

VOLUNTARY AND REFLEXIVE CONTROL OF MUSCLES

It is a beautiful, albeit cold, winter evening in Rexburg, Idaho. It just snowed six inches, and your FHE group decided that you could not pass up the opportunity to go sledding at the sand dunes. On the first run of the night, your best friend gets huge air on an unseen jump and then lands awkwardly on her back. You quickly sled down to check on her, careful to avoid the jump. When you reach her, she is sitting up but looks confused. You ask her if she is ok and if she remembers what happened, but she just looks at you. Then, without warning, she turns and vomits on the ground. You get the others and decide to take her to the emergency room to get checked out. She is a little wobbly on her feet at first but is able to walk to the car on her own. After waiting in the exam room for a time, the doctor comes in and asks her a series of questions. He then pulls out a mini flashlight and shines it in her eyes one at a time. Curious about why he is shining a light in her eyes, you ask him. He responds that he is evaluating her brain by checking her reflexes. He then has her stand up and walk across the room as he observes. After finishing his exam, he turns to you and says that she has a mild concussion, but she should be fine. He gives you some instructions and warnings, and then you take her home. As you leave, you wonder:

What are reflexes? (You used to think the only way to test reflexes was to hit someone's knee with a hammer!) How do reflexes work? How could the doctor tell that your friend was ok simply by looking in her eyes? What was he looking for as she was walking? How is the nervous system able to control both conscious and unconscious body movements? These are some of the questions that we will attempt to answer in this unit.

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Reflexes



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