#### ANGER MANAGEMENT

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Once you're calm, express your anger. ...

Get some exercise. ...

Take a timeout. ...

Identify possible solutions. ...

Stick with 'I' statements. ...

Don't hold a grudge. ...

Use humor to release tension.

Anger management: 10 tips to tame your temper

Keeping your temper in check can be challenging. Use simple anger management tips — from taking a timeout to using "I" statements — to stay in control.

By Mayo Clinic Staff

Do you fume when someone cuts you off in traffic? Does your blood pressure rocket when your child refuses to cooperate? Anger is a normal and even healthy emotion — but it's important to deal with it in a positive way. Uncontrolled anger can take a toll on both your health and your relationships.

Ready to get your anger under control? Start by considering these 10 anger management tips.

## 1. Think before you speak

In the heat of the moment, it's easy to say something you'll later regret. Take a few moments to collect your thoughts before saying anything — and allow others involved in the situation to do the same.

## 2. Once you're calm, express your anger

As soon as you're thinking clearly, express your frustration in an assertive but nonconfrontational way. State your concerns and needs clearly and directly, without hurting others or trying to control them.

## 3. Get some exercise

Physical activity can help reduce stress that can cause you to become angry. If you feel your anger escalating, go for a brisk walk or run, or spend some time doing other enjoyable physical activities.

## 4. Take a timeout

Timeouts aren't just for kids. Give yourself short breaks during times of the day that tend to be stressful. A few moments of quiet time might help you feel better prepared to handle what's ahead without getting irritated or angry.

#### 5. Identify possible solutions

Instead of focusing on what made you mad, work on resolving the issue at hand. Does your child's messy room drive you crazy? Close the door. Is your partner late for dinner every night? Schedule meals later in the evening — or agree to eat on your own a few times a week. Remind yourself that anger won't fix anything and might only make it worse.

## 6. Stick with 'I' statements

To avoid criticizing or placing blame — which might only increase tension — use "I" statements to describe the problem. Be respectful and specific. For example, say, "I'm upset that you left the table without offering to help with the dishes" instead of "You never do any housework."

### 7. Don't hold a grudge

Forgiveness is a powerful tool. If you allow anger and other negative feelings to crowd out positive feelings, you might find yourself swallowed up by your own bitterness or sense of injustice. But if you can forgive someone who angered you, you might both learn from the situation and strengthen your relationship.

### 8. Use humor to release tension

Lightening up can help diffuse tension. Use humor to help you face what's making you angry and, possibly, any unrealistic expectations you have for how things should go. Avoid sarcasm, though — it can hurt feelings and make things worse.

### 9. Practice relaxation skills

When your temper flares, put relaxation skills to work. Practice deep-breathing exercises, imagine a relaxing scene, or repeat a calming word or phrase, such as "Take it easy." You might also listen to music, write in a journal or do a few yoga poses — whatever it takes to encourage relaxation.

# 10. Know when to seek help

Learning to control anger is a challenge for everyone at times. Seek help for anger issues if your anger seems out of control, causes you to do things you regret or hurts those around you. DSM-5 refers to rage attacks as "intermittent explosive disorder" (IED), which is characterized by categorical expression of pathological impulsive aggression.

Earlier this year, two groundbreaking studies on the neuroscience of IED were published by researchers from the University of Chicago. The first study found that the neurobiology of IED is associated with lower white matter integrity of the long-range neural connections between the frontal and temporoparietal regions.

the second study on IED pinpointed significantly lower gray matter volume in frontolimbic brain structures.

Having less integrity in the white matter "information superhighways" between brain regions can lead to impaired social cognition. Having less gray matter in brain structures that regulate emotions, plays an important role in driving the biology of aggressive behavior.

### 4 Characteristics of People Prone to IED and Aggression by Royce Lee et al.

People with anger management issues tend to misunderstand the intentions of other people in social situations. They only notice things that reinforce their beliefs that the recipient of their rage is presenting a confrontational challenge. They think others are being hostile (even when they are not) and make the wrong conclusions about others' intentions.

They often don't take in all the data from a social interaction, such as body language or certain words.

Rage attacks are emotionally toxic and upsetting for all parties involved; they're also bad for your health. In 2014, a systematic review and meta-analysis by the Harvard School of Public Health concluded that outbursts of anger increase the risk of heart attacks, stroke, and other cardiovascular problems—especially in the two hours immediately following the incident. (I wrote about this study in a Psychology Today blog post, "Rage Attacks Can Trigger Heart Attacks"). Again, rage is contagious. Hate fuels hate and quickly snowballs out of control.

Martin Luther King, Jr. once said, "There is some good in the worst of us and some evil in the best of us. When we discover this, we are less prone to hate our enemies ... Someone must have sense enough and morality enough to cut off the chain of hate."

So, what can each of us do to "cut off the chain of hate" and stop the vicious cycle of rage attacks?

Obviously, I don't have all the answers. Nonetheless, this morning I decided to put together a list of five science-based ways that can help defuse rage attacks based on empirical evidence I've compiled in recent years.

Hopefully, the scientific research and actionable advice presented below will be of some practical use if you are currently filled with anger and feeling prone to intermittent explosive outbursts during these topsy-turvy and uncertain times.

# 5 Science-Based Ways to Defuse Rage Attacks by Bergland

The advice given below is based on lifestyle choices that are in the locus of most people's control. But, of course, there are also many people who would benefit by consulting with a mental health professional about pharmaceuticals, which are often a valuable tool for treating the emotional and psychological underpinnings that trigger and exacerbate outbursts of anger.

### 1. Engage Your "Tend-and-Befriend" Mechanisms via Diaphragmatic Breathing

Unbridled outbursts of anger are accompanied by a variety of bodily symptoms that include skyrocketing blood pressure, increased heart rate, and a surge in the secretion of stress hormones including adrenaline and cortisol. Reducing your "fight-or-flight" responses in the nervous system and lowering biological markers for anger and rage can be achieved via slow, deep, diaphragmatic breathing.

The vagus nerve is the prime component of the parasympathetic nervous system which regulates the "rest-and-digest" or "tend-and-befriend" mechanism. On the flip side, to maintain homeostasis, the sympathetic nervous system drives the "fight-or-flight" response.

In 1921, a German physiologist named Otto Loewi discovered that stimulating the vagus nerve caused a reduction in heart rate by triggering the release of a substance he coined Vagusstoff (German for "Vagus Substance"). The "vagus substance" was later identified as acetylcholine and became the first neurotransmitter ever identified by scientists.

Vagusstoff (acetylcholine) is like a tranquilizer that you can self-administer simply by taking a few deep breaths with long exhales. Consciously tapping into the power of your vagus nerve via diaphragmatic breathing can create a state of inner-calm while taming any reflexive tendency to have a rage attack.

# 2. Increase Self-Control by Sticking with an Exercise Regimen

Researchers in the UK recently discovered a synergistic feedback loop between improved executive function and regular physical activity that is bidirectional. The more regularly you exercise, the greater your executive function; the greater your executive function, the more likely you are to exercise ... and so on. They also observed that the higher someone's levels of executive function, the more capable he or she was of exerting self-control.

Having the emotional regulation to bite your tongue and prevent yourself from saying something vitriolic or hateful often requires tremendous self-control. Luckily, the daily practice of sticking to an exercise regimen is an easy way to fortify your self-control.

As a blueprint for The Athlete's Way, I designed a flexible workout paradigm that can include any combination of varying amounts of three activities: aerobic activity, strength training, and mindfulness-meditation/yoga. Constantly fine-tuning this triad to fit the ever-changing circumstances of your daily life will optimize your psychological and physical well-being across a lifespan.

For example, if you need to "rev yourself up," you should focus more on high-intensity cardio and strength training; if you need to "calm yourself down," you should focus more on moderate-to-vigorous physical activity (MVPA), mindfulness-meditation, and yoga. This concept is very basic. But, on a neurobiological level, these three activities are a potent remedy for stress, anxiety, and becoming a "rageaholic."

Increasingly, empirical research shows us that staying physically active is the most effective way to enter a feedback loop that helps to maintain a sound mind in a sound body while improving self-control. Spending some time each week doing varying amounts of cardio, strength training, and mindfulness-meditation/yoga nurtures a life-affirming and unbeatable combination of resilience, chutzpah, and peace of mind.

3. Improve Theory of Mind with Loving-Kindness Meditation and Reading Fiction
Theory of mind is the ability to put yourself in someone else's shoes and identify specific mental states—including beliefs, attitudes, intentions, desires, etc.—while simultaneously acknowledging that other people have different values, beliefs, desires, and intentions that are often just as valid as your own.

Aristotle once said, "Anybody can become angry—that is easy, but to be angry with the right person and to the right degree and at the right time and for the right purpose, and in the right way—that is not within everybody's power and is not easy." Finding ways to improve your theory of mind is one way to identify when your anger is justified, and when it's not.

Practicing a simple loving-kindness meditation (LKM) every day can nurture feelings of compassion while also flexing your ability to put yourself in someone else's shoes by empathizing with his or her potential suffering. Oftentimes, rage is an outward display of someone's internal suffering, which could be rooted in feeling 'less than' or marginalized in a variety of ways.

When you put yourself in the shoes of someone with a 'hostile heart' for just a few seconds, you realize how toxic holding on to anger and rage feels on a visceral level. Rage eats you up inside. LKM is a terrific way to stop holding grudges against yourself and others. Learning to let go of internalized rage in the form of self-loathing and hating yourself is often more difficult than forgiving someone else. I know. Because I've been there myself.

o practice LKM, all you need to do is systematically send compassion, forgiveness, and loving-kindness to four categories of people for a few minutes each day:

Friends, family, and loved ones. Strangers around the world, locally, and nationally who are suffering.

Someone you know who has hurt, betrayed, or violated you.

Forgive yourself for any negativity or harm you've caused yourself or others.

Another way to increase your theory of mind is by reading fiction, such as the Harry Potter series. Neuroscientists have discovered that reading a novel improves brain function on a variety of levels. As an example, a 2013 study on the brain benefits of reading fiction conducted by researchers at Emory University found that becoming engrossed in a novel enhances connectivity in the brain and improves theory of mind. Interestingly, reading fiction was found to improve the reader's ability to put him or herself in another person's shoes and flex the imagination in a way that is similar to the visualization of a muscle memory in sports.

4. Boost Humanism via Face-to-Face Social Contact with Outgroups

There are two definitions of humanism—one is believing in the "values, characteristics, and behavior that bring out the best in human beings." The other is an innate "concern for the needs and well-being and interests of all people." The Three Musketeers' maxim "One for all, and all for one" sums up the humanist philosophy and the realization that, on a global level, Homo sapiens are social creatures who have evolved so successfully because of our ability to cooperate. We're all in this together.

Face-to-face contact with people from different walks of life and systems of belief increases humanistic tendencies. A 2015 study from the University of Zurich found that being the recipient of just a few small acts of generosity by a stranger from an outside group created neurobiological changes in the brain that made individuals more empathetic to all members of that outside group.

In a statement on how learning shapes the empathic brain, the researchers said: "At the beginning of the study, the stranger's pain triggered a weaker brain activation in the participant than if a member of his or her own group was affected. However, only a handful of positive experiences with someone from the stranger's group led to a significant increase in empathic brain responses if pain was inflicted on a different person from the out-group. The stronger the positive experience with the stranger was, the greater was the increase in neuronal empathy."

In 2012, researchers in New Zealand published a study, "A 32-Year Longitudinal Study of Child and Adolescent Pathways to Well-Being in Adulthood," in the Journal of Happiness Studies. The researchers concluded that social connectedness in adolescence was primarily demonstrated by social attachments (parents, peers, coaches, and a confidant) along with participation in extracurricular youth groups and sporting clubs increased the odds of physical and psychological well-being in adulthood.

### 5. Nourish Your Spiritual Connectedness Through a Sense of Awe in Nature

The Romantic-era painter, David Caspar Friedrich (1774-1840) is probably my favorite artist of all time. Friedrich was known for his deep, philosophical attachment to the power of Nature. He found spiritual significance in his excursions to the mountains and the coastline. And he was able to transfer the sense of awe he experienced in nature onto the canvas so anyone viewing his artwork hundreds of years later could experience these feelings, too.

Sometimes, when I'm filled with anger or rage, I take a few deep breaths while staring at a big reproduction of the oil painting above, Landscape in the Riesengebirge, that hangs on my bedroom wall. Looking at this painting always fills me with a sense of inner-peace combined with awe and seems to calm me down.

In 2015, Paul K. Piff and colleagues from the University of California, Irvine reported that experiencing a sense of awe promotes altruism, loving-kindness, and magnanimous behavior. The study, "Awe, the Small Self, and Prosocial Behavior," was published in the Journal of Personality and Social Psychology.

The researchers describe awe as "that sense of wonder we feel in the presence of something vast that transcends our understanding of the world." They point out that people commonly experience awe in nature, but also feel a sense of awe in response to religion, art, music, etc. For this study, Piff et al. conducted various experiments to pinpoint and examine various aspects of awe. Some of the experiments measured how predisposed someone was to experiencing awe. Other experiments were designed to elicit awe, a neutral state, or awe-aversive reaction. In the final and most pivotal experiment, the researchers induced awe by placing individual study participants in a forest filled with towering eucalyptus trees.

In a statement to the University of California, Piff described his research on awe by saying: "Our investigation indicates that awe, although often fleeting and hard to describe, serves a vital social function. By diminishing the emphasis on the individual self, awe may encourage people to forgo strict self-interest to improve the welfare of others.

When experiencing awe, you may not, egocentrically speaking, feel like you're at the center of the world anymore. By shifting attention toward larger entities and diminishing the emphasis on the individual self, we reasoned that awe would trigger tendencies to engage in prosocial behaviors that may be costly for you but that benefit and help others.

Across all these different elicitors of awe, we found the same sorts of effects—people felt smaller, less self-important, and behaved in a more prosocial fashion. Might awe cause people to become more invested in the greater good, giving more to charity, volunteering to help others, or doing more to lessen their impact on the environment? Our research would suggest that the answer is ves."

Living in a Facebook Era May Exacerbate Feelings of Rage

In a digital age fueled by social media, all too often each of us is spoon-fed the viewpoints of likeminded "friends" inside an echo chamber on Facebook or Twitter. But in the real world, people from all walks of life need to intermingle and cohabitate with civility, which takes practice.

Last night, I went to see the thought-provoking science-fiction film Arrival, which sends a strong message about humanism and the power of equanimity. In my opinion, the main takeaway from the movie is that war and rage are usually fueled by a lack of communication and inability to practice theory of mind.

Keeping your cool when someone pushes your buttons takes a lot of mental willpower and self-control for all of us—regardless of how your brain is wired. That said, learning how-to practice equanimity and avoid being a rageaholic is always going to be in everyone's best interest for the short- and long-term.

Sustained hyperactivity of the "fight-or-flight" mechanisms of the sympathetic nervous system inherently creates a perpetual cycle of endless rage that can lead to aggressive destruction. On the flip side, our universal neurobiological response to "tend-and-befriend" is linked to the vagus nerve—which is part of the parasympathetic nervous system and drives 'harmony and understanding ' between people from all walks of life.

One Blood, One Sun, One Hope, One Love

I'm definitely not a poet. But one day while I was on a long run along the bike lanes and bridle paths of Central Park, I wrote a poem in my head that was originally titled "The Athlete's Re-Cognition." The poem was inspired by being in the park on a perfect June day surrounded by hundreds of diverse individuals collectively celebrating life in the form of physical activity and moving forward.

The semantics surrounding definitions of "God" are tricky business. I don't have a concrete set of words I use to describe my concepts of god. While writing the "The Athlete's Recognition" the secular terminology I came up with to describe god was "An infinite Source of love and compassion that is much bigger than me." For the record, that is the denotation I use to describe 'god' in this poem.

In closing, below is a poem about the importance of nurturing our collective humanism that I wrote and published in The Athlete's Way (St. Martin's Press).

"The Athlete's Recognition" by Christopher Bergland

Recognize that god is alive and well in every cell. Recognize that god is in us all.

Recognize this source of power—every hour, here. Recognize with strength and love there is no fear.

Recognize the light in every eye and soul. Recognize the sun lives in us all.

Recognize your thoughts and actions every day. REcognize the passion—always give your all. Recognize One Blood, One Sun, One Hope, One Love. Recognize the collective conscience of

Recognize One Blood, One Sun, One Hope, One Love. Recognize the collective conscience of humankind.

Recognize that god is living everywhere. Recognize that god is you and I.

Hopefully, the empirical evidence presented herein will help you defuse your anger and break the vicious cycle of rage attacks that seem to be snowballing out of control lately.

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