

Least likely to be endangered.



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## FOR REAL! TWEEN SCIENCE

**Cockroaches—those pesky household guests—were around well before households ever were.** Dinosaurs and cockroaches walked the Earth together. The fossils of modern cockroaches date back to the Jurassic period.

The bugs are famously hardy. Sixty-six million years ago a massive asteroid wiped out three-quarters of plant and animal life on this planet, pausing photosynthesis during an “impact winter.” But cockroaches? They kept going. Cockroaches seem to stroll through disasters, and they also are somehow able to defend themselves against nasty germs. Some people think they can make us healthier.

The *P. americana* species has been used in traditional Chinese medicine for centuries. The cockroach antidote is commonly in a powder form, which prevents patients from having to look at bugs during treatment (yuck) and is believed to improve the potency of certain medicinal elements of the roach. Many ingredients taken from *P. americana* are legal for medical use in China. Injections like “Kangfuxin Solution” are said to promote blood circulation and the growth of human tissue. In some rural parts of China—where farms breed cockroach colonies (yes, that’s what I said)—traditional med-

icine practitioners have prescribed roach formulations for stomach inflammation, pain and respiratory infections.

Don’t try this at home.

While doctors practicing traditional medicine may use such treatments, these approaches have not been vetted to see if any of them truly work. There’s every indication that cockroach exposure is likely to make you sick. (We know contact with the bug’s feces can cause asthma.) Yet scientists are interested in learning how these critters fight disease. In a 2016 report, European researchers suggested that creatures living in dirty environments may help us learn how to kill dangerous germs. Some other examples of animals that thrive in contaminated environments are snakes, crocodiles and water monitor lizards.

So, the next time you spot a creepy cockroach crawling by, remember to pay respect to the reigning champion of survival of the fittest.

—Maggie Medoff

Thanks to Carnegie Museum of Natural History entomologist Andrea Kautz for letting us bug her for insight on this topic.