

Introducing Sustainable Washing Practices to Campus to Reduce the Environmental Impact of Laundry

Summer Beaudoin, Health Sciences, Public Health, Specialization in Population Health, Central Washington University

Introduction

Microplastics are an ever-growing issue in the local and global environment. It has been found that a lot of these microplastics are actually microfibers, which stem from the runoff water from laundry machines. Every time a material is washed, it sheds microfibers.

Depending on the washing cycle selections, such as water temperature, water level, and soil-level, a material could shed more or less microfibers. There is also the issue of the amount of water and energy used by washers and dryers.

The Problem

- Laundry uses 19 billion cubic meters of water and releases 62 million tons of CO2 annually
- Synthetic (manmade) materials shed microfibers, a category of microplastics, into the water every time they are washed
- Microfibers lead to health issues in aquatic animals and humans, including endocrine disruption, certain cancers, and some neurological disorders



Figure 1.1. Washing Machine in Wahle Complex Laundry Room



Figure 1.2. Close up of Washing Machine Cycle Options

References

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Education

- This project is education-based, with the aim to educate students about sustainable laundry practices
- I participated in the Earth Day tabling event hosted by CWU Sustainability. At this event I was able to educate students about sustainable laundry verbally and had flyers (Figure 2) on the table with tips on how to do laundry more sustainably. I also held a raffle to give away four Guppy Friend washing bags (Figure 3).
- I was able to provide information to CWU Sustainability to develop a page within their website that has information on sustainable laundry practices and how to wash clothes properly
- I designed posters with sustainable laundry information and posted them in the 26 on campus laundry rooms. These posters include information on water temperature, ECO mode cycles, and a QR code that leads to a sustainable laundry section of the CWU Sustainability website with more information

Figure 2. Earth Day Table Flyers

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Guppy Friend Washing Bag

- Non-Shedding polyester washing bag
- Helps capture microfibers that are released during the washing cycle to prevent microfiber pollution
 - Protects the surface of your clothes



Figure 3. Guppy Friend Washing Bag
<https://guppyfriend.us/products/guppyfriend-washing-bag?variant=15269244272738>

Recommendations

- Continuing education for students: Work with RA's to create a sustainability night where on-campus freshman can learn about sustainable laundry practices
- Provide Guppy Friend washing bags or other microfiber capturing products in stores on campus.
- Provide sustainable laundry products in stores on campus.
- Provide students with sustainable laundry products in laundry rooms

UN Sustainable Development Goals

