



TECHNOLOGY

Egg-Based Dietary Supplement for the Prevention and Treatment of Infectious Diseases

OVERVIEW

Background

Influenza vaccination significantly reduces the morbidity and mortality of seasonal influenza. However, its efficacy is limited in high-risk populations such as infants, the elderly and the immunosuppressed. The lack of preexisting immunity to pandemic or zoonotic (spread from animals to humans) strains can lead to severe influenza infections that require immediate antiviral treatment. The rapid development of different strains, the narrow window of opportunity for treatment and the resistance to drugs are some of the problems plaguing the scientific community. Therefore, there is need for a simple and effective method to produce vaccines to keep up the demand.

Innovative Technology

Researchers at the University of Maryland, College Park have developed a novel egg-based dietary supplement that prevents and treats influenza infection in chickens and other animals. This antibody-based supplement derived from chicken eggs can be separated from the whites and used either "as is" in liquid or solid form (dried powder). It can be diluted into drinking water and given to animals (and potentially humans) to prevent influenza infection.

Advantages

- 1) Easily produced in high concentration in egg yolk and highly stable
- 2) Consumed in either solid/powder or liquid forms
- 3) Safe and does not have any immune-related side effects
- 4) Orally dispensable and hence convenient compared to currently invasive methods

Applications

- 1) Antiviral (anti-influenza) dietary supplement to be used in animals and potentially in humans

IP status: Patent Pending

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Additional Information

INSTITUTION

University of Maryland, College Park

PATENT STATUS

Patent(s) pending

LICENSE STATUS

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CATEGORIES

- Natural Compounds

EXTERNAL RESOURCES

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