



Protecting Perishable Foods During Transport by Truck and Rail (Summary)

This is a summary of “Protecting Perishable Foods During Transport by Truck and Rail” by Jeffrey K. Brecht and Steven A. Sargent, Professors, Horticultural Sciences Department, University of Florida, Gainesville, FL; Patrick E. Brecht, President, PEB Commodities, Inc., Petaluma, CA; Jorge Saenz, President, Wireless Data Solutions, Weston, FL; and Leonard Rodowick, Strategic Relations – Food Safety & OEM, Thermo King Corporation, Nixa, MO. The University of Florida, Institute of Food and Agricultural Sciences Extension (UF/IFAS Extension) report received funding from USDA’s Agricultural Marketing Service (AMS) through cooperative agreement number 17-TMTSD-FL-0007. The views and opinions expressed in the UF/IFAS Extension report are those of the authors and do not necessarily reflect the policies and opinions of the U.S. Department of Agriculture. The full report is available at: <https://edis.ifas.ufl.edu/pdffiles/HS/HS132800.pdf>.

WHAT IS THE ISSUE AND HOW DOES THE REPORT ADDRESS IT?

The issuance of the Food and Drug Administration (FDA) Food Safety Modernization Act (FSMA) Final Rule on Sanitary Transportation of Human and Animal Food led to a request by the authors to revise USDA AMS Agriculture Handbook No. 669, “Protecting Perishable Foods During Transport by Truck,” last revised in 1995. The initial 1987 edition of Handbook 669 superseded Handbook No. 105, “Protecting Perishable Foods During Transport by Motortruck,” revised in 1970, after its initial publication in 1956.

“These handbooks have been extremely popular, and tens of thousands of copies have been distributed worldwide. The importance of protecting perishable foods from loss of quality during transport has long been recognized... Thus, an updated version of this handbook has been long overdue, addressing both the advances in technology and the importance of food safety considerations in the transport of perishable foods.”¹

HOW WAS THE REPORT CONDUCTED?

“Many individuals and organizations provided information or other assistance in revising this handbook. Special recognition goes to the University of Florida, Institute of Food and Agricultural Science, Communications Office, for formatting the handbook and for preparing the illustrations. We appreciate the

¹ Brecht, Jeffrey K., Steven A. Sargent, Patrick E. Brecht, Jorge Saenz, and Leonard Rodowick. Protecting Perishable Foods During Transport by Truck or Rail, Preface, p. ix, HS1328, Horticultural Sciences Department, University of Florida/Institute of Food and Agricultural Sciences Extension, April 2019. Web. <https://edis.ifas.ufl.edu/pdffiles/HS/HS132800.pdf>.

suggestions offered by those with whom we discussed this publication. A great deal of the information on recommended handling requirements for fresh fruits and vegetables is from the recently updated USDA Handbook No. 66, "The Commercial Storage of Fruits, Vegetables, and Florist and Nursery Stocks."²

WHAT DID THE REPORT FIND?

The report discusses the following topics, with additional information in the appendices:

- Important Factors in Protection of Perishable Foods
- Preparation for Loading
- Loading and Unloading Considerations
- Loading (Stowage) Patterns
- Individual Commodity Requirements
- Regulatory Considerations for Truck Construction Materials, Cleaning Compounds, and Sanitation
- Food Safety Considerations for Transporting Perishable Foods by Truck

CONCLUSIONS

"This updated edition reflects the dynamic changes and innovations in the handling and transportation of perishable foods. Some of these include improved insulation and air movement, microprocessors for more efficient refrigeration, expert systems to control the transport environment and conserve fuel energy, and the use of telematics to monitor and control the performance of refrigerated vehicles during transit. This edition includes descriptions and recommendations for food transported over the road and by rail in marine containers, as well as in railcars."³

PREFERRED CITATION:

Protecting Perishable Foods During Transport by Truck and Rail (A summary of a University of Florida, Institute of Food and Agricultural Sciences Extension report); U.S. Department of Agriculture, Agricultural Marketing Service; July 2019. Web <<http://dx.doi.org/10.9752/TS235.07-2019>>

Photo credit: USDA

USDA is an equal opportunity provider, employer, and lender.

² Ibid.

³ Ibid.