



**CALIFORNIA STATE SCIENCE FAIR
2015 PROJECT SUMMARY**

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Project Title Pressure Resistance	
Objectives/Goals The purpose of our experiment is to help the companies that have to deal with pressure and packaging. With this, which fruit, watermelon, cantaloupe or honeydew melon, has the strongest layers to resist the most pressure. Abstract Methods/Materials 3 Mini Watermelons the same size (16.51 cm), 3 Cantaloupe the same size (16.51 cm), 3 Honeydew Melon (16.51 cm), 4,000 Rubber Bands, Notebook and pencil, Table 116.078 cm high, Camera to record/take pictures, Measuring Tape Method #1- Wrap Rubber Bands around the fruits to see the pressure it can handle. Method #2- Drop the fruit from 116.078 cm high. Results The Honeydew melon sustained the most with an average of 685 bands and 12 drops. The cantaloupe took 555 rubber bands with 4 total drops and the watermelon took an average of 517.5 bands. Conclusions/Discussion Based off of our experiment, we can conclude that the Honeydew Melon has a stronger outer shell than watermelon and melon. Honeydew melon resisted up to 168 bands more. We realized that the fact that the fruits dripped #juice# means that they obviously cracked open meaning it released pressure. We believe that if this hadn#t occurred the fruits would have burst at a faster pace since the pressure would#ve built up even more if it hadn't escaped. With the second method having up to 8 more drops than the others. The method would have caused the pressure in the insides to be disturbed. Our hypothesis turned out wrong with Honeydew melon turning to the top. The Melon had the top results from all the methods and experiments. The outcome of our experiment would lead up to many questions; What packing materials would support the fruit the most? Does hazardous chemicals in sprays make fruit stronger than those without?	
Summary Statement Our project demonstrates how the pressure resistance of a common fruit can impact product distribution and transportation.	
Help Received	