

## Objective

To perform a physiology experiment with second graders testing the effect of exercise on heart rate and blood pressure.

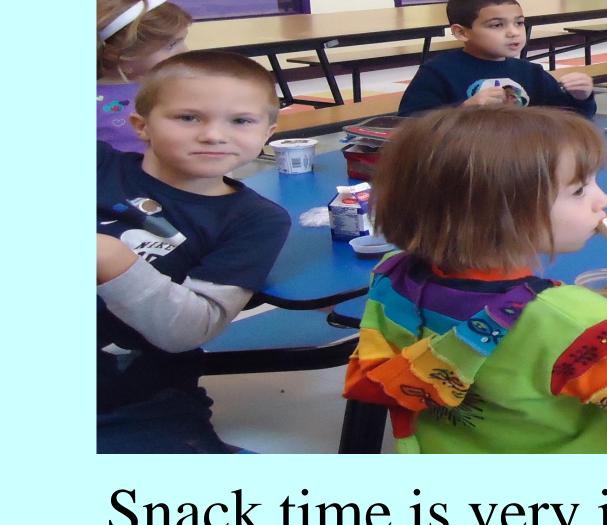
### Methods



- > The physiologist described the job of a physiologist Background information on the cardiovascular system was presented.
- > Students set out to prove their hypothesis; exercise increases heart rate and blood pressure.
- $\succ$  The teachers paired the students.
- Resting levels of heart rate and blood pressure were measured with monitors.
- Snack time.
- > On the playground one member of each pair ran laps for five minutes while the other cheered them on.
- > When exercised was completed heart rate and blood pressure were measured.
- > The exercise was repeated with the other member of the pair.
- > Results were recorded and discussed with the class.

# The Effects of Exercise on Heart Rate and Blood Pressure Were Tested by Second Graders Patricia A. Halpin

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Snack time is very important in second grade.



### Results

- pressure increased with exercise.
- walking after only 30 seconds.
- securing it tightly.
- which led to a lower reading.



Students run for five minutes on the school playground.

For the majority of students heart rate and blood

> Student pace during exercise varied greatly with some

> Students had a difficult time putting on the monitor and

Several had to attempt to take readings more than once



- pace





Students had a PhUn time and especially loved their bags and hearts.

### Conclusions

Students proved their hypothesis and learned about the benefits of exercise

Limit exercise to three laps around playground  $\triangleright$  Run with the students so they exercise at one

> Do not forget to schedule in snack time in the middle of session

> Have PhUn week earlier in the year so winter coats are not interfering with heart rate blood pressure monitors

> Funded by an 2011 ASBMB Science Technology Engineering and Mathematics (STEM) Seed Grant.