

What's actually on your dinner plate?

Jaiden and Trista
Microplastic pollution investigation

Introduction:

What's for dinner tonight? Maybe a nice plate of salmon fillet, you might think...

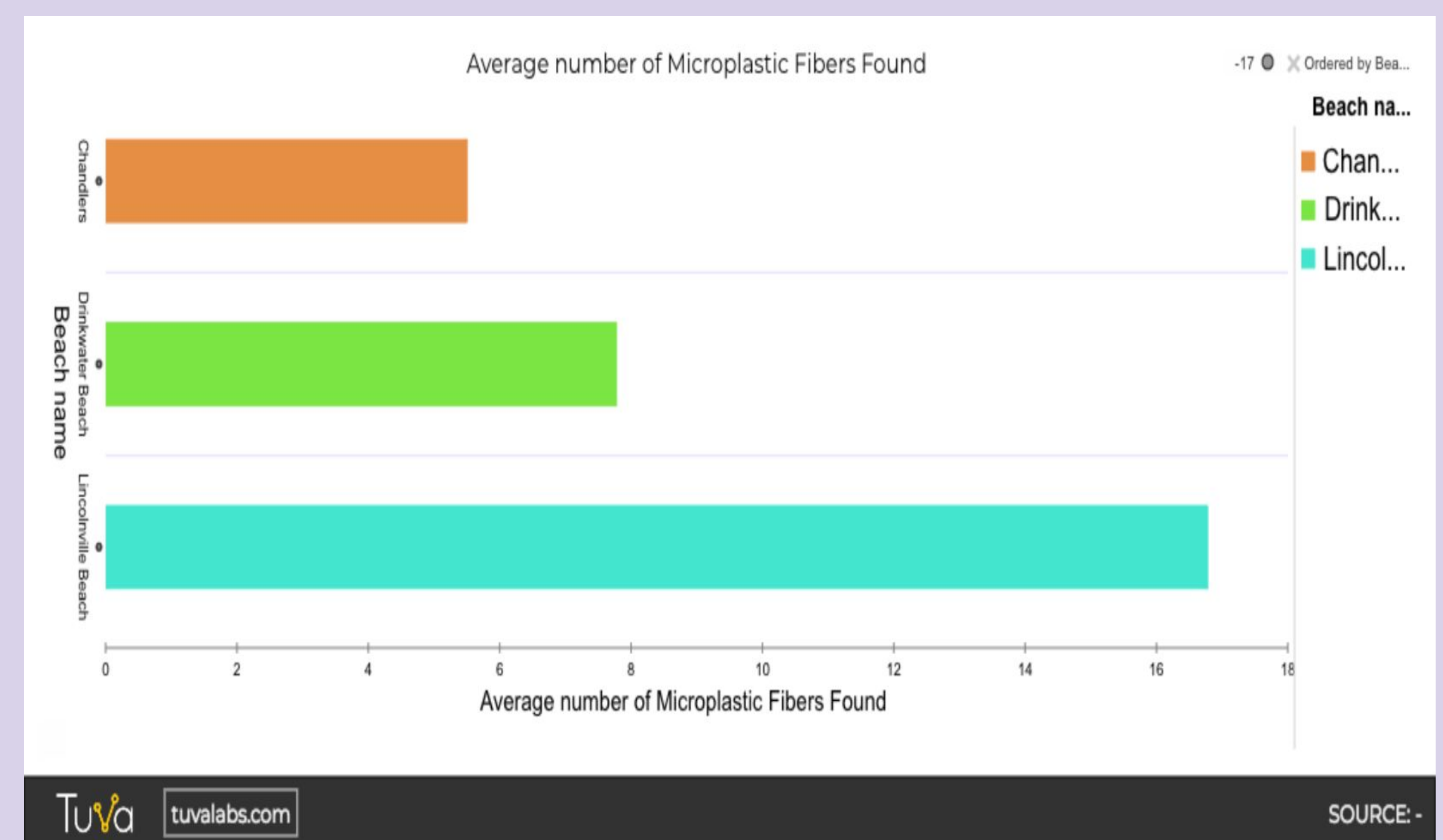
Little do you know how you're consuming **microplastic and microfibers**. As not true as it sounds, you are eating plastic! Also you are eating it in about every meal you eat. You consume about **70,000** pieces of microplastic a year. That's nasty if you really think about it. Did you know that in 2050 scientist say that there will be more microplastics in the ocean than in fish in weight. Just think about this, a plankton eats microplastic and then a crab or a small fish eats that plankton, then a whale eats the fish for a snack. All of those animals took in the plastic that the plankton ate. There are up to 4,400-5,500 different species of fish and small krill that take in plastic that you might eat for your next meal. After, it all adds up to a tragic amount of microplastic or microfibers consumed.

<https://www.nationalgeographic.com/>

<https://www.globalcitizen.org/en/content/microplastics-in-food-eating-plastic-waste/>

Investigations

Our first investigation was to head down to our Drinkwater beach and compare our data information to the Lincolnville Beach data information. Our investigation started like this. We went to our beach and we took samples with 1 gallon water jugs and took our samples back to school, filtered them, and looked under microscopes to see if we have microplastics in our oceans. We repeated this process with 3 beaches that we have investigated.



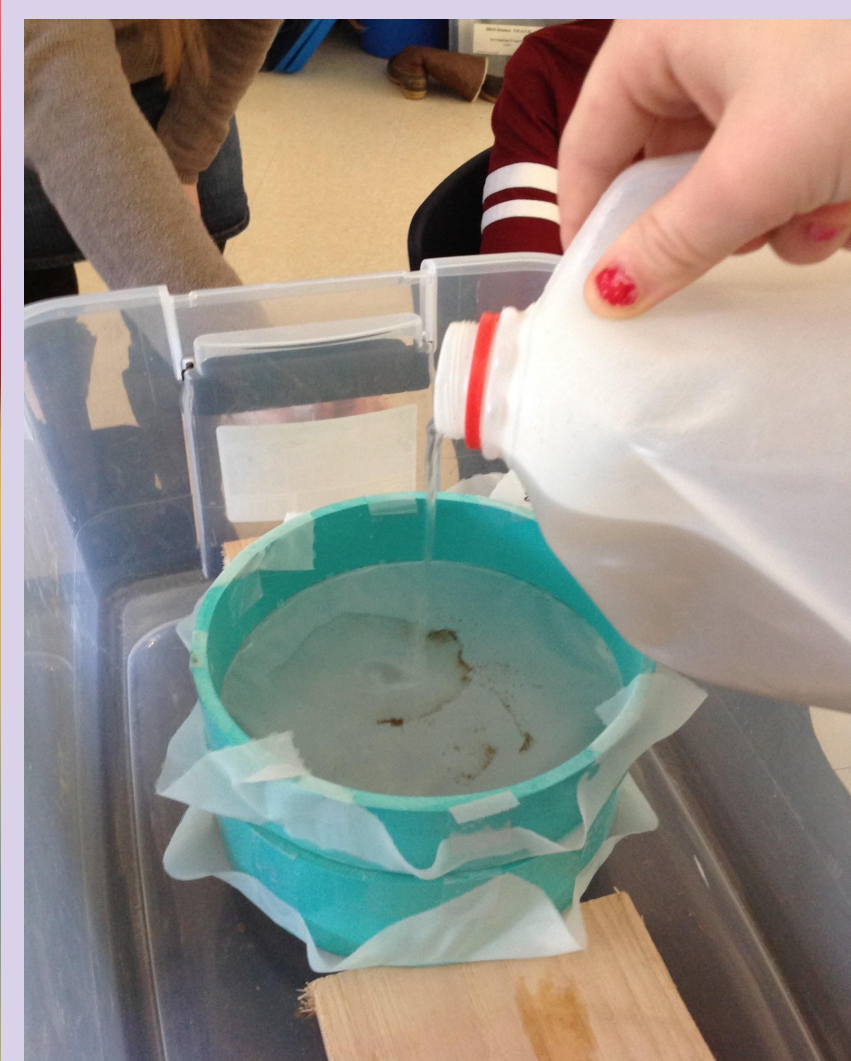
This is an image of a micro fiber in a Oysters insides! These Oysters were planted in the Penobscot Bay just right near us.

How many Oysters do you eat in a year?
We found microfibers in 3 out of 7 oysters we dissected.

So, what's actually on your dinner plate?



Tools



This was one of our first tools. It's called a sieve. It's used to filter out any items smaller than 10 microns from the water, such as microplastics or micro fibers.



This is one of the microscopes we used. We used this to have a up close look at whatever was left in the filter.

Facts

- Over 1 million seabirds and 100,000 sea mammals are killed by pollution every year.
- There are 14 billion pounds of garbage dumped in the ocean every year
- A baleen whale can eat up to 300,000 microplastic in a day just from krill.

Imagine this... one large beach... with about 70,000 pieces of plastic and garbage maybe even more. On ONE beach! That's nutz! so just think about that, would you want to be swimming in that much garbage?

It's pretty much just like swimming in a huge bucket of garbage, just in the ocean is that huge bucket of garbage...



Conclusion:

Not only are there microplastics in our oceans and water, but it's in our food too. We please ask you to watch where you put your plastic. But, most importantly make sure you reduce, reuse, and recycle! Make sure you think about what's in your food before you buy or reach for the plastic. We all know that it will end up on your dinner plate.

