

# HYGIENIC ASPECTS AT THE PRODUCTION OF GLUCOSE SYRUPS THROUGH ACID HYDROLYSIS

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**Abstract:** Glucose syrup is a valuable product, obtained through acid hydrolysis at the factory “Amylon” in Sibiu Romania. The technology is complex and the risks of contamination during the processing steps or in the final product are high. The microbiological analysis in different places from the glucose syrup compartment revealed the presence of bacteria, as coliforms, lactic acid bacteria and *Bacillus*. Moulds spores and even mycelia from *Aspergillus niger*, *Penicillium sp.*, *Fusarium sp.* were found too. A specie of *Aureobasidium pullulans* resistant to very high glucose concentrations was isolated from the glucose syrup tanks. Two contamination sources in the glucose syrup factory were identified: the deficiency at the separation of cereals storages (rich in vegetative microorganisms and spores) from the glucose syrup compartments and the deficiency in maintain the hygiene in the storage recipients.

**Keywords:** Hygiene, glucose syrup, acid hydrolysis, *Lactobacillus*, *Leuconostoc*, coliform bacteria, *Aureobasidium*, *Aspergillus niger*

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