

## Don't let bugs ruin your competition prep!

There you are only a short time away from your competition, you've nailed it and you're ready to show the world your great physique. Next thing you know you're vomiting, diarrhea, cramps, etc. and you feel your success on stage is slipping away from you. No it's not a cold--its food poisoning (correctly termed foodborne illness)! I have heard this story all too often, so to be safe seek medical attention immediately when stricken with food poisoning.

Below is a chart\* on the bugs, common food sources, how soon you get sick and how long it last, common symptoms, other symptoms and possible complications.

| Bug                            | Food  | Onset of symptoms | Length of sickness                   | Symptoms#                            | Other symptoms  | Possible Complications  |
|--------------------------------|---|-------------------|--------------------------------------|--------------------------------------|---|---|
| <b>Bacillus cereus</b>         | Meats, stews, gravies, leftovers                  | 4-16 hours        | 12-24 hours                          | D, V, AP                             |   |   |
| <b>Campylobacter jejuni</b>    | Undercooked poultry, raw milk                     | 2-5 days          | 2-10 days                            | D (may be bloody), V (sometimes), AP |   | Guillain-Barre syndrome   |
| <b>Ciguatera</b>               | Barracuda, amberjack, large groupers and snappers | 6-24 hours        | 1 day – 3 weeks                      | D, V                                 | Numbness & tingling in hands & around mouth, pain & weakness in legs                  | Chronic ciguatera syndrome, which could last from months to years |
| <b>Clostridium botulinum</b>   | Improperly home-canned foods                      | 6 hours – 10 days | Weeks (months in severe cases)       | D (sometimes), V (sometimes)         | Blurred vision, difficulty swallowing, slurred speech, dry mouth, respiratory failure | Long-term hospitalization in severe cases                         |
| <b>Clostridium perfringens</b> | Improperly cooked and stored prepared foods       | 6-24 hours        | 1-2 days up to 1-2 weeks             | D                                    |   |   |
| <b>Cyclospora</b>              | Imported berries, imported lettuce                | 7-10 days         | May come and go from weeks to months | D, V (rare), F (rare)                | Loss of appetite, weight loss, bloating, increased gas, fatigue                       |   |
| <b>Enterotoxigenic E. coli</b> | Food and water                                    | 8-44 hours        | 3-7 days or more                     | D, V                                 |   |   |

|   |  |                      |               |                   |  |  |
|---|--|----------------------|---------------|-------------------|--|--|
|   | contaminated with feces, usually while traveling                                   |                      |               |                   |  |  |
| <b>E. coli O157:H7</b>  | Undercooked beef, raw milk, unpasteurized juice, raw sprouts, contaminated water   | 1-9 days             | 2-9 days      | D (bloody), V, AP |  | Kidney failure from hemolytic uremic syndrome          |
| <b>Listeria monocytogenes</b><br><i>(mild illness)</i>            | Raw milk, cheeses made with raw milk, deli meats                                   | 9-48 hours           | Days to weeks | D, V, F           | Flu-like symptoms  |  |
| <b>Listeria monocytogenes</b><br><i>(severe invasive disease)</i> | Raw milk, cheeses made with raw milk, deli meats                                   | 3-90 days            | Day to weeks  | F                 | Headache, stiff neck, muscle ache, loss of balance, confusion      | Meningitis, sepsis, spontaneous abortions, stillbirths |
| <b>Noroviruses</b>  | Raw produce, oysters, clams, mussels, scallops, food handled by an infected person | 24-48 hours          | 12-72 hours   | D, V, F           | Malaise  |  |
| <b>Salmonella</b><br><i>(over 2300 types)</i>                     | Eggs, poultry, meat, raw milk, unpasteurized juice, raw produce                    | 12-72 hours          | 4-7 days      | D, V, F, AP       | Chills, nausea, pain in the joints, headache, muscle pain, malaise | Reactive arthritis, irritable bowel syndrome           |
| <b>Shigella</b>   | Raw produce  | 1-4 days             | 4-7 days      | D (may be bloody) |  |  |
| <b>Staphylococcus aureus</b>                                      | Improperly refrigerated meats, potato & egg salad, cream-filled pastries           | 30 minutes - 6 hours | 1-3 days      | D, V              |  |  |
| <b>Vibrio parahaemolyticus</b>                                    | Raw or improperly cooked oysters   | 4 hours – 4 days     | 2-6 days      | D, V, F           |  |  |

|                 |                            |             |                  |       |                        |                    |
|-----------------|----------------------------|-------------|------------------|-------|------------------------|--------------------|
| <b>Yersinia</b> | Undercooked pork, raw milk | 24-48 hours | 2 days – 3 weeks | D, AP | May mimic appendicitis | Reactive arthritis |
|-----------------|----------------------------|-------------|------------------|-------|------------------------|--------------------|

# D=diarrhea, V=vomiting, F=fever, AP=abdominal pain.

Sources:

- \*Adapted from Center for Science in the Public Interest's July/August 2014 Nutrition Action Healthletter, "What's Bugging You?", pg. 10-11
- Accessed at <http://www.cdc.gov/foodsafety/facts.html#what> on September 10, 2014
- Accessed at [http://www.fsis.usda.gov/wps/portal/fsis/topics/food-safety-education/get-answers/food-safety-fact-sheets/foodborne-illness-and-disease/foodborne-illness-what-consumers-need-to-know/CT\\_Index](http://www.fsis.usda.gov/wps/portal/fsis/topics/food-safety-education/get-answers/food-safety-fact-sheets/foodborne-illness-and-disease/foodborne-illness-what-consumers-need-to-know/CT_Index) on September 10, 2014

Additional Resources:

- Information on how to keep food safe, food poisoning, recalls & alerts and reporting food poisoning – <http://www.foodsafety.gov/>
- Information on causes, symptoms, treatment, and prevention of food contamination and poisoning - <http://www.nlm.nih.gov/medlineplus/foodborneillness.html>
- Q&A on illnesses, outbreaks, prevention, and much more - <http://www.cdc.gov/foodsafety/facts.html>
- Detailed information on foodborne illnesses – <http://www.cdc.gov/foodsafety/diseases/>
- General foodborne illness and information on specific diseases - <http://www.fsis.usda.gov/wps/portal/fsis/topics/food-safety-education/get-answers/food-safety-fact-sheets>
- Basic information on foodborne bugs and toxins - <http://www.fda.gov/Food/FoodborneIllnessContaminants/CausesOfIllnessBadBugBook/default.htm>