

**Carbon savings table for the reduction of meat consumption, calculated with respect to the Dutch situation by the Institute for Environmental Studies, Free University Amsterdam**

	<b>CO<sub>2</sub> in Megaton</b>	<b>If we <u>all</u> ate no meat for x day(s) a week</b>
	<b>Per annum</b>	
<b>1 day</b>	3,2	Eating no meat for one day would lead to the same carbon savings as taking 1 million cars off the road for a year (see calculation below) It would save twice as many greenhouse gas emissions as replacing all light bulbs with energy saving bulbs (2x 1,66 megaton) The present cabinet's goal of reducing domestic emissions (3 megaton CO <sup>2</sup> in 2010) could be reached in one fell swoop. We could save many more greenhouse gasses than if we all replaced cars with a C/D energy label with ones with a B energy label B (2,8 megaton) We could reduce just as many greenhouse gas emissions as if we double glazed an entire house (1,5 megaton) and replaced all light bulbs with energy saving ones (1,66 megaton)
<b>2 days</b>	6,4	By cutting out meat for two days a week we could save just as many greenhouse gasses as using an energy efficient refrigerator and freezer (1,8 megaton), energy efficient washing machine (0,18 megaton) and tumble dryer (0,18 megaton), an energy efficient dishwasher (0,615 megaton), plus an energy efficient central heating boiler (0,625 megaton), double glazing the whole house (1,5 megaton) and insulating the exterior walls (1,34 megaton).
<b>3 days</b>	9,6	Three days without meat could save just as much as taking 3 million cars off the road for a year
<b>4 days</b>	12,8	Eating no meat for four days a week could saves just as much (CO <sup>2</sup> emissions) as all CO <sup>2</sup> emissions from domestic energy use in the Netherlands (13 megaton)
<b>5 days</b>	16	Five days without meat would make the equivalent savings to 32 million return flights Amsterdam-Nice (500 kg CO <sup>2</sup> per return flight)
<b>6 days</b>	19,2	Cutting out meat for six days a week would save just as many emissions as taking 6 million cars off the road for a year It could also saves more CO <sup>2</sup> emissions than are created by all the kilometres driven in the Netherlands (18 megaton)
<b>7 days</b>	22,4	Eating a vegetarian diet for seven days a week would save more (on CO <sup>2</sup> emissions) than the CO <sup>2</sup> emissions caused by domestic use of gas by all Dutch households, for warming homes, warm water for baths/showers and cooking (20 megatons)

<http://www.milieucentraal.nl/pagina?onderwerp=Trends%20energiebesparing>

**Assumptions car savings**

- 1 megaton = 1 billion kilos
- 16 million Dutch people (according to Wikipedia there were 16,3 million people living in the Netherlands in 2007)

- A car drives on average 20.000 km per annum per annum (according to Central Bureau for Statistics, in 2005 cars drove an average of 15.500 km per annum)
- Emissions from cars = 160 gram CO<sup>2</sup> per km
- The average Dutchman eats meat each day. By not doing so, he could save the equivalent of 1400 kg CO<sup>2</sup>
- Estimated for all Dutch people that is 22,4 megaton (16 million x 1400 kg)
- If we all ate less meat for one day a week, then it would save: 3,2 megaton CO<sup>2</sup> equivalent (22,4 divided by 7 days)
- That is equivalent to 20 billion car kilometres ((3,2 billion kg x 1000 (gram)) /160 (a car emits an average 160 gram CO<sup>2</sup> per km))
- That is equivalent to the emissions of 1 million cars: 20 billion km divided by 20.000 km

#### Assumptions energy saving light bulbs

- Replacement of all light bulbs with energy saving bulbs leads to a saving of 1,66 megaton. That is half of the saving produced by eating no meat for a day (i.e. 3,2 megaton). Source: <http://www.milieucentraal.nl/pagina?onderwerp=Trends%20energiebesparing>
- An energy saving light bulb of 60 watts uses 387 kg CO<sup>2</sup> during its life (source: [www.doordachtlicht.nl](http://www.doordachtlicht.nl)). An energy saving light bulb of 60 watts uses 71 kg CO<sup>2</sup>. An energy saving bulb is thus 316 kg CO<sup>2</sup> more efficient (emits 82% less CO<sup>2</sup>).

#### Assumptions plane tickets

- A return Amsterdam-Nice costs 500 kg (consumentengids, July/August 2007); in 5 days we could save just as much CO<sup>2</sup> per Dutchman as would be created by 2 return trips from Amsterdam to Nice. In total, thus, 32 million return plane tickets Amsterdam-Nice

Number of days less meat	Savings			
	CO2 in Megaton	Number of cars Per annum	Number of light bulbs (per annum)	Number of light bulbs (per lifespan)
1 day	3,2	1 million	16,6 million	8,3 million
2 days	6,4	2 million	33,2 million	16,6 million
3 days	9,6	3 million	49,8 million	24,9 million
4 days	12,8	4 million	Etc.	etc
5 days	16	5 million		
6 days	19,2	6 million		
7 days	22,4	7 million		