



**Hazelnut Allergen component testing**

## **Discover the Connection**

Allergen components, in conjunction with whole allergen test results help you better diagnose allergy, allowing you to prepare a more comprehensive management plan.

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# Hazelnut Allergen Component test results can help determine which specific proteins your patient is sensitized to.

A specific IgE blood test that detects sensitization to hazelnut is only the first step in discovering the likelihood of a systemic reaction and the necessary precautions that may be prescribed.<sup>1</sup>

## CHARACTERISTICS OF INDIVIDUAL PROTEINS

<i>Hazelnut</i> <i>f 17</i>	<i>Cor a 1</i> <i>f 428</i>	<i>Cor a 8</i> <i>f 425</i>	<i>Cor a 9 &amp; 14</i> <i>f 440, f 439</i>
<ul style="list-style-type: none"><li>High levels of hazelnut IgE can predict the likelihood of hazelnut sensitivity, but may not be solely predictive of reactions or allergic response<sup>1</sup></li></ul>	<ul style="list-style-type: none"><li><b>LOWER RISK</b> of systemic reaction, primarily associated with local reactions<sup>2</sup></li><li>Heat and digestion labile<sup>3</sup></li><li>Cross-reactive with pollens (e.g., birch)<sup>1,4</sup></li></ul>	<ul style="list-style-type: none"><li><b>VARIABLE RISK</b> associated with local and systematic reactions including anaphylaxis<sup>2,5,6</sup></li><li>Heat and digestion stabile<sup>7</sup></li><li>Indicates cross reactivity often from a primary peach sensitization<sup>5</sup></li></ul>	<ul style="list-style-type: none"><li><b>HIGHER RISK</b> of systemic reaction including anaphylaxis<sup>1,2,8,9</sup></li><li>Heat and digestion stabile<sup>10</sup></li><li>Sensitization to these can appear early in life and indicates a primary hazelnut allergy<sup>1</sup></li></ul>

Hazelnut is among the **top five** causes of serious food allergic reactions.<sup>11</sup>



## Take the diagnosis and management of hazelnut sensitized patients to a whole new level.

### Improve your **risk assessment** of hazelnut sensitized patients using allergen components

- The presence of IgE antibodies to Cor a 9 and/or Cor a 14 are associated with systemic reactions in hazelnut sensitized patients.<sup>1,2,8,9</sup>
- The presence of IgE antibodies to Cor a 8 indicates that both local oral symptoms and systemic reactions may occur.<sup>2,6</sup>
- Mono-sensitization to Cor a 1 is typically associated with local reactions although systemic reactions to raw hazelnuts may in some cases occur, especially in adults.<sup>2</sup>

### Improve **management** of hazelnut sensitized patients

- Patients sensitized to Cor a 8, Cor a 9 and/or Cor a 14 should avoid raw as well as roasted/heated hazelnuts.<sup>7</sup>
- Patients sensitized to storage proteins (Cor a 9, Cor a 14) should also be investigated for sensitization to peanuts and other tree nuts, e.g. walnuts and Brazil nuts, as cross-reactivity may occur.<sup>10,12</sup>
- Patients mono-sensitized to Cor a 1 often tolerate roasted or heated hazelnuts.<sup>7</sup>

# Optimize management

## MAKE A SUBSTANTIATED DECISION

A better differentiation helps you distinguish between primary and cross-reactive sensitization

## MAKE A PRECISE ASSESSMENT

Allergen component test results can help you assess your patient's risk for systemic reactions

## MAKE A DIFFERENCE

Better differentiation gives relevant information that helps you determine optimal treatment

### References

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