

## How Humidity Affects the Body



It might surprise you to learn just how much the weather can affect our bodies. Our joints contain sensory nerves called baroreceptors, which respond to changes in the weather. When the weather changes, the air pressure changes, and the body responds accordingly. For example, when the weather is rainy and damp, the atmospheric pressure drops, causing our tendons, ligaments, and muscles to expand. The baroreceptors in our body respond, helping the central nervous system to regulate the resistance of blood vessels and the heart's contractions. However, for those who already have muscle or joint pain, expansion in the muscles, tendons, and ligaments can irritate the already-sensitive areas.

High humidity levels can also thicken the blood, increasing pressure in the blood vessels. This forces the heart to work harder to pump the blood throughout the body. Hot, humid climates can also be problematic. Our bodies produce sweat to keep us cool, but it is only when the sweat evaporates that our bodies cool down. When there is already a high level of moisture in the air, it is difficult for the air to absorb the moisture from our skin. This can eventually lead to a loss of body fluid and dehydration. Joint cartilage and the discs in our spine have high water content, and dehydration can decrease the concentration of fluid, agitating any arthritis that may be present. Dehydration in the heat can also cause more serious conditions like heat exhaustion and heatstroke.

## EASING THE EFFECTS OF HUMIDITY

Drier climates can sometimes reduce pain for those suffering from arthritis, but no climate will prevent you from having arthritis. There are ways to help combat the effects of humidity without going to such drastic measures.

Drink lots of water. You need to keep your body hydrated, especially if you plan on spending a lot of time outside. This will help you to restore your fluid levels and reduce water loss. Dehydration can cause stiff muscles, as the blood isn't circulating properly. This is why it is so important to drink as much water as possible.

Any movement, no matter how small, can help. Exercise can help you improve your health and fitness without hurting your joints. It increases strength and flexibility, reduces joint pain, and helps combat fatigue.

**Walking** is a suitable exercise for joint or back pain. It is low-impact, and you can easily vary the pace as needed.

**Swimming** is also an ideal exercise because it exercises all your back muscles in a safe, supportive environment. The water supports your weight well, which means that there's less weight on your back.

When not exercising, a heating pad can also help to soothe joint and muscle pain.

The word **massage** alone bring about deep relaxation and stress relief, and now studies shed light on how deep touch works to ease pain and promote healing in sore joints and muscles.

Research shows massage therapy can be an effective part of pain relief and management. Massage set off a series of molecular events in muscles and joints that help reverse discomfort; therefore it reduces inflammation and pain. It also increases levels of proteins that signal the muscles to produce cells that produce energy helping the muscle to recover from pain.

***\*The old saying "no pain, no gain" doesn't apply here.** What you're trying to do is take good care of your body, strengthen the muscles will help your protect your joint, and maintain your range-of-motion. Pay attention to your body's signals, and if your pain increases or if you notice new pain, seek medical advice.*