

CONTROLLING SALMONELLA IN TAHINI USING RT-PCR IN COMPLIANCE WITH US-FDA/FSMA LAW

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Background and Objectives: US Food & Drug Authority introduced the Food Safety Modernization Act that stipulates preventive food safety measures in monitoring pathogens infestation, at the grass root level, by species and subspecies.

To better address adherence to this mandatory regulation, and to capacity build the Tahini sector's compliance in exports to international markets; MEFOSA conducted a research project on "Compliance of Sesame-Based Products (Tahini) with FSMA Law".

Method: Random sampling of Tahini processing environment and related products from different Lebanese exporting plants. Sample analysis was performed in a private laboratory using RT-PCR with the support of advanced Biotecon kits to better address Hazard Analysis Critical Control (HACCP) implementation and export compliance.

5 exporting Tahini plants were visited for sample collection and results were compared with a previous preliminary study. Upon positive testing, further investigation is to be done.

Results: A total of 22 samples were taken. 18 samples tested negative for salmonella while 4 showed inhibition which addresses the need for further future testing.

Conclusion and Recommendations: Factories' visits and personal discussions showed a need for a capacity building by sector, individual food processing counseling plant by plant, and the use of advanced testing method to better address export compliance.

Keywords: Tahini; Salmonella, FSMA, RT-PCR