



Glossary



Glossary of Key Terms and Ideas

Plant-based Diet

This is a term that can have a number of different meanings, depending upon who you ask. It can, but does not necessarily, refer to a vegetarian or vegan diet. However, it is generally agreed that this means basing your meals around protein-containing plant foods to replace traditional sources of protein such as meat, poultry and fish. A plant-based diet may contain meat, fish and dairy, but in smaller quantities and from more sustainable sources – essentially, it's about upping the balance of plant foods in the diet. The BDA tries to avoid using this term in isolation because its definition is unclear.

Red Meat

The most commonly consumed red meats are:

- Beef and Veal
- Lamb and Mutton
- Pork*
- Venison
- Goat

Red meat does not include:

- Poultry (Chicken, Duck, Turkey etc.)
- Game birds
- Rabbit
- Any fish or seafood

* From a sustainability aspect the term red meat refers to ruminant cattle and includes beef, lamb, mutton, goat, deer and veal. Pork is a non-ruminant and therefore technically not classified as red meat. However, the WCRF and UK government dietary recommendations include pork as well as ruminants within their red meat classification.

Processed Meat

Processed meat refers to any meat (red or otherwise) that has been preserved by smoking, curing, salting or adding preservatives, such as:

- Sausage
- Bacon
- Ham
- Deli or luncheon meats
- Pates
- Canned meat

It does not include meats that have undergone a simple mechanical process such as cutting, grinding or mincing.

Processed Food

There is not one clear definition of processed food. Processing can reference any kind change from its original form, such as cutting or mincing, or a particular type of preservation, such as canning or freezing. Some forms of processing can make very little difference to the nutritional content of a food, while others can fundamentally change the nutritional value, including by adding sugar, salt, fat or other additives. Some additives, such as vitamins and minerals, can have a positive impact (such as fortified flour used to produce bread).

Often, processing is described as a spectrum, with different levels of processing fitting into different categories. The NOVA classification from Monteiro and colleagues¹ provides four broad groupings, with the advice to prioritise less processed foods and to avoid "Ultra-processed" foods. This is only one possible means of defining processed foods and there are a number of alternatives. For much more on the issue of defining "Ultra-processed foods", including some criticisms of this model, read the FRCN's building block² on this topic.

Classification	Description	Examples	
Group 1 -	Unprocessed foods are edible parts of plants	Fresh, frozen, dried or squeezed fruit	
Unprocessed or	or of animals and also fungi, algae and water,	and vegetables; grains such as rice,	
Minimally processed	after separation from nature. Minimally	corn, wheat or oats; meat, fish, eggs,	
foods	processed foods are natural foods altered by	milk, plain yoghurt; nuts, legumes,	
	processes such as removal of inedible or	mushrooms; herbs and spices; tea,	
	unwanted parts, drying, crushing, filtering,	coffee, drinking water.	
	boiling, pasteurisation, refrigeration, freezing or		
	non-alcoholic fermentation.		
Group 2 - Processed	These are substances obtained directly from	Salt, refined sugar, vegetable or plant	
culinary ingredients	Group 1 foods or from nature by processes	oils, honey, maple syrup, butter, lard,	
	such as pressing, refining, grinding, milling,	vinegar.	
	and spray drying. Group 2 items are rarely		
	consumed in the absence of Group 1 foods.		
Group 3 -Processed	These are relatively simple products made by Canned or bottled vegetables, f		
Foods	adding sugar, oil, salt or other Group 2	and legumes. Salted, cured or smoked	
	substances to Group 1 foods. Most processed	meat, canned fish, cheeses and fresh	
	foods have two or three ingredients.	made bread.	
	Processes include various preservation or		
	cooking methods, and, in the case of breads		
	and cheese, non-alcoholic fermentation		
Group 4 - Ultra-	These are industrial formulations typically with	Carbonated drinks, confectionary, pre-	
processed food and	five or more and usually many ingredients.	more and usually many ingredients. packaged cakes, breads and biscuits,	
drink products	Such ingredients often include those also used	ice-cream, sausages etc. produced	
	in processed foods, such as sugar, oils, fats,	from "reconstituted" meat. Instant	
	salt, anti-oxidants, stabilisers, and	soups, slimming products etc.	
	preservatives		

The Committee on Climate Change

The Committee on Climate Change (the CCC) is an independent, statutory body established under the Climate Change Act 2008. Their purpose is to advise the UK Government and Devolved Administrations on emissions targets and report to Parliament on progress made in reducing greenhouse gas emissions and preparing for climate change. <u>https://www.theccc.org.uk/about/</u>

Entomophagy

This refers to the eating of insects for food, derived from the Greek *éntomon*, "insect", and *phagein*, "to eat". This can include eating insects in their whole form or processed as a protein source.

Marine Stewardship Council (MSC)

The MSC is an international non-profit organisation who's aim is to protect the oceans and seafood stocks. They do this through a labelling and fishery certification program that identifies fisheries that are well-managed and sustainable. <u>https://www.msc.org/home</u>

Marine Conservation Society (MCS)

The MCS is a charity who's aim is to drive political, cultural and social for healthy seas and coasts to support marine wildlife, sustainable livelihoods and enjoyment for all. They maintain the "Good Fish Guide" and also undertake education and campaigning activities. <u>https://www.mcsuk.org/</u>

Organic farming

Farming to produce food without the use of artificial or man-made fertilisers, pesticides and fungicides. Also involves other principles such as crop-rotation, rearing livestock free-range and ecological land management.

Pescatarian

A pescatarian chooses to abstain from eating all meat other than fish. They will generally eat other animal products such as dairy and eggs.

Vegetarian

A vegetarian won't eat any meat, including fish, but may eat some animal products such as dairy, eggs or honey. Some vegetarians will abstain from eating some or all these products.

Vegan

A vegan will not eat any animal products, including dairy, eggs or even honey (although this remains a subject of debate).

Flexitarian

Flexitarian is a relatively recent term that refers to someone who chooses to eat "flexibly", reducing their meat intake on some or even most days, but still consuming some animal products or meat on some occasions.

GHG emissions and our food system

GHGs refers to gases which, when released into the atmosphere trap heat and lead to global warming. Some are man-made such as burning fossil fuel whilst others occur naturally from animal and plant respiration.

Measuring GHG emissions

Carbon dioxide equivalent (CO2 eq) is the measure of the combined climate warming effect of different GHGs over a specific period of time (normally over a one hundred year period). This is also referred to as the global warming potential (GWP) or the carbon footprint (CFP).

Different GHGs have different potencies for climate warming^{3,4}

GHGs from our food system	Potency	Food system source
Carbon dioxide – CO2	Least potent but produced in abundance.	Majority from fossil fuel used for food production including machinery, production of fertilisers and pesticides, food processes and packaging, transportation, storage and waste disposal. Airfreight is one of the biggest CO ₂ emitters. Land use change – predominantly from deforestation used for grazing cattle and growing crops to produce animal feed.
Methane – CH4	34 time	Enteric fermentation*, manure, rice paddies and
	more	decomposing organic matter (waste) in landfill.
	potent than	
	CO ₂	
Nitrous Oxide – N2O	298 x more	Soil bacteria, legume production, manure,
	potent than	livestock urine, nitrogen fertilisers.
	CO ₂	
Refrigeration gases	1,000s	Refrigeration.
(Hydrofluorocarbons –	times more	
HFCs and	potent than	
Perfluorocarbons –	CO ₂ .	
PFCs)		

* Enteric fermentation refers to the digestive process of ruminant animals such as cows, sheep, goats, deer, giraffes and camels where bacterial fermentation in the stomach produces methane gas. Non-ruminant animals such as chickens, rabbits and pigs do not produce anywhere near as much methane directly, although it is still produced from their manure.

CO₂eq. values for food and drink can be expressed in various ways including per kg of food production, kg of protein production or recommended servings. Care should be taken when comparing different data sets as it will depend on the food units used as well as which stages of production have been incorporated into the calculations.

It is important to bear in mind, that although GHG emissions and CO₂eq are the common measures used to assess our environment impact, other factors such as land use change, water use, biodiversity loss and marine ecosystem destruction can have a bigger impact on sustainability.

Lifecycle assessment (LCA) is a more holistic measure incorporating the majority of environmental impact factors and not just GHG emissions and includes all stages of production from farming right through to consumer waste.⁵

⁴ FCRN Food Source. FCRN Food Source. Chapter 3: Food systems and greenhouse gas emissions [Internet]. 2015 [cited 8/27/2018]. Available from: <u>https://foodsource.org.uk/chapters</u>

¹ Monteiro CA, Cannon G, Moubarac JC, et al. 2015 Dietary guidelines to nourish humanity and the planet in the twenty-first century Pub Health Nutr 18(13):2311-22

² Fraanje, W. & Garnett, T. (2019). What is ultra-processed food? And why do people disagree about its utility as a concept? (Foodsource: building blocks). Food Climate Research Network, University of Oxford.

³ FCRN Food Source. FCRN Food Source. Chapter 8: the difficult livestock issue [Internet]. 2015 [cited 8/27/2018]. Available from: <u>https://foodsource.org.uk/chapters</u>

⁵ FCRN Food Source. FCRN Food Source. Chapter 2: Environmental impacts of food: an introduction to LCA [Internet]. 2015 [cited 8/27/2018]. Available from: <u>https://foodsource.org.uk/chapters</u>

bda.uk.com

Produced by the BDA with project partners in the science & nutrition team at Alpro.

Published November 2018 For review November 2021

