

# FLU VACCINE: WHAT'S IN THE VIAL?



5 typical components of vaccines:

Antigens ●

Adjuvants ●

Stabilizers ●

Preservatives ●

Residual byproducts ●

## ADJUVANTS

Like morning coffee helps us get a better start on the day, adjuvants help our immune system get a better start against the vaccine.

The only flu vaccine that contains an adjuvant is Fluad, which uses MF59.

No current flu vaccines contain aluminum.



## STABILIZERS

Like buildings need fortifiers to remain stable over time, so do vaccines.

Gelatin is a stabilizer that causes concern for people with related allergies or those seeking to avoid pork products. The only flu vaccine that contains gelatin is FluMist.

## ANTIGENS

The active ingredient of the vaccine to which we make an immune response

For flu vaccines, the antigen is either:

### Whole virus

1. Dead virus (inactivated)  
Examples: Afluria, Fluarix, FluLaval, Fluzone, Flucelvax
2. Live, weakened virus  
Examples: FluMist

### Part of the virus

1. Two proteins (hemagglutinin & neuraminidase)  
Example: Fluad
2. One protein (hemagglutinin)  
Example: Flublok



## PRESERVATIVES

Like gates keep out those who shouldn't enter, preservatives keep pathogens out of vaccines. Thimerosal, a mercury-containing preservative, has been removed from most flu vaccines. Exceptions are multi-dose vials of Afluria, Fluzone and Flucelvax; none of which are given to children younger than 4.

The amounts of egg protein left in some flu vaccines (Afluria, Fluarix, FluLaval, FluMist, & Fluad) are so minor that most people with egg allergies can still get the flu vaccine.

## RESIDUAL BYPRODUCTS

Like a bit of the beach always finds its way home, a small amount of the ingredients used to make the vaccine always end up in the vial.



## FLU VACCINE: WHAT'S NOT IN THE VIAL?

|                |                      |            |
|----------------|----------------------|------------|
| Fetal cells    | Gluten               | Microchips |
| Human DNA      | Soy                  | COVID-19   |
| Blood products | Natural rubber latex |            |

\*Only one flu vaccine (FluMist) contains an ingredient of porcine origin (gelatin).

Find out more:



or  
[vaccine.chop.edu/parents](http://vaccine.chop.edu/parents)  
(Check "Parents PACK Newsletter"  
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