Fast fashion: A toxic trend

We've all likely heard the term "fast fashion"; but have we truly asked ourselves: what makes it so popular and why can't we seem to stop purchasing it? Perhaps it's the vibrant colours and patterns of the clothing, it's cheap pricing and fast shipping that makes it so irresistible for many. But what effects can all this have, not just for the environment, but ourselves? This article shines a light on the hidden, often toxic side of fast fashion.

What is fast fashion?

»Fast fashion« refers to the business model of mass-producing replicas of the latest clothing trends and designs at a low cost and selling them rapidly in stores while the demand is at its highest."¹

How does it impact the environment?

One of the defining features of fast fashion is its quick production, so it shouldn't come as a surprise, that the production of such clothing can be quite costly for the environment's well-being. The fashion industry is the second largest water consumer (second only to agriculture) and also one of the main global industries responsible for water pollution. "It takes about 700 gallons of water to produce one cotton t-shirt, while a pair of jeans requires almost 2.000 gallons."

Besides the massive amounts of water being used in production, the dyes and chemicals used aren't any less of an innocent matter, as almost 20% of wastewater worldwide is from textile dyes. Pictures of rivers in unnatural shades of blue, purple and red are often seen, and they're not just a well edited hoax, but a reality for many clothing factories. The polluted water can quickly infiltrate bigger bodies of water and may later be used for watering crops, therefore contaminating plants that may be used for food production. It also negatively effects dwindling amounts of safe drinking water. Fast fashion usually isn't worn for long due to its poor quality or quick replacement rate, meaning extremely high quantities of discarded clothing items end up in landfills. Plastic materials are extremely common in the production of these garments, meaning they contribute heavily to the percentage of microplastic found in ecosystems. But plastic isn't the most concerning out of all the materials used: there's also "PFAs, phthalates, lead, formaldehyde and about 8.000 other chemicals."



Image 1: Textile dyes, source: Canva

How does it affect you?

When you buy a new item of clothing, usually one of the first things you do is throw it into the washing machine. But sadly, this doesn't get rid of all the harmful substances that such clothes might contain. In general, wearing these clothes for a certain period of time can cause irritation, respiratory, developmental, and reproductive problems and certain cancers.³ The issues and complications depend on the type of clothing worn and also the materials/chemicals in their production.

List of the most commonly used chemicals:

- PFAs (also commonly known as: forever chemicals)
 Perfluoroalkyl and polyfluoroalkyl substances or PFAs are often used to coat clothing that needs to resist water, oil, heat and/or stains. They do not break down naturally and also accumulate in the body over time, thus the name forever chemicals. They have been linked to cancer.
- Flame retardants
 - They are a variety of chemicals added to clothing to prevent them from catching fire. They are often found in children's clothing and firefighter uniforms. They are known to build up in the blood stream, causing chronic issues. Firefighters, who have the most exposure suffer issues such as infertility, neurotoxicity and cancer.
- Phthalates
 - They are a plasticizer, commonly used in activewear and anti-odour clothing. They are used in printing ink, which is used to print images/designs onto our clothing. They are known to be cancerous and can cause hormonal disruption.³



Image 2: Pollution at every step, what we see (left), what we don't see (right). Designed by Evelin Drnovšek using Canva graphic images.

How can we fix this?

Although we can't avoid the harmful substances completely, we can try our best to minimize contact with them. The solution isn't to completely avoid fashion, but to minimize it to a point where it doesn't affect us or the environment. Possibilities include slow or sustainable fashion, meaning the clothes should be of long-lasting materials. The clothes we wear can also be bought second hand or repaired instead of thrown away. We should get informed, check tags on clothing and avoid garments where substances that could cause harm are present.

When it comes to purchasing second hand clothing, there are many companies and small businesses that offer such services. I contacted a small local business called KNOF (button in Slovene) to find out how they deal with textile waste:

1. How much of the clothing you receive is almost new or has not been worn often?

Answer: 5%

2. How many pieces of clothing are from fast fashion stores?

Answer: 70%-80% - more every year

3. How do you repurpose such clothes for resale?

Answer: We prepare better quality clothes from fast fashion companies for resale in our second-hand store. These are clothes that are always "trendy", have classic cuts, timeless designs, or are made of quality materials - silk, viscose, cotton, linen. They sell immediately. Unfortunately, these materials are becoming less and less common.

The remaining clothes, which are "second class", are otherwise clean, preserved, suitable for reuse, we put them in boxes. At the moment it is not clear who we can offer them to (even for free, almost no one wants them anymore - meaning organizations that take large quantities).

We turn damaged, soiled, absorbent clothing into industrial rags. At least 10% of textiles are handed over to a municipal company, which grinds them and, together with other waste, sends them for incineration/thermal use.⁴



Image 3: A tiny part of sortathon – a never ending process of sorting textile waste. Courtesy of KNOF.

It is obvious that solutions for dealing with textile waste, although partial, exist. However, we should start at the source. So, the question we should be asking ourselves is: **What am I going to do about it next time I go shopping for clothes?**



Image 4: Turning shredded textile waste into insulation material to be used in construction industry. Courtesy of KNOF.

- 1. Vanessa Turk, The GW Law Environmental and Energy Law Blog https://blogs.gwu.edu/law-gwpointsource/tag/fast-fashion/
- 2. Rashmila Maiti, Earth.org https://earth.org/fast-fashions-detrimental-effect-on-the-environment/
- 3. Jaye Wilson, Earthday.org https://www.earthday.org/toxic-textiles-the-chemicals-in-our-clothing/
- 4. Interview conducted in March 2025 with Mojca Žganec Metelko, the director of KNOF a social enterprise from Krško, Slovenia.