CARES UPDATE

Research Finding

From our Adolescent Balance Study

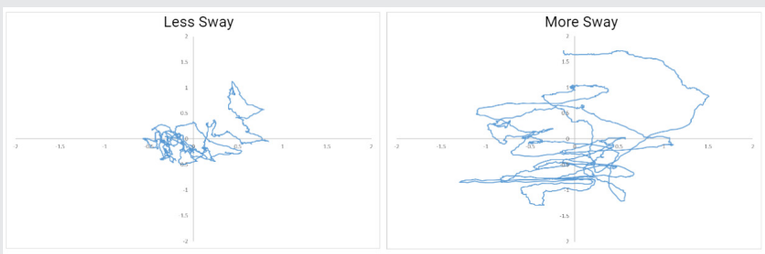
Sway is your body's natural movement even when standing still. The amount of sway a person has is based on the brain's ability to respond to visual and spatial cues. Researchers have used natural sway to measure the impact of lead and other chemicals on brain function.

We measured sway on 123 of the Marietta and Cambridge CARES adolescent participants when they were ages 13-17 years old.

To measure sway, we used a balance board like the Wii Balance Board game. Our balance board creates an image of the participants sway, called a stabilogram. See an example at right of a stabilogram with less sway and a stabilogram with more sway. Less sway means the participant's body moved less and more sway means the participant's body moved more, in order to maintain balance.

We found participants with higher levels of manganese in their blood had more sway than those with lower levels while standing on the balance board with eyes open and with eyes closed

This leads us to our next research question, do people with more sway experience more balance related injuries?



Balance testing creates a stabilogram: an image of participant sway. If you were a balance participant and would like your stabilogram, call Jody: (740) 538-1053

Team Member Spotlight

Name:
Dani McBride, PhD
Role:
Dani played an important role on the CARES team since 2017 when she was a doctoral student. She was part of the team that measured balance when CARES participants were 13-17 years old. She is now leading the new balance related injury study as a postdoctoral trainee! She also just accepted a new faculty position at Calvin University in Grand Rapids, MI.
Hobbies:
Hiking, camping, weight-lifting and drinking coffee.

Fun Fact

66 females and 57 males completed adolescent balance testing