

Green Living

The second leaflet in a series produced in September-November 2021 by the Green Living groups of Avenue St Andrew's United Reformed Church, Southampton, and its ecumenical partners, from material in *The Dorset Green Living Guide* and current versions of related websites
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Food

How the industrial food system contributes to the climate crisis

Between 44% and 57% of all greenhouse gas (GHG) emissions come from the global food system, said GRAIN (writing in 2014), a small international non-profit organisation, supporting small farmers and social movements in their struggles for community-controlled and biodiversity-based food systems.

Information and illustrations edited from <https://www.grain.org/e/5102>



Deforestation: 15-18%

The United Nations' Food & Agriculture organisation says expansion of agriculture accounts for 70-90% of global deforestation, at least half of that for the production of a few commodities for export.

Farming: 11-15%

Mostly from industrial inputs, such as chemical fertilisers and petrol for tractors and irrigation machinery, as well as excess manure generated by intensive livestock keeping.



Processing & packaging: 8-10%

Packaging and canning of foods, and processing into ready-made meals, snacks and beverages, require an enormous amount of energy, mostly carbon-based.

Transport: 5-6%

Food, grown under industrial conditions in faraway places, some processed or fed to animals in other countries, travels thousands of miles to reach our plates, accounting for a quarter of global GHG emissions linked to transportation.



Freezing & Retail: 2-4%

Refrigeration is the lynchpin of the modern supermarket and fast food chains' vast global procurement systems. Cooling is responsible for 15% of all electricity consumption world-wide, and leaks of chemical refrigerants are a major source of GHGs

Waste: 3-4%

The industrial food system discards up to half of all the food that it produces, thrown out on the long journeys, and by processors, retailers and restaurants. A lot of it rots on garbage heaps and landfills, producing GHGs



So what can you do about it?

- Reduce meat and dairy – consider reasons, and steps you might take – see page 2
- Minimise food waste – see www.lovefoodhatewaste.com
- Buy seasonal local foods – e.g. Google search 'Veg boxes Southampton'
- Choose organic – <https://www.soilassociation.org/take-action/organic-living/buy-organic/find-your-local-independent-retailer/>
- Reduce food packaging – buy loose or re-fill, or recycle packaging www.recyclenow.com
- Grow your own – ideas from www.rhs.org.uk, www.bbc.co.uk/gardening
- Urge government to prioritise local sustainable food production rather than global large-scale industrial food processing and transport

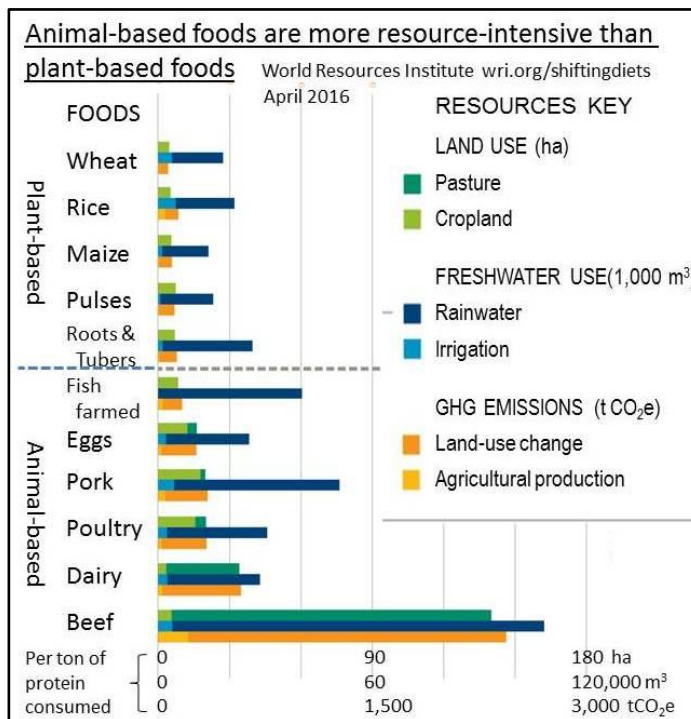
Reduce meat and dairy

The International Panel on Climate Change report in 2019 warned that meat and dairy production caused over 60% of the greenhouse gas emissions from farming and the food industry, and this far exceeds the amount from all forms of transport.

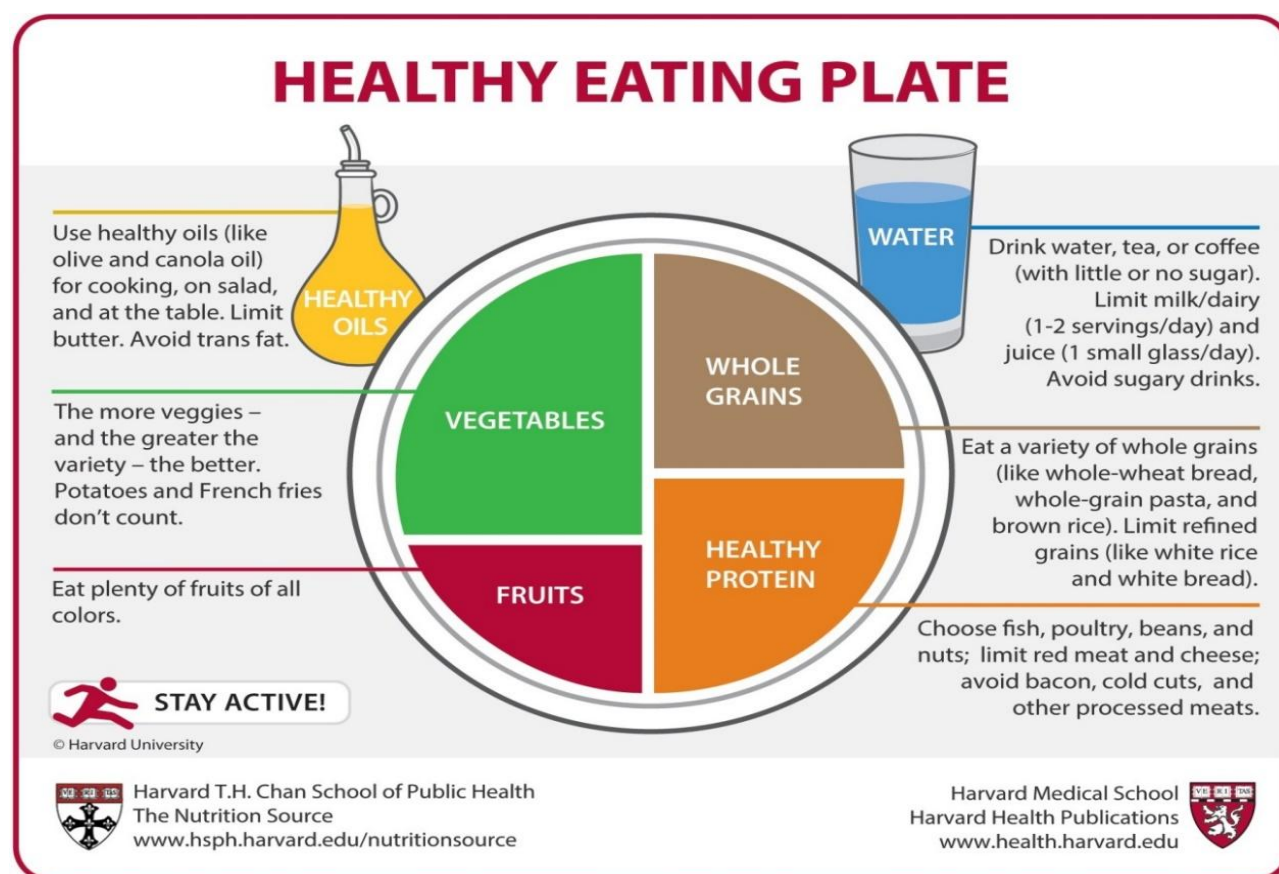
The World Resources Institute says, “beef production requires 20 times more land and emits 20 times more greenhouse gas ... per unit of edible protein than common plant-based protein sources.... Chicken and pork are more resource-efficient than beef, but still require 3 times more land and emit 3 times more greenhouse gas emissions than beans”.

Plant-based proteins such as pulses, nuts, seeds, beans, mushrooms etc. can provide a healthier option than animal-based proteins, and many are grown in the UK.

The World Health Organisation says that the Western diet (and increasingly the diet of the wealthier parts of the rest of the world) contains at least twice the amount of protein required. That leads to health problems such as obesity, cardiovascular disease, and Type 2 diabetes.



For updated and in depth information on how our diets are affecting the planet visit www.eatingourfuture.wordpress.com. Harvard Education Nutrition Source offers these guidelines:



However, recent work shows that 100% pasture-feeding is much healthier for the animals, the people who eat them, and the planet. For explanation see <https://knepp.co.uk/wild-range-meat> on Knepp Estate, Sussex, rewilding the farmland and using older breeds of cattle, pigs and deer.