

Alligators to the rescue against antibiotic resistance

Among all the animals captivating our collective attention, one of the most prevalent has been the alligator. Historical records reveal these ancient creatures have caused fascination and fear since the 16th Century. More recently, alligators have been the topic of a number of television programs, movies, and even musical compositions. While our social fancy for these creatures has a long standing history that shows no signs of waning, for public health officials, the adoration is just beginning.

Back in the 1990s, the alarm was sounded regarding the collapse of antibiotic use due to resistance. Though the end was still decades away, the mere thought of losing the ability to use these weapons for health defense sent a chill throughout the entire scientific community.

As part of the response, a number of researchers began the hunt for novel antimicrobial candidates in the environment. From soil to water to fish to bird to animals, any potential source was worth investigating. One of the most promising sources was reptiles. Over the years, a handful of options were discovered from the skin of frogs, the venom of snakes, and even turtle eggs. Most of them took the form of antimicrobial peptides. These short chains of amino acids were found to have similar effects as antibiotics with little to no issues regarding resistance.

When it came to alligators and their taxonomical cousins, the crocodiles, there was more than just hope, there was belief. First, researchers began to explore the blood of these creatures if only to find evidence of antimicrobial action. The journey was well worth the effort as the serum was found to inhibit the growth of the bacterium *Escherichia coli* in lab tests.

Read full, original article: [Alligator antimicrobials may help us in a post-antibiotic era](#)