POSSIBLE USE OF MULTIVARIATE STATISTICAL PROCESS CONTROL IN FOOD INDUSTRY

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At the first stage of our work, the theoretical knowledge needed to use the multivariate statistical process control (MSPC) was explored. Previously, we clarified the sometimes confused concepts, equations and formulas (Mihalkó and Rajkó, 2016). At the second stage, R project simulation studies and some food industrial practical model investigations are carried out for confirming the MSPC advantages compared with the univariate ones. Furthermore, we analyze, using principal component analysis (PCA), what could cause the outlying values, moreover we will demonstrate how to use the MYT-decomposition.

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Acknowledgements

József Mihalkó is supported by the UNKP-17-2 New National Excellence Program of the Ministry of Human Capacities.

As well as, the dissemination of this research has been supported by the Ministry of Human Capacities, Human Capacities Grant Management Office and the National Talent Program (Proj. No NTP–HHTDK–017–0004).