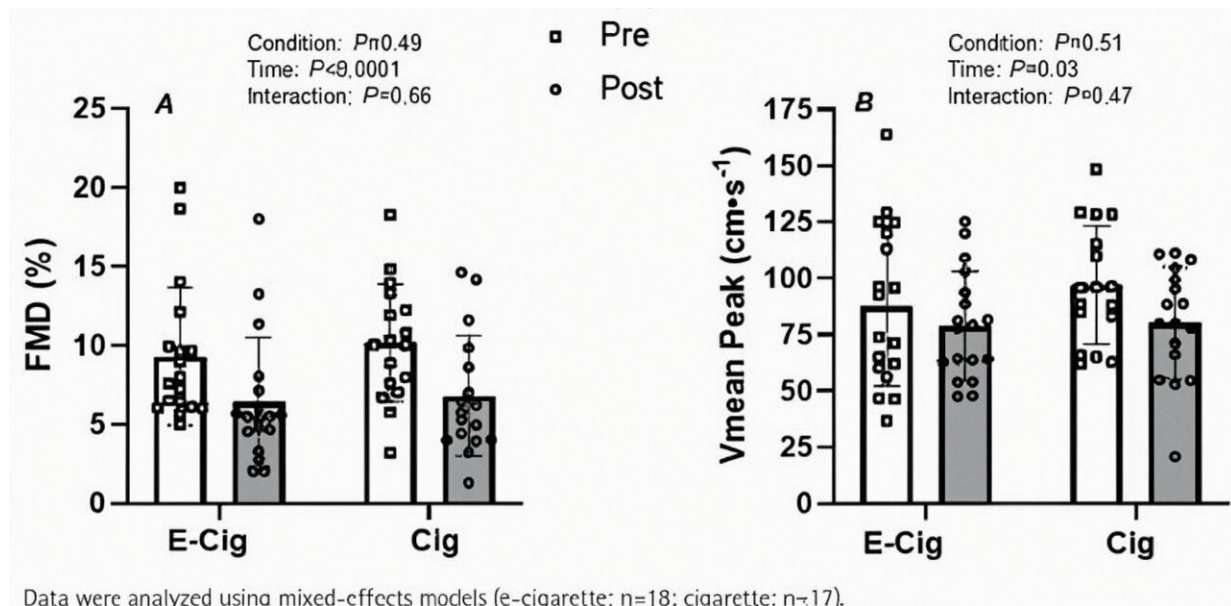


# E-cigarettes not a safer alternative to smoking, expert says

September 18 2023, by Neph Rivera



Impact of vaping and smoking on peripheral vascular function in a crossover laboratory study among adult cigarette smokers. A) Brachial artery flow-mediated dilation (FMD), and B) peak blood velocity (Vmean Peak) responses to a brief period of forearm ischemia before (white bars) and after (gray bars) the acute e-cigarette vaping and cigarette smoking sessions. Credit: *Tobacco Induced Diseases* (2023). DOI: 10.18332/tid/162366

Electronic cigarette use, or vaping, has been seen as a potentially less harmful alternative to traditional cigarette smoking. A University of Texas at Arlington expert says otherwise.

New research from Ziyad Ben Taleb, assistant professor in the College of Nursing and Health Innovation and director of the Nicotine and Tobacco Research Laboratory, says that vaping use is just as harmful to the body as cigarette smoking. Ben Taleb's study appears in the journal [\*Tobacco Induced Diseases\*](#).

"Vaping e-cigarettes is not a safe alternative to cigarette smoking, especially when it comes to preserving cardiovascular function," he said.

In the study, a group of nearly 20 participants attended two lab sessions where they smoked both a traditional cigarette and a pod-based e-cigarette. To measure the effects of the vaping and smoking, the research team measured the rate at which participants' blood vessels dilated back to their normal size. Results showed delays in that process for both electronic and traditional cigarette use.

"Blood vessel constriction can have major impacts on one's health in the long term," Ben Taleb said. "Studies link a delayed reaction and dilation to future negative cardiovascular events like strokes, [high blood pressure](#) and heart attacks."

E-cigarettes' sleek look, availability of flavors and image in [social media](#) and celebrity circles are major reasons why they are seen as a safer cigarette alternative, Ben Taleb said. But he noted their chemical makeup, which includes formaldehyde, causes harmful oxidation in the body.

"This can lead to [chronic inflammation](#) that, in turn, can lead to bigger problems in the long run, like clots and cardiovascular tissue damage," he said.

**More information:** Ziyad Ben Taleb et al, Pod-based e-cigarettes versus combustible cigarettes: The impact on peripheral and cerebral

vascular function and subjective experiences, *Tobacco Induced Diseases* (2023). [DOI: 10.18332/tid/162366](https://doi.org/10.18332/tid/162366)

Provided by University of Texas at Arlington

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