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## The gut-brain connection

**Pay attention to your gut-brain connection – it may contribute to your anxiety and digestion problems**



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The gut-brain connection is no joke; it can link anxiety to stomach problems and vice versa. Have you ever had a "gut-wrenching" experience? Do certain situations make you "feel nauseous"? Have you ever felt "butterflies" in your stomach? We use these expressions for a reason. The gastrointestinal tract is sensitive to emotion. Anger, anxiety, sadness, elation — all of these feelings (and others) can trigger symptoms in the gut.

The brain has a direct effect on the stomach and intestines. For example, the very thought of eating can release the stomach's juices before food gets there. This connection goes both ways. A troubled intestine can send signals to the brain, just as a troubled brain can send signals to the gut. Therefore, a person's stomach or intestinal distress can be the cause **or** the product of anxiety, stress, or depression. That's because the brain and the gastrointestinal (GI) system are intimately connected.

This is especially true in cases where a person experiences gastrointestinal upset with no obvious physical cause. For such functional GI disorders, it is difficult to try to heal a distressed gut without considering the role of stress and emotion.

### Gut health and anxiety

Given how closely the gut and brain interact, it becomes easier to understand why you might feel nauseated before giving a presentation, or feel intestinal pain during times of stress. That doesn't mean, however, that functional gastrointestinal conditions are imagined or "all in your head." Psychology combines with physical factors to cause pain and other bowel symptoms. Psychosocial factors influence the actual physiology of the gut, as well as symptoms. In other words, stress (or depression or other psychological factors) can affect movement and contractions of the GI tract.

In addition, many people with functional GI disorders perceive pain more acutely than other people do because their brains are more responsive to pain signals from the GI tract. Stress can make the existing pain seem even worse.

Based on these observations, you might expect that at least some patients with functional GI conditions might improve with therapy to reduce stress or treat anxiety or depression. Multiple studies have found that psychologically based approaches lead to greater improvement in digestive symptoms compared with only conventional medical treatment.

## **Gut-brain connection, anxiety and digestion**

Are your stomach or intestinal problems — such as heartburn, abdominal cramps, or loose stools — related to stress? Watch for these and other common symptoms of stress and discuss them with your doctor. Together you can come up with strategies to help you deal with the stressors in your life, and also ease your digestive discomforts.

**For more on the connection between brain health and gut health, read The Sensitive Gut, a Special Health Report from Harvard Medical School.**

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