

ALUMINUM & VACCINES: 3 THINGS TO KNOW

1

Aluminum is everywhere.

Plants. Soil. Water. Air.



Aluminum is also in vaccines, where it is an **adjuvant**.

Adjuvants allow for:

1. Lower quantities of antigen (the part of the vaccine that the immune system responds to)
2. Fewer doses

Aluminum has been used safely in vaccines since the 1940s.

2

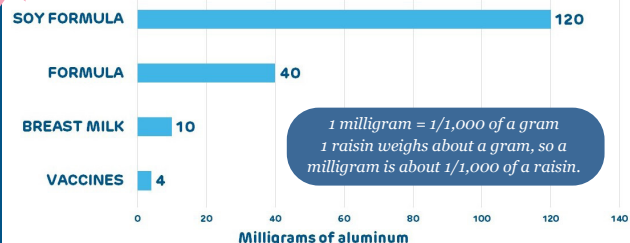
Once in the bloodstream, aluminum is processed the same whether **injected** in vaccines or **ingested** in food.

Remember the fable about the tortoise and the hare?



When it comes to aluminum exposure, food is like the tortoise and vaccines are like the hare. The slower, more regular (daily) exposure to lower quantities from food overtakes the faster, less frequent exposure to higher quantities from vaccines.

Average aluminum exposure (milligrams) in the first 6 months of life



3

We know when aluminum poses a problem to health.

Two conditions must exist for aluminum to affect a person's health:

1. Their kidneys are not functioning well or at all.
2. They are exposed to large quantities of aluminum (e.g., amounts in antacids or intravenous fluids) over months or years.



When studied, aluminum levels in blood did not increase after receiving vaccines.

Delaying vaccines to limit aluminum exposure doesn't increase vaccine safety, but it does leave a child vulnerable to potentially dangerous pathogens for a longer period of time than necessary.

