**What is the effect of consuming dairy products and beef on the climate?**

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CO2 is absorbed by plants, like grass, by a process called photosynthesis. The C is used by the plant and thus ‘stored’ in the plant. In this way plants reduce the amount of CO2 in the air. Cows eat grass and ingest the C that is stored in the plant. CO2 is exhaled, and the C ‘recycled’ back into the air. This is called ‘the short cycle’ (hours-weeks) as opposed to ‘the long cycle’ (millions of years) of the fossil fuels. The C in the feed is not only converted into CO2, however, but also in CH4, a far more potent GHG, which is also exhaled and thus released in the atmosphere. Recent reports (IPCC AR6, 2022) mention that the lifetime of CH4 has been overestimated by a factor 3-4 in previous reports and calculations. Furthermore, CH4 emissions can be substantially (30-40%) reduced with pasture management (Carmona Flores et al. 2020), or feed additives (Kebreab et al. 2022). Reducing the number of animals is not the way to achieve this. And how do we produce food for the people in the world? The amount of arable land is limited and a large part is only good to grow grass. If we would not have these lands grazed by ruminants, they would produce nothing edible for humans. Cows are thus very helpful in feeding the world population. Furthermore, if the grass is not eaten by animals it will be not eaten at all and thus die and rot. It is than converted into CO2 and CH4 as well and thus there will be no benefit for the climate. So the consumption of dairy products and meat from grass-fed cattle is not detrimental for the climate at all.

References:  
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