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*Division and Multiplication: How Planarians Regenerate*

My question was: do different substances on a scalpel affect the speed of the regeneration of planarians? To experiment, I set up with a microscope, four Petri dishes, and 20 brown planarians. Using a disposable pipette, I transported a planarian to a slide under the microscope. I used a clean scalpel to cut the planarian neatly in half. I transported the planarian to one of the Petri dishes. I repeated this process four times for replication. I repeated the same process five times with the scalpel covered in sugar, five times with the scalpel covered in salt, and five more times with the scalpel covered with a 65% alcohol solution (hand sanitizer). I then gave the planarians nine days to regenerate. As you can see in my graph, all five planarians in the "sugar" category, the "salt" category, and the "alcohol" category were dead at the end of nine days. However, I had three living planarians left in the "no treatment" (control) category, and one was fully regenerated. The other two were only partially regenerated. I discovered that my hypothesis was correct and that planarians regenerate best when they are not given help. I think this can help the world by informing scientists and doctors that alcohol kills a large percentage of useful germs and that two semi-natural substances (salt and sugar) do not help regeneration whatsoever. This will tell them that these substances will not be useful when attempting to discover a method or material that will help humans regenerate missing limbs.