Ontologies Classes Object Properties Data Properties Annotation Properties Individuals Datatypes Clouds

Class: Physical_Activity_For_Prevention_Of_LC

Annotations (3)

- rdfs:comment "Observational studies have suggested that physical activity might lower the risk of lung cancer in former and current smokers, but not in never-smokers. Using genetic instruments for self-reported and accelerometer-measured physical activity traits implemented through two-sample Mendelian randomization (MR), we sought to strengthen the evidence for causality. We used 18 genome-wide significant ($P < 5 \times 10\text{-}8$) single-nucleotide polymorphisms (SNP) for self-reported moderate-to-vigorous physical activity and seven SNP for accelerometer-measured ("average acceleration") physical activity from up to 377,234 UK Biobank participants and evaluated these in relation to risk using 29,266 lung cancer cases (including 11,273 adenocarcinomas, 7,426 squamous cell carcinoma, and 2,664 small-cell carcinoma cases) and 56,450 controls. MR analysis suggested no effect of self-reported physical activity [OR (95% confidence interval (CI)) = 0.67 (0.42-1.05); P = 0.081; Q-value = 0.243] and accelerometer-measured activity [OR (95% CI) = 0.98 (0.93-1.03); P = 0.372; Q-value = 0.562] on lung cancer. There was no evidence for associations of physical activity with histologic types and lung cancer in ever and never smokers. Replication analysis using genetic instruments from a different genome-wide study and sensitivity analysis to address potential pleiotropic effects led to no substantive change in estimates. Collectively, these findings do not support a protective relationship between physical activity and the risk of lung cancer. SIGNIFICANCE: A new genetic study provides little evidence that recommending physical activity would help prevent lung cancer." (xsd:string)
- rdfs:comment "Overall, people who are physically active appear to have roughly a 20% reduced risk of developing lung cancer."(xsd:string)
- rdfs:comment "Since lung cancer is among the cancers with the highest incidence and has the highest mortality rate of cancer worldwide, the means of reducing its impact are urgently needed. Emerging evidence shows that physical activity plays an etiological role in lung cancer risk reduction. The majority of studies support the fact that total and recreational physical activity reduces lung cancer risk by 20-30% for women and 20-50% for men, and there is evidence of a dose-response effect. The biological mechanisms operating between physical activity and lung cancer are likely complex and influenced by many factors including inherited or acquired susceptibility genes, gender, smoking, and other environmental factors. Several plausible biological factors and mechanisms have been hypothesized linking physical activity to reduced lung cancer risk including: improved pulmonary function, reduced concentrations of carcinogenic agents in the lungs, enhanced immune function, reduced inflammation, enhanced DNA repair capacity, changes in growth factor levels and possible gene-physical activity interactions. Future research should target the possible subgroup effects and the biologic mechanisms that may be involved."(xsd:string)

Superclasses (1)

- Preventative_habits_LC

OWL HTML inside