

# Gelatin or Egg Allergy May Not Rule Out Vaccine

BY SUSAN LONDON

SEATTLE — Children who are allergic to gelatin or egg protein still can receive key childhood vaccines containing these agents, but vaccination should be done by an allergy specialist under well-controlled conditions, according to Dr. John Kelso.

Gelatin is one of the ingredients in the measles, mumps, and rubella vaccine (MMR-II), Dr. Kelso said at a meeting sponsored by the American Academy of Pediatrics. “In the vast majority of people who have an allergic reaction to MMR, it’s because of allergy to the gelatin.”

Various other vaccines also contain gelatin, such as Tripedia (diphtheria,



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DR. KELSO

tetanus, and acellular pertussis), Fluzone (influenza), Zostavax (zoster), and Varivax (varicella), said Dr. Kelso, who is a pediatric allergy and immunology specialist at the Scripps Clinic in San Diego.

In Japan, where anaphylactic reactions to vaccines became common, gelatin has been removed from vaccines or hydrolyzed more thoroughly to make it less allergenic, he noted. But vaccines have not been so altered in the United States.

“Prior to giving someone a gelatin-containing vaccine, you should ask them if they are allergic to Jell-O or gelatin,” he advised. “There is some yield with that question, but it’s not a perfect test because there are children who can eat Jell-O and not have a problem, but when it is injected in their arm, they have anaphylaxis.”

Children who have a history of reactions to gelatin should be referred to an allergist for definitive testing, Dr. Kelso said. If the child is confirmed to have an allergy, the allergist can administer the vaccine using strategies such as graded dosing.

Two types of vaccines—influenza vaccines and the yellow fever vaccine—contain egg protein. Hence, children should be asked about egg allergy before these vaccines are administered.

“In one study, they gave influenza vaccine to egg-allergic children and nothing happened,” he noted. However, the amount of egg protein in any given year’s influenza vaccine varies considerably, so it is unclear what would happen if the current year’s vaccine contained greater amounts of the protein.

“The AAP’s Red Book unfortunately concluded that egg-allergic children should just not be given the influenza vaccine and that antivirals should be considered instead. But if you have a child whom you would really like to receive an influenza vaccine—even if they

are egg allergic—please send them to your local allergist,” he said. “We can skin test them with the vaccine itself and with egg for that matter because that’s an allergy that is commonly outgrown. Then, if we need to, we can administer the vaccine in graded doses.”

He encouraged pediatricians to report any reaction even potentially related to a vaccine through the online Vaccine Adverse Event Reporting System

(VAERS) at <https://secure.vaers.org/VaersDataEntryIntro.htm>.

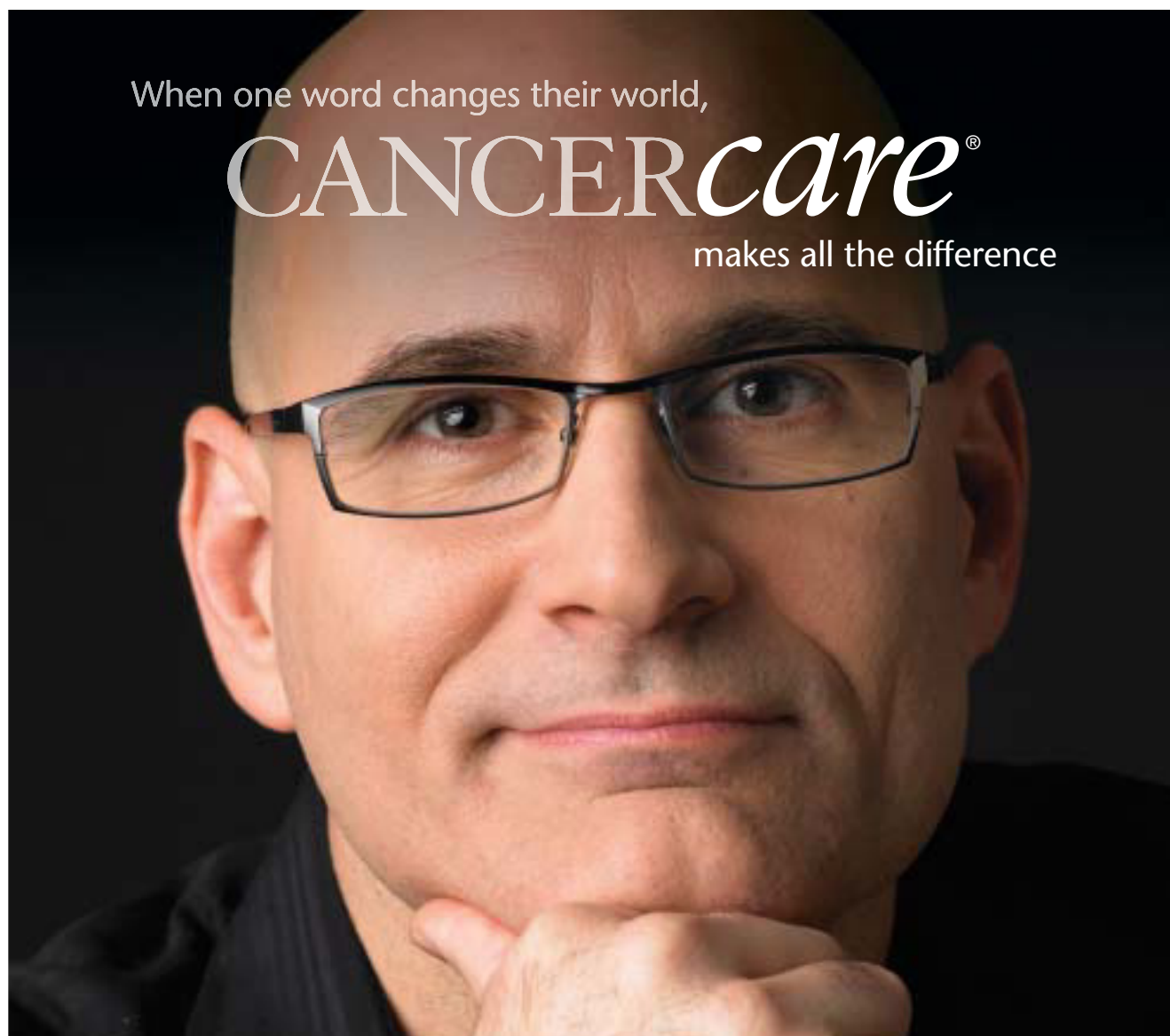
“Please submit these reports—it’s very important because this is how these very rare reactions to vaccines come to light,” he explained.

For definitive, current information on vaccines, including their components, Dr. Kelso recommended the Pink Book, formally titled “Epidemiology and Prevention of Vaccine-Preventable Dis-

eases,” which is published by the Centers for Disease Control and Prevention. “The entire book is available online. It’s a tremendous resource and it is continually updated,” he noted.

For information on the components of vaccines, go to [www.cdc.gov/vaccines/Pubs/pinkbook/downloads/appendices/B/excipient-table-2.pdf](http://www.cdc.gov/vaccines/Pubs/pinkbook/downloads/appendices/B/excipient-table-2.pdf).

Dr. Kelso reported no conflicts of interest related to his presentation. ■



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