FOOD ALLERGIES, INTOLERANCES & SENSITIVITIES 🛛 🗮 🗮 USOPC

What is an Adverse Food Reaction?

An adverse food reaction is an abnormal response to eating food. Athletes can experience a variety of adverse reactions after exposure to certain foods, such as abdominal pain, nausea, sneezing, rash, headache or bloating.

What Causes an Adverse Food Reaction?

An adverse food reaction can be the result of a food allergy, food intolerance, food sensitivity or a gastrointestinal disease.



	Food Allergy	Food Intolerance	Food Sensitivity	Celiac Disease	Irritable Bowel Syndrome (IBS)
Definition	Inappropriate immune response to a harmless food protein	Temporary reaction caused by enzyme deficiency or food component	Any physical reaction to food	Autoimmune disease that damages intestinal lining in the presence of gluten	A group of intestinal symptoms affecting bowel movements and abdominal stress
Physiology	Immune mediated response to a protein in food within ~ 2 hrs	Digestive system- based discomfort from certain foods	Adverse physical reaction to certain foods or ingredients	Inability for the gut to properly break down or respond to the presence of gluten in foods	Altered gut function; malabsorption, motility, bowl movements, etc.
Common triggering foods	Milk, eggs, fish, shellfish, soy, wheat, peanuts, tree nuts, sesame	Lactose, gluten	Lactose, fructose, gluten, sulfites, flavorings, MSG, food colorings, caffeine	Gluten from wheat, barley and rye grains	FODMAP containing foods, gluten, high fiber foods, spicy foods, caffeine/coffee, fried foods

Testing for Adverse Food Reactions

Food Intolerances and Sensitivities: Usually through food diaries and elimination diets.

Food sensitivity blood tests are not recommended.

Food Allergy: Skin prick or antibody blood tests to measure immunoglobulin E (IgE) by an allergist, or a food challenge.

Celiac Disease: Blood test and small intestine biopsy.

IBS: No definitive test, but may include colonoscopy, stool test, symptom pattern analysis, breath test.

Food Sensitivity Blood Tests

These tests measure immunoglobulin G (IgG) antibodies of foods. The advertised description of these tests suggest that higher levels of IgG antibodies indicate a sensitivity to the food. However, IgG antibodies are naturally produced when we consume various foods and **are not a good indicator of a sensitivity to a food.**



FOOD ALLERGIES, INTOLERANCES & SENSITIVITIES 🛛 🗮 🗮 USOPC

Common Symptoms of Adverse Food Reactions

Common Symptoms	Food Allergy	Food Intolerance	Food Sensitivity	Celiac Disease	Irritable Bowel Syndrome (IBS)
Bloating		✓	✓	 ✓ 	✓
Nausea	~	✓	 ✓ 	~	✓
Diarrhea	 Image: A second s	 ✓ 	 ✓ 	 Image: A second s	✓
Constipation				~	✓
Abdominal pain	~	~	~	~	~
Vomiting	~			~	
Gas		~	 ✓ 	~	✓
Heartburn			✓		
Hives & Swelling	~				
Anaphlaxis	~				
Headache			 ✓ 	 Image: A second s	✓
Fatigue				 Image: A second s	

What to do if you experience adverse food reactions?

- Consult with a sport dietitian.
- Keep a food diary
- Try an elimination diet. This is best done with guidance from a dietitian.
- Consult with qualified professionals, such as an allergist, medical doctor or gastroenterologist.

Tips for Eating Out & Travel

- Always pack an epinephrine injectable if diagnosed with a food allergy.
- Bring an allergen ID card to easily communicate allergens to restaurant staff.
- Look at a restaurant's menu ahead of time to identify items that are safe to eat.
- Always ask about ingredients, sauces and cooking methods if unsure.
- Pack snacks free of triggering ingredients.
- Communicate with your coach, team leader, or dietitian about dietary restrictions so they can assist with appropriate meals and snacks.

Foods with Common Triggers

Sauces & gravies: G, D			
Salad dressings: G, D	G = gluten D = dairy S = soy		
Soups: G, S			
B ars: G, D, S			
Cereals & granola: G, S			
Baked goods: G, D			
Soy sauce: G, S			
Chips & crackers: G, S, D			
Meat substitutes: G, S			
Breaded/fried foods: G			
Milk: D			



© USOPC SPORT NUTRITION TEAM