**LIFE SIMPLE SEVEN AND INCIDENCE OF CORONARY ARTERY DISEASE: THE MILLION VETERAN PROGRAM**

**L. Djousse**1,2,3

1Harvard Medical School, Boston, MA, USA

2Boston VA Healthcare System, Boston, MA, USA

3Brigham and Women's Hospital, Boston, MA, USA

**Background:** The Association of Life’s Simple 7 (LSS) with incidence of coronary artery disease (CAD) among US veterans has not been evaluated.

**Objective**: To test the hypothesis that adherence to LSS is inversely associated with incidence of CAD among participants of the Million Veteran Program (MVP).

**Methods:**Prospective study of 107,004 veterans enrolled between 2011 and 2016. LSS components were assessed at baseline and we used electronic health records to ascertain CAD during follow up. We fitted cox regression to estimate adjusted relative risk of CAD.

**Results:**Mean age was 64.5±11.7 years. During a mean follow up of 2.87 years, we ascertained 4,930 new cases of CAD. Crude incidence rates of CAD were 22.7, 16.9, 12.1, 8.9, and 5.3 per 1,000 person-years for being ideal on 0, 1, 2, 3, and 4+ LSS, respectively. In a multivariable adjusted cox model, we observed an inverse relation of LSS with CAD incidence, with a 72% lower risk of CAD comparing ideal on 4+ with 0 LSS (**Fig. 1**). Restricted cubic splines did not show evidence for non-linearity (p for non-linearity 0.83 and p for linearity <0.0001). In secondary analyses, we observed similar results in men and women; young and older adults; and between blacks, whites, and other ethnic groups.

**Conclusion:** In this large cohort of US veterans, adherence to LSS is associated with lower risk of CAD in a dose-response manner.

