GROWING UP, DID YOU EVER HAVE TO GIVE A PRESENTATION IN FRONT OF THE ENTIRE CLASS AT SCHOOL AND FELT LIKE THERE WAS A FROG IN YOUR THROAT? WELL, NEW RESEARCH FROM THE UNIVERSITY OF MISSOURI HAS FOUND THAT NERVES CAN HAVE AN EFFECT ON REGIONS OF THE BRAIN ASSOCIATED WITH VOICE CONTROL.

ASSOCIATE PROFESSOR OF SPEECH, LANGUAGE AND HEARING SCIENCES MARIA DIETRICH CONDUCTED A STUDY WHERE YOUNG WOMEN WERE TOLD THEY HAD TO PREPARE FOR A FIVE-MINUTE IMPROMPTU SPEECH ABOUT WHY THEY WERE THE BEST CANDIDATE FOR A JOB. DURING THE STUDY, RESEARCHERS COLLECTED SAMPLES OF SALIVA TO TEST FOR CORTISOL, THE BODY’S MAIN STRESS HORMONE. MRI SCANS ALSO WERE TAKEN OF THE PARTICIPANTS TO SEE HOW BRAIN ACTIVITY IMPACTED THEIR SPEECH.

“In the brain there are cognitive and emotional processes that are triggering the stress response, which goes along with physiological responses that are happening in the muscles and blood vessels.”

DIETRICH FOUND THAT THE PARTICIPANTS WHO HAD HIGHER CORTISOL LEVELS ALSO SHOWED BRAIN ACTIVITY THAT IMPACTED THE LARYNX. MORE COMMONLY KNOWN AS YOUR ‘VOICE BOX.’ HOWEVER, DIETRICH SAYS THERE IS A SIMPLE TIP FOR PUMPING THE BRAKES ON YOUR BODY’S STRESS RESPONSE WHEN FEARS ARISE ABOUT PUBLIC SPEAKING.

“A good physiological tip is to take a deep breath, because taking a deep slow breath engages the vagus nerve, which brings back the calmness in our body and so it reduces this feeling of stress and calms the nerves, literally.”

I’M CAILIN RILEY, WITH A MIZZOU SPOTLIGHT ON SCIENCE.