THE EFFECTS OF REGULAR PHYSICAL ACTIVITY ON ADULT-ONSET
ASTHMA INCIDENCE IN WOMEN

Marta Benet, Centre for Research in Environmental Epidemiology (CREAL), Spain; Municipal Institute of Medical Research (IMIM-Hospital del Mar), Spain; CIBER Epidemiología y Salud Pública (CIBERESP), Spain.
Raphaëlle Varraso, National Institute of Health and Medical Research, (Inserm), France.
Francine Kauffmann, National Institute of Health and Medical Research, (Inserm), France; Paris-South University 11, France.
Isabelle Romieu, I Instituto Nacional de Salud Pública, México.
Josep M Antó, Centre for Research in Environmental Epidemiology (CREAL), Spain; Municipal Institute of Medical Research (IMIM-Hospital del Mar), Spain; CIBER Epidemiología y Salud Pública (CIBERESP), Spain; Department of Experimental and Health Sciences, Universitat Pompeu Fabra, Doctor Aiguader 88, 08003 Barcelona, Spain.
Françoise Clavel-Chapelon, National Institute of Health and Medical Research, (Inserm), France; Paris-South University 11, France.
Judith Garcia-Aymerich, Centre for Research in Environmental Epidemiology (CREAL), Spain; Municipal Institute of Medical Research (IMIM-Hospital del Mar), Spain; CIBER Epidemiología y Salud Pública (CIBERESP), Spain; Department of Experimental and Health Sciences, Universitat Pompeu Fabra, Doctor Aiguader 88, 08003 Barcelona, Spain.

Background and Aims: Potential benefit of physical activity in asthma incidence is scarce and controversial. We aimed to assess the association between regular physical activity and adult-onset asthma.

Methods: We included 51,080 women from a French cohort study, and followed them from 1993 to 2003. Physical activity at baseline was defined as time spent in household and leisure time physical activity, converted to metabolic equivalents (METs), and categorised in tertiles. Adult-onset asthma during follow-up was defined according to the American Thoracic Society criteria.

Results: Mean age at baseline was 53 years, 13% of women were current smokers, 19% were overweight or obese, and 56% were postmenopausal; 512 (1%) developed asthma. No association was found between physical activity and asthma incidence in the crude or in the adjusted Cox regression model (adjusted HR 1.03 and 1.01 for the 2nd and 3rd tertiles compared to the 1st tertile, p-for-trend=0.979).

Conclusions: Physical activity is not related to adult-onset asthma in this cohort of French middle-aged women.