SAUSAGES THAT LOOK AS GOOD AS THEY TASTE!

A French manufacturer of salted meats calls on LCB food safety experts to give its sausages a facelift by keeping background contamination under control.

Despite all the measures undertaken to protect the product from contamination, the company began to notice yellow-orange staining for the first time on its sausages, making them unsaleable in that state. This appearance defect cause considerable financial loss in this modest sized business (200 employees), which had been undergoing rapid expansion.

With this quality level proving too inconsistent for the consumer, and with a real danger of its product being dropped by the supermarkets, the company was seriously worried about its financial stability. The manufacturer wanted to know what fungal flora existed around the production site and to identify the contaminant so it could be isolated.

RESULTS: After reproducing the phenomena observed in manufacturing in their laboratory, LCB food safety experts understood the mechanism by which the staining appeared on the manufacturer's sausages. They revealed the responsible strains and confirmed in which stage of the production process the contamination developed. The manufacturer was able to reinforce the quality system thanks to the literature we provided (reservoirs, modes and conditions of development, dissemination methods, etc.). The programme of microbiological checks was revised (air-surfaces-input materials), notably by means of the AIRTEST® aero-biocollector, and the disinfection plan was exposed and adapted in line with the check results (Ultradiffusion® airborne surface disinfection treatment). Since then, the background contamination has disappeared, as have the customer complaints about the sausages’ appearance.

ASK OUR EXPERTS

Does the specific identification service give me precise information on the strain I want to know about?

The identification gives accurate results: the strain is determined according to its genus and species. The report is completed by literature on the identified contaminant: characteristics of the strain, reservoir, substrate type, development conditions, liability of producing mycotoxins.

The analysis report gives precise information to allow you to deal with the matter on your own and reach your own interpretation of the results of the checks.

How do you prepare the lab operation that simulates my process?

A feasibility study is conducted by our experts in the LCB food safety laboratory. The assessment engineer is your dedicated contact for gathering all the necessary details to conduct the study: process parameters, checks you already made yourself, etc. Needless to say, all these data are kept strictly confidential. We then send you a quotation for our bespoke laboratory service.
LABORATORY REPRODUCTION OF STOVING-FLORATION AND DRYING PHASES

A. PRODUCING THE CONTROL SAMPLES (without inoculation of contaminants)

Step 1: stoving

Penicillium sp

OBSERVATIONS:
Beginning of development of technological flora on the net and on the skin

Stage 2: Floration

Step 3: pre-drying

Penicillium sp. covers the whole surface of the sausage after 3 days of pre-drying: experimental conditions enable acceptable reproduction of the flora development conditions of the sausages.
B. INOCULATION TESTS – revealing of contaminants

Inoculation with mould strain A

Step 1: Stoving

OBSERVATIONS:
No technological flora developed

Stage 2: Floration

OBSERVATIONS:
Compared with the control sample, the Penicillium sp develops very slowly.

Uncovered areas show staining: the contaminant has developed.

Identification of the contaminant as B yeast.
This B yeast corresponds to the yeast identified in the many samples sent to the customer and previously suspected of playing a part in the contamination process.