MENSTRVAL CUP WICHS LIFE CYCLE ASSESSMENTS

1 year of

menstru

ation

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This life cycle assessment compares various tampons, pads and the reusable menstrual cup, looking at the entire life cycle of each product!

## WHAT DID WE CHECK OUT?

We wanted to know how environmentally sustainable the menstrual cup is compared to disposable products. So we fired up our life cycle assessment machine and pressed a few buttons! The comparison is based on one year of menstruation and includes the following products:

- Menstrual cup
- Conventional tampons and pads (with high plastic content)
- Tampons and pads made from organic cotton

The entire life cycle of each product was examined, starting from the extraction of the raw materials, to the manufacturing, transportation and retailing of the product, down to its use and recycling at the end of the product's life.

The next step was to analyze the environmental impacts in 16 different categories (e.g., climate change, water scarcity, resource consumption, land use).

## UNKNOWNS:

Previous studies have paid little attention to the use of period products even though it's pretty important for reusable products, like the menstrual cup. In addition to analyzing different cleaning methods, other factors were investigated, like uncertainties around a product's lifespan, wearing time, where its materials came from and more, making the results of this LCA especially solid.

*If you find this super-freaky-nerdy exciting, check out our sensitivity analysis in chapter 6.2 of the <u>study</u>!* 

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And of course this is just a short summary, you can find the complete LCA <u>here</u>.

A life cycle assessment is a standardized, scientific method for measuring the potential environmental impact of a product. Based on a method of the European Commission, our LCA not only calculated the CO2 footprint of the products, but it also took a total of 16 environmental impact categories into account (e.g., climate change, water scarcity, resource consumption, land use, and more).

In almost all environmental categories, the reusable menstrual cup proved to be more environmentally sustainable than the disposable products in the study.

HE OVTCOME:

Because of its long, reusable life, over 95% of the menstrual cup's ecological footprint is created during its use phase, mainly through cleaning. By comparison, manufacturing the cup (e.g., the energy consumed during production) and other life phases have only a minor impact.

In direct comparison with conventional pads and tampons, the menstrual cup can save up to 79% of the CO2 footprint. Here, and in many other environmental categories, it's clear that reusable products, like the menstrual cup, have great potential!



\*= CO<sup>2</sup> and equivalents (i.e., all greenhouse gases) Attention please: Whichever products you choose always depends on your own personal needs during your period! The outcome of the study will hopefully help inform your decisions.

> Tampons and conventional pads score in the middle, sometimes performing better or worse depending on the environmental category

Decisive for disposable products is the raw material and how much is used. That's why the organic cotton tampon performs slightly better than the conventional tampon. And although the conventional pad uses more material for its production than both kinds of tampons, it averages in the middle along with them because it leaves behind a smaller footprint in the use phase of its life cycle.

## Organic cotton pad scores the worst in many environmental categories

Organic cotton pads score poorly not because of the organic cotton itself but because of the comparatively high amount of material needed to produce the organic cotton pad. (In 10 out of 16 environmental categories, organic cotton itself performs better than the same amount of material in a conventional sanitary napkin.) The conventional pad needs less material because it uses superabsorbent material, making it lighter. (The superabsorbent material is made of plastics that can absorb a lot of liquid.)



The LCA was funded by einhorn and other partners of disposable and reusable period products and developed by GreenDelta (www.greendelta.com). Three independent experts put the study through rigorous trials and found it to meet the international standard for life cycle assessments (ISO14040/44).