ANAPHYLAXIS TO FOODS

WHAT IS ANAPHYLAXIS?
- **Anaphylaxis** is a serious allergic reaction that comes on quickly and could be fatal.
- Various parts of the body (skin, breathing, gut, heart) can be affected.

WHAT ARE THE SYMPTOMS?
- Symptoms typically are sudden after the trigger food is eaten (minutes to 1-2 hours).
- The most dangerous symptoms are breathing difficulties and poor blood circulation.
- Possible symptoms that may occur alone or in any combination include:
  - **Skin**: itchy rash/flushing, hives (welts), swelling of lips and face.
  - **Mouth**: itchy, tingling, odd tastes.
  - **Gut**: nausea, pain, vomit, diarrhea.
  - **Breathing**: tight throat, cough/wheeze, trouble breathing.
  - **Circulation/heart**: paleness, fainting, blueness, weak/thready pulses.
  - **Other**: anxiety, feeling of “impending doom,” red/itchy/watery eyes, uterine cramps, headache.

HOW IS IT TREATED?
- The primary treatment is prompt injection (shot) of **epinephrine**.
  - This reverses severe symptoms, allowing time to seek additional care.
  - More than one dose is sometimes needed if symptoms progress or recur.
  - Epinephrine is available as spring-loaded self-injectors.
  - Epinephrine is generally safe, even if injected without anaphylaxis.
  - The primary side effects are rapid heart rate and jitteriness.
  - Side effects are not typically problematic for a healthy child.
- Additional medications: Antihistamines (such as Benadryl/diphenhydramine or Zyrtec/cetirizine) for itch/swelling/rash and asthma inhaled bronchodilators for wheezing.
  - **These medications cannot be depended upon to reverse anaphylaxis**.
- Get to an emergency room for additional care (e.g., 911, ambulance).

WHEN SHOULD EPINEPHRINE BE INJECTED?
- If there are breathing or circulation/heart symptoms (see above).
- If a reaction is progressing and several areas of the body are affected.
- If there are no symptoms (yet) but a trigger food that previously caused very severe anaphylaxis was definitely eaten.
- **AND Remember**: When in doubt treat!
HOW SHOULD I PREPARE TO TREAT ANAPHYLAXIS?

- Work with your doctor to obtain and review an EMERGENCY TREATMENT PLAN
  - The plan should include information about self-injected epinephrine, additional medications, when to treat, and contact information.
- Review how/when to use the self injector devices TEACH OTHERS including your child if age-appropriate
  - Practice with a “trainer”/“demonstrator” injector
- Make an “emergency kit” with medications and instructions
- Have your child wear a medic alert bracelet or necklace
- Children with asthma may need a bronchodilator (inhaler)

ADDITIONAL INFORMATION ABOUT ANAPHYLAXIS

- The sooner the reaction is treated, the less severe it is likely to become.
- It is possible to have anaphylaxis without hives and some studies show that fatalities are more common when there is anaphylaxis without hives.
- In the event of anaphylaxis, your child should go to a hospital for observation and/or further treatment even if symptoms improved with treatment.
  - When calling 911, explain that your child had anaphylaxis to a food and was treated with epinephrine
  - Sometimes symptoms come back, possibly worse, minutes or hours after the initial symptoms resolved.
    - Remain under medical supervision for several hours or more until it is clear that the episode is over
- Inform family, health care workers, employers and school personnel about your child’s allergy so they can watch for symptoms and help avoid allergy triggers
  - For teenagers, having informed friends can be life-saving

ADDITIONAL INFORMATION ABOUT EPINEPHRINE SELF-INJECTORS

- Periodically check expiration dates (but an expired unit is better than nothing)
- Store self-injectors so they will not be exposed to extremes of temperature
  - for example, do not store in car glove compartments or refrigerators
  - consider storage in a common place (example, kitchen cabinet at home and grandmother’s house)
- Injections can go through clothing, but time usually permits clothing removal
- Inject into the upper, outer thigh and hold for a count of ten
- Make sure you are using the “real” injector, not a “trainer”/“demonstrator”
- Bring the used unit with you to the hospital

WHAT SHOULD I ASK/TELL MY DOCTOR?

- Review/update your emergency plans and medications at least yearly
- Review when and how to treat a reaction
- Inform your doctor of any allergic reactions

RESOURCES

- This program has additional information sheets that you may find helpful
- Explore additional educational materials, for example, from Food Allergy Research & Education (www.foodallergy.org).
- An example of a written emergency treatment plan is available at www.foodallergy.org

© Consortium of Food Allergy Research NIAID Grant U19 AI 066738. Last updated: 1-14.
Disclaimer: These materials are not comprehensive and are meant to supplement a comprehensive care plan prescribed by a physician; treatment should not be based solely on its contents. The authors/sponsor are not responsible for adverse consequences associated with the use of these materials.