

**Conference for Food Protection
2018 Issue Form**

Issue: 2018 III-030

Council Recommendation: Accepted as Submitted _____ Accepted as Amended _____ No Action _____

Delegate Action: Accepted _____ Rejected _____

All information above the line is for conference use only.

Issue History:

This is a brand new Issue.

Title:

Copper Mugs Used with Acidic Beverages

Issue you would like the Conference to consider:

With the increase in the popularity of microbrews, there has also been an increase in the usage of copper mugs for drinking beer or other acidic beverages, such as, Moscow Mules. Beer typically has a pH around 4 and would be prohibited from being in direct contact with copper as outlined in the 2013 FDA Food Code Section 4-101.14. As regulators we stipulate that these copper mugs must have some type of interior lining (nickel, stainless steel, or other type of protective coating) to prevent the leaching of copper due to acidic beverages. However, Food Code Annex 3 reference for Section 4-101.14 indicates that copper kettles may be used for pre-fermentation and fermentation steps of beer and the amount of copper leached out is necessary for the fermentation process to occur. Also, the amount of copper leached out during these processes are not at levels which cause illness. Given that pre-fermentation/fermentation of an acidic beer is permitted in large copper kettles (for extended holding times) why are acidic beverages such as beer not permitted to be served within unlined copper mugs especially since the contact time is limited to single beverage consumption? Hence, we are requesting further clarification within the Food Code or Annex 3 for Section 4-101.14 as to why copper cannot be in contact with acidic beverages for short time periods, such as single person beverage containers.

Public Health Significance:

Ingesting excessive amounts of copper can cause acute gastrointestinal issues and other health effects. However, there is a developing trend of manufacturers wanting to provide copper mugs to food establishments and of customers wanting to drink from copper mugs that are not lined with protective barrier due to it creating a more crisp/acidic taste to the beverage. This is becoming an issue of health vs. public/industry desire. Since the science of with the FDA Food Code Annex 3 suggest that fermentation processes are safe within copper vessels, where the process of fermentation lowers pH of these products, is there science that suggest that single consumer, single use beverage containers made of copper material is a public health significance?

Recommended Solution: The Conference recommends...:

That a letter be sent to FDA and CDC requesting further investigation be conducted to clarify the FDA Food Code Annex 3 Section 4-101.14 concerning the use of acidic beverages within unlined/uncoated copper mugs, or specifically to determine whether short-term contact of acidic beverages with copper causes excessive amounts of copper to leach out, and in turn cause illness.

Submitter Information 1:

Name: Rodney Blanchard
Organization: Great Lakes Conference On Food Protection
Address: 145 Wood Street
City/State/Zip: Petersburg, MI 49270
Telephone: 5172438896
E-mail: blanchardr1@michigan.gov

Submitter Information 2:

Name: Amanda Garvin
Organization: Great Lakes Conference On Food Protection
Address: 334 66th St.
City/State/Zip: South Haven, MI 49090
Telephone: 616-265-9985
E-mail: garvina1@michigan.gov

It is the policy of the Conference for Food Protection to not accept Issues that would endorse a brand name or a commercial proprietary process.