

Material: Cup (Rollman's), gravy boat (Pogue's) and salad plate (Shillito's) of Cerama Stone Ware by Laurel of California

Submitted: November 8, 1960 by Dr. R. A. Kehoe for Mr. John Coy, 10 Colonial Drive, Milford, Ohio

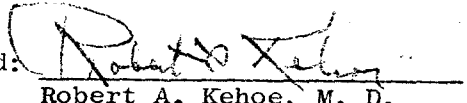
Required: Determination of quantity of lead leached from surface

<u>Piece Tested</u>	<u>Test Solution</u>	<u>Period of Contact</u>	<u>Volume</u>	<u>Mg./Liter (ppm)</u>
Cup	Cold Water	30 minutes	200	Nil
Cup	Hot Water	30 minutes	200	0.0015
Cup	Tea	30 minutes	200	0.08
Cup	Coffee	30 minutes	200	0.22
Cup	Cold 5% acetic	30 minutes	200	0.55*
Cup	Hot 5% acetic	30 minutes	200	6.29
Gravy Boat	Hot Water	30 minutes	200	Nil
Gravy Boat	Cold 5% acetic	30 minutes	200	6.14*

*It is possible that cup had been in service longer than gravy boat so that much lead had already been leached from surface of cup.

The tests demonstrate clearly the similarity of these articles, with respect to the solubility of the lead in the colored coating on the surface, to those from the same source that have been tested previously in this Laboratory. Little or no lead can be extracted from this coating by cold or hot water, and only fairly small quantities by tea or coffee. Cold dilute acetic acid, however, extracts a significant but small quantity from the cup and considerably more from the more recently purchased (and probably less used) gravy boat. Hot acetic acid attacked the surface of the cup effectively.

It would be expected that the extraction of lead from the surfaces of these articles would diminish following more and more prolonged use of these articles, and eventually the amount of extractable lead would become negligible.

Signed: 

Robert A. Kehoe, M. D.

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