Risks and Concerns with Processed and Red Meat

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We are all made equally in the image of God, and God desires hope-filled lives for all of us. Our faith reminds us that to love God is also to love others and ourselves. Thus, when possible, Christians should seek measures that promote the flourishing and well-being of all people.

We live in an age where we have greater awareness that what we eat can impact our health, especially in the long term. We can choose what we eat and what food we provide for others in our families and communities.

The following sheet considers the latest research on health risks related to eating processed and red meat in our diets.

Links to Cancer

Free-lance journalist Lucie Morris-Marr developed bowel cancer at the age of 44, which led her on a journey to examine the causes of bowel cancer. She has recently published "Processed. How the processed meat industry is killing us with the food we love". She states that people who eat meat in Australia consume an average of 17 kg of processed meat annually. She points out that the 2019 report "The Global Burden of Disease Study" found that diets high in processed meat were responsible for 34,000 deaths that year. The main focus of her book is on the use of nitrite preservatives in processed meats. Preservative 250 on ingredient lists on packaging is sodium nitrite and preservative 251 is sodium nitrate. These preservatives prevent the growth of harmful fungi and bacteria and improve processed meats' flavour, colour and texture. They keep the processed meats pink rather than grey or brown. It is these preservatives in processed meats that play a significant role in increasing the risk of cancer. It is possible to buy processed meats without the sodium nitrite and sodium nitrate preservatives.

In 2015, the World Health Organisation (WHO) International Agency for Research on Cancer reviewed 800 studies and concluded that eating processed meats like hot dogs, sausages, and bacon can cause bowel cancer. Red meat consumption also increases the risk. Red meat consumption was also linked to increased risk of pancreatic and prostate cancer. The review found that each 50 g portion of processed meats eaten daily increases the risk of bowel cancer by 18%. A 50 g portion is one hot dog or two rashers of bacon.

In 2023, the WHO issued an information brief, "Red and processed meat in the context of health and the environment: many shades of red and green". The WHO stated that "red meat can be an important element of a healthy diet, particularly at specific life stages." However, excessive consumption of red meat and processed meat is associated with increased risks of cancer, cardiovascular disease and type 2 diabetes. Grilling, frying, deep frying and barbecuing red meats produce harmful compounds that increase the health risks. They recommended that adults consume red meat between 98 g and 500 g per week.

The WHO stated that phosphate additives used as stabilisers and emulsifiers in processed meat are present in 65% of all processed meats. Excess intake of phosphate causes tumour formation and accelerated ageing.

They advised that a 14% reduction in red and processed meat consumption in upper-middle-income countries, associated with an increase in plant-based food sources, might result in 65,000 fewer deaths associated with meat consumption.

The WHO also raised environmental concerns, stating:

> *Intensive animal farming is associated with increased risk of antimicrobial resistance (AMR), and many forms of livestock farming are associated with unsustainable*

environmental impacts, such as greenhouse gas (GHG) emissions, use of freshwater and land mass, and biodiversity loss.

The Australian Cancer Council has advised:[1]

Cut out processed meats altogether or keep them to an absolute minimum. Processed meats include bacon, ham, devon, frankfurts, chorizo, cabanossi and kransky.

Links to Dementia and Alzheimer's Disease

In January 2025, a study published in the journal *Neurology* found that regularly eating processed red meats such as bacon, sausages, and salami could increase your likelihood of developing dementia and cognitive decline as you age. The researchers linked the negative health impacts to sodium, saturated fats, nitrates and nitrites in processed meat. The study found that replacing one daily serving of processed red meat with plant proteins such as nuts and legumes was associated with a 19% lower risk of dementia. Replacing processed red meat with chicken or fish also lowered the risk of dementia. A previous study that tracked 500,000 adults in the UK over eight years found that eating around 30 g of processed meat or more daily was associated with increased the risk of dementia by 44% and was associated with increased the risk of developing Alzheimer's disease by 52%.

Climate Change Impacts

The WHO found that red meat and dairy milk production were responsible for 55% of global agricultural greenhouse gas emissions.

In September 2024, the Australian Climate Change Authority urged Australians to eat less beef and lamb to reduce greenhouse gas emissions from what they ate. The Authority stated that the average Australian was responsible for around 1.2 tonnes of greenhouse gas emissions due to what they ate annually.

Parts of the meat industry have used tactics to stifle action on greenhouse gas emissions for which they are responsible. The Changing Markets Foundation published a report, "The New Merchants of Doubt", in July 2024, investigating the most significant 22 global meat and dairy corporations. The investigation found that some corporations downplayed their climate change impact through misleading science on methane emissions. The corporations and their trade groups were able to derail ten environmental policies promised in the European Green Deal. Internal memos uncovered how the leading European dairy industry group celebrated keeping methane out of air quality legislation.

In Australia, the red meat industry bodies Cattle Australia and the Australian Meat Industry Council have publicly lobbied against the Australian dietary guidelines, providing advice on the environmental sustainability of different foods. Cattle Australia also lobbied the red meat industry to ditch its net zero greenhouse gas emission target in favour of a "climate neutral" goal requiring less methane emissions reduction. Meat and Livestock Australia had announced that the industry would seek to reach net zero emissions by 2030 in 2017. However, Meat and Livestock Australia has subsequently said that the target was "not necessarily something that needs to be met".

Meat and Livestock Australia released a report in May 2024 that stated that as of 2021, the red meat industry had reduced its net emissions by 78% compared with 2005 levels. The reductions were due to recorded increases in forest regrowth that have offset methane emissions from cattle and sheep. However, scientists have argued the calculation is based on the underreporting of land-clearing by the industry in Queensland and, therefore, is likely to overstate the level of emission reduction.

[1] https://www.cancercouncil.com.au/1in3cancers/lifestyle-choices-and-cancer/red-meat-processed-meat-and-cancer/