

# Plastic Straws “Suck”! Use Pasta Instead!

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# Background

I wanted to find something to get rid of plastic in the ocean and in landfill because most plastic doesn't decompose or biodegrade and can stay in the ocean for hundreds of years.

Plastic straws are being banned because they are not being recycled and are ending up in the landfill and the ocean and are killing one million seabirds and 100 000 marine mammals. Gusts of wind or rainstorms carry garbage from our landfill to the ocean.

Some restaurants are getting rid of plastic straws and are getting paper straws. In my opinion I think paper straws are frustrating because they get soggy and dissolve in your drink. I think people should change to pasta straws. They are edible and remain sturdy.

We need to start using multi use plastic or plastic that composts fast to help the earth decrease the amount of single use plastic in the world.

Help the earth. Reduce, Reuse, and Recycle your plastic!

# Purpose

The purpose of this project is to help decrease the amount of single use plastic in the ocean and landfill.

Instead of using plastic straws we should use paper or pasta straws. Plastic straws are hurting animals.

I think restaurants shouldn't get rid of straws but should replace plastic straws with paper or pasta straws.

Pasta straws are the best. Paper straws get soggy and dissolve in your drink. Pasta straws stay strong for a longer amount of time.

I think that pasta straws are better because they are made from wheat and water and can help local farmers make more money. Wheat is grown in the Municipality of Roblin and it could be used to make pasta products.

SAVE THE TURTLES AND ALL HIS FRIENDS! 😊

# Hypothesis

My hypothesis is instead of using single use plastic straws we can use single use paper and pasta straws because they compost quicker. It can help our environment and will help reduce the amount of single use plastic in the world ending up in the landfill.

Overall, I think pasta straws are better than paper straws because they last longer and don't get soft as fast as the paper straws in liquid.

I think paper and pasta will compost much quicker than the single use plastic we are using today. They will compost in a few months.

# Materials

The materials I used in my project were:

paper straws, pasta straws, cups, Water, Powerade, Orange juice, 7-Up, labels, pens, logbook, my eyes, my hands, a camera, timer.

For the composting I used:

Soil, Jars, A spoon, pasta, A paper straw, Plastic from a whip cream lid (*same plastic as plastic straw*), Milk plastic, Gelatin plastic.

The Milk plastic and gelatin plastic were from my other Science Fair experiments and I wanted to compare them to the straws composting.

# Procedure

## All straws in water (Pasta, paper, and plastic):

1. We bought Garofalo pasta straws from Parkway Co-op and ordered Flewid Friendly 100% edible drinking straws from Amazon.ca
2. I gathered a glass.
3. I filled the glass with water.
4. I placed a plastic, paper, and pasta straw in the glass.
5. I observed every 20 minutes.
6. I wrote down my observations in my logbook.

## Pasta straws in different liquids:

1. I gathered 7-Up, Powerade, orange juice, and water
2. I poured them in a glass
3. I checked every 20 minutes
4. I wrote down my observations

## For composting:

1. We gathered 5 jars
2. I put a plastic product in all the jars (whip cream lid (*same plastic as straws*), penne pasta, milk plastic, gelatin plastic, and a paper straw)
3. I put soil in all the jars
4. I put water in all the jars
5. I checked it every week and wrote down my observations

# Observation

## All straws in water (pasta, paper, and plastic) at 4:06 pm:

5:06- The paper straw is getting a little bendy.

6:06- Only the paper straw is soft and bendy.

6:40- The pasta straw was soft but not bendy. Paper straw is very soft and bendy.

6:50- The pasta straw was soft and bendy. Paper straw is very soft and bendy. Plastic straw is still strong.

8:30- The paper straw fell apart. The pasta straw is soft and bendy but still can be used to drink. The plastic straw is not soft or bendy and can be used to drink.

## Pasta straws in different liquids at 5:00 pm:

5:22- All straws were solid

5:42- Straws are still solid

6:02- Straws are still solid

6:22- Straws are still the same

6:42- All except the straw in the orange juice are getting soft

7:10- I noticed that the straws in water and 7-Up are bendy. The other 2 are still solid

7:28- I realized all the straws, except the one in the orange juice, was flexible but still can be used to drink

7:50- Orange juice is the only one that is solid

8:10- I noticed all 4 straws are bendy

8:30- I noticed that the straws in the water and 7-Up fell apart and the ones in the Powerade and orange juice were only soft but can be used to drink



8:53- I saw that all the straws were squishy and flexible but the Powerade straw is only flexible not squishy  
12 hours later at 7:45- All the straws were too soft to use

## Composting in dirt January 12:

- The whip cream lid is the same material as a plastic straw.
- The Milk plastic and gelatin plastic were from my other Science Fair experiments and I wanted to compare them to the straws composting.

### **Jan.26 (14 days later)**

Whip cream lid: Nothing changed

Pasta straw: I saw mold through the bottom

Gelatin plastic: It looks like it composted

Milk plastic: I saw mold

Paper straw: It was moldy

### **Feb.3 (22 days later)**

Whip cream lid: It was still the same

Pasta straw: There was lots of mold

Gelatin plastic: I saw that it was moldy

Milk plastic: I saw that there were pieces of it all over the jar

Paper straw: I couldn't see the straw

### **Feb.15 (34 days later) We dug them up**

Whip cream lid: It has not changed one-bit 😞

Pasta straw: There was only a little bit left 😊

Gelatin plastic: There was not a trace 😊

Milk plastic: There is only a little bit left 😊

Paper straw: It was mostly composted 😊

# Conclusion

In conclusion, paper and pasta straws are better for the environment than plastic straws because they compost in a few months not years like plastic. They can also be digested by animals and not hurt them.

Pasta straws are better than paper straws because they don't get soggy as fast as paper straws. Pasta straws can last up to 4 hours but paper straws only last about 2 hours. You can also eat your pasta straw after you are done with it.

They also help local farmers make money if they grow wheat because pasta straws are made from wheat and water.

The pasta was almost fully composted in 5 weeks which proves it is a good alternative to plastic.

# Application

In my research I have discovered that people and restaurants shouldn't get rid of straws but should replace plastic straws with paper or pasta straws.

In my research I found out that pasta straws are the best because they last longer in drinks (they don't dissolve in drinks) and they don't get soft or soggy as fast as the paper straws.

Pasta straws are also edible for humans and animals.

Pasta and paper straws compost fully in a few months.

# Acknowledgements

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