Optimization of large scale food production using Lean Manufacturing principles

This paper discusses how the production principles of Lean Manufacturing (Lean) can be applied in a large-scale meal production. Lean principles are briefly presented, followed by a field study of how a kitchen at a Danish hospital has implemented Lean in the daily production. In the kitchen, the main purposes of implementing Lean were to rationalise internal procedures and to increase production efficiency following a change from cook-serve production to cook-chill, and a reduction in the number of employees. It was also important that product quality and working environment should not be negatively affected by the rationalisation of production procedures. The field study shows that Lean principles can be applied in meal production and can result in increased production efficiency and systematic improvement of product quality without negative effects on the working environment. The results show that Lean can be applied and used to manage the production of meals in the kitchen.

General information
Publication status: Published
Organisations: Division of Food Production Engineering, National Food Institute, Copenhagen University Hospital
Contributors: Engelund, E. H., Friis, A., Breum, G.
Pages: 4-14
Publication date: 2009
Peer-reviewed: Yes

Publication information
Journal: Journal of Foodservice
Volume: 20
Issue number: 1
ISSN (Print): 1748-0140
Ratings:
BFI (2009): BFI-level 1
Original language: English
Keywords: Foodservice
DOI: 10.1111/j.1748-0159.2008.00109.x
Source: orbit
Source ID: 211417
Research output: Contribution to journal › Journal article – Annual report year: 2009 › Research › peer-review