## Case Study 1: The Impact of the Digital World on Physical Health

**Background**

Alex, a 16-year-old high school student, spends an average of 8 hours a day on various digital devices, including smartphones, tablets, and computers. Recently, Alex has been experiencing frequent headaches, eye strain, and difficulty sleeping. Additionally, Alex's physical activity has decreased significantly, leading to feelings of fatigue and decreased concentration in school.

**Introduction to the Concept**

In a health education class, the teacher introduces the concept of physical health in the context of digital technologies. The class focuses on understanding how excessive screen time and improper use of digital devices can adversely affect physical health.

**Activities**

* **Discussion:** The class engages in a discussion about their personal use of digital media and its effects. Alex realizes that the excessive screen time might be the cause of the recent health issues.
* **Presentation:** The teacher presents on the health risks associated with excessive screen time, including eye strain, headaches, poor posture, disrupted sleep patterns, and reduced physical activity.

**Problem Identification**

Alex identifies with many of the issues discussed and recognizes the need for change. The primary problems include:

* Excessive screen time leading to eye strain and headaches.
* Poor posture while using devices, contributing to back and neck pain.
* Lack of physical activity.
* Disrupted sleep patterns due to late-night device usage.

**Solution**

Alex decides to take proactive steps to mitigate these issues:

1. **Setting Screen Time Limits:** Alex uses apps to monitor and limit screen time, aiming for no more than 2 hours of leisure screen time per day.
2. **Ergonomic Adjustments:** Alex rearranges the workspace for better posture, including adjusting the chair and screen height and using an external keyboard and mouse for the laptop.
3. **Regular Breaks:** Implementing the 20-20-20 rule - every 20 minutes, look at something 20 feet away for 20 seconds - to reduce eye strain.
4. **Increased Physical Activity:** Alex commits to an hour of physical activity daily, including walking, cycling, or team sports.
5. **Improved Sleep Hygiene:** Alex establishes a no-screen policy an hour before bedtime and keeps devices out of the bedroom to improve sleep quality.

**Outcome**

After a month, Alex reports significant improvements:

* Reduction in headaches and eye strain.
* Improved posture and less back pain.
* Better sleep quality, leading to increased energy and concentration in school.
* Enhanced overall mood and well-being due to increased physical activity.

**Conclusion**

This case study highlights the importance of managing screen time and maintaining healthy habits in the digital age. By implementing practical changes, students like Alex can significantly improve their physical health and overall well-being.