

Press release**Friedrich-Schiller-Universität Jena****Dr. Ute Schönfelder**

05/16/2024

<http://idw-online.de/en/news833720>Research results, Scientific Publications
Medicine, Nutrition / healthcare / nursing
transregional, national**One in three cardiovascular deaths is due to an unbalanced diet**

In Europe, 1.55 million people die every year due to a poor diet. This is the conclusion of a recent study by Friedrich Schiller University Jena, the Institute for Sustainable Agriculture and Food Economics (INL) and the nutriCARD Competence Cluster. The researchers analysed the importance of nutrition for cardiovascular-related deaths in the period between 1990 and 2019, and have published their findings in the European Journal of Preventive Cardiology.

The study showed that one in six deaths in Europe can be attributed to an unbalanced diet. "In the case of cardiovascular diseases, around a third of deaths are associated with poor nutrition," explains Theresa Pörschmann, the lead author of the study and a doctoral student at the Chair of Nutritional Biochemistry and Physiology at the University of Jena. According to the study, the 27 EU member states account for around 600,000 premature deaths – around 112,000 of them in Germany. In percentage terms, most people in Europe die from partially diet-related cardiovascular diseases in Slovakia (48 per cent) and Belarus (47 per cent). The lowest percentages are found in Spain (24 per cent). In Germany, 31 per cent of all cardiovascular deaths are attributable to an unbalanced diet.

The study also shows which dietary factors had the greatest influence on premature deaths. "Unfortunately, it is always the same foods that we either eat too little or too much of," says Pörschmann. In particular, the negative influencing factors include eating too few whole-grain products and too few legumes, followed by a diet with too much salt and too much red meat.

A third of deaths in people under 70

The type of cardiovascular disease as well as the distribution between the sexes and in different age groups were also examined. Most deaths were caused by ischemic heart disease, such as coronary artery disease, followed by strokes and hypertensive heart disease. In around 30 per cent of all premature deaths, those affected were under the age of 70. In total, the researchers investigated 13 different types of cardiovascular disease and 13 different dietary factors.

Actual effect of diet probably even greater

"The study does not take into account factors such as alcohol consumption and excessive energy intake, which can cause obesity and type 2 diabetes mellitus," explains Prof. Stefan Lorkowski from the Institute of Nutritional Sciences at the University of Jena. "These are other important risk factors for cardiovascular disease," adds Dr Toni Meier from the Institute for Sustainable Agriculture and Food Economics in Halle. "The actual cardiovascular deaths partially caused by an unbalanced diet are therefore likely to be significantly higher."

Proportion of partially diet-related cardiovascular disease on the rise since 2019

The analysis used data from the Global Burden of Disease Study and looked at a total of 54 countries in Western, Eastern and Central Europe as well as Central Asia, which the WHO groups together as the "European region". In addition to the EU member states and other European countries, this also includes several countries in the Middle East and Central Asia, such as Armenia, Azerbaijan, Israel, Kazakhstan, Kyrgyzstan, Russia, Tajikistan, Turkey, Turkmenistan and Uzbekistan.

Although the number of partially diet-related deaths is increasing worldwide due to the growing world population and rising life expectancy, their share of total deaths is falling. "Until 2015, the proportion of partially diet-related cardiovascular disease fell steadily. However, the figures have been rising again slightly since 2019," says Prof. Lorkowski. The latest results once again highlight the great preventive potential of a balanced diet for heart health. "In Germany, we still have a lot of room for improvement and could prevent many premature deaths."

contact for scientific information:

Prof. Dr Stefan Lorkowski
Institute of Nutritional Sciences of the Friedrich Schiller University Jena
Dornburger Straße 25, 07743 Jena
Phone: 03641 / 949710
Email: stefan.lorkowski@uni-jena.de

Original publication:

Pörschmann T, Meier T, Lorkowski S. Cardiovascular mortality attributable to dietary risk factors in 54 countries in the WHO European Region from 1990 to 2019: an updated systematic analysis of the Global Burden of Disease Study. European Journal of Preventive Cardiology 2024. <https://dx.doi.org/10.1093/eurjpc/zwae136>



Wholegrain products and legumes.

Photo: Nicole Nerger

D