the body can lead to hair loss and even muscle + bone loss in the body.
 - b. **Essential Fatty Acids** - Healthy fats are extremely important for our body, not just for the heart, brain and joints, but even for proper sebum production and skin elasticity. Healthy fats include ghee, curd, paneer, nuts (almonds, walnuts, cashews, hazelnuts), seeds (pumpkin, watermelon, sunflower, chia), avocado, virgin cold pressed coconut oil, extra virgin olive oil, cold pressed sesame seed oil, coconut milk, white butter, fatty fish etc.
 - c. **Biotin** - Vitamin H or B7 is a part of the vitamin B complex and is majorly involved in protein synthesis. Deficiency of this vitamin has been linked to poor quality and loss of hair. Deficiencies can occur because of lack of biotin in the diet or a weak gut due to which its absorption is hindered. Biotin can be obtained from nuts, eggs, nutritional yeast and a few other vegetables.
 - d. **Iron** - Iron plays a major part in maintaining the function of haemoglobin which carries oxygen throughout our body and also lack of iron can lead to weakness in the body. The correlation of iron and hair loss has been linked to its role in DNA synthesis and loss of hair is most commonly linked to deficiency of iron.
 - e. **Zinc** - It is one of the most important nutrients in the body with hundreds of enzymes using it and it helps in protein synthesis and cell proliferation. This makes it important for hair as well and a diet rich in zinc must be consumed. Supplementation of zinc must not be done in excess.
 - f. **Selenium** - It is important to minimize oxidative damage on the hair follicles and it is also important that one must get it through the diet as excess supplementation can lead to its toxicity.

Nutrient	Effect of Deficiency on Hair Loss	Studies of Supplementation
Iron	<ul style="list-style-type: none"> Chronic diffuse telogen hair loss with iron deficiency anemia [20]. In the absence of anemia, studies are not clear whether there is a significant link between ID and hair loss [16,20,24]. 	<ul style="list-style-type: none"> Insufficient evidence to recommend iron supplementation to all hair loss patients with iron deficiency in the absence of anemia [20]. Approach on a case-by-case basis. Excess supplementation can cause hemochromatosis [25].
Zinc	<ul style="list-style-type: none"> Statistically lower serum zinc concentrations in a study of 312 patients with AA, MPHL, FPHL, or TE compared to 30 healthy controls [38]. 	<ul style="list-style-type: none"> A case series demonstrated reversal of hair loss following oral supplementation in five patients with TE and zinc deficiency [37]. Limited information on effects of zinc supplementation improving hair growth in the absence of deficiency. One case report with a patient with dry brittle hair and alopecia, without clear zinc deficiency, who experienced improvement in alopecia following oral zinc therapy [40]. Excess supplementation can cause acute toxic effects including epigastric pain, nausea, vomiting diarrhea, and headache and chronic toxic effects including reduced copper status, interaction with iron, reduced immune function, and decreased concentrations of HDL cholesterol [18].
Niacin (Vitamin B3)	<ul style="list-style-type: none"> Diffuse hair loss with pellagra due to severe deficiency [2]. No known studies regarding serum niacin levels in patients with hair loss. 	<ul style="list-style-type: none"> Limited information on effects of niacin supplementation improving hair growth in absence of deficiency.
Fatty acids	<ul style="list-style-type: none"> Loss of scalp and eyebrow hair [3-4]. 	<ul style="list-style-type: none"> Limited information on effects of fatty acid supplementation improving hair growth in absence of deficiency.
Selenium	<ul style="list-style-type: none"> In animal studies, rats deficient in selenium display sparse hair growth [46], while knockout mice lacking specific selenoproteins exhibit progressive hair loss after birth, ultimately leading to almost total alopecia [47]. One case report of selenium deficiency in a young child reported clinical manifestations of dry skin and sparse, light-colored hair, improving after supplementation [49]. 	<ul style="list-style-type: none"> Limited information on effects of selenium supplementation improving hair growth in absence of deficiency. Toxicity from excess supplementation is well documented and can cause generalized hair loss [9-11].
Vitamin D	<ul style="list-style-type: none"> Serum vitamin D2 levels in a study of eight females with either TE or FPHL were shown to be significantly lower than in 40 age-matched female controls, with decreased levels correlating to increased disease severity [54]. 	<ul style="list-style-type: none"> Limited information on effects of vitamin D supplementation improving hair growth in absence of deficiency.
Vitamin A	<ul style="list-style-type: none"> Deficiency has no known link to hair loss. 	<ul style="list-style-type: none"> Limited information on effects of vitamin A supplementation improving hair growth in absence of deficiency. Toxicity from excess supplementation has a strong known link to hair loss, as well as other effects on skin, vision, and bone [4,8].

Nutrient	Effect of Deficiency on Hair Loss	Studies of Supplementation
Vitamin E	<ul style="list-style-type: none"> Deficiency has no known link to hair loss. 	<ul style="list-style-type: none"> Limited information on effects of vitamin E supplementation improving hair growth in absence of deficiency. Supplementation in one study of twenty-one volunteers suffering from hair loss has showed significant increase in hair number compared to placebo [57]. Toxicity from excess supplementation can result in risk of bleeding problems, decreased thyroid hormones, and decreased activity of vitamin K. Additionally, there is some evidence for adverse effect on hair growth with excess supplementation [8].
Folic Acid	<ul style="list-style-type: none"> No significant difference in serum folate levels in a study of 91 patients with diffuse hair loss and 74 healthy controls [58]. 	<ul style="list-style-type: none"> Limited information on effects of folic acid supplementation improving hair growth in absence of deficiency.
Biotin	<ul style="list-style-type: none"> Deficiency can result in alopecia, eczematous skin rash, conjunctivitis, and candidiasis [60]. 	<ul style="list-style-type: none"> Limited information on effects of biotin supplementation improving hair growth in absence of deficiency.
Amino Acids and Proteins	<ul style="list-style-type: none"> Protein malnutrition can result in hair loss [64]. 	<ul style="list-style-type: none"> L-lysine supplementation in addition to iron supplementation has been shown to significantly increase mean serum ferritin concentration in some women with chronic TE who failed to respond to iron supplementation alone [8]. Limited information on effects other amino acids and proteins improving hair growth in absence of deficiency.

- g. **Vitamin D** - This prohormone is extremely essential for the body and in the context of hair, it is linked to the cycles of hair and hence a deficiency in vitamin D can lead to a disturbed hair growth cycle. Vitamin D is best taken by exposure to the sun during the early morning or early evening hours. However, supplementation along with vitamin K2 is also beneficial.
- h. **Vitamin A** - It plays a role in the activation of hair follicle stem cells and excess of vitamin A through supplementation has been linked to hair related issues.
- i. **Vitamin E** - The vitamin E complex which comprises tocopherols and tocotrienols is an important antioxidant to protect the hair follicle. Vitamin E is best sourced from whole foods, like nuts, seeds, certain cold pressed oils etc.



j. **Copper &**

Chromium - Copper is required for the strength of the hair and chromium plays a key role in regulating insulin in our body which in turn decides the level of absorption of nutrients by the cells.

2. **Insulin Management** -

This book cannot be complete without mentioning Insulin and its indirect role in hair loss. Insulin is a very important hormone in the body which allows the cells to absorb nutrition and it is itself triggered by the carbohydrates

and proteins in our diets to a major extent. Frequent eating, consuming high sugar foods/ processed foods, all lead to excessive production of insulin which over the years leads to insulin resistance. This insulin resistance leads to nutritional deficiencies since the cells are no longer sensitive to insulin. Also, high amounts of insulin in the body lead to excess DHT production which cause damage to the hair and cause hair loss. Insulin must be regulated well in our body and that can be done by practicing intermittent fasting, low carbohydrate diets and elimination of high sugar packaged foods.

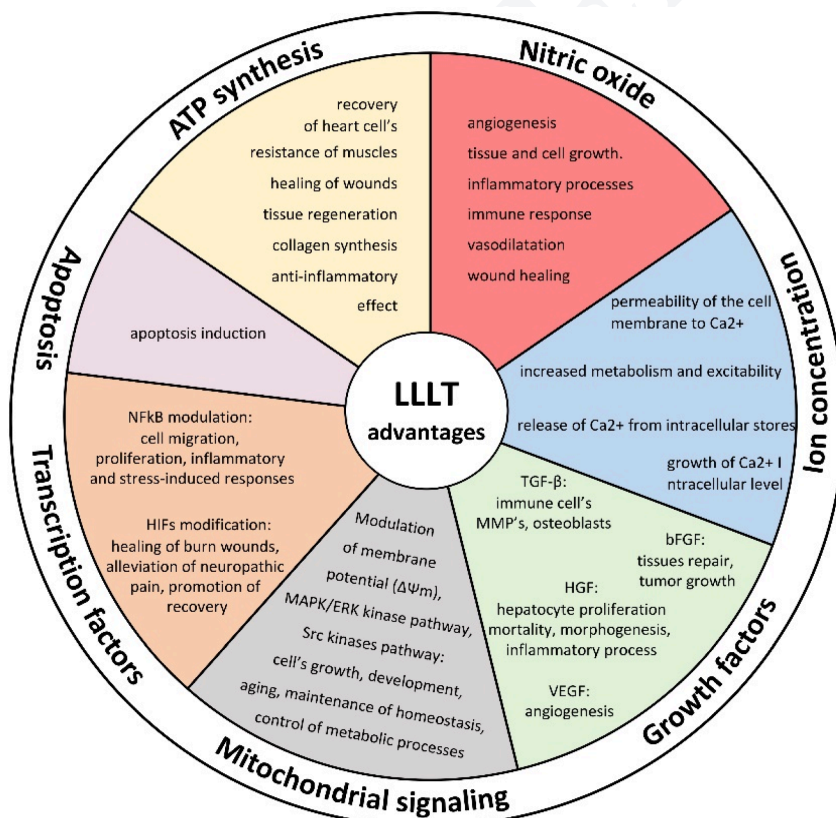
- 3. **Good Sleep** - A good sleep is not decided by the number of hours an individual has slept but by the quality of sleep, how deep it is and whether the body is recovering and repairing during that time or not. A good quality sleep can be judged based on the energy levels, happiness and rejuvenated feel an individual gets after waking up. There are a few things which can ensure better sleep. These include, chamomile tea, jasmine tea, lavender tea, lemon balm tea, valerian tea, eating the last meal before sunset or at least 3-4 hours before bed time, reducing time spent in front of the screen and including magnesium & potassium rich foods in the diet.
- 4. **Controlling stress & maintaining physical activity** - Stress if eliminated will be the best, however

to minimise its ill-effects one can practise meditation and yoga and also decrease oxidative stress in the body by consuming things like green tea, fruits, vegetables and by applying good quality hair oils/serums topically. Physical activity will improve blood circulation and proper waste excretion from the body improving the quality of hair, skin and overall health.

5. **Choosing the correct products from the market** - When it comes to choosing correct grooming and styling products, one must ensure to read the ingredients list and do some research before making the purchase. Buying products which use mild surfactants, natural or mild preservatives and natural actives are a better choice than products filled with harmful chemicals. If one wishes to purchase hair oils, he/she must make sure that there is no mineral oil, silicones or chemical film formers in the ingredients if the intention is to nourish the hair.
6. **Maintaining a healthy scalp** - A healthy scalp can be maintained by keeping it clean by using a shampoo or herbal cleansers at least 1-2 times a week. For individuals who have dandruff, a shampoo which contains tea tree oil, neem and/or ketoconazole will be beneficial. A healthy scalp can breathe better and produce good quality sebum which ensures optimal health of the hair.
7. **Maintaining balanced hormones** - Keeping DHT, Thyroid and Insulin in check for hair health is very important and this can be done by focusing on the diet, being physically active and maintaining a very healthy gut. Following a sattvic diet & including raw fruits and vegetables (in the form of salad) will help greatly to balance the hormones and not to forget a good quality sleep cycle will help too.

8. LLLT - Low Level Laser

Therapy is a recent treatment modality added to the list. It uses red-light emitting laser diodes, specifically at 630-660nm (for at-home products). This wavelength of red light has shown improvement in hair growth when used consistently for a long duration of time. However, this is not a stand-alone treatment and is shown to give best results when used in addition to other traditional treatments. This is not successful in reversing advanced stages of baldness and is best used for telogen effluvium or initial stages of hair loss.



SPECIAL INGREDIENTS TO PROMOTE HAIR GROWTH

Currently, there are many ingredients which may include, botanical extracts, bio-active compounds, essential oils, teas, nutrients, etc., available to an individual & we will now quickly go through some very effective ones.

1. **Procapil** - Procapil is a herbal active complex which is mainly composed of Oleanolic acid, Apigenin & Biotinyl-GHK. These ingredients present in Procapil along with some delivery agents, make it a very potent solution to stop hair fall and encourage the follicles to grow new hair. Oleanolic acid inhibits 5 α - reductase thereby decreasing the harmful effect of DHT. Apigenin functions as a vasodilator and increases blood circulation, whereas Biotinyl-GHK is a vitamin-bearing peptide, which strengthens hair roots and improves anchorage. Procapil doesn't have any known side-effects and is tolerated by almost everyone.
2. **Minoxidil** - This is a vasodilator and is available in a solution form of 2% or 5%. This increases blood circulation to the area on which it is applied, thereby increasing the nutrition that a hair follicle gets, thus leading to hair growth. However, it does have some side effects and it must be used under a doctor's guidance. This medication must be used for long periods of time to ensure sustained results.
3. **Soluvit Richter** - This is a multivitamin herbal complex which comprises vitamin A, vitamin E, biotin, linoleic acid, inositol, vitamin B5, and horse chestnut extract which increases blood circulation and is a great anti-inflammatory.
4. **Cressatine** - This is an aqueous extract of watercress (*Nasturtium officinale*) and Indian cress (*Tropaeolum majus*) leaves and shoots. Cressatine is a very potent ingredient which promotes hair growth and also strengthens the hair by promoting the formation of keratin.
5. **Onion Juice/extract** - Onion juice is high in sulfur compounds which are a key component of keratin. Along with this onion juice/extract is rich in various minerals and a good antioxidant and antimicrobial. Quercetin is a flavonoid found in onion juice which imparts antioxidant properties and has been shown to promote melanin formation in mice.
6. **Green Tea/ EGCG** - Epigallocatechin-3-gallate (EGCG) is a polyphenol present in green tea which provides very promising results for hair growth because of its antioxidant properties and other anti-inflammatory & vasodilating properties which are present in green tea itself. Green tea can be consumed and applied topically as well to see maximum benefits.
7. **Redensyl** - This is a biotechnology marvel which comprises DHQG, EGCG-2, glycine, zinc chloride, sodium metabisulfite, glycerin and water. This is a bioactive complex which takes care of DHT

reduction, vasodilation, reducing oxidation and inflammation and promoting hair growth by supporting the anagen phase of the hair cycle. This ingredient is very well tolerated by the majority and produces significant results as per scientific research.

8. **Tocotrienol** - This is the more powerful partner of the vitamin E complex which also contains tocopherol. Tocotrienol is a very powerful anti-oxidant and it is up to 60 times more potent than tocopherols that you usually see in the products. Tocotrienol also has a higher absorption rate than tocopherols due to its smaller structure. Due to these characteristics, it helps reduce free radical damage on the hair follicles and promotes hair growth.
9. **Bio-Capigen VEG** - This is an alternative to the animal keratin which is used in many hair products. Few ingredients which stand out the most from this botanical formulation are Onion bulb extract and Ginseng along with the essential amino acids & zinc. Onion bulb extract has sulfur compounds which enhance growth and strength of hair and ginseng reduces inflammation.
10. **Caffeine** - Caffeine is a naturally occurring alkaloid and its role in hair growth and prevention of hair loss is that it inhibits the function of phosphodiesterase which in turn decreases the damage caused by DHT on our hair follicles. Apart from this, caffeine also increases micro blood circulation in the scalp, along with increasing cell division of hair cells and increasing antioxidant activity to prevent the hair follicles.
11. **Copper peptides** - GHK-Cu has been proven to fight inflammation, stimulate hair growth and decrease hair loss. It decreases DHT, increases the function of the hair follicle, increases blood flow to the scalp and prolongs the growth cycle of the hair. Cu-peptides also improve the results of hair transplant and it's best to use it under the guidance of a doctor.
12. **Bhringraj** - This is also known as the False Daisy and is a very potent ayurvedic ingredient which has been used to treat many ailments including hair loss. It is known to show very good results as far as decreasing hair fall, increasing hair growth, delaying greying of hair and treating dandruff is concerned. It is also high in vitamin E, which helps in providing the antioxidant benefits. Bhringraj can be used in the form of an oil or as a paste made from its powder.
13. **Ayurvedic Herbal Oils** - There are many ayurvedic herbal oils which are blends of many herbs, extracts along with carrier oils, mainly coconut or sesame oil. Some examples of potent herbal oils are Neelibhringadi tailam, Yashtimadhu tailam, Dhurdhurapatradi tailam etc.
14. **Panax Ginseng** - The ginseng extract has an active compound called ginsenoside which provides great antioxidant benefits and is known to promote hair growth by reducing apoptosis and increasing blood circulation.
15. **Essential Oils** - Essential oils are highly concentrated with active compounds which carry with them a very high antimicrobial, anti-inflammatory and antioxidant property. The major essential oils which promote hair growth are rosemary essential oil (reduces DHT and promotes micro blood circulation), tea tree essential oil (increases blood circulation and reduces hair fall caused due to dandruff), lavender essential oil (heals the skin and enhances hair follicle function), eucalyptus essential oil (increases blood circulation and antimicrobial activity). Some other oils which have

shown promising results are peppermint oil and pumpkin seed oil.

16. **Finasteride** - This is a compound which is very commonly prescribed as a 5 α - reductase inhibitor to reduce DHT in an individual thereby increasing the chances of hair growth. Finasteride is a very powerful drug and it must only be used under the guidance of a doctor as it has a history of having side effects which may range from minor to slightly major. Also, this medicine must be used for at least 1 year under the guidance and observation of the doctor to see significant results.
17. **Platelet-rich Plasma** - A PRP treatment is a medical procedure of using your own blood's plasma which is concentrated with platelets and other growth factors to inject the desired area. When the PRP is injected into the scalp, the growth factors encourage the hair follicle to function better and start growing hair again. A new entry to this medical procedure is a biotin rich PRP which is a way to administer biotin directly to the affected area.

This is not the final conclusive list. There are ingredients that are very promising for hair growth, however they aren't well researched or documented and hence have been excluded from the list.

Phytochemicals	Mechanism of Action
Caffeine	5 α -reductase inhibition. Stimulates the HFK and ORS proliferation. Reduces oxidative stress. Reduces apoptosis and necrosis.
Epigallocatechin gallate (<i>Camellia sinensis</i> (L.) Kuntze)	Extension of anagen phase. Reduces oxidative cell damage and oxidative stress. Reduces the senescence-related gene expression. Inhibits the IFN- γ signaling.
Procyanidin B2	Suppresses inflammation.
Herbal mix * (<i>Chamaemelum nobile</i> (L.) All., <i>Althaea officinalis</i> L., <i>Persea Americana</i> Mill., <i>Rosmarinus officinalis</i> L., <i>Aloe vera</i> (L.) Burm. F., <i>Urtica dioica</i> , <i>Thymus vulgaris</i> L.)	5 α -reductase 2 inhibition. Inhibits apoptosis.
Herbal mix (<i>Urtica uren</i> L., <i>Urtica dioica</i> , <i>Matricaria chamomilla</i> , <i>Achillea millefolium</i> , <i>Ceratonia siliqua</i> , <i>Equisetum arvense</i>) contains vitamins B ₁ , B ₂ , B ₆ and C, and myricetin, quercetin, kaempferol, and trace elements (iron, zinc, and copper)	Induces the HF effects.
Vitamin C, zinc, horsetail stem extract, and flax seed extract *	Systemic effects.
Capsaicin (<i>Capsicum annuum</i> L.)	Stimulates the perifollicular nerves. Stimulates the HF immune system.
Crude onion juice (<i>Allium cepa</i> L.) *	Induction of immunological reaction and antigenic competition.
Red ginseng extract (<i>Panax ginseng</i> C.A. Mey.)	Increased cell proliferation.
Red ginseng extract + ginsenoside Rb1 and ginsenoside Rg3	Induced upregulation of androgen receptor.
Pumpkin seed oil *	5 α -reductase inhibition.
Saw palmetto extract *	5 α -reductase inhibition.

A Few Recommended Products : [Shampoo](#) | [Hair Oil](#) | [Hair Growth Serum](#) | [Wooden Comb](#)

ESSENTIAL TESTS TO BE DONE



When it comes to testing for hair loss, there are no direct tests that can point to one root cause which is responsible for hair loss or balding. Hair loss is a result of multiple imbalances in the body and hence the tests needed to diagnose the root cause must contain a variety of tests which can help in tracing imbalances, deficiencies and infections.

1. Blood Tests :

- a. **CBC** - This helps in detecting multiple nutrient deficiencies, anemia, infections, dehydration and much more.
- b. **Glucose profile** - This includes Fasting glucose, Fasting Insulin, HbA1c and PP glucose. This helps in detecting insulin resistance, pre-diabetes, diabetes and glucose management. Additional tests like C-peptide, PP Insulin, Homa IR can be done in case significant derangements are noticed.
- c. **Iron Profile** - This includes Serum Iron, TIBC, Transferrin saturation and Ferritin. This gives an idea about anemia, iron toxicity, liver dysfunction and chronic inflammation in the body. Iron and Ferritin status has been linked to hair loss, since significant deficiencies lead to poor oxygenation of the blood and poor nutrient transport to the hair follicles.
- d. **Inflammation Profile** - This includes ESR and Hs-CRP which give an idea about chronic and acute infections/inflammation, respectively. Too much inflammation in the body correlates to increased oxidative stress which hampers hair growth.
- e. **Vitamin markers** - This includes Vitamin D, Vitamin B12, Folic acid, Zinc and Selenium. Chronic deficiencies in these nutrients can lead to hair loss.
- f. **Lipid Profile** - The important tests here are Total Cholesterol, LDL, HDL, Triglycerides and

VLDL. This gives an idea of insulin resistance, thyroid dysfunction, poor metabolism, poor dietary choices and liver dysfunction. In case of significant dysregulation, additional tests of the cardiac panel like APO A1, Apo B, LP(a) and Homocysteine might be needed to assess the level of damage done to the body.

- g. **Liver Profile** - The important tests here are Total Bilirubin, SGPT, SGOT, ALP, Albumin, Globulin, GGT and Total Protein. These tests give us an idea about liver dysfunction, obstruction, cirrhosis along with clues into infections, dehydration, thyroid dysfunction and nutritional deficiencies.
- h. **Kidney Profile** - The important tests here are Total Creatinine, BUN, Electrolytes and eGFR. These markers give us an idea into kidney dysfunction, nutritional deficiencies like protein, vitamin B6 etc. and electrolyte balance in the body. eGFR tells us how effectively the kidney is functioning.
- i. **Thyroid Profile** - This includes Free T3, Free T4 and ultrasensitive TSH. These markers give us an idea about the metabolism, pituitary function, nutrient deficiencies and adrenal function. In case TSH is found to be high, additional tests like Anti-TPO and Anti-TgAb need to be done to diagnose autoimmune conditions like Hashimoto's hypothyroidism or Grave's Disease. Thyroid function is strongly linked to hair growth and hair cycle regulation.
- j. **Hormone Profile** - The most important tests here include - Total Testosterone, Prolactin, Estrogen, DHT and Cortisol. Long-term hormonal imbalance leads to hair loss and a disruption in the regular hair growth cycle.

2. **Urine & Stool Test** - These tests help detect infections and unnatural blood loss in the body. While this is not directly linked to hair loss, it can prove to be valuable when connecting the dots with a comprehensive blood panel.

3. **Advance Tests** - This includes tests like GI Map, DUTCH test, HTMA and OMX. These tests can help us dive deep into the intricacies of specific health markers based on the irregularities picked up in the blood reports, to find out the actual root cause of the problems faced by the individual. The GI map can help detect deeply rooted gut issues, infections and inflammation. The DUTCH test can help identify the root cause of hormonal issues. The HTMA test can identify the presence of heavy metal toxicity & the OMX test can help identify issues with the metabolic processes in the body. These tests are not necessary to be done initially, but in complicated cases, these tests can provide valuable information and insights.

EASY DIYs TO INCREASE HAIR GROWTH



Making your own safe and tested home remedies that promote hair growth has to be the most intuitive way of helping your hair grow back. Here are a few DIY recipes that have shown a lot of appreciation from a lot of people.

1. **Green Tea Hair Mask** - Promotes hair growth, reduces hair fall, increases density and improves texture of hair.
 - a. Boil water with a small piece of peeled ginger and ½ tsp [cinnamon](#) powder
 - b. After the water has changed colour, turn the flame off and add a little black pepper powder and [green tea leaves](#) and cover the pot for 5 minutes.
 - c. Drink the tea if you wish to keep some in the pot to cool down to room temperature to apply it on your scalp and hair.
 - d. Keep the green tea in your hair for the entire day, and wash it off with normal water the next day. Make a fresh batch every time
2. **Brahmi + Bhringraj + Amla Hair Mask** - Promotes hair growth, heals skin, delays greying and treats dandruff.
 - a. Mix equal quantities of all three powders (organic preferable) with pure filtered water or rose water and apply on the scalp and hair. Keep it on for at least 15-20 minutes before washing it off.
 - b. This can be used 2 times per week

3. **Virgin Coconut oil + Curry Leaves** - Promotes healthy hair growth, gets rid of dandruff, heals scalp.
 - a. Warm some [coconut oil](#) over an indirect flame and add 5-6 curry leaves to the oil till they change color.
 - b. Once the curry leaves have become black and the color of the oil has changed and become dark, set aside the oil to cool.
 - c. Once the oil has cooled, you can apply it overnight and wash with a mild shampoo the next day.
 - d. Make sure to do a patch test before use. Use 1-2 times/week.
4. **Methi (Fenugreek) seeds paste** - Improves hair texture, prevents greying and enhances hair growth.
 - a. Soak methi seeds in pure filtered water overnight.
 - b. Blend the soaked seeds making a semi-thick paste.
 - c. Apply the mask for at least 30 minutes before shampooing the hair.
 - d. This can be used 2 times per week.
5. **Homemade Hair Oil** - Nourishes scalp and hair, gets rid of dryness and itching, promotes healthy hair growth.
 - a. For a one-time-use batch - Virgin coconut oil (as per requirement/hair length) + 3-5 drops of [rosemary essential oil](#) + 3-5 drops of [lavender essential oil](#) + 3-5 drops of [hibiscus essential oil](#).
 - b. Once this formulation suits your scalp, you can make a bigger batch of 50 or 100ml in a glass bottle, by adding 1-2 capsules of vitamin E to it.
 - c. This can last for 1-2 weeks in a dark cool place.
6. **Rice Water Hair Mask** - Improves hair texture and shine, detangles hair, promotes hair growth and length.
 - a. For Fermented Rice Water -
 - i. Clean half a cup of rice thoroughly , then soak it in clean water for 20-30 minutes.
 - ii. Strain the water and transfer it in a glass jar and close the lid and store it for a day or until you notice a sour smell from it.
 - iii. Once the sour smell is prominent, transfer the jar to the fridge and use this fermented rice water by diluting it with lukewarm water.
 - iv. Apply the diluted fermented rice water on your scalp and hair and keep it for at least 15 minutes, then wash it off with normal water.
 - v. You can use this 1-2 times per week.
 - b. For cooked rice water -
 - i. Boil rice with some extra water, after rinsing it thoroughly, till the water becomes a creamy white color.
 - ii. Strain this excess water, cool it and use a mask before shampoo or as a conditioner after shampoo. Keep it on for 10-15 minutes.

7. Diluted Apple Cider Vinegar Mask - Maintains scalp pH, cleans scalp, improves texture and shine in hair, reduces split ends, reduces hair fall and dandruff.

- Take 1 tablespoon of [ACV](#) and dilute it in a cup of water.
- Use this after your shampoo, on slightly damp hair as a conditioner, post which you can either keep it in your hair or rinse it off after 5-10 minutes.
- Can be used 1-3 times/week.

8. Anti-Dandruff Hair Mask -

- Mix one part organic [hibiscus flower powder](#), one part organic [brahmi powder](#), ½ part organic [neem powder](#) along with fresh [aloe vera gel](#) (blend it first if required) and water to make a smooth paste.
- Apply this for at least 30 minutes and then wash the hair with a mild shampoo or normal water.
- Can be used once/week.

1. Taila Kalpana (Medicated Oils)

Used for scalp massage (*Shiro Abhyanga*). Oils are prepared by boiling herbal decoctions and pastes with a base oil like **sesame or coconut oil** until only the oil remains.

Name / Herb	Preparation	Classical Reference	Benefits
Bhringraj Taila	Fresh bhringraj juice (swarasa) + sesame oil, boiled until oil remains.	<i>Bhavaprakasha Nighantu</i>	Regrows hair, prevents premature graying.
Neeli Bhringadi Taila	Bhringraj, amla, indigo (neeli), yashtimadhu decoction boiled with coconut oil.	<i>Kerala tradition (Sahasrayogam)</i>	Cooling, nourishes scalp, darkens hair.
Brahmi Taila	Brahmi leaves juice + sesame oil.	<i>Bhavaprakasha</i>	Improves memory, reduces stress, supports thick hair.
Amla Taila	Amla decoction + sesame oil.	<i>Charaka Samhita</i>	Strengthens follicles, adds shine.
Jatamansi Taila	Jatamansi paste infused in sesame oil.	<i>Charaka Samhita</i>	Calms nerves, prevents graying, nourishes scalp.

2. Lepa (Herbal Pastes / Masks)

Applied directly to the scalp for nourishment, dandruff reduction, and hair strengthening.

Herb	Preparation	Reference	Action
Amla Lepa	Amla powder + water (or buttermilk) → paste applied to scalp.	<i>Bhavaprakasha</i>	Strengthens roots, prevents hair fall.
Neem Lepa	Neem leaves ground into paste.	<i>Sushruta Samhita</i>	Antimicrobial, clears scalp infections.
Hibiscus Lepa	Hibiscus flowers/leaves ground with water or yogurt.	<i>Bhavaprakasha</i>	Promotes black, shiny hair.
Fenugreek Lepa	Soaked methi seeds ground into paste.	<i>Bhavaprakasha</i>	Reduces dandruff, prevents thinning.
Shikakai Paste	Shikakai powder + warm water.	<i>Traditional formulations</i>	Gentle scalp cleanser, natural shampoo.

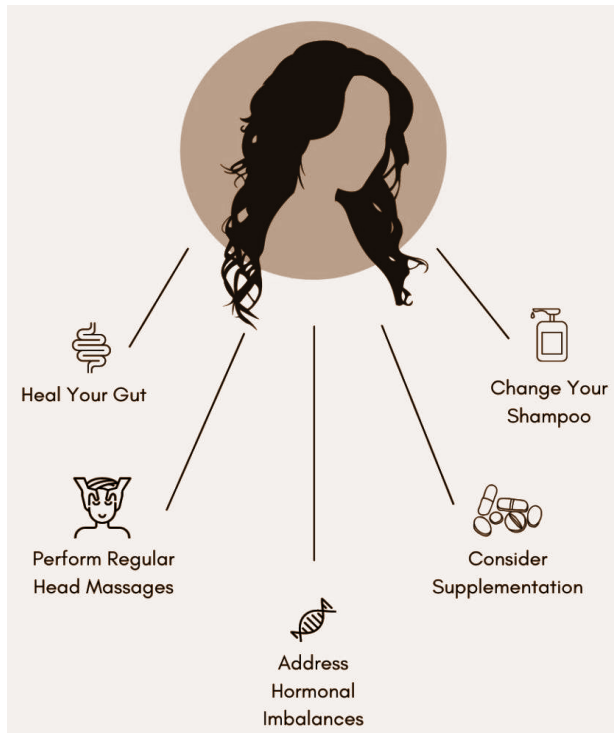
3. Kwatha (Herbal Decoctions / Rinses)

Prepared by boiling herbs in water until reduced to 1/4th. Used as hair rinse after washing.

Herb	Preparation	Reference	Action
Amla–Bhringraj Kwatha	Equal parts amla + Bhringraj boiled in water → used as rinse.	<i>Bhavaprakasha</i>	Strengthens follicles, promotes growth.
Neem Kwatha	Neem leaves boiled in water → filtered rinse.	<i>Sushruta Samhita</i>	Dandruff control, scalp detox.
Shikakai–Reetha–Amla Decoction	Dried pods boiled → natural shampoo alternative.	<i>Traditional Ayurveda</i>	Cleanses scalp, conditions hair.
Hibiscus Decoction	Hibiscus flowers boiled → rinse.	<i>Kerala tradition</i>	Improves luster, cooling.

SIMPLE TIPS TO MAINTAIN HEALTHY HAIR

Taking care of our hair is just as important as taking care of our health. The trick is to take care of your body from the inside first. This will not only cater to your hair but will keep you healthy overall, as well. Hair grows from the inside out, remember?



Here are some simple tips which will ensure that you are healthy and your hair is not a reason for your stress.

1. Eat more **RAW FOODS** like fruits, salads, nuts, seeds and sprouts. These will give you bioavailable vitamins, minerals and antioxidants.
2. Include **HEALTHY FATS** in your diet like virgin coconut oil, organic ghee, cold pressed sesame oil, extra virgin olive oil etc. Make sure to not heat or cook these fats; add them to your sprouts, salads, veggie juices, protein shakes etc.
3. Focus on lowering **INSULIN SPIKES** which are a result of frequent eating and/or eating high carbohydrate meals. Insulin, in excess, is an enemy for your hair follicles, especially if there is no nutritious food consumed by you.
4. **AVOID PROCESSED/PACKAGED/JUNK FOOD** which are loaded with sodium, chemicals, colors, artificial flavors, GMO ingredients and are extremely high in carbohydrates/sugar without the presence of minerals and vitamins unlike fruits/honey/jaggery etc.
5. Get enough **VITAMIN D** through the **SUN** and/or **SUPPLEMENTATION** as it is key in maintaining your hormonal balance.
6. Use **MILD SHAMPOOS** to cleanse your hair and always use a dedicated anti-dandruff shampoo for dandruff prone hair instead of any normal shampoo. Long term use of harsh shampoos with poorly formulated sulfate based surfactants and harsh preservatives, damages the scalp and weakens the foundation for your hair.
7. Use **GOOD QUALITY HAIR OILS** which are free from mineral oil, paraffin liquid, paraffin oil, silicones and chemical film formers. Stick to good quality cold pressed carrier oils blended with active extracts or essential oils. It would be best to prefer hair oils which contain **cold-pressed oils** which have much better antioxidant properties, nourishing capabilities and higher absorption as compared to regular carrier oils.
8. Use **POTENT HAIR GROWTH SERUMS** which are different from hair styling serums (usually filled with silicones or mineral oil to give a shiny, non-greasy feel to the hair). Hair growth serums have dedicated active ingredients which stimulate the hair follicles, heal the scalp, improve blood circulation and protect the hair from oxidative damage.
9. Avoid **STYLING** your hair frequently by using hair styling products like, serums, waxes, gels, sprays

& blow dryers, straighteners, irons etc. These make the hair look good for a while but slowly weaken the hair.

10. Maintain the **pH** of your scalp by using a low pH shampoo, conditioner and/or pH balanced serums/vitalizers and/or rose water or diluted apple cider vinegar. Constantly using commercial shampoos which are usually alkaline in nature, weakens the hair and the scalp hence causing more hair fall in the long run. Maintaining the pH of the scalp and hair, minimizes the split ends and excessive shedding.
11. Use **DIYs** to strengthen your hair, because our body doesn't love anything more than your attention and natural ingredients.
12. Lower **STRESS** by going on long morning walks, meditating, practising controlled breathing, having relaxing teas like chamomile, lavender, jasmine tea etc.
13. Refrain from harmful habits like **SMOKING, DRINKING ALCOHOL, ABUSING DRUGS** etc. These addictions deplete the body's nutrient reserves especially the B and C vitamins and also cause a lot of oxidative stress and inflammation in the body.
14. Avoid tying **TIGHT PONYTAILS** or making other such hair styles which pull the hair and cause damage to the root inturn causing hair loss.
15. **DO NOT SELF MEDICATE** for any ailment or hair related issue especially pertaining to certain medications, topical solutions etc. as they are supposed to be used only under the guidance of a trained professional.

Tip	Scientific Basis	Why It Helps
Wash scalp 1-2x per week with mild shampoo	American Academy of Dermatology (AAD) recommends frequent but gentle cleansing to remove oil, dirt, and DHT buildup.	Prevents clogged follicles and scalp inflammation without stripping all oils.
Use conditioner after shampoo (long hair) / ACV rinse (short hair)	Studies show conditioning agents reduce friction and fiber breakage (Int J Trichology, 2015).	Keeps cuticles smooth, reduces split ends, improves shine.
Scalp massage with oil	Massage increases scalp blood flow (research in <i>Eplasty</i> , 2016). Oils like coconut reduce protein loss from the hair shaft.	Stimulates follicles, strengthens hair shaft.
Protect hair from heat	Excess heat denatures keratin proteins and weakens hair (J Cosmet Sci, 2011).	Reduces breakage, dryness, and cuticle damage.
Balanced diet (protein, iron, vitamins)	Nutritional deficiencies (iron, vitamin D, biotin, protein) linked to hair loss (Dermatol Ther, 2019).	Supports keratin production and follicle health.
Reduce stress (yoga, meditation, sleep)	Chronic stress raises cortisol, linked to telogen effluvium (stress-related shedding).	Improves hair growth cycle regulation.
UV protection (hat/scarf)	UV exposure oxidizes hair lipids and proteins, causing roughness and fading (Photochem Photobiol Sci, 2014).	Preserves hair strength and color.

BASIC EATING PATTERN FOR A HEALTHY BODY



In this segment of the book, I will not give you a specific diet plan because that is something that varies from individual to individual and cannot be the same for everyone. But there are a few fundamentals which will work for the majority and that is what I will explain in brief.

I will take you through the entire day with healthy eating habits right from the start of the day till you sleep.

Morning :

- Avoid having milk/milk products, milk tea/coffee first thing in the morning as this puts a lot of pressure on your digestive system and causes indigestion, bloating, gas and heartburn further in the day.
- Have a glass of lukewarm water or room temperature water as soon as you wake up.
- Instead of having chai and snacks, have water with lemon juice or water with 1 tbsp apple cider vinegar (for those who have indigestion) or warm water with 1 tsp honey (for non-diabetics) or green tea. Avoid eating first thing in the morning.
- If you absolutely need breakfast, prefer fruits (for normal weight and non-diabetic people) or salad or a meal which has less carbs and more fat & protein (like seeds and nuts/dry fruits). Eating raw vegetarian foods first thing in the morning will ensure you have enough micronutrients in the body to keep the stress low and energy high.

Afternoon :

- If you have skipped breakfast, then this is the most important meal of your day and it should include all aspects of a healthy diet - salad, protein, fats and less carbs, vitamins (if required).
- If you are a heavy eater of breakfast, then if possible it would be best to skip lunch and have an early dinner, to allow the digestive system to rest and absorb nutrients better.
- Before the lunch (cooked food), it is always best to consume a small-medium size bowl of salad (cabbage, capsicum, cucumber, tomato, coriander, ½ tbsp virgin coconut oil, ½ tbsp extra virgin olive oil, ½ tbsp [nutritional yeast](#), seasoning). This will provide your micronutrients and also be a healthy food source for the gut microbes, being a prebiotic.
- Avoid eating a carbohydrate rich meal or junk food for lunch as it will make you extremely lethargic and sleepy. Rather, have good fats, protein sources and nutrient dense foods like sprouts, pulses, vegetables etc.

Evening :

- If possible, have your last meal before sunset or skip it all together or have something very easy on the digestive system like homemade soup (not from a packet), vegetable juice, dal, khichdi etc.
- Avoid foods high in sodium, carbohydrates and those which are packaged or processed in nature.
- If you have a problem with constipation, a salad before lunch and 1 tbsp of raw [organic ghee](#) after dinner is going to be very beneficial for you.
- Give atleast 2-3 hours between your dinner and sleep.
- Avoid eating meals, late at night, especially packaged or processed food.

Important Tips

1. Do not mix fruits/vegetables and dairy.
2. Do not eat raw veggies with the cooked meal, this leads to gas and bloating. Eat it before the cooked meal.
3. Avoid dairy as much as possible, if needed consume, ghee, curd, buttermilk or butter.
4. Give Intermittent Fasting a try... Read about it.
5. The key to a good diet is that it should lead to less insulin spikes in the blood, i.e avoiding junk, processed & carb-rich food.
6. Focus on getting micronutrients (vitamins/minerals) - this will automatically steer you to making healthy choices.
7. Get enough sun, because vitamin D isn't going to come in adequate amounts from your diet.
8. Avoid sweets/sugary foods/ cold drinks/ desserts etc. If you feel like eating something sweet, have a little jaggery, dates or little honey.
9. Eat till you are 80% full & make sure to walk for 10-15 mins post the meal.

REFERENCES

1. <https://pvr cosmeticclinic.com/low-level-laser-therapy-lllt-a-comprehensive-guide-to-laser-treatment/>
2. <https://scholar.valpo.edu/cgi/viewcontent.cgi?article=1337&context=jmms>
3. <https://www.mdpi.com/2304-6732/9/7/502>
4. <https://www.mdpi.com/1424-8247/16/2/206>
5. https://www.researchgate.net/publication/316012307_Diet_and_hair_loss_effects_of_nutrient_deficiency_and_supplement_use
6. https://www.capillus.com/blogs/all/understanding-hair-growth-stages?srsId=AfmBOornw99_ttDI6Fu-HbvB2MKwMP25HdugwBS6CM8CIXy8PDpyOS
7. <https://www.mdpi.com/2077-0383/12/3/893>
8. https://www.researchgate.net/figure/Some-of-the-factors-causing-hair-loss-due-to-dysregulation-of-hair-cycle-or-unfavourable_tbl1_328980562
9. <https://www.jaad.org/article/S0190-9622%2823%2900979-9/pdf>
10. <https://www.formen.health/blogs/hair/types-of-alopecia>
11. <https://nyulangone.org/conditions/hair-loss/types>
12. <https://www.frontiersin.org/journals/pharmacology/articles/10.3389/fphar.2025.1544068/full>
13. <https://www.ncbi.nlm.nih.gov/books/NBK546248/>
14. <https://courses.lumenlearning.com/wm-biology2/chapter/hair/>
15. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4755418/>
16. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5315033/>
17. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4144211/>
18. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5397031/>
19. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2929555/>
20. [https://www.jidonline.org/article/0022-202X\(93\)90510-O/pdf](https://www.jidonline.org/article/0022-202X(93)90510-O/pdf)
21. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2166020/pdf/brmedj02384-0027.pdf>
22. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4852869/>
23. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5551307/>
24. <https://www.longdom.org/open-access/understanding-hair-loss-due-to-air-pollution-and-the-approach-to-management-2167-0951-1000133.pdf>
25. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5499037/>
26. <https://www.karger.com/Article/FullText/492035>
27. https://www.cosmeticsbusiness.com/news/article_page/Redensyl_the_hair_growth_galvanizer/9671

28. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4737838/>
29. <https://www.hilarispublisher.com/open-access/a-comparative-study-between-topical-5-minoxidil-and-topical-redensyl-capixyl-and-procapil-combination-in-men-with-androg.pdf>
30. <https://www.ulprospector.com/en/asia/PersonalCare/Detail/1411/44314/Procapil>
31. http://www.avisgida.com/literatur/Procapil_TechnEng.pdf
32. https://www.abcdef.com.ua/fotky27371/_psa_bio-capigen-pt-i-rev00.pdf
33. <http://www.dr-baumann-international.co.uk/science/BASF%20Panthenol.pdf>
34. <https://www.aloepersonalcare.com/#>
35. <https://www.creative-peptides.com/product/biotinoyl-tripeptide-item-cpc1632-137.html>
36. http://www.avisgida.com/literatur/Procapil_TechnEng.pdf
37. <https://pubchem.ncbi.nlm.nih.gov/compound/Panthenol>
38. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6380979/>
39. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3935391/>
40. <https://www.ncbi.nlm.nih.gov/books/NBK546248/>
41. <https://www.ncbi.nlm.nih.gov/books/NBK499948/>
42. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6290285/>
43. <https://www.hairguard.com/copper-peptides-study/>
44. <https://www.ncbi.nlm.nih.gov/books/NBK482378/>

PLATFORM	LINKS
YOUTUBE	https://www.youtube.com/@BeardedChokra/videos
INSTAGRAM	https://www.instagram.com/abhijeetbhansali15/
FACEBOOK	https://www.facebook.com/beardedchokra
TELEGRAM	https://t.me/BeardedChokra
EMAIL	beardedchokra15@gmail.com
WEBSITE	https://www.beardedchokra.com/
PERSONAL CONSULTATION	https://calendar.app.google/5DJQxBNG8ajm3vHC7

If you found the knowledge in this book valuable and if you feel the need for personal assistance / coaching, you can book a [personal consultation session](https://calendar.app.google/5DJQxBNG8ajm3vHC7).

THANK YOU