

## **Optimal Strategies to Relieve Tissue Congestion**

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### **Problem Statement:**

To design a new and efficient milking machine teat-cup attachment and pressure system. Current milking devices on the market often cause tissue congestion problems in cows, which can lead to hyperkeratinization and infection. The new attachment must use vacuum to draw milk out while providing simultaneous compression of the teat to better reduce tissue congestion in the teats themselves. Standard milking machines use a pulsation effect to reduce tissue congestion during the milking process, however, the new device can also utilize post milking massaging for congestion reduction. The attachment must also milk at speeds comparable to current milking devices.

### **Last Week's Goals**

- Finish testing and analysis of data
- Make poster

### **Summary of Accomplishments**

- Finished collecting data and made a graph of the results
- Made poster

### **This Week's Goals**

- Presentation!
- Write paper and finish design notebooks

### **Project Difficulties**

- Getting a compressor to use at our presentation

### **Activities**

- We finished testing and analyzed the results
- Everyone got together to make the poster

### **Expenses**

- None to report so far

