

Podcast: Time to eat bugs? Fighting high cholesterol with CRISPR; mRNA flu vaccines coming soon?



Are you ready to eat insects? Some scientists say it's time we get more protein from bugs and less from meat. CRISPR gene editing may help eliminate high cholesterol, potentially reducing the deadly threat posed by heart disease. Flu shots based mRNA technology may be coming to a drug near you.

Join geneticist Kevin Folta and GLP contributor Cameron English on episode 198 of Science Facts and Fallacies as they break down these latest news stories:

- [**Insect food? Public skepticism remains a major hurdle but here is the sustainability case for including them in our diet**](#)

Is it time for consumers in the developed world to make bugs a staple in our diets? Some scientists and policymakers have been vocal in their demands that we eat insects in order to reduce agriculture's contribution to climate change. As is often the case with controversial ideas, two questions arise: does the science support this campaign to put mealworms on the menu, and will doing so really reduce our environmental footprint?

- [**Poor cholesterol? A gene-edited solution could lower 'bad' LDL and reduce heart disease risk**](#)

Millions of Americans suffer from high cholesterol, a major risk factor for heart disease. Although multiple treatments exist for high cholesterol, a novel CRISPR-based therapy may allow scientists to edit the gene that controls LDL levels, potentially eliminating the risk before it becomes a problem later in life. This gene-editing solution is many years from commercialization, but it's still tempting to speculate about how it may impact the interplay between genetics and environment that dictates our risk for heart disease.

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- [**Universal mRNA-based vaccine targeting 20 types of flu is a real possibility**](#)

Effective flu shots are infamously difficult to produce. Although a vaccine can reduce your risk of catching influenza between 10 and 60 percent, depending on the season, scientists would like to eliminate the year-to-year variability and offer the public a consistent level of protection against infection every fall. Shots based on the same mRNA technology that yielded the COVID-19 vaccines may make that possible. These souped-up flu shots could be manufactured relatively quickly, experts say, allowing vaccine developers to target more strains of the virus and thus making them more effective. However, the ongoing controversy surrounding COVID immunizations has some scientists worried that the public won't get

mRNA flu vaccines, even if they are far better than the current shots.

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