Our garden was covered by flood waters. Can we eat the vegetables that were growing?

Flood waters can contain or have had contact with bacteria, viruses, parasites, and chemical toxins. If flood waters have covered a garden, most produce will be unsafe to eat.

The safety will depend on:
- Kind of produce
- Maturity of produce at the time of flooding
- Time of year flooding occurred
- Severity of flooding (depth of water and silt)
- Duration of flooding
- Bacterial content of flood water
- Likelihood of contamination from sewage or other bacterial contaminants

Early in the growing cycle, most fruits and vegetables exposed to flood waters should be safe to eat by the time of harvest. A general rule of thumb regarding safety is to allow at least 120 days between harvesting produce that has been flooded. For additional safety, wash products thoroughly before eating. Cooking will reduce levels of most bacteria but will not destroy chemical toxins. Do not eat fruits and vegetables that were in contact with flood water.

Some fruits and vegetables are more susceptible than others to bacterial contamination.
- Leafy vegetables (such as lettuce, cabbage, mustard, kale, collards, spinach, Swiss Chard, and celery), fleshy vegetables (such as tomatoes, summer squash, and peppers), and berry fruits (such as strawberries) are highly susceptible to bacterial contamination. Silt and other contaminants may be imbedded in the leaves, petioles, stems, or other natural openings of fleshy structures and can be difficult to remove. Do not use if mature when flooded. In the case of strawberries, do not use any fruit that is set on, regardless of maturity.
- Root, bulb, and tuber crops (such as beets, carrots, radishes, turnips, onions, and potatoes) are less susceptible to bacterial contamination. Wash by scrubbing, peel and cook them before eating. Because radishes and green onions are not cooked, they should not be used. Green onions can be left to grow into a mature bulb for later use.

In summary, some produce in contact with flood waters may be used if it is was early in the growing cycle and if the harvested product is washed and cooked prior to eating.

For more information check these resources:
- Iowa State University Extension and Outreach
  - AnswerLine • 1-800-262-3804
  - HortLine • (515) 294-3108
  - Horticulture
  - Online Store
  - Video - Flood Food Safety

University of Wisconsin
- Safely Using Produce from Flooded Gardens
  - hort.uwex.edu/articles/safely-using-produce-flooded-gardens

USDA Food Safety and Inspection Service
- Keep Your Food Safe During Emergencies
  - http://goo.gl/1Eg0rD

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