Meetings International SciTechnol

Joint Event
World Congress on
BIOAVAILABILITY & BIOEQUIVALENCE: BA/BE STUDIES SUMMIT
&
International Conference on
FOOD & BEVERAGES

August 06-07, 2018 | Tokyo, Japan

Bjorn Margeirsson et al., J Pharm Sci Emerg Drugs 2018, Volume: 6
DOI: DOI: 10.4172/2380-9477-C5-018

Volume utilization and fresh fish quality during transport in different food containers

Bjorn Margeirsson[1,2], Dagur Oskarsson[2], Sigurjon Arason[3,4] , Magnea Karlsdottir[3], Ogmundur Knutsson[5]
[1]University of Iceland, Iceland
[2]RPC-Tempra, Iceland
[3]Matis, Iceland
[4]University of Iceland, Iceland

Insulated plastic containers with volume capacity of 300–600 L have replaced smaller, more primitive wooden and single wall plastic containers in many fish industries worldwide. The main reasons are faster and easier handling and transport of the fish and improved temperature control, traceability, grading and quality. The current work is conducted in cooperation between Sæplast, Matís, Innovation Center Iceland, University of Iceland, University of Akureyri, ITUB and Icefresh in Germany. The aim is to develop new twin-transport tubs, which are intended to improve volume utilization during transport and storage and decrease transport cost, preserve food quality as well or better and improve stacking safety compared to existing packaging solutions. Transport of both wild cod and farmed fish are studied and the new tubs compared to the widely used 460-L tubs and 25-kg expanded polystyrene boxes with regard to cost, quality and handling safety. The main results obtained show that the new twin transport containers, which were placed on the market in 2018, offer around 50% better volume exploitation then the traditional 460-L tubs during transport of empty tubs in trucks. It has also been shown that the quality preservation of superchilled fish during one-week transport is similar in tubs with depth of 29-40 cm as compared to expanded polystyrene boxes with depth of 17 cm.

Biography

Bjorn Margeirsson is a mechanical engineer holding an MSc degree from Chalmers University of Technology in Gothenburg, Sweden and a PhD from University of Iceland since 2012. He serves as Assistant Professor at the University of Iceland since 2016 and Research Manager at the plastic manufacturers RPC-Saeplast and RPC-Tempra in Iceland since 2013. He has been involved in research, development and teaching within the field of heat transfer modelling, fresh fish processing, packaging and transport for 10 years.

bjornm@hi.is

Notes: