

Beware of backpacks

The continuous misuse of backpacks proves dangerous to student health

words & layout | Angela Cai

Effects of Backpacks

After shoving an iPad, textbooks, notebooks, folders and various other things in a backpack, students can feel like they're carrying the weight of the world on their shoulders. This can cause dangerous effects.

Heavy backpacks are a common problem amongst students. "In student patients that I see in my office, pain from backpacks, text neck, sports injuries are the most common mechanisms of injury," chiropractor Dr. Aaron Giddings said.

In fact, Giddings said that there are nearly 5,000 emergency room visits per year due to backpack-related injuries.

“At least a few times a week I was weighing backpacks and telling kids ‘this is too heavy’.”
-Susan Krebs

School nurse Susan Krebs often gets visits from students suffering from chronic headaches, neck pain and back pain all caused primarily by their backpacks.

Although the above effects might seem like minor daily occurrences, they can greatly affect students' lives over time. "I've had a few patients I've

needed to pull from sports or gym class temporarily while we addressed the problems that stemmed initially from their backpacks," Giddings said.

Improperly using a backpack can lead to recurrent or chronic back pain, neck pain, headaches, muscle spasms, muscle strains and even tingling or numbness in the arms or sometimes the legs. These problems often come from improper spinal alignment that causes the muscles to fatigue quickly.

This then leads to changes in posture as people shift their weight forward, causing forward head posture, even altering the way they walk. "If not corrected, it can cause problems as an adult," Giddings said. "Adults I see with back pain often had back pain as kids."

A student's experience

Although many students have felt the effects of a backpack that is too heavy, Katelyn Winkler '19 feels them particularly acutely. Winkler was diagnosed with Scoliosis, a sideways curvature of the spine.

In order to correct and halt the progression of her spinal curve, Winkler wears a spinal brace. "One of the first things my doctor told me when I got my brace was, 'make sure that your backpack is not heavy,'" Winkler said. "I'm out of alignment so much anyways that having the backpack there to force me even more out of alignment is just not good."

Winkler said it is hard on her when her backpack

is too heavy because of her back problems. "A lot of times I'll have to go home from school and just lay down," she said. "I have some medical devices I use to help get my back more into alignment."

It's been very difficult for Winkler to follow her doctor's instructions. "He would prefer me to not carry a backpack at all," she said. "I feel like with my classes, five minutes isn't enough time to go to my locker, which is on the other side of the building from most of my classes."

Winkler has also tried other ways to lighten the load in her backpack. "I know that if I asked certain teachers 'hey can I leave this in your room' it would be fine," Winkler said.

However, she needs to bring most of the things in her backpack home to do homework, and is unable to leave them in classrooms. "I feel like the only solution is to have less stuff which I'm not really sure is an option," Winkler said.

Reducing the impact

Although backpacks are very heavy now, they used to be even heavier. "Before we had our iPads, I had students that would have very heavy backpacks," Krebs said. "Now that we have our iPads I don't see near as many problems with the backpack issues."

Before the iPads, Krebs would frequently weight backpacks that were 25-30 pounds. "I would prob-

ably have students coming in frequently with heavy backpacks," Krebs said. "At least a few times a week I was weighing backpacks and telling kids 'this is too heavy.'"

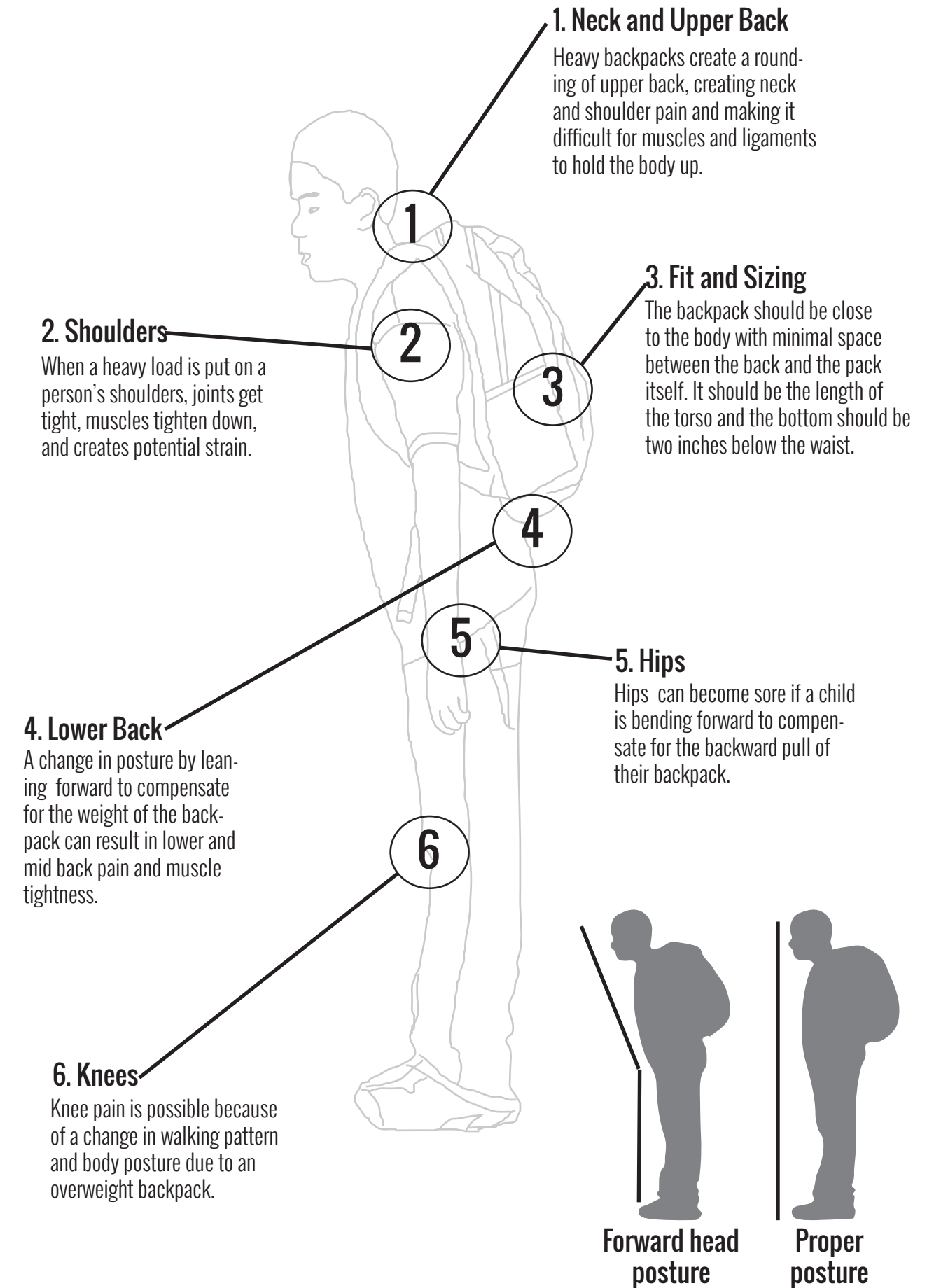
To Krebs, the iPads have helped to reduce the severity of backpack problems. "I was more concerned years ago [about backpacks] but not so much anymore, not with the iPad use," she said.

There are several ways to reduce the effects of backpacks. According to The American Academy of Orthopedic Surgeons, backpacks should not weigh more than 10-15% a person's body weight.

Giddings says students' backpacks should contain individualized compartments, padded shoulders and adjustable shoulder straps. These things help to better position the contents of the backpack, make it more comfortable and ensure that it fits properly.

Additionally, he recommends that students use both shoulder straps, make more frequent stops to their locker, only carry what they need for their next class and make sure that pointy or bulky objects are packed away from the area that will rest on the student's back.

At the beginning of the school year, the Chiropractic Health & Wellness Clinic performs free backpack safety checks. They evaluate the backpack with its typical contents. They also evenly distribute the load to ensure it isn't too heavy and properly adjust the straps. If interested, free backpack safety checks can be scheduled by calling (515) 270-6737.



Randomly weighed student backpacks



Ajmaeen Iqbal '17: 11 lbs



Almedin Smajlovic '19: 10.5 lbs



Dylan Galusha '19: 7.5 lbs



Dylan Braafhart '19: 12.7 lbs