

The Heat is On

Question: Can negative ions really help heal your tresses?

September 3, 2010 By Willette Francis

When hair product manufacturers began using ion technology, Madison Avenue re-joiced. The ionic hair appliances, from blow-dryers to flatirons, offered a way to target health-conscious consumers. The hype? That negative ions would help restore health to damaged hair.

But what exactly are ions? Basically, they are atoms that, through chemical reactions, gain or lose an electron, giving them either a positive or negative charge. (Positive ions lose an electron, while negative ions gain an electron in order to achieve molecular stability.)

Negative ions provide the basic science behind ionic styling tools and products. “Hair carries a positive ion charge. When it’s heated, negative ions are produced,” says Ellin LaVar, owner of LaVar Hair Designs in New York City, and a stylist who has worked with celebrities from Iman and Oprah to Serena Williams. “The reactions of the positive and negative ions are believed to cancel each other out and cause the cuticle of the hair to become smoother.”

But there is no scientific proof that negative ions can smooth the hair cuticle, LaVar stresses. The heat and pressure from ionic heat styling tools (made of tourmaline, titanium or ceramic materials) hold the cuticle—the protective shingled layer of the hair shaft—flat, temporarily giving it a smoother appearance.

Product manufacturers claim their ion technology breaks down water molecules in the hair into fine particles that can penetrate the hair shaft and thus restore moisture to condition the hair. It’s this process, they say, that makes hair softer, shinier and smoother.

But LaVar explains that it’s the heat generated by the appliance’s metal material that determines how smooth the hair becomes. And hair care products also play a role. “Ionic styling tools all promise to make your hair softer, silkier and shinier,” she explains, “but they have the potential to do that because of their heating capability, not ionic technology.”

In addition, LaVar adds, if the hair is rough and damaged (caused by a breakdown of protein in the hair) to begin with, ionic styling tools won’t help. “Once hair is damaged, it cannot be reversed,” LaVar says. “But hair can be conditioned with protein-rich conditioner to help temporarily reseal the cuticle.”

The important thing, LaVar emphasizes, is that regardless of the type of heated styling tool you prefer, you should know how to use it correctly. “Any improper use, such as having the temperature too high, holding the appliance in one place too long and [overusing hot tools], will damage the hair,” cautions LaVar. She recommends using heat styling tools no more than twice a week to avoid hair damage.

To get the best results from these tools, LaVar gives a few but important tips: Smooth hair out with a heat protectant product (which will help straighten the hair faster) and blow-dry hair first (on a low setting) to relax waves or curls. In addition, work with thin sections of hair starting at the back, and apply heat from roots to ends while slowly moving the styling tool down the hair shaft (to allow heat to penetrate).

These steps ensure that hair straightens the first time you pass the heated styling tool over it. You won’t have to repeat the step, thereby limiting damage to each section.

Another important hair-protecting step is to properly care for your styling tools. “Wipe the plates of your flatiron clean with a damp cloth after use, and store them in a dry cool place,” LaVar says. “And never unplug tools by pulling their cord.”

Finally, fancy physics aside, LaVar recommends limiting your use of heat styling tools—of any kind—and teaming with a stylist. Doing so will help you minimize damage and maximize your hair’s health.

Stuff We Love

These products are worth every cent.

Umberto Beverly Hills Repair Shampoo and Conditioner

(12 oz., \$8.99 each) and Treatment Masque (6 oz., \$9.99)

This intensive hair treatment trio repairs damaged tresses.

Umberto Beverly Hills ICU10 Ionic Ceramic Styler

(\$99.99)

Its ionic- and ceramic-infused plates put the lock on moisture, sheen and hair’s natural oils.

Salon Tech Feather Light 2800

(\$170)

Tourmaline technology dries and conditions, simultaneously promoting hair’s natural shine.

Ouidad Double Detangler

(\$24)

Aaah, perfectly spaced teeth and rounded tips are gentle on the scalp and detangle the thickest curls.

Blow’s Blow Out Spray

(10 oz., \$19.75)

Prevents the frizzies and flyaways of blow-dried hairstyles.

Organix Shea Butter Smoothing Treatment

(6 oz., \$6.99)

Defends against heat from blow-dryers, curling irons and other hairstyling tools.

Doing Damage Control

Quick tips to keep hair out of harm's way.

The key to keeping hair healthy between salon visits is to use products that protect and nourish the tresses, says Johnny Wright, SoftSheen-Carson's artistic style director. And don't forget to also...

Talk to your stylist.

While at the salon, ask about a hair care regimen suitable for your hair type, and a style that maintains your hair's health.

Get regular trims.

Many women are afraid to cut their hair while it grows out, but this can lead to breakage and splitting. Keep hair healthy with a trim every six to eight weeks to remove split ends.

Use a gentle shampoo and moisturizing conditioner.

Often, women don't wash their hair enough because they fear it will get dry and break off. Replenishing and fortifying shampoos and conditioners, such as the ones in the new SoftSheen-Carson Optimum Care Salon Collection, promise to do just what their names say. They're formulated to strengthen and protect the hair—and provide a salon-quality look at home.

Opt for at-home relaxers with hair strengthening ingredients.

Wright recommends the Optimum Care Collection Relaxer system, which offers exclusive, salon-quality breakage protection. The system conditions before, during and after the relaxing process, Wright says. It contains two packets of strength builders that rescue, replenish and treat over-processed hair to boost its health.