

Can GM maggots save us from antibiotic resistant bacteria?

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A world without antibiotics would drive us back to the Dark Ages. When we run out of bacteria-fighting drugs—a [scenario](#) that scientists [say](#) might come sooner than later—major surgery will be too risky to perform, and food will get more [expensive](#). Even our wound treatment could get medieval, but with a high-tech twist. One scientist is making genetically-modified maggots that pump out human growth factor, which could help treat and sterilize open wounds when antibiotics don't work anymore.

Max Scott, a professor of entomology at North Carolina State University, developed the wound-cleaning [maggot](#) as a side project, and received no funding to do his proof-of-concept work. “We had the technology to engineer blowflies, and realized we could apply it to a closely related species, for cleaning wounds,” he told me.

Scott's lab focuses on creating engineered strains of the Australian sheep blowfly and the New World screwworm, two livestock pests. For decades, these bugs have been controlled by blasting them with radiation to sterilize them, then releasing them into the wild to mate with others. But healthy bugs don't really like to mate with sickly, irradiated ones. And anyway, Scott says his GM technique is a lot more efficient.

“We're modifying [insect] strains so they carry genes that are lethal to female flies, but not male,” he said. The males still mate with female bugs, but produce no offspring—a similar method to what's being done at Oxitec, with mosquitoes, to put a [stop](#) to the [transmission](#) of Zika and other mosquito-borne viruses.

Read full, original post: [A Scientist Has a Solution to Antibiotic Resistance — Genetically Modified Maggots](#)