



The Dangers of Dairy

By Lauren Tabacchini

It snowed in Texas, yes Texas. Why? Global warming. Why global warming? Because of the immense amount of greenhouse gasses produced that pollute the environment.

Milk is a major contributing factor for greenhouse gasses and therefore global warming. The purpose of this article is to inform the audience about different types of milk and their different environmental effects. We will now examine different types of milk and environmental factors that go into the process of producing milk: such as carbon emissions, water and land use.

When it comes to milk products and their detrimental effects to the environment, there are three factors to consider. The first is the amount of greenhouse gasses produced, followed by the amount of water and land used. In fact a 2018 study by researchers at the University of Oxford estimated that dairy has around three times more greenhouse gas emissions than plant based milks. This is due to the reason that in most milk making procedures, carbon emissions will be produced regardless. But what many do not know is that although carbon emissions are a major liability in the regards to greenhouse gasses in the environment, cow milk, unlike any other type of milk, produces methane as well, which is actually worse than carbon dioxide for the environment. In an article written by Beth Daily it was said that, "Dairy has the biggest environmental footprint, by far". Which means cows milk sits in first place of highest carbon emissions and greenhouse gas emissions out of all milk types. In a study comparing all milk

types, Daniella Haake, was able to make a chart comparing carbon emissions, land use and water use of all milk types. Carbon emissions are measured in kilograms of carbon dioxide per litre of milk and with cow made milks it is a whopping 3.2. In regards to water cows use 632 gallons and about 9 square meters of land. As you'll see, more resources than any other type of milk.

Moving on to plant based milks, almond milk is extremely popular among the nut milk community. It is sweeter than cow milk but produces less detrimental effects to the environment. When it comes to carbon emissions for almond milk compared to carbon emissions for cows milk, almond milk produces 0.7 kilograms of carbon emissions, 2.5 less than cows. The pattern is similar in regards to water used in the almond milk making process with almond milk using 371 gallons, a little over half the water used by cows for the same quantity of milk. Where the comparison is extremely drastic is in land use. Almond milk uses .5 square meters of land, that means cows use 18 times more land in production of milk quantity than that of almonds.

Soy milk has been deemed the best milk for the environment, and is also deemed the most similar to cow milk in regards to taste and texture. In regards to carbon emissions, soy milk produces 1.0, less than cow milk by 2.2, however more than almond milk by 0.3. The amount of water used in the process is the least amount of water out of all milk types. Soy milk uses only 28 liters of water, roughly 22 times less water than cow milk and 13.25 times less water than almond milk. The land use is also similar to that of almond milk with soy plants only taking up .7 meters squared of land. With this being said, although soy milk uses a bit more land and produces a bit more greenhouse gases, the water amount used makes it the most environmentally friendly milk option.

Ignorance is bliss, the way for change is to destroy ignorance. The next time you go to the store and grab a gallon of cow milk, look around at the other plant based options and think about the environmental effects.

sources:

<https://theconversation.com/which-milk-is-best-for-the-environment-we-compared-dairy-nut-soy-hemp-and-grain-milks-147660>.

<https://blog.datawrapper.de/cow-milk-and-vegan-milk-alternatives/>.

<https://science.sciencemag.org/>.