



Egg Allergen component testing

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Whole Allergens and Allergen Components help you diagnose allergy, allowing you to prepare a more comprehensive management plan.

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Egg Allergen Component testing can help determine which proteins your patient is sensitized to.

A specific IgE blood test that detects sensitization to egg white is the first step in discovering your patient's allergy. Egg Allergen Component tests can help you determine the likelihood of reaction to products baked with egg, such as muffins or cookies, as well as the likelihood of allergy persistence.

CHARACTERISTICS OF INDIVIDUAL PROTEINS

Egg White f 1	Ovalbumin Gal d 2 / f 232	Ovomucoid Gal d 1 / f 233
<ul style="list-style-type: none"> High levels of egg white IgE may predict the likelihood of sensitivity, but may not be solely predictive of reactions to baked egg or allergy duration¹ 	<ul style="list-style-type: none"> Susceptible to heat denaturation² HIGHER RISK of reaction to uncooked egg^{1,3} LOWER RISK of reaction to baked egg^{1,3*} Patient likely to "outgrow" egg allergy⁴ 	<ul style="list-style-type: none"> Resistant to heat denaturation² HIGHER RISK of reaction to all forms of egg¹ Patient unlikely to "outgrow" egg allergy with high levels of specific IgE to ovomucoid^{5,6,7,8}

*In clinical studies, extensively baked muffin and waffle were heated to the point of protein denaturation.

70% of children with egg allergy do not react to **baked egg**.⁹



Knowing which protein your patient is sensitized to can help you develop a management plan.^{1,2,9,10}

Ovalbumin Gal d 2 / f 232	Ovomucoid Gal d 1 / f 233	Management Considerations
+	-	<ul style="list-style-type: none"> Avoid uncooked eggs Likely to tolerate baked egg Baked egg oral food challenge with a specialist may be appropriate Consider repeating IgE component test biennially during childhood to determine potential tolerance May be transferred via breast milk, so mothers of infants with egg allergy should take caution when breast-feeding
+/-	+	<ul style="list-style-type: none"> Avoid all forms of egg Consider repeating IgE component test biennially during childhood to determine potential tolerance Patients sensitized to ovalbumin with low levels of IgE to ovomucoid may react to egg that is not fully baked

As in all diagnostic testing, any diagnosis or treatment plan must be made by the physician based on test results, individual patient history, the physician's knowledge of the patient, and the physician's clinical judgement.

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Optimize management to help:

- **ASSESS** risk for systemic allergic reactions
- **EVALUATE** potential reaction to baked egg products
- **ADDRESS** parental anxiety

With **Egg Allergen Component test** results, you have more of the information necessary for proper diagnosis, allowing you to evaluate your patient's potential risk of systemic reaction, and develop a more comprehensive management plan.

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References

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