## LAY ABSTRACT

TITLE: Association between Accelerated Biological Aging, Diet, and Gut Microbiome

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AUTHORS: Shweta Sharma<sup>1,2</sup>, Anna Prizment<sup>1</sup>, Heather Nelson<sup>2</sup>, Lin Zhang<sup>3</sup>, Christopher Staley<sup>4</sup>, Jenny N. Poynter<sup>5</sup>, Gokul Seshadri<sup>1</sup>, Aidan Ellison<sup>1</sup>, Bharat Thyagaragan<sup>1\*</sup>

\* Corresponding author

INSTITUTIONS:

1 Department of Laboratory Medicine and Pathology, University of Minnesota, Minneapolis, MN 55455, USA

2 Division of Epidemiology & Community Health, University of Minnesota, Minneapolis, MN 55455, USA

3 Division of Biostatistics & Health Data Science, University of Minnesota, Minneapolis, MN 55455, USA

4 Department of Surgery, University of Minnesota, Minneapolis, MN 55455, USA

5 Department of Pediatrics, Division of Epidemiology and Clinical Research, University of Minnesota, Minneapolis, MN 55455, USA

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This study looks at what causes faster biological aging (BA). BA is how fast the cells in our body are aging. Faster biological aging can lead to poor health.

This study looks at how diet and gut bacteria affect biological aging in 117 adults. The researchers measured BA and compared it to actual age. The study also considered things like family, age, sex, gender, smoking, alcohol, and weight.

People who ate more fiber had lower BA than their actual age. People who ate more processed meat had higher BA than their actual age, but some of this may also be because of certain gut bacteria. Some gut bacteria were related to different speeds of biological aging.

This study suggests that eating more fiber could slow biological aging. More studies are needed to confirm this.