

# The Energy in Trash

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The goal of this experiment is to see what types of biomass make biogas the best out of cow manure/fruit/vegetable peelings. First, materials were gathered for the experiment. Next, a safe work station was found away from open flames and that had good ventilation. Next, the bottles were prepared by measuring 2 cm from the top of each bottle and making a small mark and labeled each bottle appropriately using masking tape and a marker. I then took 40 grams of fresh cow manure and put it into the bottle labeled "Cow Manure". This was done with the other two bottles also labeled "Cow Manure". I then took 20 grams of cow manure and 20 grams of vegetable peelings and put it into a bottle labeled "Cow Manure + Vegetable Peelings". This was also done with the other two bottles. I then took 20 grams of cow manure and 20 grams of mashed banana and put them into a bottle labeled "Cow Manure + Mashed Banana". This was also done with the other two bottles. All bottles were then put side by side in the safe work environment and I recorded the circumference of the balloon using a string and a ruler each night. On the 4th day, heat was put next to the bottles. After 12 days, the data was recorded and observed. The work station and tools were cleaned thoroughly and safely with bleach and warm water.

**Awards Won:**

