

Washington State Board of Health
P. O. Box 47990
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February 10, 2020

RE: Petition to raise awareness about baker's yeast-recombinant technology in vaccines

To Whom It May Concern:

I, Tetyana Obukhanych, Ph.D., hereby petition to the Washington State Board of Health (SBOH) to develop guidelines for WA state-licensed vaccine administrators and programs on adequate cautioning of vaccine recipients about vaccine brands produced via yeast-recombinant technology, which currently include the Hepatitis B and the HPV vaccines.

The yeast species used in the yeast-recombinant vaccine production technology is called *Saccharomyces cerevisiae*. The same yeast species, commonly known as baker's or brewer's yeast, is used in making bread, beer, wine, and as a nutritional yeast supplement. *Saccharomyces* lives naturally on grapes, plums, and other fruit. This yeast may also be part of human gut biome in some individuals. Because of this, priming the immune system to react to this yeast species may be fraught with negative consequences in a subset of susceptible individuals. This may include development of gastrointestinal food allergies (GIFA) to subsequent dietary yeast consumption or development of inflammatory bowel diseases, such as Crohn's, when the immune system produces anti-*Saccharomyces cerevisiae* antibodies and attacks the gut biome.

The Hepatitis B vaccine is heavily contaminated with the *Saccharomyces cerevisiae* yeast antigen.¹ In fact, there is potentially 1000 times more yeast antigen (5 mg) than actual Hepatitis B viral antigen (5 mcg) in some Hepatitis B vaccine brands. When injected with a potent aluminum adjuvant, which is present in these vaccines, the priming of the immune system against the *Saccharomyces cerevisiae* antigen is immunologically unavoidable.

¹ "Hepatitis B vaccines are made using baker's yeast and residual quantities of yeast proteins are contained in the final product. Engerix-B® (GlaxoSmithKline) and Heplisav-B® (Dynavax Technologies) contain no more than 5 mg per ml and Recombivax HB® (Merck and Co.) contains no more than 1 mg per ml of yeast proteins. Two combination vaccines, Pediarix® and Twinrix®, that contain the hepatitis B vaccine (Engerix-B) also contain no more than 5 mg per ml. Pediarix combines hepatitis B with diphtheria, tetanus, pertussis and polio vaccines; Twinrix, an adult vaccine, combines hepatitis A and hepatitis B vaccines. The version of the human papillomavirus (HPV) vaccine contains less than 0.007 mg of yeast proteins." **Source: Children's Hospital of Philadelphia's website, <https://www.chop.edu/centers-programs/vaccine-education-center/vaccine-ingredients/yeast> (accessed on January 23, 2020).**

I myself started experiencing frequent bouts of intestinal pain after receiving the Hepatitis B vaccine in my graduate research immunology program. No helpful explanation was ever given to me by healthcare professionals about the cause of my gut pain. We are not taught what's in vaccines in graduate or medical schools. Only years later, as I started looking into vaccine ingredients and contaminants on my own, did I realize that I might have been immunologically primed to react to baker's yeast. I was able to become virtually pain-free by excluding every possible source of yeast from my diet. Re-introduction of it brings the bouts of pain back. All these years of pain and immune-mediated gut damage could have been avoided, if only I had been told by the nurse that I was receiving a yeast-recombinant vaccine and that this would entail a risk of being immunologically primed to and potentially needing to avoid all yeast in my diet from then on.

It is my strong conviction that the people of Washington will greatly benefit from the willingness of the State Board of Health to recognize the negative health impact of using baker's yeast-recombinant vaccines in a bread-consuming population, and that the implementation of guidelines suggested below will reduce healthcare costs currently spent on avoidable gut-related health issues. I therefore petition to the Board to adopt the following guidelines for WA state-licensed vaccine administrators and programs:

- a) that the use of yeast-recombinant vaccine brands be avoided, whenever possible;
- b) that vaccine recipients (and parents/legal guardians of minors) be alerted if they are receiving a yeast-recombinant vaccine brand and be given a list of common foods containing baker's/brewer's yeast;
- c) that gut-related issues and associated behavioral changes be carefully monitored in any infant who has received a yeast-recombinant vaccine, especially after introducing solids that contain baker's yeast; and
- d) if gut-related or behavioral complaints ensue, that dietary changes be recommended in order to avoid perpetuating vaccine-induced priming of their immune system with further dietary exposure to yeast antigen.

Thank you for your consideration,

Dr. Tetyana Obukhanych, Ph.D.
Concerned Citizen, Legislative District 24

cc: Sen. Kevin Van De Wege
Rep. Steve Tharinger
Rep. Mike Chapman

cc: Informed Choice Washington