

Anti-inflammatory drugs interfere with aspirin's clotting ability

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A new study conducted at Ben-Gurion University of the Negev (BGU) reveals that Celebrex and other anti-inflammatory coxib medications may counter the positive effects of aspirin in preventing blood clots.

The research, published in the *Proceedings of the National Academy of Sciences (PNAS)*, indicates that people who are taking aspirin and coxibs together are in fact inhibiting the aspirin's effectiveness in preventing heart attacks and strokes.

"This finding strongly suggests that humans who are consuming coxibs and a low dose of aspirin simultaneously are exposed to a greater risk of cardiovascular events," said Professor Gilad Rimon, Department of Clinical Pharmacology, Ben-Gurion University of the Negev in Israel.

In the past decade, a new group of anti-inflammatory drugs, coxibs, which include Celebrex and Arcoxia was developed to treat arthritis as well as other pain. Arthritis patients who take Celebrex are instructed to take low-dose aspirin to counteract Celebrex's own potential clot-promoting effect.

Aspirin is the oldest and one of the most effective non steroidal anti-inflammatory drugs. It is also well known for its ability to prevent the blood clots that can potentially lead to [heart attack](#) and stroke.

Therefore, doctors often advise patients who are more prone to heart-related illnesses to take a daily tablet of low dose aspirin (81 mg).

Approximately, 50 million Americans take aspirin every day to reduce

their risk of cardiovascular diseases.

Now, the BGU research suggests that in the presence of coxibs, aspirin's protective role in preventing new [blood clots](#) is blunted.

This finding mirrors a cooperative study conducted at the University of Michigan, Ann Arbor that showed for the first time that Celebrex and other coxibs directly interfere with the protective qualities of [aspirin](#).

More information: "Coxibs Interfere with the Action of Aspirin by Binding Tightly to One Monomer of Cyclooxygenase-1", The National Academy of Sciences in the United States of America (PNAS).

Provided by American Associates, Ben-Gurion University of the Negev

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