

Albumen – A kind of Protein (source Chicken Egg Whites)

Albumen is the protein which is the main component of surface skin cells

This albumen is made from dried, pasteurized egg whites. It is shelf stable (does not need refrigeration). It replaces raw egg whites in recipes and formulations calling for uncooked or lightly cooked eggs such as frostings, meringue and skin care products. Egg white powder albumen is negative for salmonella bacteria.

1 T Albumen + 2 T water equals 1 egg white. Fantastic for pore-tightening masks, anti-acne formulations, eye gels/creams! Pure enough to eat! FDA Approved. **Protein 11.5g**



Egg white is the common name for the clear liquid (also called **albumin** or **glair/glaire**) contained within an egg. It is the cytoplasm of the egg, which until fertilization is a single cell. It consists mainly of about 10% proteins dissolved in water. Its primary purpose is to protect the egg yolk and also to provide additional nutrition for the growth of the embryo, as it is rich in proteins and is of high nutritional value. Unlike the egg yolk, it contains little fat.

All proteins, including those in egg white, are made of long chains of amino acids which might be considered as similar to beads on a string. In a raw egg, these strings are ravelled up in a tangled compact mass. There are bonds between the amino acids within each protein that stop the ball from unravelling. As the egg cooks, the heat causes the bonds within the proteins to break. Each ball of protein unfolds and tangles up with the other protein balls. Bonds form between the amino acids on different proteins setting the albumen into a rubbery texture.

What happens to an egg white as it is beaten

The protein partially unravels and forms a good foaming agent. A foam is formed by the protein forming a stable film around the included air. Studies show that the best foam forms when the unraveling of the protein is only partial. Overbeating egg whites destabilises the foam by fully unravelling the protein molecules. The protein is elastic, so when the egg white is cooked, and the air expands, the white stretches then sets in the expanded position.

Use of a copper bowl to aid foaming

Many cooks recommend using a copper bowl to beat egg whites. This has the effect of making it take longer to form the foam, but leads to a much more stable foam. This is probably because the copper atoms form a complex with the **conalbumin** protein which makes it difficult to unravel, which means that it takes around twice the time to get a good foam, but very much more difficult to overbeat. (The danger of overbeating may be the reason many cooks recommend beating by hand rather than use an **electric whisk**)

The one possible drawback of using a copper bowl is the **toxicity** of copper. However, the amount of copper incorporated into the egg whites is likely to be far too small to cause ill effect.

A number of Copper Peptides are particularly effective in healing wounds and skin lesions as well as some gastrointestinal conditions. One of the end results of this research was lamin gel approved by the FDA for the treatment of acute and chronic wounds and ulcers. A lot of substances can have a positive effect on wound healing, such as Hyaluronic Acid. A distinctive feature of GHK copper peptides is that they reduce scar tissue formation while stimulating normal skin remodeling. In other words, they help better restore the damaged area to its original look. Copper Peptides are used in amazing preparations for anti-aging skin serums!

Certainly preparing Albumen in a copper bowl will not create a copper peptide, but it does tie a little copper to the protein chain – enough to make foam, then stop. Use the hand whisk. Use to 100% in masks & skin products.