

EPIC–Oxford Newsletter 2023



Hello from all of us here at the EPIC-Oxford Study!

Happy 30th! We celebrated in February this year to mark the 30 year anniversary of the EPIC-Oxford study! Thank you to all of the participants and research team members, past and present, who have made the study and the research possible.



EPIC-Oxford has continued to provide important evidence on the relationships of diet and other factors with long-term health, with our main focus on the health of vegetarians and vegans as well as collaborative work in the EPIC study across Europe on risk factors for cancer and other chronic diseases. We thank all the participants in EPIC-Oxford and the funding agencies for their continued support. In the last year these data have been included in analyses leading to more than 20 scientific publications. Below we summarize the findings from a few of these.



Dietary amino acids and risk of stroke subtypes: a prospective analysis of 356,000 participants in seven European countries.

In analyses of EPIC-Europe, we found that the risk for stroke was a little lower in people with higher intakes of a particular amino acid component of protein – proline. This new finding would need to be confirmed in other studies before drawing strong conclusions, but it supports the idea, which we are pursuing in other research within EPIC, that the nature of protein consumed might impact long-term health.

Tong TYN et al. *Eur J Nutr.* 2023
<https://pubmed.ncbi.nlm.nih.gov/37804448/>



Protein and amino acid intakes in relation to prostate cancer risk and mortality-A prospective study in the European Prospective Investigation into Cancer and Nutrition.

Findings from our analyses in EPIC Europe have suggested a slightly higher risk of prostate cancer in men with higher intakes of dairy protein. More information on this possible relationship will be provided by our nearly finalised analyses in the international collaborative Diet and Cancer Pooling Project with the Harvard School of Public Health.

Schmidt JA et al. *Cancer Med* 2023; 12(4):4725-4738
<https://pubmed.ncbi.nlm.nih.gov/36148781/>

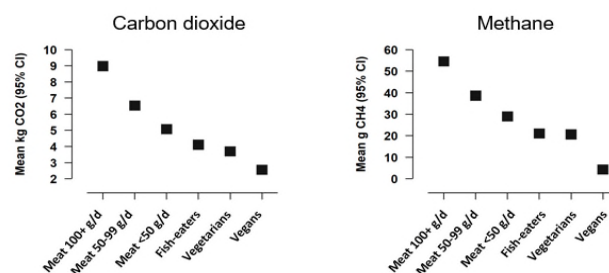


Vegans, vegetarians, fish-eaters and meat-eaters in the UK show discrepant environmental impacts.

Using data from EPIC-Oxford, colleagues at Oxford University have calculated the environmental footprints of the participants according to their dietary patterns. The results are striking, with vegans having much lower diet-related emissions than meat-eaters of all three major greenhouse gases (carbon dioxide, methane and nitrous oxide); furthermore, other impacts were also much lower, with about 70% lower impact on biodiversity.

Scarborough, P et al. *Nat Food* 2023; 4, 565–574
<https://pubmed.ncbi.nlm.nih.gov/37474804/>

Greenhouse gas emissions by diet group in 55,500 EPIC-Oxford participants



Alcohol intake and endogenous sex hormones in women: meta-analysis of cohort studies and Mendelian randomization.

Using data from EPIC and other studies worldwide, we found that women who regularly drink alcohol have higher blood levels of several hormones including oestrogens; the differences are small, but may still contribute to the known impact of alcohol on the risk for breast cancer.

Tin Tin S et al. *Res Sq.* 2023: rs.3.rs-3249588
<https://pubmed.ncbi.nlm.nih.gov/37645769/>



Circulating Isoleucylcarnitine and Lung Cancer Risk: Evidence from Mendelian Randomization and Prediagnostic Blood Measurements.

In analyses of data from EPIC, other studies and also genetic data, we found that higher levels of a chemical in the blood, isoleucylcarnitine, predicted a lower risk of lung cancer.

Smith-Byrne K et al. *Can Epi Bio Prev* 2022; 31(10): 1966-1974
<https://pubmed.ncbi.nlm.nih.gov/35839461/>



Meat, vegetables and health - interpreting the evidence.

We commented on new studies from the Global Burden of Disease group, and concluded that the current evidence supports dietary guidelines to limit red meat and increase vegetable intake.

Tong TYN et al. *Nat Med.* 2022; 28(10):2001-2002
<https://pubmed.ncbi.nlm.nih.gov/36216937/>



Genetic predisposition to metabolically unfavourable adiposity and prostate cancer risk: A Mendelian randomization analysis.

We investigated different aspects of body composition in relation to hormones and prostate cancer risk, including studying whether adiposity that is linked to unfavourable metabolic characteristics is linked to a higher risk.

Perez-Cornago A et al. *Cancer Med.* 2023
<https://pubmed.ncbi.nlm.nih.gov/37305903/>

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New study on plant-based diets

“Feeding the Future” – or FEED – is a new online survey which aims to generate up-to-date information on diets in the UK, with a focus on the contemporary diets of those following plant-based diets including vegans, vegetarians, fish eaters and “flexitarians”. Keren Papier and her team have now recruited over 6,000 participants, and are starting data analyses, looking particularly at intakes of important nutrients such as protein and vitamin B12 in people choosing current plant-based meat and dairy alternatives. Keren also created a short video earlier this year promoting the FEED study with the team at Oxford Sparks.

<https://www.oxfordsparks.ox.ac.uk/videos/feeding-the-future-study-feed/>



The EPIC-Oxford Participant Panel

Recruiting again now! Be part of the EPIC-Oxford Participant Panel. We established a participant panel for the EPIC-Oxford study in 2019, consisting of a group of existing study participants who meet with the EPIC team about once a year via video conference. It is important for us to have a participant panel to discuss and take advice on issues such as areas for research, providing adequate information about the study, disseminating research findings and writing lay summaries, and providing feedback on the use of health data. The most recent online meeting of the Panel was held in October 2022. The main topics on the agenda were an update on our research, in particular seeking the advice of the members on the new revised version of the study website. Constructive feedback was received, agreeing that the revisions to the website have addressed their previous concerns for improved accessibility and transparency, with some additional advice for further improvements. We would like to expand the number of volunteers on this panel so if you would like to volunteer or wish to know more about the panel, please email us at queries@epic-oxford.org for further information.



Public engagement

We have also presented our research widely to the public, particularly focusing on our work on diet and on large prospective cohort studies, putting our research on prostate and other cancers in the broader context of our group's research on nutrition and other diseases, and more broadly in relation to the best dietary choices for health and for the environment working with the input of other scientists in our group funded by Wellcome. We have presented this to a range of audiences including through videos, a short Youtube video on Modelling the Food System and a video for the “Expert witness on diet and health” that was used for deliberative forums in Glasgow and Bridlington run by the COPPER project, in which members of the public were

asked to prioritise subsidy and tax policy ideas based on evidence supplied by our expert witnesses), a podcast interview for the Oxpop “Science with Sanjula” podcast series on understanding the impact of diet on health (<https://www.youtube.com/watch?v=3fFyHVm3oPQ>), a panel discussion on the science of Veganism (<https://www.youtube.com/watch?v=9M22XfOQH-k&t=203s>), through interviews with journalists leading to newspaper articles such as with the Guardian on the topic of processed meat and health (focussing on cancer), “Should I worry about how much processed meat I eat?” and on the BBC Radio London afternoon show and a Conversation article on the environmental impacts of plant-based diets “Vegan diet has just 30% of the environmental impact of a high-meat diet, major study finds”.

Thank you

We would like to thank all of the EPIC-Oxford participants for your continued support. If you wish to contact us our details can be found below. Our website is regularly updated with news and new publications, and we value the support of our participants to be able to continue this important research.

Our Team

The Principal Investigator of EPIC-Oxford is Professor Tim Key and the Co-Investigator is Professor Ruth Travis. The study is co-ordinated by the Steering Committee, comprising Professors Tim Key and Ruth Travis and Dr Tammy Tong.

Please be reminded that participants in EPIC-Oxford are free to withdraw from the study at any time. Full details of how to do this, as well as details of how we use your data, are given on our website at <https://www.ceu.ox.ac.uk/research/epic-oxford-1/for-participants/frequently-asked-questions-1> or if you don't have access to the website you can contact us by e-mail or telephone. Our privacy policy can also be viewed at <https://www.ceu.ox.ac.uk/research/epic-oxford-1/for-participants/data-protection>.

Our website: <https://www.ceu.ox.ac.uk/research/epic-oxford-1>

Email: queries@epic-oxford.org

Tel: Office hours (01865) 289600 (usually answered by an answer machine and you will be called back)

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