



## 719 - CARDIOVASCULAR HEALTH, AS PER LIFE'S ESSENTIAL 8, AND UNHEALTHY AGING IN OLDER ADULTS

D. Gómez Ángel, M. Sotos-Prieto, F. Rodríguez Artalejo, R. Ortola

Universidad Autónoma de Madrid; CIBERESP; Harvard T.H. Chan School of Public Health; IMDEA Food Institute.

### Resumen

**Background/Objectives:** Cardiovascular health (CVH), defined by a combination of biological markers and health-related behaviors, has been linked to several age-related health outcomes, but its relationship with healthy aging has not been studied. This study aimed to investigate whether CVH is associated with the progression of unhealthy aging over time.

**Methods:** We analyzed data from 2,487 participants aged  $\geq 65$  years from the Seniors-ENRICA-2 cohort. At 3 timepoints over a 5.5-year follow-up period, we assessed CVH by the American Heart Association's Life's Essential 8 (LE8) score (0–100; higher scores indicate better CVH) and two indicators of unhealthy aging, namely a Deficit Accumulation Index (DAI) and an Intrinsic Capacity Deterioration (ICD) score (both ranging from 0–100; higher scores indicate more unhealthy aging). Mixed-effects linear regression models were used to estimate both the average association between CVH and unhealthy aging, and the rate of change in unhealthy aging over time.

**Results:** Better CVH was associated with lower average levels of the DAI score (mean difference per 10-point increment in the LE8: -2.53; 95% confidence interval [CI]: -2.77; -2.29) and the ICD score (mean difference: -2.84; IC95% -3.24; -2.43). Better CVH was also associated with a slower yearly increase in the DAI score (mean difference per 10-point increment in the LE8: -0.10; IC95% -0.17; -0.03), but not with the progression of ICD (mean difference: -0.015; IC95% -0.15; 0.12). The strongest protective effects of better CVH were seen in the functional impairment and self-rated health domains of the DAI, and the locomotion domain of the ICD score. Sleep health, BMI and blood glucose stood out as major individual contributors to the slower rate of deficit accumulation associated with increasing CVH.

**Conclusions/Recommendations:** Better CVH, as measured by the LE8 score, was associated with both lower average levels and slower accumulation of health-related deficits in older adults. Promoting CVH may offer meaningful benefits in reducing the burden of aging-related deficits, thus contributing to healthier aging.

**Funding:** ISCIII (20/00896, 22/01111, 23/00079), AEI (CNS2022-135623); MCIU/AEI/“NextGenEU/PRTR” (PLEC2022-009352, CPP2022-009718); ISCIII-CDTI/“NextGenEU/PRTR” (PMPTA22/00107, PMPTA23/00012).