

TREATMENT

A **treatment group** is a group that receives a treatment in an experiment. The “group” is made up of test subjects (people, animals, plants, cells etc.) and the “treatment” is the variable you are studying. For example, a human experimental group could receive a new medication, a different form of counseling, or some vitamin supplements. A plant treatment group could receive a new plant fertilizer, more sunlight, or distilled water. The group that does not receive the treatment is called the control group.

Treatment Group Examples

1. You are testing to see if a new plant fertilizer increases sunflower size. You put 20 plants of the same height and strain into a location where all the plants get the same amount of water and sunlight. One half of the plants—the control group—get the regular fertilizer. The other half of the plants—the treatment group—get the fertilizer you are testing.
2. You are testing to see if a new drug works for asthma. You divide 100 volunteers into two groups of 50. One group of 50 gets the drug; they are the treatment group. The other 50 people get a sugar pill (a placebo); they are the control group.
3. You want to prove that covering meat prevents larva from hatching. You put meat into two different jars: one with a lid and one left open. The jar with the lid is the treatment group; the jar left open is the control group. (This is the famous Redi experiment).

The only difference between the control group and the treatment group must be the hypothesis you are testing. In the first example above, the people must be of similar age, health status, socioeconomic background etc. That way you know that if the drug improves asthma for the treatment group, it's not due to other factors like better health status or a younger age.