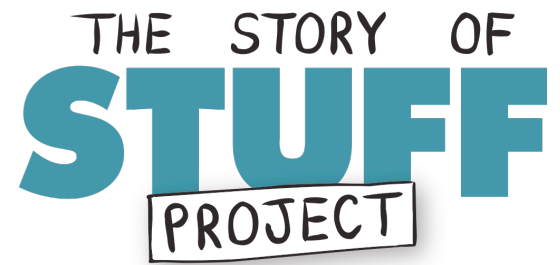

THE STORY OF MICROFIBERS

FAQs



What is a microfiber?

A microfiber is tiny fragment of the type of plastic used to make synthetic fabrics. These fibers are shed from synthetic clothing during a washing machine cycle. Because they are so small, microfibers aren't all caught by wastewater treatment plants; instead, many are released into the environment.

How bad is the problem?

Right now, it's estimated that fibers are, by count, the single largest contributor to watershed plastic pollution in developed countries and account for a significant portion of plastic waste entering the ocean. Though we don't yet know the extent to which microplastic pollution might affect humans, we do know that many animals within the aquatic food chain ingest these plastics and the toxics they absorb from the water around them, which can transfer to their tissue and cause gut impaction, hormone disruption, and liver damage.

What is the basis of the estimate that there may be 1.4 million trillion microfibers in the ocean? Anyways, microfibers are so small – is that really that much?

This number was arrived at by George Leonard, Chief Scientist for The Ocean Conservancy, and was extrapolated based on the findings from [this study](#). We can also look at the problem by the total mass of microfibers being released into the ocean, rather than number of individual particles. [A study published by the International Union for Conservation of Nature and Natural Resources](#) estimates that 0.6 – 1.7 million tons of microfibers are released into the ocean every year!

What percentage of clothing is made of microfiber polluting fabrics?

Millions of people wash clothes made of synthetic fibers. In fact, [60% of fabric produced by the textiles industry in 2014 was polyester](#), and more is made of other synthetic materials. Synthetic fabrics that release microfibers are on the rise; [polyester is the fastest growing fabric in the world](#).

Which fabrics cause microfiber pollution?

Microfibers can be released from any synthetic fabric, including polyester, rayon, and acrylics, or blends of these materials with natural materials.

Should we switch to natural fabrics like wool, cotton, and hemp?

It's a good idea to buy natural materials whenever possible. For a long time, synthetic fabrics were reserved for performance gear – and you don't need a jacket built for summiting Everest just to go get coffee! Unfortunately, more and more everyday clothing (even underwear!) is partly or completely made from synthetic fabrics. They're hard to avoid! That's why the ultimate solution is to tackle the problem head-on by getting clothing brands to figure out how to stop synthetic fabrics from releasing microfibers into the environment.

How long has the clothing industry known about this problem, and what are they saying and doing about it?

Consumer brands have known about this problem for at least five years, but they're still scratching their heads on what to do about it. Some haven't even acknowledged that it is a problem, and others have proposed solutions that put the burden on the consumer, not on the producer (more on that below). You can get a sense of where the conversation stands from [this update from the Outdoor Industry Association](#), dated February 2017.

Couldn't microfibers be filtered out by the washing machine?

Washing machine filtration is one proposed solution that's popular with the clothing industry. The problem is that there are already 89 million washing machines in the United States, and we don't think it's realistic to retrofit all of those machines. What's more, we don't know how or if this type of filtering would even work. At the end of the day, this problem is the responsibility of the clothing industry, not washing machine manufacturers.

Can we avoid microfibers by using a different type of synthetic fabric?

No, microfibers are a problem with all synthetic fabrics – not just polyester.

Could we solve the problem by banning synthetic fibers?

Sure, but with more than 60% of clothes made from synthetic fibers, we don't think that's a feasible solution.

Can we avoid microfibers by using a different manufacturing process?

It is possible that there is a way to eliminate or reduce the release of microfibers through a different manufacturing process. But such a method hasn't been developed yet. That's why we need to push clothing manufacturers to find a solution! However, there are some roads that we don't want to go down; for example, the idea of a chemical coating to prevent microfiber release could cause more problems than it solves if those chemicals are also bad for the environment and human health.

Can microfibers be filtered out by wastewater plants?

Wastewater treatment plant filters aren't designed to capture tiny particles like microfibers. [A recent study](#) by the San Francisco Estuary Institute found that "Microparticles passed through Bay Area wastewater treatment plants, even those using the most advanced technologies." Fibers that do get filtered can still be released into the environment when solids captured during treatment are spread on fields as fertilizer.

What voluntary actions can people take to address this problem on their own?

There are certainly steps you can take to reduce your contribution to the problem of microfibers; however, we don't yet have data to assess the effectiveness of these solutions – and in the long term, we need a permanent solution to the underlying problem with synthetic fabrics. In the near term, there are some actions you can take to reduce your impact like reducing your use of synthetic fabrics and washing them only when necessary. There are also a couple new consumer products designed to reduce microfiber pollution, like the [Guppy Friend Wash Bag](#) or the [Rozalia Project wash ball](#). While these are good ideas, we don't have any data about their effectiveness – and these are not a permanent solution to the broader problem with synthetic fabrics.

Should we organize a boycott?

It's important to live out your convictions and avoid buying bad Stuff. While well-organized boycotts can be a powerful way of doing this, boycotts can also actually shift the burden of responsibility off of companies that profit from this Stuff, and put it on us as consumers. So yes, let's avoid buying bad Stuff – but let's also flex our Citizen Muscles and [put pressure on companies to do things right](#).

What can I do to help solve this problem for good?

Our goal with The Story of Microfibers is to raise the volume on this issue by expanding public understanding and creating a chorus of voices demanding accountability and transparency. We aim to initiate and encourage collaboration between the clothing industry, scientists, advocates and policymakers, so that we tackle this problem head on and out in the open. But to do that, we need YOU to join us, speak out, and flex your Citizen Muscle! [Add your name to our petition today](#).