

## MEAT EATING AND THE PLANET

The issue of meat eating extends beyond greenhouse gasses, to include, but not limited to, deforestation, energy use, water use, erosion, pollution, human health issues and of course, the obvious fact that animals, (including birds and fish are sentient, therefore have feelings, rich emotional lives and diverse needs that are totally denied to them during their lives as so called 'food animals' before their pain and terror filled slaughter.

Both the burning of fossil fuels during food production and non-carbon dioxide emissions associated with livestock and animal waste contribute to the problem, the University of Chicago's Gidon Eshel and Pamela Martin wrote in their report accepted for publication in the journal Earth Interactions.

Livestock production and associated animal waste emit greenhouse gases not associated with fossil-fuel combustion, primarily methane and nitrous oxide.

An example would be large-scale pork production, which emits a lot of nitrous oxide into the atmosphere. While methane and nitrous oxide are relatively rare compared with carbon dioxide, they are far more powerful greenhouse gases than carbon dioxide. A single kg of methane, for example, has the same greenhouse effect as approximately 50kgs of carbon dioxide.

In their study, Eshel and Martin compared the energy consumption and greenhouse-gas emissions that underlie five diets: average American, red meat, fish, poultry and vegetarian (including eggs and dairy), all equaling 3,774 calories per day.

The vegetarian diet turned out to be the most energy-efficient, followed by poultry and the average American diet. Fish and red meat virtually tied as the least efficient.

Martin and Eshel's research has concluded that a plant-based diet is more beneficial both for people and the planet.

*"The adverse effects of dietary animal fat intake on cardiovascular diseases is by now well established. Similar effects are also seen when meat, rather than fat, intake is considered," Martin and Eshel wrote. "To our knowledge, there is currently no credible evidence that plant-based diets actually undermine health; the balance of available evidence suggests that plant-based diets are at the very least just as safe as mixed ones, and most likely safer."*

Annually, an estimated 50 billion liters of water goes down the drain in order to sustain current levels of meat consumption in SA. This is double the yearly amount of drinking water for the total South African population!

Government policy is to supply poor households with 6 000 liters of free water per month. If we were to save just 15% of total water used to convert animals into meat at the abattoir, then 104 000 households could be provided with all their water needs for one year. Water information used with kind permission of Humane Education Trust / Compassion in World Farming SA.

South Africa's demand for water will exceed possible supply by 2025.

In order to clearly illustrate the difference, a day during which no flesh of any description is consumed, will indirectly use 136.08 liters, compared to a meat day, which will indirectly use 18 184.38 liters.

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Current annual slaughter figures and the amount of water required to convert these so called 'food animals' into carcasses, are shown in the table below.

The water figures do not include the water used to grow the crops to feed these animals, nor the water required by them to grow to slaughter weight.

Animal	Number p.a.	Water for slaughter <i>per animal</i>	Total water (litres)
Chickens	761 million	14 litres	10.6 billion
Pigs	2.1 million	3000 litres*	6.3 billion
Cattle	2.2 million	9000 litres	19.8 billion
Sheep	5.5 million	2500 litres*	13.7 billion
Totals	770 million		50 billion

*Figures supplied by SA Poultry Association, SA Pork Producer's Organisation, Red Meat Levy Association.  
\* Compassion in World Farming estimates.*

This is clearly not a benefit to the planet or for the people.

A plant based diet frees up grains and other foods that can be used to feed the world's hungry. The global spike in grain prices over the past year is in large part due to the impact on grain supplies of the growing demand for meat. Animals are extremely inefficient "protein converters" it can take up to 10 kg of grain to make 1 kg of beef.

A plant based diet preserves our topsoil, water, and other food production resources vital to the survival of our children and their children.

Furthermore eliminating the meat habit protects our forests, grasslands, and other wildlife habitats from encroachment, while reducing the polluting effects of methane, soil particles, manure, and pesticides on our air and water.

Soy is the fourth agricultural crop of the world after rice, wheat and maize. The main product is soy meal, rich in protein and therefore much sought-after as animal food. The growing demand for meat therefore drives the production of soy.

The majority of soy is grown to feed cattle and not people, resulting in the decimation of forests. The perception that tofu eaters are the cause of more carbon dioxide emissions is both inaccurate and insulting, as much of the world's grain production, including soy, is fed to animals rather than to humans, and the Brazilian soy is used as animal fodder. The FAO estimates that about 20% of the planet's pastureland has been degraded by grazing animals, and increased demand for meat means increased demand for animal feed. It is

even worse, as millions of South American children are underfed while Brazil is one of the largest exporters of animal fodder in the world!

The contention that free ranging, pasture fed cows will solve the planets problems is ridiculous, especially with the alarmingly increasing demand for flesh foods by the rising middle classes and overall average increased consumption of meat products, which was once for 'special occasions' and now is a daily requirement at practically every meal.

The animals currently use nearly one-third of the earth's entire landmass. In Latin America alone the FAO estimates that roughly 70% of the forests have been converted for grazing resulting in the heating of the planet, because trees absorb CO<sup>2</sup> while they're alive and when they're burned or cut down, the greenhouse gas is released back into the atmosphere.

How this can possibly benefit the planet and its people as whole, with the exception of those who farm animals, is anyone's guess.

We, as a species, need to take individual responsibility for how our behaviour and choices affect the planet. To try and find reasons to continue living as we do, without thought or care of the consequences instead of acting upon we can each do right now, is selfish in the extreme and extremely shortsighted.

Is the future of the planet and her inhabitants, including your offspring, really worth that hamburger or steak that you seem so desperately determined to have, especially when there are so many food choices around?