[Lesson 521]
[1190L]
[Word Count: 650]

A Bodily Oddity

Suppose you were asked to guess what connects tadpoles, dogs, and prenatal human babies. Odds are, you would not guess that each experiences the phenomenon of hiccupping. Scientists have conducted extensive research to determine precisely why these pauses in breathing occur, but there is no conclusive answer, which is perhaps why human beings have developed superstitions to explain this bodily oddity. In some cultures, it is believed that hiccups occur in individuals who are the subject of gossip! One thing is certain: hiccups are universal, and they are a mystery.

There is much more to a hiccup than its telltale sound. It is actually a complex motor act involving a spasm of the diaphragm, or the muscle dividing the chest cavity from the abdominal cavity. When this involuntary response occurs, it causes a sharp inhale of breath. Almost simultaneously, the glottis—an area between the vocal folds—constricts, and as it shuts, the resulting sound is the infamous “hiccup” often accompanied by a bodily jerk!

No specific factor will bring on an episode of hiccups; in fact, there are several different possibilities. They can occur if a meal is consumed too hastily, and even the degree of spiciness in food can be a factor. In other instances, a violent coughing or laughing outburst might produce this interruption in breathing. Even medical procedures have resulted in long-term hiccups; imagine how miserable that must feel! Sometimes they can happen for seemingly no reason at all.

Just as mysterious as what causes hiccups is what purpose they might serve the unfortunate individual who has them. In recent years, experts have focused their studies on hiccups experienced by babies while developing inside a mother’s womb. In this case, a baby’s digestive system might be guarding against the possibility of inhaling amniotic fluid from the mother. Another theory is that an unborn baby needs to hiccup in order to be ready to breathe immediately following birth. By this reasoning, hiccups are a type of leftover survival tactic that do not serve a purpose following birth. To date, there is no evidence that hiccupping provides a benefit.

Interestingly, tadpoles might provide a helpful example in understanding hiccups. When a tadpole uses its gills to breathe, its brain stem signals a flap to shut the glottis (another word for

vocal cords). Without this safeguard, water would enter a tadpole's lungs and drown it; instead, water is diverted through the gills. This cycle is remarkably similar to an occurrence of hiccups in other living things. For four-legged animals, hiccups might have evolved to facilitate digestion; it is possible that stuck food might have pressed on a nerve that resulted in hiccups. One thing is clear: hiccups were necessary long before human beings even existed!

Several remedies are used to cure hiccups, though many are home remedies and not based on science. Some popular methods that sometimes offer relief include holding one's breath and counting steadily to 10, drinking a glass of cold water, or slowly eating a spoonful of sugar, honey, or creamy peanut butter. Another trick used by some is breathing into a paper bag repeatedly for a brief time. Some medical authorities think that techniques in which a person controls his or her breathing (such as slowly eating something, holding one's breath, or breathing into a paper bag) actually creates a calming effect and may reduce anxiety about hiccups, perhaps ending them altogether.

Hiccups are classified by the amount of time they afflict the person suffering from them. Common hiccups will end within an hour, but those with persistent hiccups might experience the annoyance for up to 48 hours. An example of acute hiccups, which can last up to two months, involved a 15-year-old girl who hiccupped approximately 50 times every minute she was awake for over five weeks! Luckily she did not have diabolic hiccups, like the unfortunate man who hiccupped continuously for 68 years.

phenomenon, n., an occurrence that is difficult to explain
Yawning, like hiccups, is another phenomenon occurring in the body.

constrict, *v.,* to become narrower, smaller, or tighter
In bright light, both pupils in the eye will constrict.

spasm, *n.,* a sudden and involuntary contraction of a muscle
She had a spasm in her eyelid; the fluttering lasted for several seconds.

Sources

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