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Vaccines as alternatives to antibiotics for food producing animals. Part 2: new approaches and potential solutions

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In **Significant Impact Groups:**

Pathogen management \ Vaccination Specific alternatives

Species targeted: Pigs;Poultry;Dairy;Beef;Sheep;Other;

Age: Young;Adult;

Summary:

This article highlights new approaches and potential solutions for the development of vaccines as alternatives to antibiotics in food producing animals. Many current vaccines fall short of ideal vaccines in one or more respects. Promising breakthroughs to overcome these limitations include new biotechnology techniques, new oral vaccine approaches, novel adjuvants, new delivery strategies based on bacterial spores, and live recombinant vectors; they also include new vaccination strategies in-ovo, and strategies that simultaneously protect against multiple pathogens. However, translating this research into commercial vaccines that effectively reduce the need for antibiotics will require close collaboration among stakeholders, for instance through public–private partnerships. Targeted research and development investments and concerted efforts by all affected are needed to realize the potential of vaccines to improve animal health, safeguard agricultural productivity, and reduce antibiotic consumption and resulting resistance risks.

Where to find the original material:

https://veterinaryresearch.biomedcentral.com/articles/10.1186/s13567-018-0561-7?optIn=true;
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