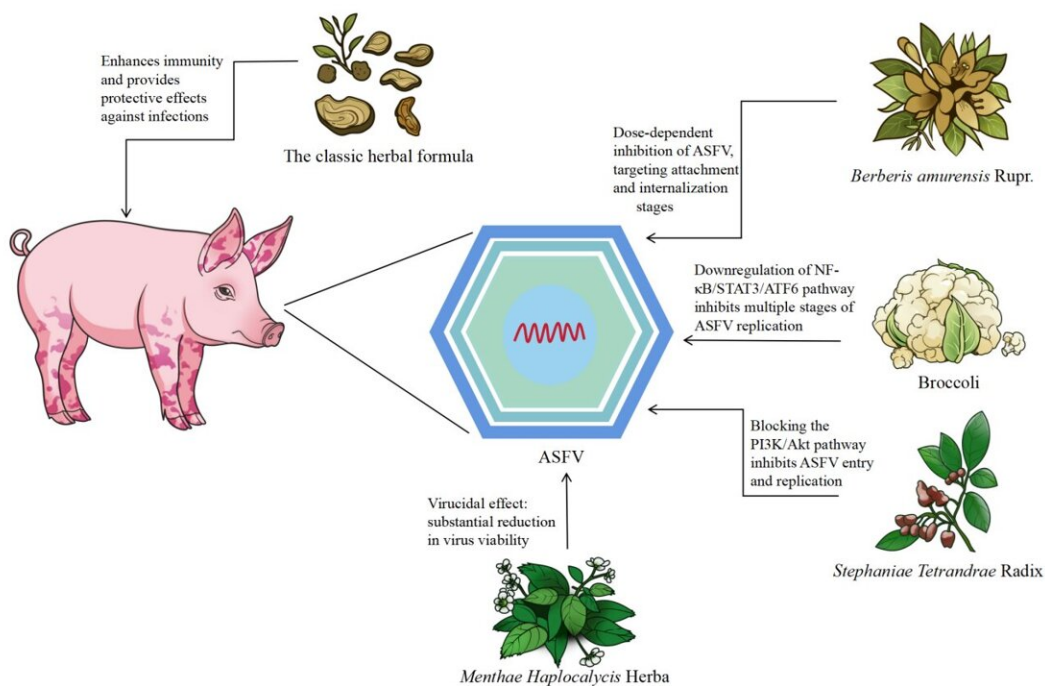


# Ancient remedies for modern woes: Traditional Chinese medicine and the fight against African swine fever

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Different pathways associated with the protective effects of traditional Chinese herbs against African swine fever. Credit: *Animal Diseases* (2024). DOI: 10.1186/s44149-024-00122-1

African Swine Fever (ASF) poses a grave threat to the swine industry, with the virus causing severe economic and agricultural disruptions since

its emergence in China in 2018. The disease, transmitted by the African Swine Fever Virus (ASFV), has become endemic with a high mortality rate nearing 100%.

This urgency calls for innovative approaches to manage and mitigate the impact of ASF on pig farming communities. However, despite extensive efforts, the development of effective vaccines or treatments has been hindered by the virus's complex nature.

Researchers from Huazhong Agricultural University, in collaboration with the Hubei Jiangxia Laboratory, have published a [comprehensive review](#) in the journal *Animal Diseases*.

The study delves into the advancements of traditional Chinese medicine (TCM) in the prevention and control of ASF, highlighting the antiviral and immunoregulatory capabilities of herbal compounds.

The review meticulously details the multifaceted approach of TCM in addressing ASF. It underscores the antiviral potential of various herbal extracts, such as berbamine hydrochloride from *Berberis amurensis* Rupr., which inhibits ASFV proliferation by interfering with early viral infection stages. Luteolin, found in common vegetables such as broccoli, has demonstrated the ability to suppress the virus's replication cycle by modulating key signaling pathways.

The study also highlights the role of TCM in immunomodulation, showcasing how certain herbal formulas can enhance the pigs' immune responses and potentially reduce the severity of ASF. The integration of such traditional knowledge with modern scientific methods presents a robust strategy to combat this devastating disease, illustrating the profound impact of TCM in contemporary [veterinary medicine](#).

Dr. Qiang Zhang, a corresponding author and expert in veterinary

medicine, states, "TCM offers a [unique perspective](#) in managing diseases like ASF. Its multi-component, multi-target approach can potentially lead to more effective and safer treatments with less risk of resistance development."

The findings suggest that integrating TCM into modern pig farming practices could significantly bolster [disease prevention](#) and control measures. The use of herbal additives in feed and the development of TCM-based [antiviral drugs](#) present promising avenues.

In addition, this research could pave the way for a deeper understanding of TCM mechanisms, facilitating its integration with Western medicine and contributing to global health strategies against ASF and potentially other [infectious diseases](#).

**More information:** Yuwei Yang et al, Advances in research on the efficacy of traditional Chinese herbal medicine in combating African swine fever, *Animal Diseases* (2024). [DOI: 10.1186/s44149-024-00122-1](#)

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