
Digital Health & Wellness is keeping teenagers away from danger of physical and psychological harm. Many problems can be contributed to electronic devices. Teenagers need to be aware of the risks of spending hours online. It is crucial that teenagers are informed of the hazards of digital life and how to keep healthy and safe.

As the world today has such a digital importance, and dependence on the Internet is high, we need to make sure that people know and understand the physical and psychological damage and risks that can occur.

Without the thorough understanding of digital health and wellness and digital safety, you are under the major risk of being in danger.

**Source:** [http://digiteen.wikispaces.com/Digital+Health+and+Wellness](http://digiteen.wikispaces.com/Digital+Health+and+Wellness)

Part II – Class/Advisory Activities

| 1. Video          | Internet Addiction (2:51 minutes)  
|                   | Caught in the Web (2:14 minutes)- Introduction  
|                   | Caught in the Web (2:17 minutes)- Interview *note: a commercial will play at the beginning of this video.* |
| 2. Discussion Questions | 1. How many hours a day do you spend online or playing games?  
|                     | 2. Do you know the symptoms or risks of online addiction?  
|                     | 3. What ergonomics suggestions do you think you should improve on when working on a computer? |
| 3. Activities      | 1- Caught in the Web: Online Addiction  
|                     | Watch: Internet Addiction, Caught in the Web Introduction, and Caught in the Web Interview.  
|                     | Class Discussion: How many hours do you spend online or playing games? Do you know the symptoms or risks of online addiction?  
|                     | Teacher Tips: Show slides 1-10 of the Digital Health and Wellness.  
|                     | Activity Suggestion: writing prompt 1 and journal 1. |
### Part III – Reflection

| 1. Writing Prompt(s) | 1. You may be addicted to the internet if…
| | 2. The four most important ergonomic suggestions are:
| 2. Journal Writing | 1. Write a 5-7 sentence paragraph defining what you think online addiction is and what elements of online addiction you feel should not be categorized as “addiction” and why.
| | 2. Think of your computer at home or a computer you use at school. Describe how you can change the set up so that it is more ergonomic and healthy.

### Part IV – Resources

| Video | [http://www.youtube.com/watch?v=3N3lVltkPWk&feature=related](http://www.youtube.com/watch?v=3N3lVltkPWk&feature=related) |
| Ergonomics | [http://www.leeds.ac.uk/lsmp/healthadvice/computerergonomics/computergonomics.htm](http://www.leeds.ac.uk/lsmp/healthadvice/computerergonomics/computergonomics.htm) |
**Digital Health & Wellness**

**Addiction & Ergonomics**

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**4 Components of Internet Addiction**
- **Negative Consequences**
  - Has your use of the internet negatively affected your quality of life?
- **Excessive Time Spent Online**
  - Do you lose track of time when you are online?
- **Tolerance**
  - Do you feel the need to be online more to be happy?
- **Withdrawal**
  - Do you feel angry or depressed when you are not online?

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**Signs of Internet Addiction**
- Excessive thinking about the internet when not online
- Lying about how much time you spend online
- Using the internet to escape problems or bad emotions
- Your home or school life is negatively affected
- Wanting to be online more than you are now
- You feel “cravings” or “withdrawal” symptoms when not online

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**The Risks**
- You can be so consumed by this addiction that you can discount the seriousness of the disorder which can prove fatal.

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**Fatal Attraction**
- Chinese officials reported today that a man died after a three-day non-stop gaming binge at a Beijing Internet cafe. The 30-year-old man was rushed to the hospital after passing out during the 3 day marathon and was pronounced dead shortly thereafter. Authorities say the cause of death was most likely exhaustion.

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**Fatal Attraction**
- In 2005, a 28-year-old South Korean man died of exhaustion after a 50-hour marathon gaming session in an Internet cafe. The South Korean man, identified only as Lee, spent 50 straight hours playing the game ‘Starcraft’ in an Internet cafe, pausing only to use the toilet and brief naps. Lee had eaten next to nothing in that time, and was physically exhausted. “We presume the cause of death was heart failure stemming from exhaustion,” a Taegu provincial police official told the Reuters news agency.
Fatal Attraction

- in 2002, a 24-year-old South Korean man died after 86 hours of online gaming, while that same year, a 27-year-old Taiwanese man died after 32 hours of Internet gaming.

- Xiao Yi, like so many Chinese teens, was so hooked on video games he would sometimes play for two days straight, even skipping food or sleep.
- Distraught, the 13-year-old rode an elevator to the top of a 24-storey high-rise -- from which he jumped to his death. He left behind a note explaining that he was going to another world to meet the game's characters.

Other Serious Risks

- Poor work habits
- Erosion of normal social relationships
- Not able to interact offline normally
- Financial issues can emerge
- Multiple disorders can arise: ie. depression

Get Help

- Speak to a trusted adult
- Let a friend know
- Talk to your counselor

Tips

- Ensure the chair back is adjusted so that your upper body is relaxed and supported
- Your lower back needs to be supported by the chair, alter the angle so that your lower back is supported. You may still need extra support and can add a cushion in the small of your back. You should change the angle during the day to vary your sitting posture and avoid being in one static posture all day
- Adjust your seat height. Sit in front of your computer and adjust your seat height so that your forearms are horizontal and wrists are straight when your hands are placed on the keyboard. With your shoulders relaxed the underside of the elbow should be at desk height

Ergonomics

- Definition:
- The applied science of equipment design, as for the workplace, intended to maximize productivity by reducing operator fatigue and discomfort. Also called biotechnology, human engineering, human factors engineering.
- Design factors, as for the workplace, intended to maximize productivity by minimizing operator fatigue and discomfort: The ergonomics of the new office were felt to be optimal.
Tips

- If there is pressure on the back of your thighs find something to rest your feet on.
- If your feet are not comfortable on the floor find something to rest your feet on. Shorter people often lower the seat so that their feet are on the floor, but this can mean that your arms are not at the correct height for the keyboard.
- The space under your desk should allow you to place your legs underneath without twisting or leaning, or being squashed under a low desk.
- Double-check that your forearms are horizontal and wrists are straight when your hands are placed on the keyboard. With your shoulders relaxed the bottom of your elbow should be at desk height.

Tips

- Ensure your wrists are not bent, use a wrist-rest (sometimes supplied as part of a keyboard, or can be purchased for £6 from stationers, computer shops, Argos)
- Adjust your screen position - the top of the screen should be level with your eyes and you will then repeatedly look at the centre of the screen. If using a CRT monitor it may be necessary to move it further away from your head to create a comfortable viewing distance. Ensure that there are no reflections or glare. If necessary to reduce your screen to a different angle, avoid sitting with your head directly in the shadow cast by your screen. If possible or necessary to cut out the light, adjust the brightness and contrast controls on the screen to suit lighting conditions. Remember to keep your screen clean, and have your eyes tested regularly.
- Organise your work area, ensure the keyboard and mouse are close when in use, that the desk is not cluttered. Use a document holder to raise documents to a comfortable height and viewing distance.

Proper Ergonomics

- Neutral Hand position
- Shoulders relaxed
- Upper arm vertical
- Forearms horizontal
- Adjustable height
- Adjustable base
- Feet flat on floor (or toes)
- Hips between 90-100 degrees
- Flat keyboard
- Tilt-able keyboard

Proper Ergonomics

- http://www.leeds.ac.uk/lsmp/healthadvice/computerergonomics/computerergonomics.htm
- http://www.ask.com/web?q=dictionary%3A+ergonomics&content=ahdi&cTID=7C3432750&c=0&i=dl&ad=0
- http://www.amaltas.org/show-ergonomics-power-computer-users.html
Computer Ergonomics

The following information is to give guidance on basic ergonomics related to the use of computer equipment, which will reduce problems related to poor working postures. The way you sit when using a computer influences your entire body and adjusting your posture can help reduce aches and pains, and long-term musculo-skeletal problems.

Laptop computer ergonomics

Laptop computers are not designed for lengthy working periods. If you intend to use a laptop for 10 to 15 minutes it can be used as is, however, if you intend to use it for 1 to 2 hours or more, it is important that you use correct ergonomics. Laptop use is a major source of musculoskeletal problems, and using a laptop for any length of time without a laptop stand, and ideally separate keyboard and mouse, will cause poor posture which is likely to cause neck, back, and arm pain.

The best device to use is a laptop/notebook riser or laptop/notebook stand. These start at around £20 for basic models that you would use without a separate mouse and keyboard (shown in the picture above). If you pay upwards of £40 you will get a better stand that raises the laptop screen to the correct height, but you will need a separate keyboard and mouse (around £15). This is the best way of working for long periods (e.g. more than 1 hour), and allows you to replicate the ideal ergonomic position that you would create with a desktop computer. Laptop stands can be purchased from computer shops including PCWorld, and many stationery shops.

Ensure you also read the advice below relating to desktop computer posture, especially pause gymnastics.
Desktop computer ergonomics

1. Ensure the chair back is adjusted so that your upper body is relaxed and supported.

2. Your lower back needs to be supported by the chair, alter the angle so that your lower back is supported. You may still need extra support and can add a cushion in the small of your back. You should change the angle during the day to vary your sitting posture and avoid being in one static posture all day.

3. Adjust your seat height. Sit in front of your computer and adjust your seat height so that your forearms are horizontal and wrists are straight when your hands are placed on the keyboard. With your shoulders relaxed the underside of the elbow should be at desk height.

4. If there is pressure on the back of your thighs find something to rest your feet on.

5. If your feet are not comfortable on the floor find something to rest your feet on. Shorter people often lower the seat so their feet are on the floor, but this can mean that your arms are not at the correct height for the keyboard.

6. The space under your desk should allow you to place your legs underneath without twisting or leaning, or being squashed under a low desk.

7. Double-check that your forearms are horizontal and wrists are straight when your hands are placed on the keyboard. With your shoulders relaxed the bottom of your elbow should be at desk height.

8. Ensure your wrists are not bent, use a wrist-rest (sometimes supplied as part of a keyboard, or can be purchased for £6 from stationers, computer shops, Argos).
9. Adjust your screen position - the top of the screen should be level with
your eyes and you will then naturally look at the centre of the screen.
If using a CRT monitor it may be necessary to move your desk away
from the wall, so that you can push the monitor further away from your
head to create a comfortable viewing distance. Ensure that tired
eyes/headaches may result in problems relating to reading your
screen. Ensure you do not have reflections or glare and if necessary
ty moving your screen to a different angle. Avoid sitting with windows
or lights directly in front or behind your screen. If possible, sit with the
screen at right angles to light coming through windows, if not use
window blinds or curtains to cut out the light. Adjust the brightness and
contrast controls on the screen to suit lighting conditions. Remember
to keep your screen clean, and have your eyes tested regularly

10. Organise your work area, ensure the keyboard and mouse are close
when in use, that the desk is not cluttered. Use a document holder to
raise documents to a comfortable height and viewing distance

ORGANISE YOUR WORKING DAY
Try and ensure your computer work is interspersed with other jobs. Rotate
activity to avoid long periods of time in front of the screen. Short frequent
breaks are much more effective in reducing muscle fatigue than taking
longer breaks less often. During your breaks: DO - Get out of your seat,
stretch your legs, arch your back, walk around for a couple of minutes, try
Pause Gymnastics (see below). DON'T - remain seated at your desk

PAUSE GYMNASTICS
These are simple movements designed to move joints and stretch the
muscles and nerves, will stimulate the circulation, lubricate the joints and
relieve muscle and nerve tightness. They can be done sat at your desk, and
take only a few minutes to do:

1. Stretch your head from side to side (i.e. ear to shoulder)
2. Breathe in, pull the chin in to make a double chin, hold for 5 seconds
then relax
3. Stand up, put the palms in the small of the back, and gently bend
backwards interlock the fingers; turn the palms to face away from you
and lift the arms up so the palms face the ceiling
4. Now stretch the arms back behind the head
5. Stretch the arms back to each side at about hip height Keep the
elbows straight and then bend the wrists back (palms facing out). Try
to get the arms as far back behind the body as possible You may feel
some pulling in the arms and hands
6. Gently curl the fingertips of the right hand into the palm
7. Keep the right elbow straight and with the left hand passively bend the
right wrist so that the palm side of that hand moves towards the inside
of the forearm. Repeat on other side

You need to do these movements regularly, one or two stretches every 20
minutes are better at relieving fatigue than longer exercise breaks taken less
frequently. Make the exercises automatic so you do not have to think about
doing them

Sources: Various 2006
**Proper Computer Ergonomics**

**Directions:** Label the diagram below with helpful hints on how to sit at a computer using proper ergonomics.

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<th>Body Part or Computer Item</th>
<th>Describe Proper Ergonomics</th>
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**Source:** http://www.leeds.ac.uk/lsmp/healthadvice/computerergonomics/computerergonomics.htm