Rice Water as a Natural Hair Treatment

Fransis, Angelina (School: S:ta Ragnhildgymnasiet)
Ada, Gabriella (School: S:ta Ragnhildgymnasiet)

Hair health is an important factor in maintaining a healthy body. Although hair appears strong, it is constantly exposed to mechanical wear, environmental factors, heat, chemical treatments, stress and nutritional deficiencies, all of which can affect the hair shaft. There are several different methods of hair treatment, one of which is rice water, a natural remedy that has been used throughout East and Southeast Asian cultures. The aim of this study is to investigate how rice water treatment affects hair structure, shine, strength, and elasticity compared to untreated hair. The study was divided into two parts. The first part involved the treatment of the hair, during which the hair was separated, washed, and treated with rice water. In the second part, the hair was analyzed using an electron microscope and then underwent an elasticity and strength test to analyze the difference between treated and untreated hair. Conclusions from the experiment were that rice water improved hair elasticity and smoothed the hair cuticle surface, although the increase in tensile strength was relatively small. Treated strands showed flatter cuticle scales with fewer signs of fragmentation compared to the control group. Based on the results, rice water appears to act primarily as a conditioning treatment that enhances flexibility and surface structure rather than repairing deeper structural damage within the hair shaft.

Awards Won: