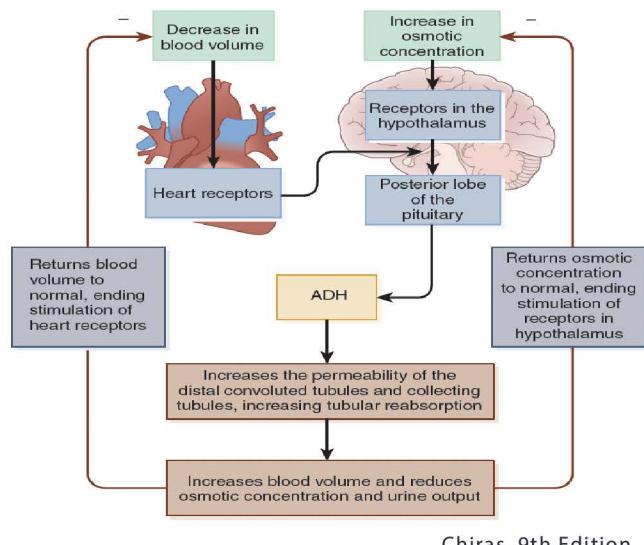


# What to Worry About After Drinking: Dehydration & Inflammation

Once in the bloodstream, alcohol (the ethyl alcohol present in alcoholic beverages) circulates the body and impairs the hypothalamus' production of ADH (antidiuretic hormone). Decreased levels of ADH cause a drop in water absorption and dehydration. Hydration is critical to homeostasis within the body. The integumentary system protects the skin (the dermis, epidermis, hypodermis) from dehydration. Returning to hydrated homeostasis after a night of drinking is a slow process, which is why hangovers often last an entire day. Bodily systems are uniquely affected by alcohol's effects. For the skin, drinking can cause telangiectasia (enlarged blood vessels), inflammation, and a lack of hydration in the epidermis.



During homeostasis, heart receptors send signals to receptors in the brain to create ADH. Alcohol inhibits the production of ADH, which creates an imbalance and causes inflammatory and dehydrating effects on the skin.

## SAYING BLOODY MARY 3 TIMES IN THE MIRROR ISN'T HALF AS SCARY AS INFLAMED, HUNGOVER SKIN



### BLOODY MARY MASKS SUNDAY MORNING AFTER SKINCARE

#### The Bloody Mary Mask is just the "hair of the dog" you need for simple morning after drinking skincare

Through a unique blend of aloe vera and ethanol alcohol, the Bloody Mary Mask is a simple one step skin care product. The aloe vera hydration contrasts the dehydrating effects of the alcohol, and the alcohol is reintroduced to for its fast acting, anti-bacterial, and pore enlarging effects. The mask is designed to be worn for 10-20 minutes while the products rest on the skin. Keep masks in cool, dry spaces when not in use, and place in the fridge for heightened cooling effects.

#### Product Details:

- 1 Package Contains 7 Masks (*enough for a week long bender*)
- Each Mask is Made of Two Ingredients (Aloe Vera and Ethanol Alcohol)

## Who Needs Bloody Mary Masks?

College students have a critical need for a hydrating solution for the effects of hangovers. According to WashU, 5,152 students engage in high-risk drinking, which does not include moderate to light alcohol usage. The Bloody Mary Mask is for after any alcohol consumption; the only stipulation is that we recommend you keep it next to your bed if your hangover is likely to be too severe to make it to the bathroom for your morning skincare.

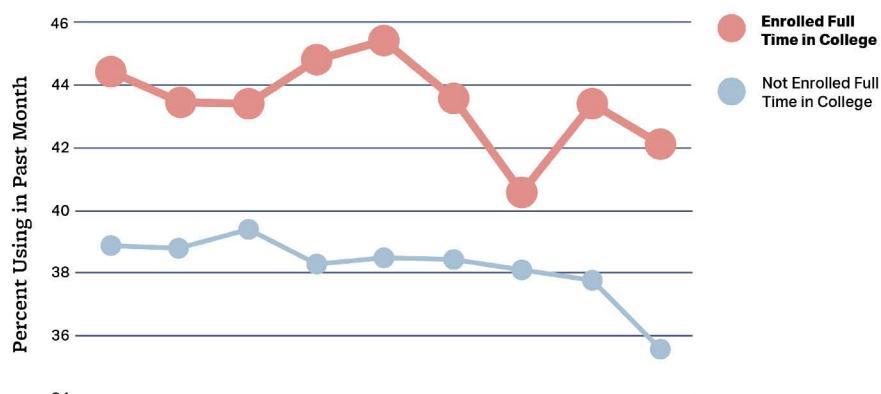
## The Secret Ingredient: Hair of the Dog (Alcohol)

**Fast Acting:** The biology of membranes allows small molecules like alcohol to move through the membrane wall through the process of diffusion, and this process makes the ethanol component of the mask fast-acting. Both the molecular size of alcohol as well as the concentration gradient allow for osmosis and diffusion to cause the quick transfer and movement of alcohol throughout the body's cells. Alcohol has the potential to act as a skin penetration enhancer for transdermal penetration of other products which could include aloe vera. (Lachenmeier)

**Anti-Bacterial:** Ethyl alcohol is toxic to bacteria and impairs bacteria growth, variability, and metabolism. Anti-bacterial ingredients are important to combat bacteria you may have encountered out drinking or collected on enlarged pores. On a chemical level, the molecules within alcohol are amphiphile chemical compounds that are both water and fat-loving. Bacteria are composed of fat-based and water-based parts which make alcohol easily bond with these molecules and break down their protective membranes. In the mask, the ethanol rests on the epidermis and contains anti-bacterial components.

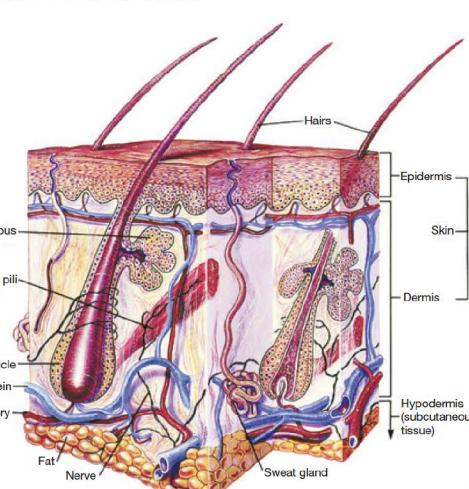
**Enlarges Pores:** Alcohol often causes enlarged pores in the skin due to inflammation. Pores are depressions in the skin with openings. Enlarged pores carry more solutions than fine pores. The Bloody Mary Mask delivers the solution directly onto the pores and aims to deliver a maximum amount of product.

Binge Alcohol Use among Adults Aged 18 to 22 by College Enrollment 2002-2010



## Restoring Moisture: Aloe Vera

Depleted ADH leaves the body and skin dehydrated from alcohol. Aloe vera hydrates by cooling and moisturizing, and the inner mucilage of aloe is 99.5% water. Dermatologists endorse this ingredient. Dr. Nussbaum described how it is "great for face masks and calming." Hungover skin is inflamed and dehydrated, which aligns with the healing properties of aloe vera.



Chiras, 9th Edition

The Bloody Mary Mask would be applied to the epidermis, and hydrate and soak the skin.



For more information on this product, contact  
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