

## Is There a Diet for “Yeast Allergy”?

**T**HERE ARE OVER 20 SPECIES OF *Candida* that can cause a fungal infection or candidiasis in humans.<sup>1</sup> The most common species, *Candida albicans* commonly resides on the skin, mouth, intestinal tract, vagina, and other moist, warm, and dark areas of the body. *Candida* is often called yeast, but it is a dimorphic fungus, meaning that it grows as a yeast form in a carbohydrate media and forms hyphae (strands) when the medium is low in nutrients. For this reason, *Candida* is also referred to as a *pseudoyeast*.<sup>2</sup> *Candida* is a typical inhabitant of the body’s resident microflora, but under certain circumstances it can become infective.

Those at risk for infection include individuals with a weakened immune system due to certain medications (such as antibiotics) and diseases that compromise the immune system. The presence of oral *candidiasis* (thrush) is a common condition in human immunodeficiency virus-infected individuals and is associated with poor nutrition because it may result in painful mucosal lesions, impairing the ability to consume food.<sup>3</sup> *Candida albicans* can also be a cause of *Candida vulvovaginitis*, commonly termed “yeast infection.” Consuming cultured dairy products may offer some protection against the infection, but the evidence is not conclusive.<sup>4</sup> Women with *Candida vulvovaginitis* may wish to try cultured dairy products not only for their potential ability to improve the infection, but also because of the nutrient density of these products.

It has long been proposed that *Candida* might be an allergen associated with a variety of symptoms.<sup>5</sup> The concept of “candidiasis hypersensitivity”

was popularized in the book, *The Yeast Connection*, originally published in 1983. Promoters also referred to this condition as chronic candidiasis, candidiasis hypersensitivity, *Candida*-related complex, the yeast syndrome, yeast allergy, yeast overgrowth, or simply “*Candida*” or “yeast problem.” The American Academy of Allergy, Asthma, and Immunology issued a position statement that the concept of candidiasis hypersensitivity should be regarded as “speculative and unproven” unless supported by competent research.<sup>6</sup>

Another member of the fungi family is mold. The Academy publication, *The Health Professionals Guide to Food Allergies and Intolerances*, includes a chapter titled “Yeast and Mold Allergy.” According to the publication,<sup>2</sup> individuals sensitized to fungi and fungal spores produce immunoglobulin E (IgE) against the fungal allergenic proteins. These IgE antibodies can be detected in blood tests such as allergen-specific IgE. In addition, skin tests for the fungal allergen are usually positive. There is no scientifically proven connection between *Candida* and this allergy discussed in the Academy publication.

The management of a yeast and mold allergy requires the elimination of all food that might contain yeast or mold. A yeast and mold allergy handout will be available as part of a set of patient education materials available in 2013 with detailed recommendations for this allergy. Some of the yeast-related dietary exclusions include:

- Baked goods. Yeast (*Saccharomyces* species) are used in leavened baked products.
- Alcoholic beverages. Yeast fermentation of a substrate (sugar) is the basis of production of alcoholic beverages. Distilled beverages such as spirits, are usually tolerated.
- Savory spreads. Some use yeast extracts. In Britain the product is marketed as Marmite (Unilever), in Australia as Vegemite (Kraft Foods, Inc), and in Switzerland a similar product is Cenovis (Cenovis AG).

- Sourdough breads. Sourdough starter is a form of yeast.
- Certain multivitamin preparations. Yeast is a source of B vitamins and is present in many multivitamin preparations containing B vitamins.

Food allergies are a growing concern. Registered dietitians will likely encounter patients seeking dietary counseling for suspected or diagnosed food allergies including requests such as a “yeast allergy diet.” Maintaining current information and resources to communicate evidence-based guidelines is critical. Working with a board-certified allergist can support the individual’s understanding of this topic and help determine whether a dietary intervention is warranted or not.

### References

1. Centers for Disease Control and Prevention. Candidiasis. <http://www.cdc.gov/fungal/candidiasis/>. Updated January 5, 2012. Accessed December 19, 2012.
2. Joneja JV. *The Health Professionals Guide to Food Allergies and Intolerances*. Chicago, IL: Academy of Nutrition and Dietetics; 2012.
3. Hendricks KM, Dongs KR, Gerriot JL, eds. *Nutrition Management of HIV and AIDS*. Chicago, IL: Academy of Nutrition and Dietetics; 2009.
4. Pirota M, Gunn J, Chondros P, et al. Effect of lactobacillus in preventing post-antibiotic vulvovaginal candidiasis: A randomized control trial. *BMJ*. 2004; 329(7465):548.
5. Barrett S. Dubious “yeast allergies”. Quackwatch website. <http://www.quackwatch.com/01QuackeryRelatedTopics/candida.html>. Revised October 8, 2005. Accessed December 21, 2012.
6. Position statement: Executive Committee of the American Academy of Allergy and Immunology. Candidiasis sensitivity syndrome. *J Allergy Clin Immunol*. 1986;78(2): 271-273.

### Additional Academy Resource-FNCE 2012 Sessions

1. Food Allergy Nation and the Role of RDs <http://www.starlibraries.com/fnce/session/123/Food-Allergy-Nation-and-the-Role-of-RDs>
2. Beyond Belly Aches: Identifying and Differentiating Food Allergies and Intolerances <http://www.starlibraries.com/fnce/session/107/Beyond-Belly-Aches-Identifying-and-Differentiating-Food-Allergies-and-Intolerances>

This article was written by **Eleese Cunningham, RD**, of the Academy of Nutrition and Dietetics’ Knowledge Center Team, Chicago, IL. Academy members can contact the Knowledge Center by sending an email to [knowledge@eatright.org](mailto:knowledge@eatright.org).

doi: 10.1016/j.jand.2013.01.013