



The Wellness Family

Dr. McDowell Keeps You Informed

Laughter

Laughter is contagious – it can evoke giggling fits in those that hear it. It's more infectious than the common cold and easier to catch. It's also been said that laughter is the best medicine – an antidote to stress and a cure for the blues. Yet, the very basics we know about laughter are just the tip of the iceberg.

What is laughter?

Whether it's a quiet little giggle, a throaty chuckle or one of those loud laughs that has everyone turning to see what's so funny, we all know what it means to laugh. What we may not know is why we do it.

Dr. Robert Provine, a professor of psychology at the University of Maryland, has authored the books *Curious Behavior* and *Laughter: A Scientific Investigation*. He believes that the modern-day "ha-ha" probably evolved from our primitive ancestors making a similar sound (perhaps a pant) to reassure one another that their rough-housing was all in good fun and not an attack. He has speculated that this eventually became an automatic response.

Laughter is considered an innate behavior, something that doesn't need to be taught. However, a study published in the journal *Infant Behavior and Development* reported that when observing the interactions between mothers and children, the more the mothers laughed, the more their children laughed.

Dr. Caspar Addyman, a post-doctoral research fellow at the University of London, believes that the behavior is similar to crying. Infants realize that laughter garners an adult's attention and so they quickly develop laughter as a communication too.

What causes laughter?

Contrary to popular belief, the number one cause of laughter isn't a funny joke but is in fact interaction with another person. On average there will be about 6 bouts of laughter in a typical 10-minute conversation and, according to Dr. Provine's research, there is a 30% increased probability of laughing if there is laughter nearby – as opposed to when alone. However, the odds of a funny joke causing laughter is actually, surprisingly less likely.

Dr. Scott Weems, a research scientist at the University of Maryland, and the author of *Ha! The Science of When We Laugh and Why*, says there isn't a magic formula for what's funny. In general, laughter is typically the result of our brain

expecting one thing but then experiencing another: the surprise is what's humorous.

Other studies suggest that what is considered funny may be regional. British psychologist, Dr. Richard Wiseman, the author of *Quirkology*, says that research has shown a distinct regional preference for what is funny. While Americans tend to like jokes that include a sense of superiority, Europeans tend to laugh at jokes that make light of something that most would find serious or anxiety causing.

Experts are unsure of the reason for these differences but Dr. Weems suspects that the regional preferences may have a lot to do with our regional personalities. Americans are expressive and encouraged to be themselves so aggressive humor isn't surprising; whereas the British, he concludes, are more easily entertained by word play.

Regardless, it is impossible to accurately assess what will cause laughter: a joke, a gag gift, slap-stick, coincidence, etc. What one person finds humorous, another might find offensive or even cruel.



Contrary to popular belief, the number one cause of laughter isn't a funny joke but is in fact interaction with another person.

Is laughter good medicine?

Dr. Provine proposes, "The definitive research into the potential health benefits of laughter just hasn't been done yet." Nevertheless, whether or not it's the act of laughter or just having the kind of life where laughter more naturally and frequently occurs, it's clear that it doesn't hurt.

Laughing actually causes physiological changes: muscles stretch throughout the face and body; blood pressure goes up; the pulse quickens; and respiration increases, sending more oxygen to the body's tissues. Steve Wilson, a psychologist and laugh therapist, says that the effects of laughter are very similar to exercise, "Combining laughter and movement, like waving your arms, is a great way to boost your heart rate."

Other, perhaps coincidental but clearly beneficial, results of laughter may include:

- Improved immune system – Negative thoughts manifest into chemical reactions that can affect the body by bringing more stress into the system and decreasing immunity; whereas, positive thoughts actually release neuropeptides that help fight stress and potentially more-serious illnesses
- Pain relief – A study published by Dr. Robin Dunbar, a professor at the University of Oxford, revealed that laughter had a significant positive effect on pain thresholds because it stimulated the release of endorphins that interacted with brain receptors to reduce the perception of pain
- Cardiovascular health – Speaking of endorphins, Dr. Michael Miller, the director of the Center for Preventive Cardiology at the university of Maryland Medical Center, says when laughter-released endorphins and their by-products bind to the lining of blood vessels they activate the release of nitric oxide which in turn dilates the blood vessels, lowers blood pressure, prevents clot formation and reduces inflammation – all heart-protective effects
- Memory retention – A study from Loma Linda University in California, found that elderly patients who watched a funny video that made them laugh prior to a memory test scored better than those who didn't – researchers believe this is a result of laughter causing a reduction in the stress hormone cortisol which is known to damage neurons in the brain thus indirectly enhancing the ability to remember
- Improved perspective – Laughter can also make it easier to cope with difficult situations as well as decrease feelings of depression or anxiety by improving feelings of overall happiness

While these benefits may not be directly related to laughter, they are common with those who find it easy to laugh.

Can laughter be learned?

While laughter is almost instinctive, a healthy sense of

humor isn't. Realistically, life can be cruel and sometimes there aren't a lot of reasons to laugh; that doesn't mean that laughter can't be developed. Like a muscle, it can be trained – with a few routine exercises.

- Line of sight – photos or comic strips that will typically elicit a giggle or laugh should be placed in the home at eye-level
- Find the humor – remember that life is only as serious as it is taken; no matter the experience, try to find the humor, irony or absurdity in it
- Share the humor – the way to be less serious about life is to share an experience of a time that life was taken too seriously
- Learn to tell a joke – it can be its own art form and the ability to tell a joke with the right timing can take practice... so practice
- Find the difference – some things are funny and some just aren't, don't laugh at the expense of others, some forms of humor just aren't appropriate, some jokes shouldn't be told in mixed company, some jokes are great and some are hurtful or cruel, develop discernment
- Keep things in perspective – life is impossible to control, especially someone else's life; cast off the weight of the world, it's unrealistic and unproductive to focus on other people's behavior
- Fun people – there are people who laugh easily and raucously; spend time with these people
- Emulate children – they are experts in playing, taking life lightly and laughing

The Chiropractic Factor

Your Family Wellness Chiropractor recognizes the benefit of laughter and understands that we are innately meant to express joy. We are integrative: mind, body and spirit. So next time you're in for your chiropractic adjustment don't forget to take a moment to laugh.



*Dear Patient,
Dr. McDowell is dedicated to providing you with the absolute best in family wellness care. So take a moment today to discuss with your Family Wellness Chiropractor any concerns you may have regarding your family's overall health and wellness.*

This newsletter is provided to you by:

The Chiropractic Office of
Dr. Gary McDowell
8300 University Avenue
LaMesa, CA 91942
619.670.7700