Diet shifts after the pandemic could avert premature deaths

A University of Edinburgh study has found that plans to get over the pandemic should focus on healthier diets as much as economic growth to prevent avoidable deaths.

This is the first analysis of the long term effects of recovery plans on the global food system.

It is estimated that advice to eat more fruit and vegetables could avert as many as 26 million deaths every year by 2060. The diseases which cause premature deaths include heart disease, stroke and cancer and these are also risk factors for Covid-19 patients. Some of the risk could be reduced by including in recovery plans ways of lowering meat consumption – something which would also reduce the cost of providing food for families particularly in low and middle income countries.

PhD student Aimen Sattar, of the University of Edinburgh's Global Academy of Agriculture and Food Systems, who was involved in the research, said: "The Covid-19 recovery stimulus packages present an opportunity to reduce the impact of the food system on some of the most urgent global challenges, including diet-related diseases, the impact of the food system on the environment, and the affordability of food, especially for those on the lowest income. This analysis shows the dramatic benefit of increasing global cooperation and improving diets."

The findings suggest post-pandemic plans prioritising economic recovery above all else would lead to millions more deaths linked to poor diet, be worse for the environment and do less to reduce food costs.

Governments around the world have committed trillions of pounds to recover from the unprecedented impacts of the Covid-19 pandemic. Now, researchers have carried out the first global analysis of the long-term effects of different recovery plans on global health, the environment and the cost of food.

Findings from the study could inform the development of strategies to improve global health and food affordability and help limit the impacts of climate change.

A team led by the University of Edinburgh used a leading-edge computer model to assess the impacts that different Covid-19 recovery plans could have between 2019 and 2060. Researchers modelled four post-pandemic scenarios and considered how the global food system would be affected by each of these.

Their findings show plans that include dietary shifts toward less meat and more fruit and vegetables could prevent 2600 premature deaths per million people by 2060. With the world's population projected to be more than 10 billion by 2060, this could potentially avert 26 million deaths that year alone, the team says.

Adopting low-meat diets would make food more affordable, especially in low-income countries, where 50 per cent of earnings needed to have enough food in 2019 would fall to around 10 per cent by 2060.

Cutting meat consumption would also reduce agricultural land use and the need for irrigation and fertiliser, which can affect water quality and harm biodiversity, the teams says.

By contrast, recovery plans focused solely on restoring economic activity to pre-pandemic levels could lead to as many as 780 extra deaths per million in 2060 – almost eight million deaths that year alone, based on population projections.

These strategies would also increase land, irrigation and fertiliser use, and have less impact on making food more affordable, researchers say.

The study is published in the journal *The Lancet Planetary Health*. It was supported by the Biotechnology and Biological Sciences Research Council, Economic and Social Research Council, Natural Environment Research Council and the Scottish Government. The work also involved researchers from Karlsruhe Institute of Technology, Germany.