## Bacterial DNA used in innovative Hepatitis B vaccines

Two hepatitis B virus vaccines are currently on the market. Earlier this month, however, the Food and Drug Administration licensed another hepatitis B vaccine. This new vaccine employs a unique strategy: fighting the hepatitis B virus with ... bacterial DNA.

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It's identical to the two existing hepatitis B vaccines—which have been available since the 1990s—in that it contains 20 micrograms of a protein that is located on the surface of the virus. But unlike these other hepatitis B vaccines, the new vaccine also contains 3 milligrams of repeated linkages of cytosine and guanine—a molecular pattern unique to bacterial DNA called CpG oligonucleotides. It's the first time this immune-boosting product has been used in a vaccine.

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The FDA licensed this novel hepatitis B vaccine for people older than 18 years of age in certain high-risk groups like household contacts of someone who is infected, injection drug users, healthcare workers, or people with HIV, diabetes, or chronic lung or kidney diseases.

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Ironically, the best way to address the problems with the hepatitis B vaccine—as well as with any strategy necessitating the induction of long-lasting, specific immunity—might be to solicit the help of a part of our immune system that is designed to respond to something entirely different.

The GLP aggregated and excerpted this blog/article to reflect the diversity of news, opinion, and analysis. Read full, original post: Ancient Bacterial DNA Could Thwart a Devastating Disease