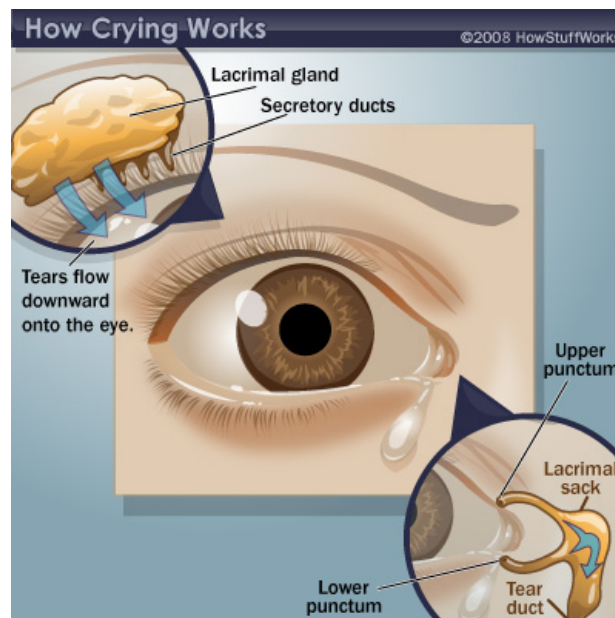


# The Purpose of Crying

What happens when you cry, exactly? A salty fluid chock full of protein, water, mucus and oil is released from the lacrimal gland in the upper, outer region of your eye. This fluid, better known as **tears**, then flows down the surface of your eye, across your face and smears your mascara.



Of course, not all tears are of the emotional variety. In fact, three types of tears exist, all with different purposes. **Basal tears** are omnipresent in our eyes. These constant tears are what keep our eyes from drying out completely. The human body produces an average of 5 to 10 ounces of basal tears each day. They drain through the nasal cavity, which is the reason so many of us develop runny noses after a good sobfest.

The second type is **reflex tears**, which serve to protect the human eye from harsh irritants such as smoke, onions or even a very strong, dusty wind. To accomplish this feat, the sensory nerves in your cornea communicate this irritation to your brain stem, which in turn sends hormones to the glands in the eyelids. These hormones cause the eyes to produce tears, effectively ridding them of the irritating substance.

The third type of tears is **emotional tears**. It all starts in the cerebrum where sadness is registered. The endocrine system is then triggered to release hormones to the ocular area, which then causes tears to form. Emotional tears are common among people who see Bambi's mother die or who suffer personal losses.

## **Crying At Different Ages**

During our earliest weeks and months, we cry to have our most basic needs fulfilled. If we're too hungry, sleepy, gassy or dirty, we cry so that a caretaker can rectify the problem. As babies grow and mature, however, crying becomes a more sophisticated way of communicating specific and varying needs, so it becomes necessary to change the pitch, intensity and length of the cry.

Babies are also believed to change their crying goals sometime around the age of 10 months. At this time, give or take, they often cry to gain attention for other reasons. Some experts believe this to be the beginning of manipulative crying. Some studies have reported that women in particular continue this behavior throughout life in order to manipulate others into giving them what they want -- for example, forgiveness, pity or a diamond bracelet [source: The Age].

After babyhood ends, researchers believe that girls and boys do equal amounts of crying until they reach the hormone-fraught adolescent years. As levels of testosterone skyrocket in boys, their amount of crying plummets. The opposite is true for girls, whose estrogen levels begin to rise substantially during the early teenage years. This is especially interesting, considering the relationship between the protein prolactin and breast milk production, which only happens in women. Perhaps this is why women cry roughly four times as much as men, according to biochemist and researcher William Frey and co-author Muriel Langseth, who wrote "Crying: The Mystery of Tears."

Frey estimates that women have about 60 percent more prolactin in their bodies at any given time than men [source: Women's Health]. He also believes that these elevated levels cause women to cry more because the protein revs up the endocrine system, which makes people more likely to cry. One study that required research subjects to record how often they cried over a one-year period found that women cried roughly 64 times a year, compared with only 17 for men [source: TheAge.com].

Interestingly, pretty much everyone involved in the study underestimated what his or her results would be at the end of that year. Another theory put forth to explain why men cry less is that they sweat a lot more on average, thereby releasing some of the toxins found in emotional tears. With age, however, the tables turn on men and women as it relates to crying. According to Women's Health Magazine, in middle age, men begin to cry more and get angry less, while women experience the exact opposite. This is due in large part to our old pals testosterone and estrogen, which begin to decline in men and women respectively and help to even out the playing field.