Editor's note: The following is abridged from an editorial published simultaneously in the *British Medical Journal, Lancet* and the *Finnish Medical Journal* in advance of the United Nations Climate Change Conference, 29 November–10 December 2010.¹

In November 2010, representatives from countries around the world will meet in Cancún, Mexico, at the 2010 United Nations Climate Change Conference. Here they will attempt to draft a treaty aimed at stabilising atmospheric greenhouse gas concentrations at a level that will prevent catastrophic climate change...

Health professionals everywhere have a responsibility to put health at the heart of climate change negotiations. Firstly, because climate change already has, and will continue to have, a major adverse impact on the health of human populations.² Secondly, because reducing greenhouse gas emissions has unrivalled opportunities for improving public health.³ Indeed, moving to a low carbon economy could be the next great public health advance. The hazards to human health from climate change are well documented. Strong evidence already exists that climate change will affect rates of malnutrition, diarrhoea, malaria, deaths as a result of floods, and temperature related deaths from cardiovascular disease.²

More recently, the health benefits of reducing greenhouse gas emissions have been assessed and quantified. Meeting greenhouse gas emissions targets in the transport sector will require substantial increases in walking and cycling, with corresponding reductions in car use.⁴ The available epidemiological evidence linking physical activity and health has shown that this would dramatically reduce rates of chronic disease, with around a 10-20% reduction in ischaemic heart disease and stroke, 12% reduction in breast cancer, 8% reduction in dementia, and 6% reduction in depression.4 This last estimate considered the effects of physical activity only. It did not take into account the mental health benefits of urban greening, reduced community severance, reduced fatness, and less noise.

The project also considered the health effects of reducing livestock production to limit the cattle related methane emissions and deforestation that are contributing to global warming.⁵ A reduction in animal products in the diet would reduce consumption of saturated animal fats and result in a large (about 15%) fall in ischaemic heart disease. Reducing meat consumption might also reduce rates of cancer of the colon and rectum. Colorectal cancer is the second most common cancer in men after lung cancer and meat consumption is an established 7.

risk factor. Eating less saturated fat and taking more physical activity will reduce levels of population fatness. Consuming less animal products will also reduce food prices because cattle are fed on grain and high meat consumption forces up world grain prices. Feeding grain to animals is an inefficient use of food energy in a world where millions of people go hungry.⁶

A reduction in car use would also affect food prices. In April 2008, Evo Morales, president of the poor and increasingly hungry Bolivia, pleaded "la vida primero los autos segundos" (life first, cars second), exhorting the wealthy world to stop burning food in their cars. He was objecting to Western governments' policies on biofuels for transport. However, car use and food prices were linked long before the introduction of biofuels. Car use drives up food prices because oil is a key agricultural input. A reduction in car use is essential to prevent starvation.

Responding to climate change could be the most important challenge that health professionals face. The Climate and Health Council was established to enable health professionals around the world to take personal and collective action against the causes of climate change, and to insist that global health is central in climate change negotiations.⁷ It seeks to provide information on all aspects of health and climate change and suggests a range of actions that health professionals can take. We invite colleagues everywhere to join us in tackling this major public health scourge of the 21st century. By signing the Climate and Health Council pledge (www.climateandhealth.org/pledge), you will join the thousands of health professionals already committed to action.

References

- 1. Roberts I, Stott R. Doctors and climate change. BMJ 2010;341:c6357.
- 2. McMichael A, Woodruf R, Hales S. Climate change and human health: present and future risks. Lancet 2006;367:859-69.
- 3. Haines A, Wilkinson P, Tonne C, Roberts I. Aligning climate change and public health policies. Lancet 2009;374:2035-8.
- Woodcock J, Edwards P, Tonne C, Armstrong BG, Ashiru O, Banister D, et al. Public health benefits of strategies to reduce greenhouse-gas emissions: urban land transport. Lancet 2009;374:1930-43.
- Friel S, Dangour AD, Garnett T, Lock K, Chalabi Z, Roberts I, et al. Public health benefits of strategies to reduce greenhouse-gas emissions: food and agriculture. Lancet 2009;374:2016-25.
- 6. Roberts I. The economics of tackling climate change. BMJ 2008;336:165-6.
- 7. Climate and Health Council. www.climateandhealth.org/.