

New evidence that people make aspirin's active principle -- salicylic acid

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Scientists in the United Kingdom are reporting new evidence that humans can make their own salicylic acid (SA) — the material formed when aspirin breaks down in the body. SA, which is responsible for aspirin's renowned effects in relieving pain and inflammation, may be the first in a new class of bioregulators, according to a study scheduled for the Dec. 24 issue of ACS' biweekly *Journal of Agricultural and Food Chemistry*.

In the report, Gwendoline Baxter, Ph.D. and colleagues discuss how their past research revealed that SA exists in the blood of people who have not recently taken aspirin. Vegetarians had much higher levels, almost matching those in patients taking low doses of aspirin. Based on those findings, the researchers previously concluded that this endogenous SA came from the diet, since SA is a natural substance found in fruits and vegetables.

Now the group reports on studies of changes in SA levels in volunteers who took benzoic acid, a substance also found naturally in fruits and vegetables that the body could potentially use to make SA. Their goal was to determine whether the SA found in humans (and other animals) results solely from consumption of fruits and vegetables, or whether humans produce their own SA as a natural agent to fight inflammation and disease. The results reported in the study suggest that people do manufacture SA.

"It is, we suspect, increasingly likely that SA is a biopharmaceutical with

a central, broadly defensive role in animals as well as plants," they state. "This simple organic chemical is, we propose, likely to become increasingly recognized as an animal bioregulator, perhaps in a class of its own."

Source: American Chemical Society

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