## Tooth loss in middle age linked to risk of heart disease

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Lu Qi, MD, PhD, who holds the HCA Regents Distinguished Chair and is a professor of epidemiology at Tulane University School of Public Health and Tropical Medicine, presented a study on the link between middle-aged tooth loss and cardiovascular disease at a recent American Heart Association meeting. A Tulane research fellow, Yoriko Heianza, PhD, was listed as first author on the study. (Photo by Paula Burch-Celentano)

New research suggests that loss of two or more teeth in middle age is linked to an increased risk of cardiovascular disease.

Lu Qi, MD, PhD, holder of the HCA Regents Distinguished Chair and professor of epidemiology at Tulane University School of Public Health and Tropical Medicine, collaborated with colleagues from the Harvard T.H. Chan School of Public Health on a study that examined more than 60,000 men and women over the course of eight years. The preliminary findings were reported at a poster presentation at the American Heart Association meeting in March, with Yoriko Heianza, PhD, a research fellow at Tulane University, as the first author.

The authors found that among adults ages 45-69 who had most or all of their natural teeth at the study's start, those who lost two or more during the study period also experienced a 23 percent increased risk of cardiovascular disease. Factors such as diet quality, activity level, body weight or even other cardiovascular risk factors did not affect the results. The results were similar for individuals who started the study with even fewer than 25 teeth. In this study, none of the participants had cardiovascular disease at the beginning of the study period.

"Tooth loss in middle age is more likely related to heart disease, but it hasn't been clear how this later-in-life tooth loss might influence disease risk," said Qi.

"The results are expected," he added. "We assumed that tooth loss might affect inflammation, unhealthy dietary intakes and the microbiome in the human body, which in turn may affect heart health."

Previous studies have linked dental health problems with chronic diseases like heart disease and diabetes.

The findings may encourage people to practice better dental care for the long run.

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