



Missouri Department of Health and Senior Services


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TO: Local Public Health Agency Administrators
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FROM: Eric Hueste, Bureau of Environmental Health Services, Chief 

SUBJECT: Technical Bulletin F1-17 Microgreens

DATE: May 30, 2017

In response to recent requests for guidance on *microgreens*, the following information is provided.

Microgreens are a unique challenge. Some of the questions that inspectors have asked include: are they produce (a raw agricultural product), are they 'sprouts', and are they time-temperature control for food safety (TCS)/potentially hazardous food (PHF).

Microgreens are edible young greens and grains that are produced from various kinds of vegetable, herb, or other plant seeds. They range in size from 1" to 3" including the stem and leaves. The seeds are not consumed like they would be if it were a sprout. A *microgreen* has a single central stem and a set of leaves, which will be cut just above the soil line during harvesting. The average crop-time for most *microgreens* is 10-14 days from planting to harvest. *Microgreens* are used both as a visual and flavor component or ingredient. Smaller than "baby greens," and harvested later than "sprouts," *microgreens* can provide a variety of leaf flavors, such as sweet and spicy. They are also known for their various colors and textures

In the food code sprouting seeds or beans requires approval in 3-502.11 Special Processes. So if *microgreens* are 'sprouts' a special process or variance would be needed according to the retail food code. However, a change to 3-502.11 in the model food code was proposed at the Conference for Food Protection in Boise, ID in 2016, which would more clearly define 'sprouts': "(H) Sprouting seeds or beans for the purpose of human consumption of both the seed and the sprout, as in raw seed sprouts." The proposed language would clearly demonstrate that *microgreens* are not sprouts and a special process approval wouldn't be required. This proposed change to the model food code is currently under review by the FDA.

If *microgreens* aren't sprouts the production and processing of the *microgreens* might make them subject to the Standards for the Growing, Harvesting, Packing, and Holding of Produce for Human Consumption in 21 CFR Parts 11, 16, and 112; which were adopted under the Food Safety Modernization Act. The federal register 21 CFR Parts 11, 16, and 112 states: "Because *microgreens* are not sprouts, they are not subject to the requirements in subpart M. However, *microgreens* are considered "covered produce" for the purposes of this rule and, unless exempt or excluded under the provision in subpart A, *microgreens* and microgreen farms are subject to all other subparts of part 112." A copy of the Standards for the Growing, Harvesting, Packing, and Holding of Produce for Human Consumption can be found at: <https://www.gpo.gov/fdsys/pkg/FR-2015-11-27/pdf/2015-28159.pdf>.

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One final challenge remains to be answered, are *microgreens* a TCS/PHF? *Microgreens* and cut leafy greens and sprouts are similar and although cut leafy greens and sprouts are TCS/PHF, the FDA currently states that *microgreens* are not TCS/PHFs.

Therefore the guidance offered by the Bureau of Environmental Health Services (BEHS) depends on the production location and the point of sale or usage.

- If a retail food establishment plans to grow and use *microgreens* in their facility, BEHS would not require a special process approval unless problems with the process are discovered during inspection.
- If the grower, plans to provide the *microgreens* to other retail establishments they would need to comply with the Standards for the Growing, Harvesting, Packing, and Holding of Produce for Human Consumption.
- If a farmer or individual plans to grow and harvest *microgreens* for sale at a farmer's market, they would also need to comply with the Standards for the Growing, Harvesting, Packing, and Holding of Produce for Human Consumption. The Standards for the Growing, Harvesting, Packing, and Holding of Produce for Human Consumption does allow certain exemptions that apply to farms that have an average annual value of produce sold during the previous three- year period of \$25,000 or less.
- Producers may be encouraged to chill the *microgreens* to promote a fresh appearance, prolong 'shelf-life' and slow down the possible growth of bacterial contamination.

Additional information may be found at:

<http://www.fda.gov/Food/GuidanceRegulation/FSMA/ucm334114.htm> .

For questions or concerns contact Ellen Dettman, Retail Food and Lodging Program Manager at 573-751-6095 or district staff.