



No matter where we are in terms of our health — whether we are taking proactive, preventive steps, whether we have suffered a heart attack, whether we have had heart surgery or live with congestive heart disease — our emotions and mental state affect our heart health.

Depression sufferers are four times more likely to develop heart disease. Some suggest this because people with depressive personalities are less likely to exercise regularly or have the capacity to seek out stress reduction and mind-body healing strategies. Others favour biochemical explanations because there is a connection between psychosocial stress factors such as how we think, feel and react to the perceived threats in our life. Psychosocial stress can be defined as an imbalance between the demands placed on us and our ability to handle those demands.

A 2018 Australian study that found that in a group of 221,677 adults 45 and older, those with high or very high psychological distress were at increased risk of stroke and heart attack in comparison to those with low psychological stress even when risks due to heart

harmful lifestyle behaviours were accounted for.

## **Women More At Risk**

Research shows that women are more vulnerable to depression than men. About twice as many women suffer from this affliction, a statistic echoed in most countries around the world regardless of ethnic, racial and economic situations. A combination of uniquely feminine factors put women more at risk.

Biologically, female hormones are intricately entwined with their emotions. Menstruation, pregnancy, postpartum 'baby blues', perimenopause and menopause — these are just a few specific situations in a woman's life when hormonal chemical messengers can cause major mood fluctuations. Socially and culturally, women are also under strain from the multiple roles they play (wife, mother, career woman, house keeper, chauffeur), while an often relatively lower income puts women more at risk of depression.

If you think depression is affecting you, sharing this concern with a trusted professional is important. In a 2003 National Women's Health Resource Center survey of more than 1,000 women, although the majority reported having been depressed or having known someone with depression, almost half would not discuss matters with a health-care practitioner. This is doubly and tragically ironic considering 95 percent of them also understood that depression is treatable. As it stands, many people with depression are not adequately treated and, in women, depression is misdiagnosed 30 to 50 percent of the time.

## **Men and a Missed Diagnoses**

Depression also affects men and current statistics may not accurately capture rates in men due to higher rates of misdiagnosis. Men may not recognize symptoms, or may ignore and downplay the symptoms they are having. Even if they are aware there is a problem, they may be reluctant to seek help or discuss their symptoms with a health care professional. Men are more likely to die from suicide, suffer addiction, and often have less access to social support systems or to seek social support.

## **Symptoms of Depression**

- Change in appetite leading to weight gain or loss
- Concentration or memory troubles
- Crying easily or unexplained crying

- Feeling like you are pushing yourself through the day
- Feeling numb emotionally, perhaps even to the point of not being able to cry
- Feeling restless but not being able to relieve those feelings
- Feeling sad or empty
- Feeling tired all the time
- Feeling worthless or guilty
- No interest or pleasure in things you used to enjoy
- Problems sleeping, especially in the early morning, or wanting to sleep all the time or 'hide under the covers'
- Thinking about death or suicide
- Trouble making everyday decisions

### **Symptoms of Depression that May Be Seen in Men**

- Avoidance behaviour (escaping from uncomfortable or difficult thoughts and feelings)
- Increased anger or irritability
- Reduced sex drive or ability to perform
- Risky behaviour
- Social isolation
- Substance abuse
- Suicidal thoughts
- Violent behaviour

### **Achy, Breaky Heart**

When we are depressed, the nervous system is stimulated and puts stress on the heart. Heart rate and blood pressure increase and the risk of irregular heartbeat (arrhythmia) rises. Depression causes dysfunction of our 'happy hormone' serotonin, which encourages blood platelets to clump together, creating blood clots that can eventually clog arteries and cause heart attacks.

People with depression have more heart attacks and are more likely to die of sudden death. In one study of 2,800 heart-disease-free participants, those suffering from major depression were three times more likely to develop fatal heart disease within four years than those who were not depressed. A 2009 study in *Journal of the American College of Cardiology* confirmed this link, evaluating 63,000 women from the long-running Nurses Health Study (1992-2004). None had heart disease signs at the study's beginning; eight percent showed signs of serious depression. The depressed women were over twice as likely to die from

sudden cardiac death, frequently caused by arrhythmia. They were also slightly more likely to die from coronary heart disease than the women without depression.

### **Formulate Your Heart-Health Plan**

Not only is depression a heart disease ‘precursor’, but people who have a cardiac event (like a heart attack) or who are in recovery mode (after heart surgery) are also prone to depression, which actually increases the chance of another heart attack and/or heart-disease-related fatality. Another recent study in the journal *Circulation* also suggests that depression further increases the risk of atherosclerotic progression (thickening of the arteries).

After a heart attack or surgery, it is crucially important to formulate a heart-health plan. Gather a supportive team comprised of healthcare advisors and family, friends, club members or someone from your religious faith—whomever you need. If depression is a part of your life, or if you think you might be depressed, your team may involve a counselor or psychologist—again, someone you feel comfortable with to help guide you to better mental and emotional health.

### **Lifesaving Support**

Social and family life keep us healthy. People with healthier support networks report better health. Single people have higher death rates than married people. Retired men who have often given up a huge portion of their lifelong identity—their work—have almost double the risk of fatal heart attack than working men.

Men and women with poor social support are more likely to suffer complications during cardiovascular surgery. In early 1980s research, Hawaiian men with large social networks (family, work, church, social groups) were less likely to suffer a heart attack, angina or other forms of heart disease.

Interestingly, the stronger a man’s social connections, the lesser the risk. In 2003, in a review of that evidence, National Heart Foundation of Australia researchers concluded in the *Medical Journal of Australia* that “there is strong and consistent evidence of an independent causal association between depression, social isolation and lack of quality social support and the causes and prognosis of coronary heart disease.”

## Anger Hurts the Heart

Faced with upsetting news or an unwanted situation, clenching our fists, grinding on our back teeth, and lashing out verbally, causes internal stress. Which can trigger an immediate heart attack or sudden cardiac death, but it also causes more long-term wear and tear on our cardiovascular system.

In times of anger and heightened emotions, numerous physical changes are activated. We tense up as if preparing for battle. Cortisol, a 'stress' hormone, surges through our system. Our heartbeat speeds up and our arteries constrict, raising our blood pressure, triglycerides and cholesterol. Simultaneously, our heart's need for oxygen to sustain these changes increases. This set of factors is why angina (chest pain) is a common symptom during bouts of anger and panic attacks. Stress, cortisol and other hormones, meanwhile, are also getting busy elsewhere in the body while, as we discussed elsewhere, the hard-working adrenal glands become exhausted.

More than 50 years ago, the propensity toward unhealthy excitable emotions and the accompanying traits of aggression, hostility, over-achievement, competitiveness and impatience was deemed Type A behavior by two cardiologists. Type As, they argued, had a higher risk of heart disease. But over time, some aspects of their theory have been rejected, others refined. Many Type As, it turns out, do quite well in life, managing their stronger personality traits without ill health effects. It is people prone to anger, hostility and cynicism who are especially vulnerable to heart disease.

Living in a state of chronically elevated stress hormones sets the stage for [high blood pressure](#), arterial damage and atherosclerosis. In one Harvard study of 1,600 participants who had had a heart attack, eight percent reported being angry in the 24 hours prior to the attack. Those who also reported intense anger in the two hours prior had double the heart attack risk. In 2009, researchers did a meta-analysis of 44 studies on coronary heart disease and anger and hostility. These emotions, they concluded, impact heart disease outcomes in both healthy populations and in people with existing heart disease. In other words, whether we have heart disease or want to avoid it, learning to appropriately handle our emotions is essential.

## Anxiety — The False Heart Attack

Poor Jack Nicholson in the film, *Something's Gotta Give*. You cannot help but sympathize with his character when he suffers what he thinks is a heart attack after being rejected by

Diane Keaton's character, only to later be told by a doctor (played by Keanu Reeves) that he had had a panic attack instead.

Heart attacks and anxiety attacks have overlapping symptoms so it is easy to understand where the mistake is made. Both involve an increased heart rate and an irregular beat, and both are painful and uncomfortable. With a heart attack, however, the severity of pain is usually stronger and may affect other parts of the upper body besides the chest—the arms, jaw, neck, stomach (for other heart attack and gender specific symptoms, see [Heart Disease](#)). Heart attack victims do not tend to hyperventilate, while people having a panic attack might (unless it was the panic attack that triggered the heart attack).

Using learned techniques, such as [deep breathing](#) and relaxation exercises, panic attacks can be controlled and heart disease slowed. Anxiety sufferers may also find benefit with 5-HTP (5-hydroxytryptophan), a metabolite of the amino acid tryptophan. Proteins in the food you eat provide amino acids, including tryptophan. Tryptophan is broken down by vitamins, enzymes, and other cofactors into 5-HTP, and 5-HTP is then turned into serotonin, our “feel good” hormone. Serotonin is the neurotransmitter that tells your brain that you are satisfied and do not need to eat more. Serotonin deficiency contributes to weight gain, depression, sleeplessness, anxiety, inflammation and joint pain, among other symptoms.

5-HTP, extracted from the herb Griffonia, has been researched for the treatment of depression, anxiety and insomnia and other sleep disorders, and comes without the potential side-effects of pharmaceutical anti-depressants and sleep aids. Look for 5-HTP that is pure and enteric coated. Enteric coating ensures the 5-HTP is absorbed in the small intestine. Poor quality, non-enteric coated 5-HTP can cause nausea when taken in optimal doses.

Recommended dosage: start with 50 mg in the morning, 50 mg mid-afternoon and 50 mg at bedtime. You can go as high as 200 mg three times a day, but start with the lower dosage as it is often enough for aiding sleep and reducing anxiety. 5-HTP provides relief within two weeks, and it can be taken long-term with no side-effects. However, if you are taking MAO inhibitors, SSRIs (Prozac, Luvox, Paxil, Effexor, Zoloft) and/or tricyclic anti-depressants (Elavil, Tofranil, Pamelor), do not take 5-HTP without discussing it with your health-care provider. 5-HTP is used to [wean people off SSRIs and other anti-depressants](#), but this should be done under the guidance of a physician.

## Pets Invited

Animals are very heart-healthy. In the aftermath of a heart attack, dog owners are significantly more likely to be alive one year later, regardless of how severe the attack, according to a National Institutes of Health study involving 421 adults. In another study involving 240 married couples, those with pets had lower blood pressure and heart rates in both times of relaxation and stress, compared to non-pet owners. Owning a dog also invites more opportunities to get out there and walk, as other studies have shown. Dog owners get more exercise, resulting in other heart benefits and greater mobility.

Cats are equally as heart healthy as they too help to reduced levels of stress and anxiety. One study looked at 4,435 adults between the ages of 30 and 75, half of the group were cat owners. The study found that, over a 10 year period 5.8 percent of the non-cat owners died of heart attacks while only 3.4 percent of the cat owners died.

In addition to reducing stress and anxiety, animals have been shown to reduce depression and combat feelings of isolation and loneliness, all of which can negatively affect heart health.

## The Mind is the Body

Gone are the days when heart disease was strictly considered a physical phenomena, the mind and body disassociated from each other. Thinking on this point has come full circle in the past few decades, supported by a growing body of research. Simply put, heal our minds, heal our emotions, heal our hearts. Healthy emotional expression and positive thoughts (and reactions) are part of a strong heart-health plan. We can stop destructive patterns and replace them with beneficial alternatives.

Mood-enhancing, anti-stress considerations and techniques can be found in [Meditation and Inspiration](#). For now, though, do yourself a favor. Give yourself a moment to just breathe. Place your hands at your sides or over your stomach if you wish. If you are in bed, sit up and put your feet on the floor.

Close your eyes. Focus on pulling oxygen through your nose, deep into your belly. Hold it there, at the back of your spine for a count to eight, then release.

Repeat your breathing several times, while trying to clear your mind of anything but the moment. Let the stresses of the day drain away. When you are ready, let your eyes open.

How do you feel? Relaxed, refreshed?

Congratulations, you have essentially just given your cardiovascular and central nervous systems a big hug of appreciation. Maybe even better, it did not cost a cent.