



April 24, 2015

The Honorable Michael R. Taylor  
Deputy Commissioner for Foods  
and Veterinary Medicine  
Food and Drug Administration  
10903 New Hampshire Avenue  
Silver Spring, MD 20993

Susan T. Mayne, Ph.D.  
Director, Center for Food Safety  
and Applied Nutrition  
Food and Drug Administration  
5100 Paint Branch Parkway  
College Park, MD 20740

Bernadette M. Dunham, D.V.M., Ph.D.  
Director, Center for Veterinary Medicine  
Food and Drug Administration  
10903 New Hampshire Avenue  
Silver Spring, MD 20993

Dear Deputy Commissioner Taylor, Dr. Mayne and Dr. Dunham:

We are writing with recommendations to the FDA based on our new testing results of shrimp published today. In light of the findings, which included illegal antibiotic residues on imported shrimp, significant contamination with *Vibrio*, and contamination of a number of samples with MRSA, we urge the FDA to improve surveillance and enforcement and make several policy changes.

Consumer Reports' Food Safety and Sustainability Center tested for bacteria and antibiotics in shrimp purchased at retail outlets from 27 market areas across the country. We purchased 284 uncooked samples of frozen shrimp and 58 samples of previously cooked and frozen shrimp from grocery stores, big box stores, and "natural" food stores from March to April of 2014. The sample set included shrimp from 10 different countries, with the majority being imported. All samples were subjected to microbiology testing, where we looked for *E. coli*, *Staphylococcus aureus*, *Listeria monocytogenes*, *Salmonella*, *Vibrio* species, and *Aeromonas* species. Bacteria that were found were subjected to antibiotic susceptibility testing. Additionally, uncooked samples were subjected to chemistry testing for a wide variety of antibiotic residues.

Several findings were of particular concern:

- Eleven samples of imported farmed shrimp had residues of antibiotics that are not permitted on shrimp imported into the U.S. Residues we detected included

tetracycline, enrofloxacin and two sulfonamide drugs. The overuse of antibiotics promotes the development of antibiotic resistance. The eleven samples came from Vietnam (8), Thailand (2) and Bangladesh (1). (A report with the full results of our study is available at [greenerchoices.org/shrimp](http://greenerchoices.org/shrimp)). We have submitted a separate letter to the agency requesting that it investigate these illegal residues and a third party certification (Global Aquaculture Alliance Best Aquaculture Practices) that appears on 4 of the packages of the adulterated shrimp.

- 28 percent of the uncooked frozen samples had *Vibrio*, a type of bacteria that can potentially cause food poisoning. Though the incidence of foodborne illness caused by *Vibrio* has been rising according to the CDC, regulators have so far focused only on oysters as the source.
- Some 20 percent of samples tested had *Staphylococcus aureus*, another potential pathogen, and 7 samples contained a methicillin-resistant *Staphylococcus aureus* (MRSA). That was more MRSA than we found in food samples in any other test project we have previously conducted, including those on turkey, pork, and chicken.

Since about 94 percent of shrimp consumed in the United States is imported, assuring the safety of shrimp requires a focus on import safety. In light of our research, Consumer Reports is urging Congress to increase the FDA's inadequate food safety funding. We also make the following recommendations to the agency:

1. Increase testing of imported shrimp at the border, and inspections of foreign facilities. Given what we have found, testing 0.7% of shrimp shipments at the border and inspecting fewer than 1,500 of the more than 200,000 registered foreign food facilities is inadequate. We would also hope that agency data on the number of import and foreign facility inspections would be readily available to the public on the FDA website.
2. Address the potential for *Vibrio* and other bacterial contamination in shrimp and require controls as part of producer HACCP plans. Guidelines already exist for *Vibrio* in other seafood. Given our findings of relatively high levels of *Vibrio* species in this study, we think the FDA should create a standard for *Vibrio* in shrimp, test for it at the border, and develop mechanisms for more direct enforcement on foreign shrimp farms.
3. Have a zero tolerance for MRSA in shrimp. We found a significant number of samples with concerning multidrug-resistant bacteria, which can cause serious disease in people, including MRSA. MRSA may be introduced into shrimp during processing (removal of heads and shells, freezing and bagging).
4. Do not allow the extra-label use of antibiotics in domestic shrimp production and have zero tolerance for antibiotic residues in domestic shrimp. When testing for residues in shrimp from any origin, the agency should ensure that is using the most sensitive detection levels technology allows.

Thank you for your consideration of these recommendations. We are happy to answer any of your questions.

Sincerely,



Urvashi Rangan, Ph.D.  
Executive Director, Food Safety  
and Sustainability Center  
Consumer Reports



Michael Crupain, M.D., M.P.H.  
Director, Food Safety  
and Sustainability Center  
Consumer Reports

101 Truman Avenue  
Yonkers, New York 10703-1057  
914 378-2000