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Discover the Natural Treatment of Hair Loss...

# Hair<sup>®</sup> First

*Nutra*  
BioHerbals

**NUTRITIONAL  
SUPPORT FOR  
HEALTHY  
HAIR**

*The Natural Hair Growth Formula for MEN*

## HairFirst tablets

Hair loss is a concern that affects us all. It's comforting to know that the human body sheds approximately 100 of its 100,000-150,000 strands of hair every day and new ones grow to take their place. As we age, this renewal process may slow where more hairs are lost than grown. Real hair loss is most noticeable in men. What is commonly known as male-pattern baldness is an inherited condition called androgenetic alopecia and it may begin as early as age 20. Male hair loss is distinguished by a receding hairline or widow's peak and thinning on the crown. The rate of hair loss may be slow, gradual, or fast. By age 50, about 50 percent of men will experience thinning and hair loss. For 40-50 percent of women, hair may begin to thin after age 50 (typically after menopause). This is called female-pattern baldness. Women tend to see their hair thin throughout the head, but most visibly on the crown. Significant hair loss for women before age 50 is rare and usually triggered by hormonal fluctuations, stress, or a secondary health concern.

### Other kinds of hair loss :

**Alopecia areata:** This form of hair loss is characterized by patchy baldness or bald spots. It affects both men and women equally, both adults and children, but it is rare, affecting less than 2 percent of the population. Hair loss due to alopecia areata is usually triggered by an immune system disorder. Once addressed, the hair usually grows back.

**Anagen effluvium:** This condition occurs when hair in the growth phase falls out prematurely. Prescription medications used for the treatment of cancer are the most common cause of this condition. Chemotherapy patients may lose up to 90 percent of their hair as a result of anagen effluvium.

**Telogen effluvium:** A natural part of the hair growth cycle includes a resting phase called telogen, which involves 10 percent of hair at any given time. Telogen effluvium occurs when up to 30 percent of hairs on the head are in the resting phase at any given time. This condition may be caused by physical or emotional stress, and hair growth will return to normal as stress is eased.

The health of your hair is a reflection of the overall state of your health, so it is important to address hair loss from a multi-pronged approach that includes both the use of standard medical treatments to slow hair loss, and nutritional and lifestyle changes to address and improve health.

### Sign & Symptoms of Hair loss

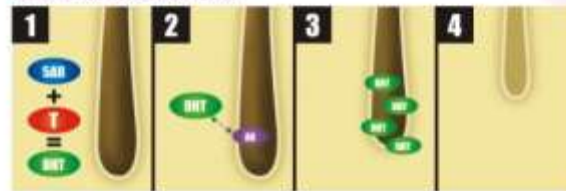
- Bald patches
- Scalp irritation
- Sudden, excessive, or increased hair loss
- Visible thinning of the hair around the top and sides of the head
- If hair loss is accompanied by other symptoms such as fatigue, cold hands and feet, dry skin and hair, and menstrual fluctuations, it may be the warning signs of hypothyroidism or an underactive thyroid.

### Risk factors for Hair loss

- o Age: Hair loss is more common with age
- o Burns, injuries, and skin infections such as ringworm
- o Drugs used to treat gout, arthritis, depression, heart problems, high blood pressure, and birth control pills can lead to hair loss.

- o Hair treatments: Chemicals used for dyeing, tinting, bleaching, straightening, or perming can cause hair to become damaged and break off if they are overused or used incorrectly; hairstyles that pull your hair too tightly also can cause some hair loss, which is known as traction alopecia.
- o Hormonal changes such as pregnancy and menopause
- o Immune disorders (lupus, diabetes, thyroid disease)
- o Nutritional deficiencies: Inadequate protein, iron, or essential fatty acids
- o Severe gastrointestinal disorders
- o Stress: Emotional stress, fever, surgery, flu
- o Weight problems and extreme dieting

**Hair Loss Mechanism:**



TESTOSTERONE  $\xrightarrow{5\alpha\text{-Reductase}}$  DHT

1. The enzyme 5 Alpha-Reductase (5AR) converts Testosterone (T) to Dihydrotestosterone (DHT)
2. DHT (DHT) binds to Androgen Receptors (AR)
3. DHT causes increased hair loss & gradual miniaturization of the hair follicle
4. Over time the hair follicles die & the scalp becomes visible

**HairFirst - Nutritional support for Healthy Hairs**

Hair first is an intensive formula for men & women, towards strengthening hair & promoting hair growth.

**COMPOSITION**

1. Saw palmetto	160 mg	9. Calcium Pantothenate	30 mg
2. Beta Sitosterol	90 mg	10. PABA	90 mg
3. Stinging Nettle	50 mg	11. Selenium	50 mcg
4. L-cysteine	90 mg	12. Vitamin E	30 IU
5. INOSITOL	5 mg	13. Zinc	22.5 mg
6. TYROSINE	50 mg	14. Folic Acid	400 mcg
7. LYSINE	50 mg	15. COPPER	1 mg
8. Biotin	200 mcg		

**Pharmacology**

Saw palmetto extract, Beta sitosterols, Stinging nettle extracts are powerful DHT inhibitors effective for the treatment of Androgenic Alopecia. DHT stands for dihydrotestosterone, a hormone formed when the enzyme 5-alpha-reductase breaks down testosterone. DHT is the primary underlying cause of male-pattern baldness. DHT shortens the hair growth cycle, causing the hair follicles to shrink and stop production of hair, leading to hair loss. DHT not only affects men but also women, particularly after menopause when levels of estrogen decrease. Hair first tablets used to treat baldness work by inhibiting the action of 5-alpha-reductase, thus reducing the formation of DHT. High-fat diets can also boost DHT levels.

L- cysteine:	◆ Retains hair luster, prevents Alopecia as well as hair follicle cell apoptosis.
Inositol:	◆ Helps to grow & repair hair ◆ Retains hair luster
TYROSINE:	◆ Helps retain hair lustre ◆ Helps to grow & repair hair
LYSINE:	◆ Plays strong role in hairfollicles growth, ◆ Makes Hair Stronger
Biotin :	◆ Regenerates RBC which is vital for healthy hair
Calcium	
Pantothenate:	◆ Strengthens hair shaft & stops further hair loss
PABA (para amino benzoic acid):	◆ Restores grey hair to its original color.
Selenium:	◆ Strengthens hair shaft & stops further hair loss ◆ Accelerates hair regrowth ◆ Prevents Hypopigmentation of Skin
Vitamin E :	◆ Helps in improving hair follicle nutrition ◆ Smoothes hair growth to an even rate
Zinc:	◆ Prevents Dandruff & boosts hair regeneration,
Folic Acid:	◆ Important hair growing vitamin that promotes healthy hair growth  ◆ Decreases thinning of hair & receding hair line* ◆ Prevents premature greying of hair
Copper:	◆ Helps as pigmenting factor for hair

### Mechanism of Action of Phytonutrients in HairFirst

Saw palmetto, Beta sitosterol & Stinging nettle extracts synergistically act as powerful DHT inhibitors, effective for treatment of Androgenetic Alopecia<sup>1,2</sup>

Saw Palmetto extract:	◆ Lowers the Levels of DHT ◆ Slows down the process of hair loss ◆ Stabilizes hair density
Stinging Nettle extract:	◆ Excellent hair vitalizing nutrient ◆ Blocks 5-Alpha reductase activity thus DHT promotes hair follicle activity and ensures strong healthy Hair ◆ Lowers levels of elevated TNF alpha another cause of hair loss
Beta Sitosterol:	◆ Targets hormones responsible for male & female pattern baldness ◆ Has estrogen blocking effects ◆ Prevents new DHT Synthesis ◆ Exhibits anti-inflammatory property



### Essential Hair Specific Nutrients in HairFirst

<b>BIOTIN:</b>	<ul style="list-style-type: none"> <li>◆ Promotes hair growth &amp; increases hair elasticity, preventing breakage*</li> <li>◆ Increases hair shaft diameter &amp; gives a fuller appearance*</li> </ul>
<b>Zinc:</b>	<ul style="list-style-type: none"> <li>◆ Essential for normal hair growth &amp; maintenance*</li> <li>◆ Accelerates hair regrowth &amp; protects hair color</li> <li>◆ Prevents dandruff</li> <li>◆ A beneficial adjuvant therapy in mild type of long term alopecia areata.*</li> </ul>
<b>Copper:</b>	<ul style="list-style-type: none"> <li>◆ Strengthens hair shaft &amp; stops further hair loss</li> <li>◆ Prevents defects in color &amp; structure of hair</li> </ul>
<b>Calcium Pantothenate:</b>	<ul style="list-style-type: none"> <li>◆ Strengthens hair shaft &amp; stops further hair loss</li> <li>◆ Helps to grow &amp; repair hair</li> <li>◆ Retains hair lustre</li> </ul>
<b>INOSITOL:</b>	<ul style="list-style-type: none"> <li>◆ Helps to repair hair</li> <li>◆ Retains hair lustre</li> </ul>
<b>Lysine:</b>	<ul style="list-style-type: none"> <li>◆ Plays strong role in hair follicles growth,</li> <li>◆ Makes Hair Stronger</li> </ul>
<b>PABA:</b>	<ul style="list-style-type: none"> <li>◆ Helps to prevent, maintain &amp; restore natural hair color?</li> <li>◆ Prevents bleaching of hair by sunlight</li> <li>◆ Improves quality &amp; strength of hair</li> </ul>
<b>Vitamin - E:</b>	<ul style="list-style-type: none"> <li>◆ Helps in improving hair follicle nutrition</li> <li>◆ Smooths hair growth to an even rate</li> </ul>
<b>Tyrosine:</b>	<ul style="list-style-type: none"> <li>◆ Helps retain hair lustre</li> <li>◆ Helps to grow &amp; repair hair</li> <li>◆ Used by cells to synthesize proteins</li> <li>◆ Plays strong role in hair follicles growth</li> </ul>
<b>L-Cysteine:</b>	<ul style="list-style-type: none"> <li>◆ Significantly reduces hair-pulling symptoms for people with Obsessive Compulsive Disorder</li> <li>◆ Prevents hair follicle cell apoptosis and alopecia*</li> </ul>
<b>Folic Acid:</b>	<ul style="list-style-type: none"> <li>◆ Important hair growing vitamin that promotes healthy hair growth</li> <li>◆ Decreases thinning of hair &amp; receding hair line*</li> <li>◆ Prevents premature greying of hair</li> </ul>
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### Benefits of HairFirst tablets

- ◆ Provides vital nutrients for hair follicles
- ◆ Restores hair's health
- ◆ Maintains natural balance of hair
- ◆ Rejuvenates damaged hair

**DOSAGE** 1-2 tab a day  
 Notable changes observed when used daily for a period of 6 months



#### INDICATIONS

- Alopecia
- Premature Greying of Hairs
- Alopecia due to thyroid disorders
- Strengthening of hairs
- Promoting hair growth

#### References:

1. FERS Lett. 1999 Jan 8; 442 (1): 89-94
2. Br J Pharmacol. 1984; 93 (suppl): 401 P.
3. J Altern Complement Med. 2002 Apr; 8 (2): 143-52
4. Pediatr Dermatol. 2003 Apr
5. J Am Acad Dermatol. 1985 Jul; 13 (1): 97-102
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7. HAZARDI 1992 Jan; 44(1): 380-4
8. Alopecia and hair follicle cell apoptosis in mice exposed to environmental cigarette smoke. Toxicol. Lett. 114, 117-121.
9. Linda, ND, Ph.D. Herbal Pharmacist. 1991.



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**Xena Bio Herbals Pvt Ltd.,**

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<b>Calcium Pantothenate:</b>	<ul style="list-style-type: none"> <li>Strengthens hair shaft &amp; stops further hair loss</li> <li>Helps to grow &amp; repair hair</li> <li>Retains hair luster</li> </ul>
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 7. Shastriar. 1993; Jan; 44(8): 288-4  
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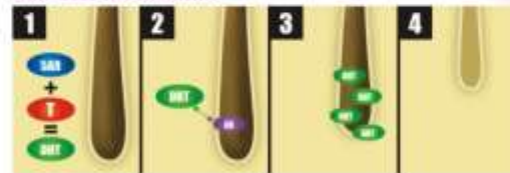
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- o Hormonal changes such as pregnancy and menopause
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- o Nutritional deficiencies: Inadequate protein, iron, or essential fatty acids
- o Severe gastrointestinal disorders
- o Stress: Emotional stress, fever, surgery, flu
- o Weight problems and extreme dieting

### Hair Loss Mechanism:



TESTOSTERONE  $\xrightarrow{\text{by Enzyme DHT}}$

1. The enzyme 5 Alpha-Reductase converts Testosterone to Dihydrotestosterone
2. DHT binds to Androgen Receptors
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- Stinging Nettle extract:**
  - Excellent hair vitalizing nutrient
  - Blocks 5-Alpha reductase activity thus DHT promotes hair follicle activity and ensures strong healthy Hair.
  - Lowers levels of elevated TNF-alpha another cause of hair loss<sup>4</sup>
- Beta Sitosterol:**
  - Targets hormones responsible for male & female pattern baldness
  - Has estrogen blocking effects
  - Prevents new DHT Synthesis
  - Exhibits anti-inflammatory property