

# Cross Reactions Between Foods

*Food allergies affect many children and adults worldwide. Treatment of food allergies can sometimes be difficult due to the ability of some foods to “cross-react” with other foods. This cross reaction occurs when the immune response to something within one food causes an immune reaction to something similar in another food.<sup>1</sup>*

Cross-reactions and the resulting symptoms may occur with similar foods (e.g. cross reaction between almonds and other tree nuts), or with seemingly unrelated foods (e.g. cross reaction between wheat and cow’s milk). Cross reactivities can occur between pollen, plant-derived foods, pet dander, and animal derived foods.<sup>2</sup> For more information on cross reactions between food and environmental allergens, please ask your practitioner for IFM’s [Cross Reactions Between Food and Environmental Allergens](#) handout.

Understanding potential cross-reactions may be helpful if treatments geared at the main food allergy do not reduce or eliminate symptoms.<sup>3</sup> The table below summarizes some of the top allergens and their potential cross reactive foods.

Food Type	Similar Food Cross Reactions	Other Cross Reactions
Wheat <sup>4-9</sup>	Millet, rice, oat*, corn	Cow’s milk, instant coffee†
Cow’s milk <sup>6,10-12</sup>	Other milks: buffalo, goat, sheep	Soy, wheat
Soy <sup>12-13</sup>		Cow’s milk, rice
Corn <sup>4-6,9,13-15</sup>		Millet, rice, potato, soy, wheat
Eggs <sup>1</sup>	Meat from same or different bird species	
Egg whites <sup>16</sup>	Chicken, hen egg yolk, egg whites—turkey, duck, goose, seagull	
Egg yolks <sup>16</sup>	Egg whites	
Almond <sup>1,17</sup>	Peanut, Brazil nut, pistachio, cashew, walnut, pecan	
Brazil nut <sup>17-18</sup>	Peanut, hazelnut, cashew, pistachio, almond	
Cashew <sup>19-22</sup>	Pistachio, peanut	Mango, pink peppercorn, sumac spice
Hazelnut <sup>18,23-27</sup>	Peanut, coconut, walnut, pecan, macadamia	Carrot, celery, fennel, pomegranate, kiwi, sesame seeds, poppy seeds, rye
Macadamia <sup>25</sup>	Hazelnut	
Pecan <sup>18</sup>	Walnut, hazelnut	
Peanut <sup>17,23,28,29</sup>	Almond, Brazil nut	Green bean, kidney bean, pomegranate, buckwheat
Pistachio <sup>18,22,30</sup>	Cashew, peanut, walnut	Mango, sunflower seed
Walnut <sup>18,30,31</sup>	Coconut, pecan, pistachio	

\*Oats—cross contaminated with wheat †Instant coffee—contaminated with wheat when processing<sup>6</sup>

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