

Reduce meat consumption to curb Climate change

Global Warming is a serious and urgent issue that threatens the very survival of mankind.

In 2018, United Nations IPCC released a report "Global Warming of 1.5 Deg". The Report states that the World should limit Global Warming to 1.5 Deg (rather than 2 Deg) to avoid disastrous changes to the Climate.

The world has already warmed by 1 Degree. To keep the warming within the limit of 1.5 Deg, the World would have to cut Green House Gas by 45% by 2030 to achieve that. (We have 10 years to reduce GHG by Half.)

The report states: "Limiting Global Warming to 1.5 Deg C would require rapid, far-reaching and unprecedented changes in all aspects of society." The World would need to cut green house gas from all sectors. The World would need to change to renewable energy, improve energy efficiency, convert pasture lands to Forest, and change towards a less resource-intensive diets. (more plant-based diets)

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Livestock industry (Animal farming) is an industry that is contributing to a huge variety of Environmental problems. It is a major emitter of Green House Gas, a major driver of Deforestation, pollution, environmental degradation and consumes vast amount of the World's Food and water resources.

Livestock industry (Animal farming):

- Produces 15 % of Global Green House Gas
(More than all the air planes, trucks, cars combined)
- Uses 80% of the world's Agriculture Land.
- Consumes more than Half of the world's Food crops.
- Uses majority of the water used in Agriculture
(70% of the world's water resources are used for Agriculture Sector.)

Producing Meat emits a lot of GHG.

e.g. Producing 1 kg of Veggies only emit 2 kg of GHG, while producing 1kg of meat emits 6 kg to 40 kg of GHG.

Producing meat consumes a lot of Food resources.

It takes 2 to 3 kg of crops to convert to 1kg of chicken and 8 kg of crops to convert to 1 kg of Beef.

Producing Meat also consumes vast amount of water resources.

It takes 200 lts of water to produce 1 kg of Tomatos,
2500 lts of water to produce 1 kg of Rice.

But it takes

4000 lts of water to produce 1 kg of chicken
& 15.400 lts of water to produce 1 kg of Beef.

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To reduce Green House Gas, we can encourage the Singapore population to reduce meat consumption by Half.

The Global ave meat consumption rate is about 40 kg / person / year.
However, we in Singapore are consuming about 80 kg of meat / person / year.
[That's double the Global Average]

We can encourage our population to follow the “My Healthy Plate” Diet promoted by Health Promotion Board. [The “My Healthy Plate” is also a planet-friendly diet.]

Health Promotion Board: My Healthy Plate :
<https://www.healthhub.sg/programmes/55/my-healthy-plate>

The “My Healthy Plate” Diet encourages our citizen to eat 1 portion of meat per meal. However, many people in Singapore are eating 2 portions of meat for Lunch and Dinner. If we can encourage the people to eat only 1 portion of meat (and 2 portions of veggie/ fruits) for lunch and dinner, that will reduce the people’s meat consumption by Half. It is better for the planet and better for the people’s health.

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We can also encourage the people to support Meatless Days, go Meatless 1-day-a-week. (e.g. Meatless Mondays/ Veggie Mondays)

If a person supports Meatless Monday for 1 year (52 Veggie Days), he can save 223 kg of Green House Gas (GHG).

If a person goes meatless for 1 year, he will save 1500 kg of GHG.

What is even better, if a person goes Meatless just for 1 day, he will save 1600 lts of water that day (equivalent to 10 days of water he can use at home.)
Thus, if he goes 1 month Meatless, he will save 10 months of water he can use at home.

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Reducing meat consumption / meat production globally is an essential step to reduce Global Warming and protect the planet’s resources.

“A Substantial reduction of impacts would only be possible with a substantial worldwide diet change, away from animal products. ”

- UNEP 2010 report “Assessing the Environmental Impacts of Consumption and Production”

Global adoption of a diet that follows global guidelines :
56% reduction in beef, mutton, pork consumption with a
25% increase in consumption of Fruits & Veggies
could cut food-related GHG emissions by **29%**,
save the world **\$700 billion/ yr** on healthcare costs &
save **\$230 billion** due to reduced GHG.

- USA 2016 PNRS Report

Huge reduction in meat-eating ‘essential’ to avoid climate breakdown: (Oct 2018)

<https://www.theguardian.com/environment/2018/oct/10/huge-reduction-in-meat-eating-essential-to-avoid-climate-breakdown>

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Reducing meat consumption by Half, going Meatless 1-day-a-week, support Meatless Mondays are effective ways to reduce GHG and conserve the Food and water resources on the planet.

It is a relatively easy step that everyone can take to reduce their individual carbon footprint to protect the environment.

If many people in Singapore can take this step, we will achieve a substantial carbon saving/ water saving.

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Reference :

1. UN IPCC Special Report on Global Warming of 1.5°C (Summary for Policymakers):

<https://www.ipcc.ch/sr15/chapter/spm/>

2. UK Oxford University 2014 Report “Dietary greenhouse gas emissions of meat-eaters, fish-eaters, vegetarians and vegans in the UK”

<https://link.springer.com/article/10.1007%2Fs10584-014-1169-1>

Extract:

GHG emissions in kilograms of carbon dioxide equivalents per day (kgCO₂e/day) were 7.19 (7.16, 7.22) for high meat-eaters (≥ 100 g/d), 5.63 (5.61, 5.65) for medium meat-eaters (50-99 g/d), 4.67 (4.65, 4.70) for low meat-eaters (< 50 g/d), 3.91 (3.88, 3.94) for fish-eaters, 3.81 (3.79, 3.83) for vegetarians and 2.89 (2.83, 2.94) for vegans.

Assuming that the average daily energy intake in the UK is 2,000 kcal, moving from a high meat diet to a low meat diet would reduce an individual’s carbon footprint by 920kgCO₂e every year, moving from a high meat diet to a vegetarian diet would reduce the carbon footprint by 1,230kgCO₂e/year, and moving from a high meat diet to a vegan diet would reduce the carbon footprint by 1,560kgCO₂e/year.

3. University of Twente, Enschede, The Netherlands 2013 Report
"Water Footprint of EU for different diets"

https://waterfootprint.org/media/downloads/Vanham-et-al-2013_2.pdf

Extract:

EU reference diet (omnivore diet) uses 4265 lts of water per day while a vegetarian diet uses 2655 lts of water per day.

Thus, going Meatless /Veggie 1 day saves: $4265 - 2655 = 1610$ lts of water.

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