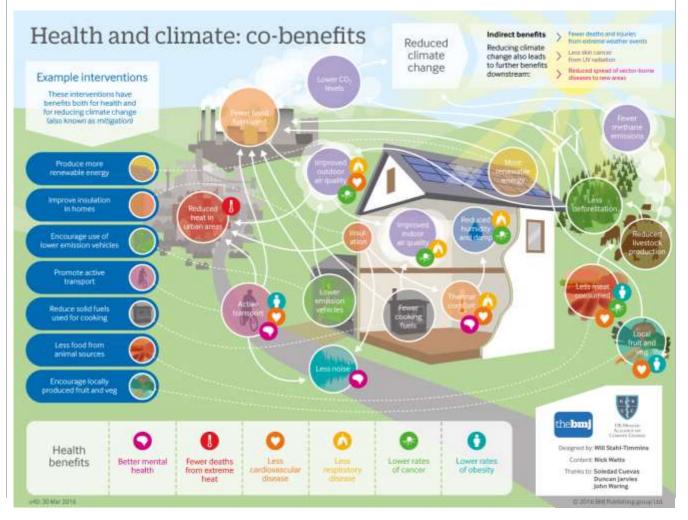
HEALTH BENEFITS OF ACTION ON CLIMATE CHANGE

Why does taking action on climate change have a beneficial impact on health?

"Putting in place public policies that prevent additional climate change presents unrivalled opportunities for improving public health." The economic and social policies that reduce greenhouse gases will also bring substantial health improvements such as reductions in inequalities in health, heart disease cancer, obesity, diabetes, road deaths and injuries and urban air pollution¹. Ian Roberts was referring to 3 major climate change and health-related issues;

- 1. Two important determinants of health human nutrition and movement
- 2. Contraction and convergence (a framework for reducing carbon emissions resulting in worldwide equitable per capita shares).
- 3. Population policy and the promotion of family planning

As explained in the Marmot Review "Creating a sustainable future is entirely compatible with action to reduce health inequalities"². We can prioritise policies and interventions that both reduce health inequalities and mitigate climate change by: improving across the social gradient; active travel; the availability of good quality green spaces; the food environment in local areas; and energy efficiency of housing. These interventions will all have a positive long term impact on health including obesity². The "Health and Climate: co-benefits" infographic³ below gives examples of interventions in the use of energy and the human nutrition and movement determinants, illustrating how our health can benefit whilst reducing our impact on climate change. These interventions can be applied in homes and within organisations.



Resource 5 : The Health Benefits of Action on Climate Change

Food: Our current food system contributes to pollution, a reduction in natural resources and to climate change and is a main behavioural driver behind mortality in the UK⁴. A transition to more nutritious and diverse diets (with fewer processed foods and more fruit and vegetables) is projected to result in reduced Greenhouse Gas emissions, as well as likely reductions in non-communicable diseases⁵ Changing dietary habits can prove difficult. However, interventions in schools, care homes and hospitals to offer sustainable food that is more healthy, can support change. The national Food for Life Catering Mark⁶ adopted by the NHS in the East Midlands, provided a comprehensive framework for improving the health and sustainability standards of food served to patients, staff and visitors7. See FPH SIG resource 7 on Sustainable Food Systems.

Population growth:

Acts as a multiplier of sustainability pressures, including climate change¹⁰. Family planning slows unsustainable population growth and allows people to attain their desired number of children and determine the spacing of pregnancies. Family planning also¹¹;

- prevents pregnancy-related health risks in women
- Reduces infant mortality
- Helps to prevent HIV/AIDS
- Empowers people and enhances education
- Reduces adolescent pregnancies

See also FPH SIG SD resource 8 on Population Stabilisation & FPH Maternal and Sexual and Reproductive Health Special Interest Groups.

Human Movement::

Walking, cycling and using public transport instead of driving cuts air pollution and greenhouse gases and increases physical activity. Physical activity is essential for good health and well-being because it can reduce the risk of coronary heart disease, stroke, cancer, obesity and type 2 diabetes, helps keep the musculoskeletal system healthy and promotes mental wellbeing8. Where car use is essential, electric vehicles can reduce the impact on air quality. For example, health and healthcare professionals trialled electric cars in one of the East Midlands NHS **Carbon Reduction Project** pilots, thereby reducing associated air pollution on their journeys to visit patients⁹. See also the forthcoming FPH SIG SD Human Movement resource for further details.

Energy: Reducing carbon emissions through insulating buildings and utilising renewable energy: The World Health organisation points out that "investments in home insulation have reduced health care costs of chronic respiratory disease in some settings, justifying investments made in large-scale housing improvement programmes. More such costbenefit evaluation would likely make the case for action even more compelling."12 The Nottinghamshire Healthy Housing Referral Service¹³ and the East Midlands NHS Carbon Reduction Project¹⁴ are examples of projects that reduced carbon emissions

Inequalities, Contraction & Convergence:

and unnecessary expenditure on

heating, while improving health.

As the health impacts of climate change are unevenly distributed, existing inequities will be exacerbated as warming increases, more at 2.0 °C than at 1.5 °C warming. Maintaining the temperature rise to 1.5 °C could therefore prevent some of the worst health effects of climate change and improve the effectiveness of adaptation ...^{*15}

Contraction and Convergence is a proposed global framework that aims to reduce overall emissions of greenhouse gases to a safe level that reduces the risk of runaway climate change (contraction), resulting in every country bringing its emissions <u>per capita</u> to a level which is equal for all countries (convergence). Emissions trading can take place within the context of this scientifically calculated equitable carbon budget.¹⁶

The East Midlands NHS Carbon Reduction Project

delivered minimum savings

of 2.556 tonnes of CO2e and

between £1.5 and £1.6 million whilst improving wellbeing through trialling more sustainable procurement, food, travel, energy efficiency and renewables in NHS Trusts and Care Homes⁹.

References

- 1. Griffiths J Rao M Adshead F & Thorpe A The Health Practitioners Guide to Climate Change Diagnosis & Cure 2009 Earthscan P89
- 2. Marmot M Marmot Review report 'Fair Society, Healthy Lives' 2010 <u>https://www.local.gov.uk/marmot-review-report-fair-society-healthy-lives Accessed 25/6/2019</u>
- 3 Stahl-Timmins W and Watts N UK Health Alliance on Climate Change Health and Climate: co-benefits infographic BMJ 2016;352:i1781doi : <u>https://doi.org/10.1136/bmj.i1781</u> (Published 30 March 2016) https://www.bmj.com/content/352/bmj.i1781/infographic accessed 23/7/2018
- 4 Faculty of Public Health SD SIG Sustainable Food Systems Resource K7 FPH website –2019 <u>https://www.fph.org.uk/policy-</u> campaigns/special-interest-groups/special-interest-groups-list/sustainable-development-special-interest-group/
- 5 United Nations System Standing Committee on Nutrition Sustainable Diets for Healthy People and a Healthy Planet p14 August 2017 <u>https://www.unscn.org/uploads/web/news/document/Climate-Nutrition-Paper-Nov2017-EN-WEB.pdf Accessed 27/6/2019</u>
- 6 <u>Soil Association Food for Life Catering Mark https://www.foodforlife.org.uk/catering/food-for-life-served-here</u> Accessed 25/6/19
- 7 East Midlands NHS Carbon Reduction Project <u>https://www.sduhealth.org.uk/delivery/engage/east-midlands-nhs-</u> <u>carbon-reduction-project.aspx</u> Accessed 25/6/19
- 8 Guidance Physical Activity Walking & Cycling Public health guideline [PH41] November 2012 https://www.nice.org.uk/guidance/ph41/chapter/2-Public-health-need-and-practice
- 9 East Midlands NHS Carbon Reduction Project <u>https://www.sduhealth.org.uk/delivery/engage/east-midlands-nhs-</u> <u>carbon-reduction-project.aspx</u> Accessed 25/6/19
- 10 Faculty of Public Health SD SIG Population Stabilisation Resource 2019 <u>https://www.fph.org.uk/policy-campaigns/special-interest-groups/special-interest-groups-list/sustainable-development-special-interest-group/</u>
- 11 World Health Organisation: Family planning/Contraception Key Facts <u>https://www.who.int/en/news-room/fact-sheets/detail/family-planning-contraception</u> Accessed 24/6/2019
- 12 World Health Organisation: Health co-benefits of climate change mitigation Housing sector green economy 2011 https://www.who.int/hia/hgehousing.pdf accessed 27/06/2018
- 13 Nottingham Energy Partnership Nottinghamshire Healthy Housing Referral Service <u>https://nottenergy.com/our-</u> services/healthy-housing/ Accessed 27/6/2019
- 14 The East Midlands NHS Sustainable Development Network *"Achieving a reduction in Carbon Equivalent Emissions in the NHS"* June 2015. <u>https://www.sduhealth.org.uk/delivery/engage/east-midlands-nhs-carbon-reduction-project.aspx</u>
- 15 World Health Organisation: COP24 Special Report Health & Climate Change Page 25 https://apps.who.int/iris/bitstream/handle/10665/276405/9789241514972-eng.pdf?ua=1 Accessed 27/6/19
- 16 Stott R Contraction and convergence: the best possible solution to the twin problems of climate change and inequity 2012 https://www.bmj.com/content/344/bmj.e1765.full.print Accessed 27/6/2019

Other useful references:

- 1. Met Office https://www.metoffice.gov.uk/climate-guide/climate-change accessed 15/7/ 2018
- Watts, N, Neil Adger, W, Agnolucci, P et al. Health and climate change: policy responses to protect public health. Lancet. 2015; 386: 1861–1914 <u>https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(17)32464-</u> 9/fulltext?elsca1=tlpr&code=lancet-site#back-bib2 accessed 22/7/2018
- 3. Climate Change Act 2008. United Kingdom.: The Stationery Office http://www.opsi.gov.uk/acts/acts2008/ukpga_20080027_en_1.htm accessed 22/7/2018
- 4. Head J & Atherton E A Healthy & Sustainable Food Future <u>https://www.medact.org/wp-content/uploads/2017/03/A-Healthy-Sustainable-Food-Future.pdf</u> accessed 24/6/2018
- Lukasz Aleksandrowicz, et al "Impacts of Dietary Change on Greenhouse Gas Emissions, Land Use, Water Use, and Health: A Systematic Review" <u>http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0165797</u> accessed 24/6/18
- 6. <u>Horgan GW¹</u>, <u>Perrin A²</u>, <u>Whybrow S³</u>, <u>Macdiarmid JI³</u> Achieving dietary recommendations and reducing greenhouse gas emissions: modelling diets to minimise the change from current intakes. https://www.ncbi.nlm.nih.gov/pubmed/27056829
- 7. World Health Organisation: Health Impact Assessment Determinants of health <u>https://www.who.int/hia/evidence/doh/en/</u> Accessed 24/6/2019

Professional Development Questions

- 1. Summarise the main health co-benefits of acting on carbon emissions
- 2. Describe a minimum of 3 interventions in domestic and organisational settings that benefit health and reduce carbon emissions.

FPH General CPD Questions

- 1. What did I learn from this activity or event?
- 2. How am I going to apply this learning in my work?

3. What am I going to do in future to further develop this learning and/or meet any gaps in my knowledge, skills or understanding?