8<sup>th</sup> International Conference on

## **Food Safety and Regulatory Measures**

June 11-12, 2018 | Barcelona, Spain

## Prevalence of *Salmonella and Shigella* species in chicken eggs from different poultry farms in Owerri, Imo State, Nigeria

Nnagbo P A, Ezenwa C M and Uzoechi A U Imo State University, Nigeria

Salmonella and Shigella contamination of eggs and egg shells has been identified as a public health concern worldwide. A recent shift in consumer preferences has impacted on the egg industry, with a push for cage-free egg production methods. There has also been an increased desire from consumers for raw unprocessed foods, potentially increasing the risk of *salmonellosis* and *shigellosis*. The present study was conducted to determine the prevalence of *Salmonella* and *Shigella* in chicken eggs from different poultry farms in Owerri, Imo state. Based on expected prevalence of *salmonellosis* and *shigellosis* in Nigeria at 75% confidence interval and 5% absolute precision, egg shell and egg contents of 360 eggs were examined for *Salmonella* and *Shigella* using cultural method. The overall prevalence of Salmonella in egg shells and contents was 37 (10.28%) while that of *Shigella* in egg shells and contents was 21 (5.83%). The results of this study indicated that egg shell contamination with fecal material was significantly higher than that of egg contents. The present study reports that contamination of eggs by *Salmonella* and *Shigella* species can cause an outbreak of food-borne disease due to eating raw eggs or the products having such eggs in the study area.

paulyn.ahuocha@gmail.com