

Stress is your body's response to certain stimuli, which can come from physical, social, environmental, or perceived sources. The stress response involves a number of complex interactions in your brain, which affect the body functions that are not under your conscious control. There are more than one hundred million neurons in the digestive tract (enteric nervous system), which is more than in the spinal cord, so stress is a significant factor in digestive health and wellbeing.

Physiological adaptations to stress include:

- · a heightened state of awareness
- · faster breathing and heart rates
- elevated blood pressure
- a rise in blood cholesterol
- an increase in muscle tension

The information in this pamphlet is for individuals who are mostly functioning well in society but, at times, could have difficulty coping with routine stresses. If you suffer from a mood disorder, such as bipolar disorder, clinical depression, or an anxiety disorder, you should seek the help of a qualified physician.

Brief periods of stress can be beneficial for improved performance because these bouts equip your body to work harder and more intensely. This 'fight or flight' response is good for short-term bursts of energy and concentration, provided the stress subsides and your body quickly returns to its normal state.

Some individuals can handle major upsets without batting an eye, while others become distressed at the slightest deviation from their normal routine. Most people fall somewhere in between. It is important to remember that, in small doses, stress can be a good thing. It can give you the push you need, motivating you to do your best and to stay focused and alert. Problems accumulate only when stress is constant or unmanaged.

The specific signs and symptoms of stress vary among individuals, but the potential harm to your physical health, emotional wellbeing, and relationships is real.

## **Physical Effects**

For those who experience persistent stress, a further degree of physical response occurs, which involves lowering of immune system function, ongoing rise in cholesterol and blood pressure, increase of gastric acid production, and decrease in sex hormones. In this state, normal life pressures may become overwhelming. As smaller strains pile up, such as job challenges, family troubles, financial difficulties, or personal relationship changes, the stressed individual may be physically affected.

All types of stress can involve the body by aggravating preexisting conditions or causing physical symptoms to appear, such as muscle tension, headaches, loss of sexual desire, diarrhea or constipation, insomnia, and appetite changes.

## **GI-Specific Effects**

If you have a gastrointestinal (GI) disease or disorder, you are vulnerable to the effects of stress on your existing illness and may experience an increase in pain, aggravation of the disease process, and interference with healing. Research has not shown psychological stress to cause structural problems in the gastrointestinal system; however, stress can make existing conditions worsen, or increase the likelihood of relapse in individuals with inactive disease. Evidence of this exists for functional gastrointestinal disorders, such as irritable bowel syndrome (IBS), dyspepsia, and gastroesophageal reflux disease (GERD), as well as for inflammatory bowel diseases (Crohn's and ulcerative colitis).

An individual coping ineffectively with chronic stress keeps his or her body in an over-activated state, thus disrupting its

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normal operation, including that of the digestive system. Physical changes include a shift of blood flow away from the intestinal tract, increased muscle tension, and immune system suppression. These changes are significant for those who have GI conditions.

## **Management**

Decreasing your stress levels and learning effective stress management techniques might be beneficial for your disease outlook and might decrease the severity of your gastrointestinal symptoms. Here are some helpful suggestions to manage stress.

Eat a well-balanced diet by following Canada's Food Guide, available from Health Canada. Good nutrition is the key to both good physical and mental health. Inadequate nutrition increases stress on your body and decreases its ability to heal. Choose foods wisely and, in addition to reducing stress, your body will love you for it!

Become a better breather by learning to breathe more slowly and deeply from your abdomen. Stress can cause shallow breathing, which means that your body won't get enough oxygen to fully relax unless you consciously make an effort to breathe deeply.

**Watch your 'self-talk'** because much of our anxiety is self-induced, meaning that we often get ourselves wound up worrying about worst-case scenarios or blowing small incidents out of proportion.

**Monitor your negative thoughts** to see how often you fret about things such as making mistakes or losing your job. Try to substitute each negative thought with positive, but realistic, ones.

**Get physical** because exercise is a well-known tension reducer. Take care to increase exercise slowly and assess your body's tolerance to this as you do. Use caution though, as high-impact exercises might exacerbate gastrointestinal symptoms in persons with gastroesophageal reflux disease (GERD), hiatus hernia, Crohn's disease, and ulcerative colitis.

Become a better time manager so time doesn't manage you. Many of us underestimate the amount of time it will take to do something, which means we're often running late. Try keeping a time management log for a week to get a better idea of how much time various tasks actually take.

Learn to say no in the right situations. Thinking you can 'do it all' creates unnecessary pressure. Learn how to set boundaries for yourself. Politely, yet firmly, turn down additional responsibilities or projects for which you don't have the extra time or energy.

Take time out for yourself because our minds and bodies require a certain amount of variety or else our overcharged nervous systems will keep speeding right into the next day. Try to take at least one day off each week to do something you really enjoy, whether it's reading, listening to music, or just hanging out with friends.

Have a good belly laugh since this natural stress reliever can help to lower blood pressure, slow your heart and breathing rate, and relax your muscles.

Get professional treatment if you feel that you need more help than the above strategies offer. Professional psychologists have developed a range of methods and useful tools for helping individuals handle stress more effectively. Some of the more frequently used treatment methods include relaxation training (progressive muscle relaxation training, biofeedback, and hypnosis), time management training, lifestyle changes, cognitive behavioural therapy, assertiveness training, deep breathing training, systematic desensitization, and brief psychotherapy.

Use Caution when accessing stress management services to ensure you are receiving treatment from an appropriately trained and licensed professional. A poorly trained therapist may provide ineffective treatment, waste your time and money, fail to detect the presence of a more serious problem, and/or eventually discourage you from seeking real treatment. Many communities have programs covered by basic healthcare plans and some extended healthcare plans provide coverage for additional therapy. Ask your physician to refer you to specific resources in your area.

## **Outlook**

Occasional stress is an inevitable and even welcome part of life; however, the above tips might help you to manage your stress levels and avoid negative health consequences or worsening of your gastrointestinal symptoms.

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Notes:	About the Gastrointestinal Society
	The GI (Gastrointestinal) Society is a registered Canadian charity committed to improving the lives of people with gastrointestinal and liver conditions, supporting research, advocating for appropriate patient access to healthcare, and promoting gastrointestinal and liver health.
	Want to learn more on this subject? The <i>Inside Tract</i> ®, the GI Society's quarterly newsletter, provides the latest on digestive and liver research, disease and disorder treatments (e.g., medications, nutrition), and a whole lot more. If you have any kind of digestive problem, then you will want this timely, informative publication. <i>Subscribe today!</i>
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