

# Publication

Leisure-time vigorous physical activity is associated with better lung function : the prospective ECRHS study

## JournalArticle (Originalarbeit in einer wissenschaftlichen Zeitschrift)

## ID 4480972

**Author(s)** Fuertes, Elaine; Carsin, Anne-Elie; Antó, Josep M.; Bono, Roberto; Corsico, Angelo Guido; Demoly, Pascal; Gislason, Thorarinn; Gullón, José-Antonio; Janson, Christer; Jarvis, Deborah; Heinrich, Joachim; Holm, Mathias; Leynaert, Bénédicte; Marcon, Alessandro; Martinez-Moratalla, Jesús; Nowak, Dennis; Pascual Erquicia, Silvia; Probst-Hensch, Nicole M.; Raherison, Chantal; Raza, Wasif; Gómez Real, Francisco; Russell, Melissa; Sánchez-Ramos, José Luis; Weyler, Joost; Garcia Aymerich, Judith **Author(s) at UniBasel** Probst Hensch, Nicole ;

### Year 2018

**Title** Leisure-time vigorous physical activity is associated with better lung function : the prospective ECRHS study

Journal Thorax

Volume 73

Number 4

#### Pages / Article-Number 376-384

Mesh terms Adult; Aged; Europe; Exercise; Female; Forced Expiratory Volume; Humans; Leisure Activities; Lung, physiopathology; Lung Diseases, physiopathology; Male; Middle Aged; Predictive Value of Tests; Prospective Studies; Sensitivity and Specificity; Surveys and Questionnaires; Vital Capacity We assessed associations between physical activity and lung function, and its decline, in the prospective population-based European Community Respiratory Health Survey cohort.; FEV; 1; and FVC were measured in 3912 participants at 27-57 years and 39-67 years (mean time between examinations=11.1 years). Physical activity frequency and duration were assessed using questionnaires and used to identify active individuals (physical activity >2 times and >1per week) at each examination. Adjusted mixed linear regression models assessed associations of regular physical activity with FEV; 1; and FVC.; Physical activity frequency and duration increased over the study period. In adjusted models, active individuals at the first examination had higher FEV; 1; (43.6(95% CI 12.0 to 75.1)) and FVC (53.9(95% CI 17.8 to 89.9)) at both examinations than their non-active counterparts. These associations appeared restricted to current smokers. In the whole population, FEV; 1; and FVC were higher among those who changed from inactive to active during the follow-up (38.0(95% CI 15.8 to 60.3) and 54.2(95% CI 25.1 to 83.3), respectively) and who were consistently active, compared with those consistently non-active. No associations were found for lung function decline.; Leisure-time vigorous physical activity was associated with higher FEV; 1; and FVC over a 10-year period among current smokers, but not with FEV; 1; and FVC decline.

Publisher British Medical Association ISSN/ISBN 0040-6376

edoc-URL https://edoc.unibas.ch/64799/ Full Text on edoc Available; Digital Object Identifier DOI 10.1136/thoraxjnl-2017-210947 PubMed ID http://www.ncbi.nlm.nih.gov/pubmed/29306902 ISI-Number WOS:000428933000016 Document type (ISI) Journal Article