

Erectile dysfunction could be prevented by blocking endothelin-1

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The findings of a new study indicate erectile dysfunction and inflammation could be prevented by blocking the effect of endothelin-1, which is a potent vasoconstrictor peptide and regulator of blood flow. A

research team from Aarhus University in Denmark will present its findings virtually October 4–7 at the [Seventeenth International Conference on Endothelin \(ET-17\)](#), hosted and organized by the American Physiological Society (APS).

There is a strong, established tie between [heart disease](#) and erectile dysfunction, which is the inability to get and keep an erection for sex. Approximately half of all men with erectile dysfunction have a "robust risk for [cardiovascular disease](#)," according to study author Rafael Fais, Ph.D., of National Jewish Health in Denver.

Endothelin-1, also referred to as downstream signal pathways, is released from the inner cell layer of blood vessels. It is closely associated with erectile dysfunction and inflammation because it can increase blood pressure. In this study, conducted using a [mouse model](#), Fais blocked endothelin-1 by using an endothelial type A and B receptor antagonist called bosentan. Bosentan was injected directly into the cavernosal tissue of the penis, confirming the role of endothelin-1 in erectile dysfunction.

The findings suggest that endothelin-1 could play a significant role in reducing erectile dysfunction and inflammation. Fais hopes this study will lead to newer medications to treat [erectile dysfunction](#) and heart problems. Another goal is to increase a couple's quality of life by improving their sexual relationship.

Provided by American Physiological Society

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