# Reduced red meat intake could hit Scotland climate goals

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Scotland could make significant progress towards its climate change targets by reducing meat consumption in line with existing dietary advice, research shows.

If consumers with a high intake of red meat and processed red meat—such as beef, ham and sausages—reduced their consumption to the recommended 70g or less per day, this would achieve a 16% reduction in all meat consumption across the country.

If those consumers reduced their intake further, to 60g or less per day, Scotland would meet the Climate Change Committee's recommended target of a 20% shift away from all meat by 2030.

Supporting a greater proportion of the population to adopt dietary recommendations is an important step to help address climate change, experts say.

## Climate change

Meat and dairy production contribute significantly to the world's greenhouse gas emissions.

The UK's Climate Change Committee recommends that the Scottish Government takes action to encourage a 20% reduction in consumption of all meat by 2030, rising to 35% by 2050, and a 20% shift away from dairy products by 2030.

## Nutritional impact

University of Edinburgh researchers, in collaboration with Food Standards Scotland (FSS), modeled the impact of reductions in meat and dairy consumption on the nation's micronutrient intake, as well as incidence of type 2 diabetes and other diseases.

The study used data on dietary intakes collected in more than 3,400 adults as part of the Scottish Health Survey in 2021.

If meat and dairy removed from diets is not replaced with nutrient-rich foods—such as oily fish, beans or vegetables—it could increase the percentage of the population below dietary requirements for essential nutrients, such as calcium, iodine and zinc, by up to 9 percentage points.

Meat and dairy reductions were not associated with any concerns over intakes of protein as a result, the research showed.

## Diet improvements

A blanket approach to reduce meat and dairy consumption cannot be recommended without broader improvements in diet among the Scottish population, experts say.

"There is no question that we need to change our diets to reduce our impact on the planet. Healthy and sustainable diets are all about balance. We found that some people in Scotland are eating too much meat and could benefit from balancing their diet by replacing meat with other nutrient rich foods available in Scotland such as vegetables, beans and oily fish," says Professor Lindsay Jaacks, Personal Chair of Global Health and Nutrition, and Interim Director of the Edinburgh Earth Institute.

"Although the assumption is that meat and dairy reductions would be of benefit to both climate change mitigation and human health, the reality is more complex. Given the diet of the Scottish population is so poor, particularly in some sub-groups, an 'across the board' population reduction in meat and dairy consumption cannot be recommended as micronutrient intakes may be worsened among those with already low intakes," says Dr. Fiona Comrie, senior public health nutritionist, Food Standards Scotland.

**More information:** Modelling the impact of reductions in meat and

dairy consumption on nutrient intakes and disease risk. www.foodstandards.gov.scot/pub … kes-and-disease-risk

Provided by University of Edinburgh