

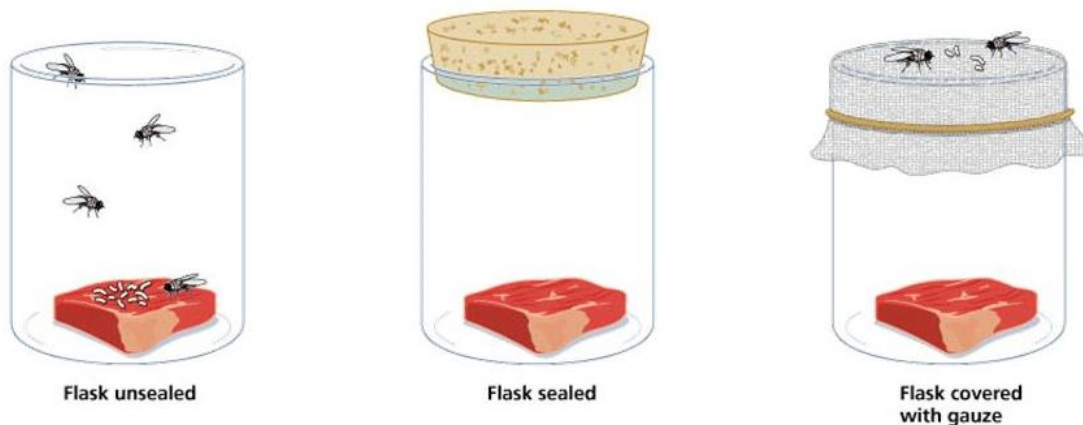
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Spontaneous Generation of Maggots



Introduction:

Spontaneous generation or abiogenesis is the idea that life could appear from nonliving material. On the other hand, biogenesis is the belief that life originates from preexisting life.

Objective: Determine if maggots can be spontaneously generated from meat using a controlled experiment.

Materials

3 glass jars of the same size

3 slices of fresh meat (pork, meat, chicken) or mashed fruits (potato, banana, papaya) as substitute clean stockings or gauze.

Rubber bands

Estimated Time Frame: 1-2 weeks

Procedure:

1. Clean and dry three glass jars.
2. Put a piece of fresh meat or fruit at the bottom of the three jars.
3. Keep the first jar open and leave it outside the room where it will be exposed to flies. Label this jar A.
4. Seal the mouth of the second jar with clean stockings or gauze using a rubber band. Keep it beside Jar A. Label this Jar B.
5. Tightly put the cap and seal the third jar. Keep it inside the laboratory room (dry area). Label this Jar C.
6. Observe the appearance of maggots after several days to two weeks. Continue the observation until you observe the growth of maggots.
7. Record your observations.

Observations:

	Jar A	Jar B	Jar C
Growth of maggots	The maggots grow quickly because it does not cover a cap of jar.	The maggots grow slowly because it covers clean gauze.	The maggots does not grow or no formation of maggots.
Smell	The smell is very unpleasant and disgusting.	The smell is unpleasant, but Jar A is stinkier.	The smell is not foul rather than Jar A and Jar B.
Color of meat or fruit	The color of the banana is dark brown with a little white spots.	The color of the banana is dark brown.	The color of the banana is light brown. Also, has many white and green spots.
Growth of fungi	There are fungi, because it is open jar.	There are small amount of fungi.	There are many fungi than Jar A and Jar B.

Conclusion:

- Growth of maggots, smell of jars, color of bananas, and growth of fungi are observed in each jar. As time passed by, flies were seen entering Jar A and Jar B. While the Jar C, neither maggots nor flies are never seen; because flies does not lay their eggs in the bananas. Maggots grew where flies were able to lay eggs. In general, Redi's experiment disproved the concept of spontaneous generation.

Post-Laboratory Questions:**1. What is a controlled experiment?**

- Controlled experiment is a type of experiment which all of the variable determinants have same characteristics, but there is different result or outcome. For instance, same size of jar and same amount of bananas, but different growth of fungi and maggots.

2. What is the manipulated variable in this experiment?

- The manipulated variable in this experiment is the cap of jars. Jar A has no cap; Jar B has gauze, and Jar C has a cap of jar. It means the presence and absence of maggots depend on the cover of the jar. As an example, Jar A has an opened jar, so maggots can grow rapidly. On the other hand, Jar C has a closed jar, so maggots do not form.

3. What do you observe growth of fungi in all setup after several days of the experiment?

- In several days, I observed that the growth of fungi grows rapidly due to different conditions. During those days of observation or experiment, the weather is fluctuating. As a result, the fungi grow well in three jars. Additionally, I recognized that the Jar C, grows more fungi because of the moist. The moist during the rainy weather.