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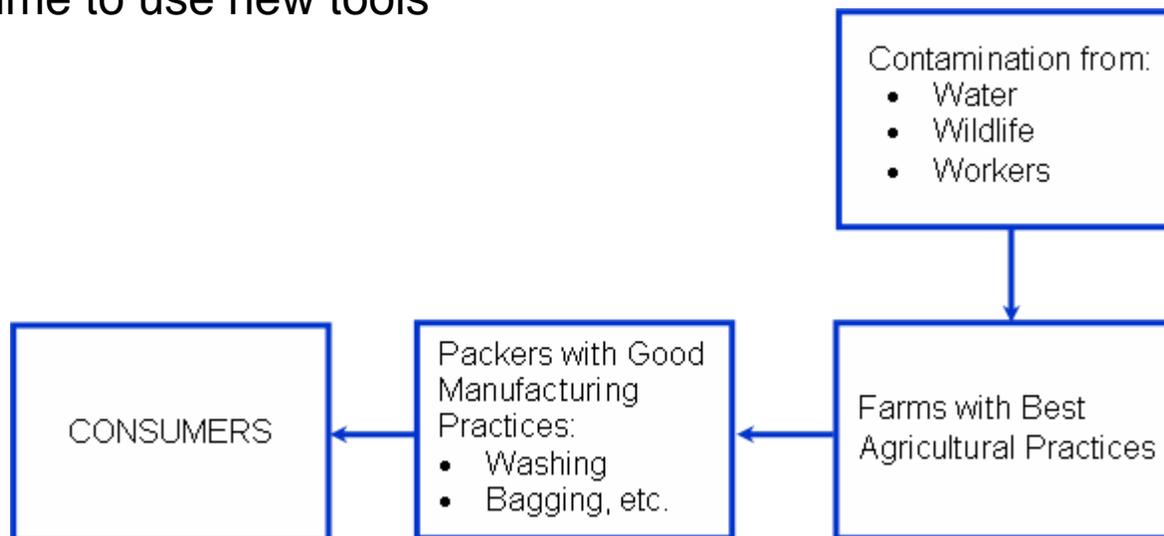
Cold Pasteurization: A Kill Step to Improving the Safety of Green Leaf Vegetables by 1000X

**Presented to
FDA Hearing on Green Leaf Vegetables
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Fresh Produce Supply Chain Has Many Points of Possible Contamination

- US produce industry is already doing a better job than most countries in providing safe produce for the consumer
- Difficult job given the many points of possible contamination in the field that are hard to eliminate
 - Contamination can be deadly, as evidenced by recent incidences
 - May be approaching point of diminishing return with current approach to eliminate points of possible contamination
 - Time to use new tools



Cold Pasteurization (Irradiation): Proven Method for Control of Pathogens

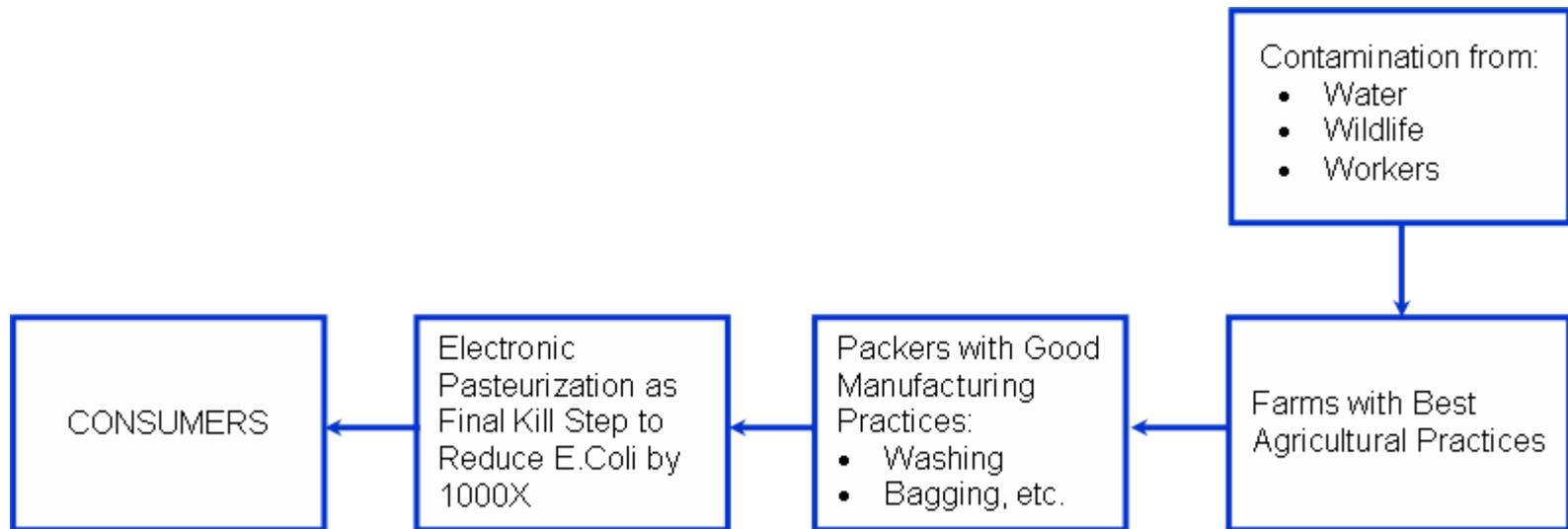


- Approved by FDA/USDA for control of pathogens such as E. coli and salmonella in meats and other food products
- Used for dis-infection of herbs, spices and seasonings
- Already approved by FDA for dis-infestation of insects in green leaf vegetables



Cold Pasteurization Can Improve Safety of Bagged Vegetables by 1000X

- Cold pasteurization as the final kill step will reduce residual E. coli count by 1000X
 - After bagging to prevent any secondary contamination during packaging process



FDA Has Already Done Lots of Work In Cold Pasteurization

- FDA has already done a lot of work towards cold pasteurization of green leaf vegetables:
 - FDA has already approved cold pasteurization of green leaf vegetables such as spinach to 1 kGy for dis-infestation of insects
 - Will reduce E. coli count by at least 1000 times at 1kGy
 - FDA has already approved irradiation of various packaging materials up to 3 kG
- Next step is for FDA to approve regulations to allow cold pasteurization for bagged green leaf vegetables for pathogen control



Approval of Cold Pasteurization for Bagged Vegetables Will Provide Quantum Jump in Food Safety

- Need FDA approval of cold pasteurization for control of bacteria, as well as dis-infection
 - Electrons and X-rays will not distinguish between E. coli and insects
- Need FDA approval of cold pasteurization of bagged vegetables for pathogen control
- The questions for FDA:
 - What needs to be done by the commercial sector to get approval of cold pasteurization of bagged green leaf vegetables?
 - What needs to be done by FDA to approve cold pasteurization of bagged green leaf vegetables, and when?

