

Stress: An underlying cause of hair loss

75% of adults reported experiencing moderate to high levels of stress in the past month and that their stress has increased in the past year¹. This percentage has likely increased due to the current COVID-19 pandemic.

Both acute and chronic stress can disrupt hair growth.

Traditionally, during periods of increased stress, cortisol signals the hair follicle to prematurely shift from anagen to telogen, where hair prepares to shed three to six months later^{2,3}. However, repeated exposure to stressful situations such as emotional, relationship, finance, employment, and physical health problems also play a role in the disruption of normal hair growth cycling⁴.

For years conventional medicine has viewed hair loss as the result of either hereditary or acquired factors. **It is now understood that hair loss is multifactorial and that there may be more similarities than differences across the hair loss disorder spectrum, one of which is stress⁴.** Studies have found that stress results in:

- Release of cortisol, which induces catagen and follicle regression⁵.
- Release of substance P, a stress-associated neuropeptide that modulates inflammation in the skin and collapses immune privilege surrounding the follicle opening it to attack⁶⁻⁹.
- Release of corticotropin-releasing hormone, which binds to the follicle, inducing further production of local stress hormones and hair growth arrest².

Stress not only has a direct effect on the hair follicle, but indirect effects via other systems in the body including the endocrine and digestive systems. Over time constant activation of the central stress response leads to disruption of hypothalamic feedback loops, namely thyroid and reproductive hormones - all of which play a role in regulating hair growth and quality¹⁰⁻¹³. With chronic stress, gut microbiome shifts potentiate mucosal permeability, system-wide inflammation, and malabsorption, many of which are implicated in hair loss disorders¹⁴⁻¹⁷.

NUTRAFOL®

There are no medications available to address stress or stress-related hair thinning.

Nutrafol is a clinically effective nutraceutical that improves hair growth and thickness by multi-targeting root causes of hair thinning, including stress^{4,18}. Exclusive to Nutrafol, Sensoril® ashwagandha is a medical-grade stress adaptogen shown to lower elevated cortisol levels in adults and assist in helping the body adapt to external stimuli to build stress resistance^{19,20}. Ashwagandha is part of Synergen Complex®, a proprietary blend of standardized botanical extracts clinically tested to target the negative effects of stress including DHT sensitivity, oxidative stress, and a rise in inflammatory cytokines⁴.

In recent clinical studies, both men and women with self perceived thinning hair reported improved hair growth, thickness, and less shedding after six months.

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