Juicing Guidance

When fresh juice is made, any bacteria present on the outside or inside surface of fruits and vegetables can become part of the finished product. Unless juice is further processed to destroy potentially harmful pathogens, the juice could cause food borne illness such as E. Coli infection or intoxication or Salmonellosis. The requirements for making fresh juice are included below.

"Juice" means the aqueous liquid expressed or extracted from one or more fruits or vegetables, purees of the edible portions of one or more fruits or vegetables, or any concentrates of such liquid or puree. Local and state regulations do not consider liquids, purees, or concentrates to be juice unless they are used as beverages or ingredients of beverages.

“HACCP plan” a written document that delineates the formal procedures for following the Hazard Analysis and Critical Control Point principles.

An “acidified food” is a low acid food to which acid(s) or acid food(s) are added to produce a product that has a finished equilibrium pH of 4.6 or below and a water activity greater than 0.85.

Option A: Freshly squeezed juice sold by the glass on site (not packaged)

- Does not require a HACCP plan
- Has to remain at temperatures of 41°F or below
- No warning required

Option B: Juice that is freshly squeezed, packaged and not pasteurized on site

- Does not require a HACCP plan
- Has to remain at temperatures of 41°F or below
- Shall bear the phrase: “WARNING: This product has not been pasteurized, and therefore, may contain harmful bacteria that can cause serious illness in children, the elderly, and persons with weakened immune systems” and meet the requirements of the Federal Fair Packaging and Labeling Act.
- May only be sold exclusively and directly to its consumers. No wholesaling permitted.

Option C: Juice that is packaged and held at room temperature or sold wholesale

- Must create a juice HACCP plan that is approved by a representative from the Department of Environmental Health.
- Must accomplish a 5-log reduction. The 5-log pathogen reduction must:
  - be accomplished for the microbe identified as the "pertinent microorganism," which is the most resistant microorganism of public health significance that is likely to occur in the juice, e.g., E. coli O157:H7,
  - take place in one facility just prior to or after packaging, and
be applied directly to the juice.

- FDA recommends the following to accomplish a 5 log reduction:
  
  160°F for at least 6 seconds
  165°F for at least 2.8 seconds,
  170°F for at least 1.3 seconds,
  175°F for at least 0.6 seconds, or
  180°F for at least 0.3 seconds

- Facility shall test samples from three separate batches of each juice by an approved food laboratory to assess shelf-stability. The pH needs to be 4.2 or less for product to be considered shelf-stable. A combination of pH and water activity can also be used as per the definition of “potentially hazardous foods” in the Denver Food Establishment Regulations.

- If operator is acidifying the juice then the operator shall attend Better Processing School and have an approved acidification HACCP plan.

- See Canning/Jarring Guidance for packaging of juice

- If the juice is prepared in a commissary and sold offsite, an approved juice HACCP plan is required.

NOTE** All highly susceptible facilities must have pasteurized juices. Freshly squeezed juices are prohibited.