

# Breaking News English.com

**Scientists discover why shaving blunts razors – 9th August, 2020**

## **Level 0**

Scientists found why razor blades lose their sharpness. Razor blades are 50 times harder than hair, but hair damages them. Razor blades are made from steel. Every time a blade cuts a hair, the hair damages the blade. Hair makes the blade blunt. This means the life of a razor blade is short. It needs to be replaced often.

The scientists got a close-up view through a microscope of a blade cutting a hair. The hair made a small hole on the blade. This hole got bigger as it cut more hair. After more shaving, the blade did not cut cleanly. A scientist said it was interesting that steel failed when it cut hair. He said this is "an important engineering problem".

## **Level 1**

Scientists have found why razor blades become blunt after use. They found out why blades lose their sharpness. Razors are 50 times harder than hair, but hair damages the edge of a blade. Razor blades are made from steel. They are toughened with carbon. Each time a blade cuts a hair, the hair damages the blade a little. A blade can cut thousands of hairs. This means the life of a razor blade is short. It needs to be replaced often.

The scientists used microscopes to get a close-up view of what happens when a blade cuts a hair. They said a hair made a small chip on the blade. This chip got bigger as it cut more hair. After more shaving, the blade could not cut cleanly. A scientist was interested that, "if you cut something very soft, like human hair, with something very hard, like steel, the hard material would fail." He said this is "an important engineering problem".

## **Level 2**

Scientists have discovered why razor blades become blunt after repeated use. They did research on why blades lose their sharpness. Razors are 50 times harder than hair. Even though hair is 50 times softer than the metal of a razor, the hair damages the edge of the blade. Razor blades are made from stainless steel and coated with tough materials like carbon. The scientists said each time a blade cuts a hair, the hair causes tiny amounts of damage. A blade can cut thousands of hairs. This means the life of a razor blade is limited. It needs to be replaced regularly.

The researchers used microscopes to look at how hair damages razor blades. They got a close-up view of what happens when the blade cuts a hair. One cause of damage is because a hair can make a tiny chip on the edge of a blade. This chip gets bigger as it cuts more hair. After more shaving, the blade loses its ability to cut cleanly. A researcher said he wanted to make metal stronger. He said it was interesting that, "if you cut something very soft, like human hair, with something very hard, like steel, the hard material would fail." He called this "an important engineering problem".

## **Level 3**

Scientists from MIT have discovered why razor blades become blunt after repeated use. They did research into why razor blades lose their sharpness. Razor blades are 50 times harder than the hairs they cut. Even though human hair is 50 times softer than the metal of a razor blade, the hair damages the edge of the blade. Razor blades are made from stainless steel. They are usually coated with tougher materials like hardened carbon. The MIT scientists said that each time a blade cuts a hair, the hair causes tiny amounts of damage. A blade usually cuts thousands of hairs in one shaving session. This means the life of a razor blade is limited and will need to be replaced regularly.

The researchers used powerful microscopes to find out how hair damages a razor blade. They got a close-up view of what happens during a shave when the blade cuts a hair. The blade gets damaged in a variety of ways. One way is that a single hair creates a tiny chip on the edge of a blade. This chip becomes bigger as it cuts more hair. After more shaving, the blade loses its ability to cut cleanly and becomes blunt. A researcher said: "We are metallurgists and want to...make better metals. In this case, it was intriguing that if you cut something very soft, like human hair, with something very hard, like steel, the hard material would fail." He said his team is "aiming to solve an important engineering problem".

**More free lessons, listening & online quizzes at [breakingnewsenglish.com](http://breakingnewsenglish.com) - Copyright Sean Banville 2020**