



Move It or Lose It (A Physical Health Story)
(4th Grade – 9-10 yrs.)
Video: Laughing Away the Pain



STORY CONNECTION – SLIDE 11 (Approx Time: 10-15 mins)

When you move your body, your heart must pump blood to the muscles so they can work. This causes the release of some special chemicals in your brain – such as endorphins and endocannabinoids. When these chemicals are released in the brain, they activate the reward center or your brain's "happy place," and you feel good. These chemicals are released as soon as your heart rate starts to work faster and your muscles start to move in rhythmic ways – like running, walking, or swimming. This has been called a "runner's high" which means that running or any kind of exercise will make you feel happy. Just like you might feel when you do well on a test, or how you feel when you score a goal, or get to the next level of a video game. Because the endorphins and endocannabinoids are released when you move a lot, the brain likes you to move because your brain likes to be happy. The chemicals do lots of good things to help your brain stay healthy, so by activating your reward center it makes you want to move your body more. Plus, moving your body makes you feel good about yourself, and this may also help you if you are feeling sad or depressed.

Materials needed:

- Science for Kids - Why Do We Laugh? | Science Experiments for Kids | Operation Ouch Video link:
 - <https://www.youtube.com/watch?v=u8U4znYyDpk> (4:41)
- Equipment to show online video
- Chart paper/board
- Marker
- Area for student(s) to do a wall sit

Preparation needed:

- Preview the video before the activity.
- Pre-determine places to pause and discuss information with student(s).
- Create chart of student names for recording data
- Determine material to use to "make student(s) laugh"
 - tell jokes
 - watch a funny video
 - read them funny poems (Shel Silverstein would be good or this.), etc.
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Instructions:

1. This activity is an extension of the learning about endorphins from the story. This activity shows how laughing releases endorphins that allow us to handle pain more effectively.

2. Explain to student(s) they will watch a video then recreate the experiment.
3. Watch the video with the student(s).
4. Stop at pre-determined locations to discuss.
5. After the video, ask all student(s) to come and sit against the wall in the “chair position” for as long as they can. Student(s) may remain sitting on the floor after their wall sit.
6. Record the results.
7. Next, do something that will cause the student(s) to laugh.
8. Now, have them sit against the wall in the “chair position” for as long as they can again.
9. Record the results
10. Compare the results of the test before and after the laughter by discussing the following questions:
 - Did the endorphins kick in and allow them to endure the pain of sitting against the wall longer?
 - Did they feel any different after the laughing episode?
 - Did they feel any different after the second test? How?
11. In closing, review endorphins and how movement and things like laughter allow our brains to release them and how this makes us feel good and healthy.