Acetate controls endothelial-to-mesenchymal transition: Potential therapeutic target for reducing atherosclerosis

June 19 2023
In a new study, researchers including Yale School of Medicine's Michael Simons, MD, identify the molecular underpinnings of persistent endothelial-to-mesenchymal transition (EndMT), an important process related to vascular inflammation in diseases including pulmonary hypertension.

Researchers found atypical acetate production from glucose triggered metabolic modulation of the endothelium activated TGF-β signaling, triggering a positive feedback loop and EndMT persistence.

The work identifies endothelial ACSS2 as a potential therapeutic target for reducing atherosclerosis. The study is published in the journal Cell Metabolism.

**More information:** Xiaolong Zhu et al, Acetate controls endothelial-to-mesenchymal transition, Cell Metabolism (2023). [DOI: 10.1016/j.cmet.2023.05.010](https://doi.org/10.1016/j.cmet.2023.05.010)

Provided by Yale School of Medicine
