Podcast: CRISPR can cause cancer? Vitamin B6 may fight depression; COVID 'groupthink'



RISPR gene editing has already proved to be a useful biomedical tool, but a recent study indicates it may damage DNA and rarely lead to cancer. How worried should we be? Vitamin B6 may help mitigate the symptoms of depression and anxiety. Is it time to start popping vitamin pills again? COVID-19 abruptly forced scientists into the political spotlight, turning a

pandemic into a partisan battle. Can we learn from this mistake before another public health crisis comes along?

Join geneticist Kevin Folta and GLP contributor Cameron English on episode 180 of Science Facts and Fallacies as they break down these latest news stories:

• CRISPR may not always be safe: Study finds gene editing can damage genome and in extreme cases cause cancer

Recently published evidence indicates that CRISPR gene editing may cause unintended changes to a patient's DNA that could, in rare circumstances, lead to cancer. The results raise a pressing question: what steps can experts take to mitigate serious, though uncommon, risks linked to a useful, even life-saving genetic technology already used to treat patients?

Vitamin B6 shown effective in treating depression and anxiety

Anxiety and depression are treated with cognitive behavioral therapy and a wide range of FDA-approved drugs. According to a recent study, however, a simple vitamin B6 supplement could augment these standard treatments and help mitigate the symptoms associated with these mental health conditions. What do the study's results actually tell us? More importantly, what *don't* they tell us?

• <u>Viewpoint: Groupthink — How the COVID pandemic made scientists into politicians, with</u> equally loyal followers

During the COVID-19 pandemic, science became politicized like never before. Career academics and federal regulators were suddenly thrust in front of microphones and cameras and expected to make authoritative statements about a virus nobody knew very much about. The predictable result was vitriolic partisan clashes, during which some experts and their supporters attacked other scientists and their supporters.

Can we learn from these unfortunate circumstances and incorporate the lessons into our preparations for the next public health emergency—before it arrives?

Kevin M. Folta is a professor, keynote speaker and podcast host. Follow Professor Folta on Twitter @kevinfolta

Cameron J. English is the director of bio-sciences at the <u>American Council on Science and Health</u>. Visit <u>his website</u> and follow ACSH on Twitter <u>@ACSHorg</u>