

# #YOURHAIRMATTERS

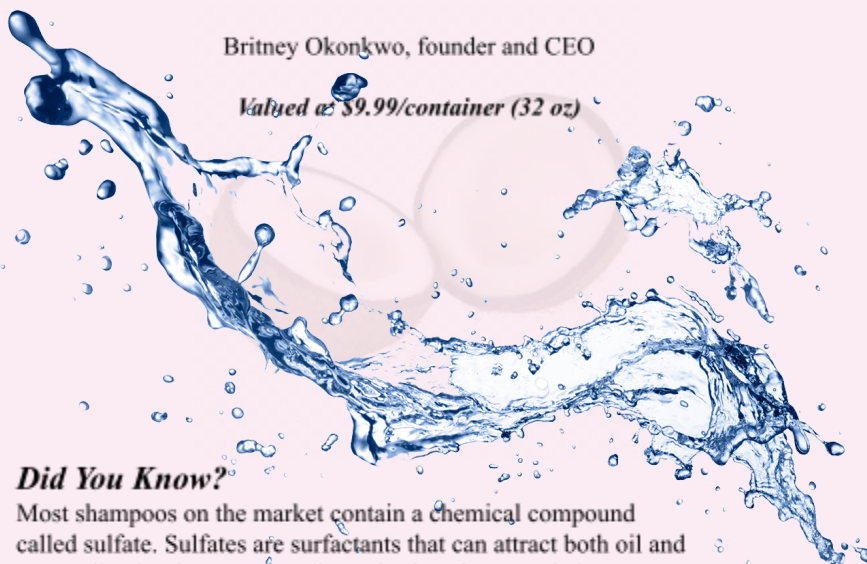
Are you experiencing hair loss, scalp soreness and/ or skin irritability?

## The Coconut Mist

"Our new hair product, *The Coconut Mist*, is infused with the essences of coconut oil to tame frizz and heal breakage. Our extremely light-weight formula is based on an element that is essential to life and also promotes hair growth as it is considered to be a key ingredient that supports vitamins. Additionally, it is safer to use than your typical shampoo because it is free of sulfates and other harsh chemicals."

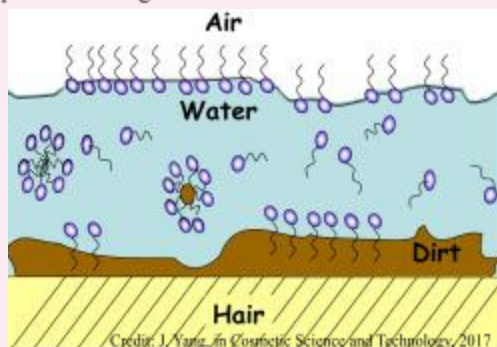
Britney Okonkwo, founder and CEO

Valued at \$9.99/container (32 oz)

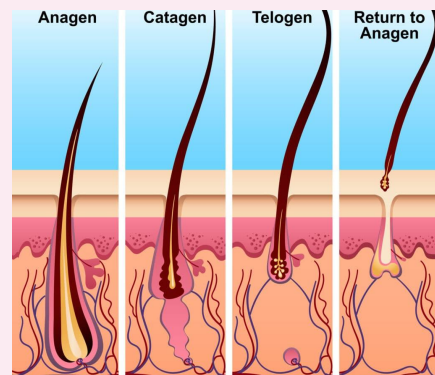


### Did You Know?

Most shampoos on the market contain a chemical compound called sulfate. Sulfates are surfactants that can attract both oil and water allowing it to remove dirt and grime from our hair. However, sulfates are powerful enough to strip too much moisture from our hair, leaving it brittle and dry. If your skin is particularly sensitive, the dryness can lead to extreme scalp irritation. Researchers have also discovered that sulfates wash away the natural antimicrobial peptides, proteins, and waterproofing oils created by our biome. Without these substances, our hair and scalp will lose the moisture, vitamins and other necessary nutrients needed to promote hair growth.



**Figure 2:** Our body's sebaceous glands, located in the mid-dermis and alongside a hair follicle, are responsible for producing an oily, waxy substance called Sebum as seen in the diagram above. The purpose of Sebum is to coat, moisturize and protect the skin. Overtime, the body produces a build up of Sebum on the surface of the skin and if left unattended, it can cause scalp inflammation, itching and an odor. Surfactants, such as sulfates, are used to emulsify the oily substance so it can be pulled into water and washed off easily. The scalp becomes clean and free of the oily substance until fresh sebum is regenerated.



Credit: Istock by Getty Images

**Figure 1:** The hair growth cycle can be broken down into three stages: Anagen, Catagen, and Telogen. The first stage of the cycle, Anagen, is considered the growth phase and it is expected to last between 3-10 years. During this phase, cells rapidly divide in the hair bulb and dermal papilla as newer strands grow from the scalp. Following this is the Catagen stage. This second stage is considered to be a transitional phase that is expected to last 2-3 weeks. Unlike the first stage, Anagen, cell division stops in this stage and the melanocytes stop producing pigment. Lastly, we have the Telogen stage. This is the resting phase that usually lasts 3-4 months during which the hairs on our body begin the process of shedding and eventually fall off.

### What exactly is our hair made of?

Our hair can be divided into three parts: the medulla, cuticle and cortex. The medulla is the innermost layer of the hair shaft that is composed of oily substances that function to lubricate the hair follicle and help to preserve moisture. Next, we have the cortex layer. The cortex is the main component of hair as it contains long chains of keratin, a fibrous protein that adds elasticity and resistance to our hair. Following cortex layer is the cuticle layer, a thin, protective layer made up of dead, scaly-looking cells that overlap one another to generate a protective layer around the hair and thus promoting hair growth.

### Nutritional Factors and Hair Loss

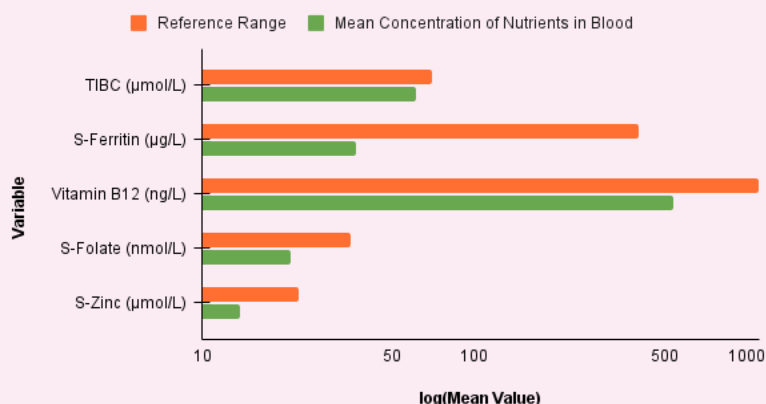


Table 1: Data table shows biochemical results obtained in 200 apparently healthy women complaining of increased hair shedding for longer than 6 months.

In an attempt to find a correlation between hair loss and nutritional factors, researchers assessed the solute concentration of various blood variables (ferritin, vitamin B12, folic acid, and zinc) in 200 women presenting with unexplained persistent hair shedding. The table above presents the data obtained and shows the frequency of blood variables believed to be affected by loss of nutrition in the scalp. The data shows that the mean average in all five categories fell below its reference point, a value that is based on results that are seen in 95% of the healthy population. The results suggest that there is a positive correlation between hair loss and low nutrients through a lack of minerals and vitamins.