

Food Safety and Quality in Home Food Delivery

Pizza was only the beginning

Addressing the transportation of perishable food items that are produced at retail food establishments and transported by mail directly to the consumer

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What is this?



Over the past year, have you ordered home delivery for ready to cook foods?

Yes

No

FDA FSMA Rules on the Sanitary
Transportation Of Human and Animal Foods

Section 1.908 (3)

All transportation operations must be conducted under such conditions and controls necessary to **prevent** the food from becoming filthy, putrid, decomposed or otherwise unfit for food, or being rendered injurious to health from any source during transportation operations

<https://www.federalregister.gov/articles/2016/04/06/2016-07330/sanitary-transportation-of-human-and-animal-food>

Retail and Restaurant Exemptions
From the Rules on the Sanitary Transportation
Of Human and Animal Foods

**Clarification on Food Establishment Waiver from
Requirements of the Sanitary Transportation of Human and
Animal Food Rule: Guidance for Industry**

U.S. Department of Health and Human Services Food and Drug Administration Center
for Food Safety and Applied Nutrition Center for Veterinary Medicine

August 2017

<https://www.fda.gov/downloads/Food/GuidanceRegulation/GuidanceDocumentsRegulatoryInformation/UCM571341.pdf>

FDA waives the requirements of the rule for:

Businesses subject to the requirements of part 1, subpart O, that are permitted or otherwise authorized by the regulatory authority to operate a food establishment that provides food directly to consumers (i.e., restaurants, retail food establishments, and nonprofit food establishments as defined in 21 CFR 1.227), only when engaged in transportation operations as:

- a. Receivers, whether the food is received at the establishment itself or at a location where the authorized establishment receives and immediately transports the food to the food establishment;
- b. shippers and carriers in operations in which food is transported from the establishment as part of the normal business operations of a retail establishment, such as:
 - i. Delivery of the food directly to the consumer(s) by the authorized establishment or a third-party delivery service, or
 - ii. Delivery of the food to another location operated by the authorized establishment or an affiliated establishment where the food is to be sold or served directly to the consumer(s).

The Issues

**What about quality?
How safe is the food?**

Remember Chipotle?

Do “Good things come from Sysco”?



TIP LINE:
1-888-996-TIPS (8477)
TheUnit@nbcbayarea.com



Sysco Food Stored in Dirty Sheds Served to Bay Area Restaurants



\$19.4 Million
Fine from California

Old School

Call-in Order
Delivery by Auto
Or
Drive to sales location for pickup

New School

2 Primary Types

Direct delivery – usually by vehicle

Call in or Order online

Order online

UPS, USPO or DHL Type of Delivery

Convenience

Driver orders at the counter, like any other customer. The credit card he pays with is a company card; it charges to DoorDash, which will then charge the Baskin-Robbins orderer. The ice cream goes into a takeout bag, which goes into a silver space blanket, which goes into a cooler bag, which goes into the trunk of Ejigu's car.

Online versus dial-up ordering

Food Safety and Quality Issues

Companies

Products

Costs

By Mail or Daily Direct

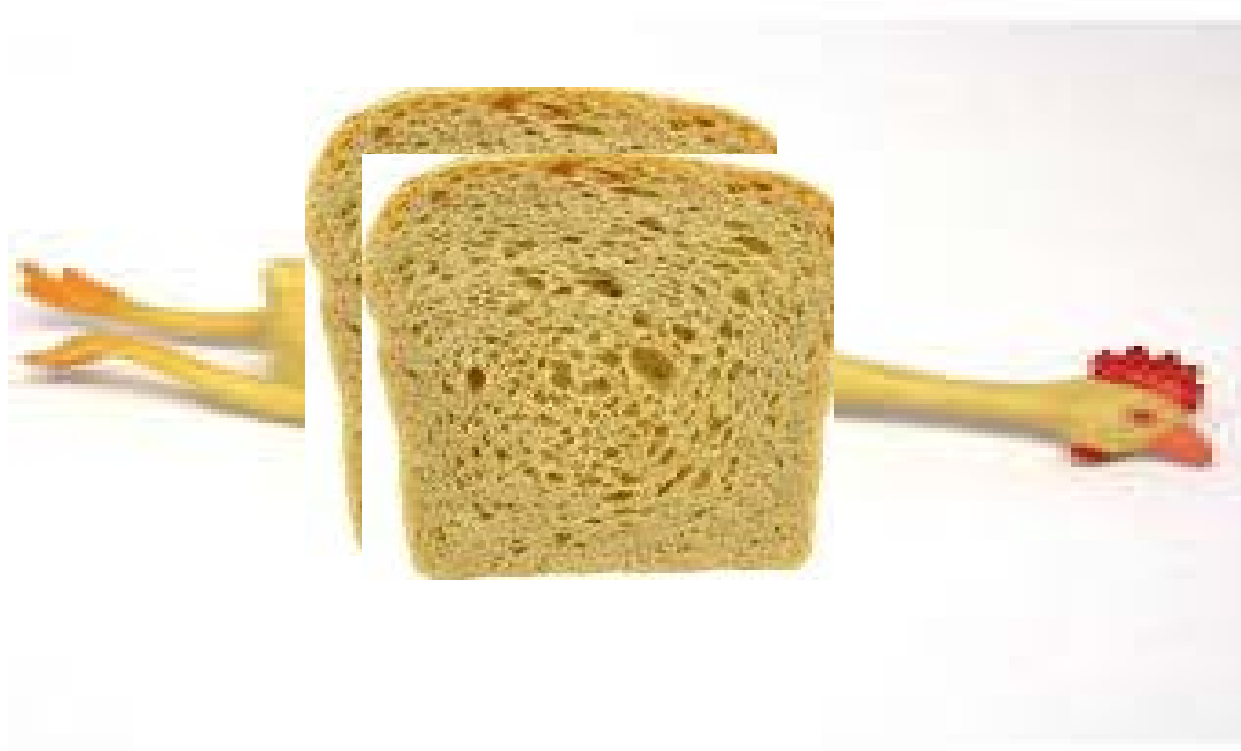
Tech start-ups

Problems

Solutions

Name this treat.

Chick-fil-A®



Direct Delivery

**Daily
Within Hours
Call-in Order**

Robot company Starship Technologies plans 1,000 delivery bots

By Melanie Abbott
BBC Radio 4's You and Yours



<http://www.bbc.com/news/technology-43949554>

Starship Technologies is partnering with the Co-op in Milton Keynes to deliver groceries in South London.

Direct Delivery

Grocery delivery from your favorite local stores.

Try two weeks free
+ **\$15 OFF**
your first order!

[OFFER DETAILS](#)

Enter zip to get started

GO



You order from the app.

We make ordering and payment fast, simple, and convenient.



We shop for you.

We partner with a local community of reliable shoppers.



We deliver to your door.

Get your delivery in as soon as 1 hour after you order.

<http://www.RyanSystems.com>



Direct Delivery

A promotional image for Martha & Marley Spoon. On the left, Martha Stewart, a woman with blonde hair wearing a purple short-sleeved button-down shirt, stands in a kitchen behind a counter. On the counter are several brown paper delivery boxes and bags, some with recipe cards and fresh ingredients like tomatoes, onions, and fish. The text on the boxes includes 'martha & MARLEY SPOON' and 'KING REDESIGNED'. On the right, there is a white text box with a green button.

**OVER 18,000 RECIPES FROM
AMERICA'S MOST TRUSTED
HOME COOK**

Martha & Marley Spoon delivers pre-portioned, seasonal ingredients and the recipes of your choice directly to your door.

[View Boxes](#)

Designed with easy weeknight cooking in mind, our vast selection of recipes reflect Martha's love for seasonal ingredients and delicious flavors. Martha & Marley Spoon brings Martha's celebrated recipes and smart cooking techniques to your kitchen.



(Photo: Martin Klimek)

For now, ordering through DoorDash and others is dirt cheap. The company charges just \$1 to pick up and deliver your take-out meals. (Tips are optional and extra.)

<https://www.usatoday.com/story/tech/2015/10/13/doordash-rides-food-delivery-app-craze-home/73838592/>

<http://www.RyanSystems.com>



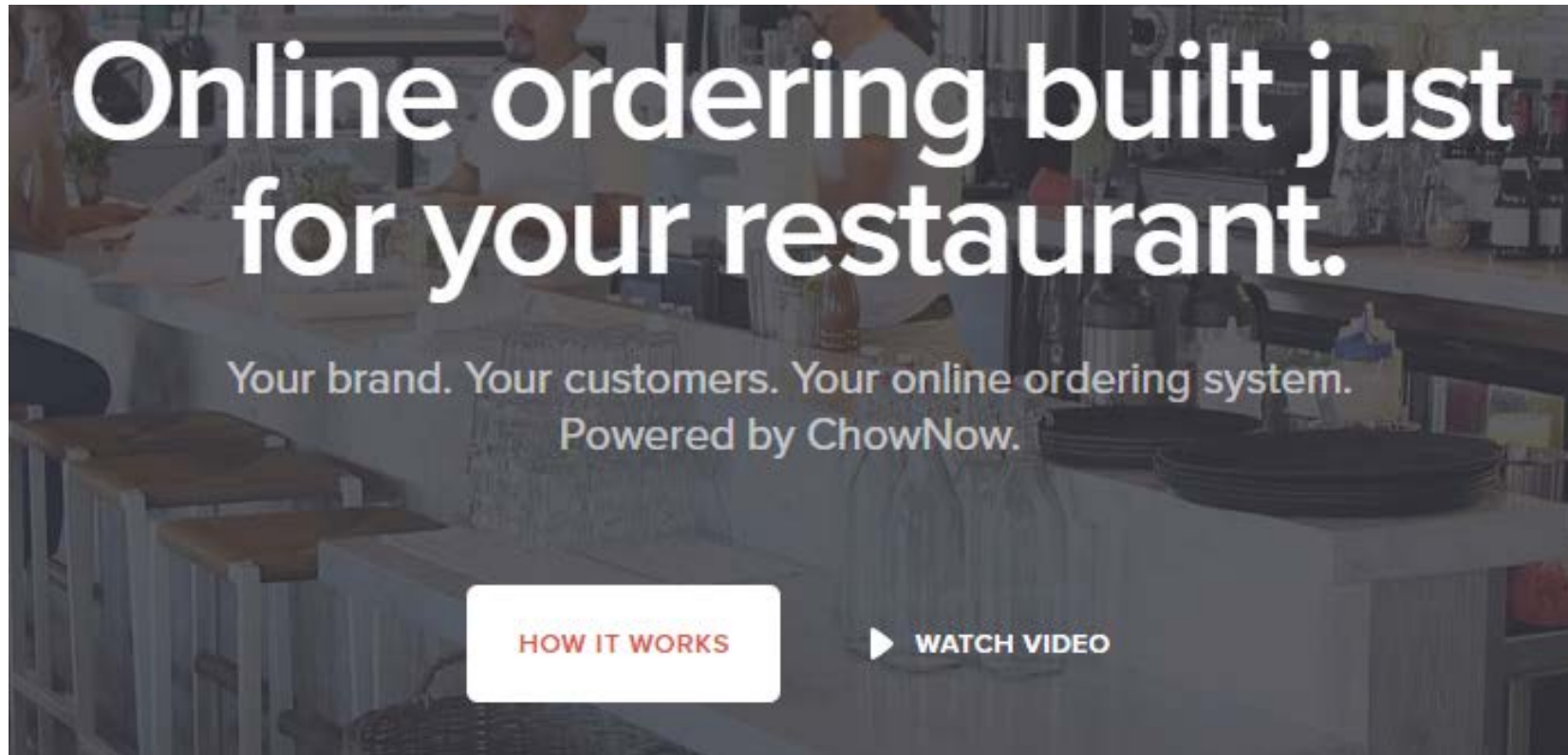
Good Eggs: Farm Fresh Food Delivered to Your Home



Recent 206,000,000 recall



Direct Delivery



Online ordering built just for your restaurant.

Your brand. Your customers. Your online ordering system.
Powered by ChowNow.

[HOW IT WORKS](#) [▶ WATCH VIDEO](#)

<https://www.chownow.com/>

<http://www.RyanSystems.com>



Direct Delivery

Restaurants lack infrastructure and logistical expertise for operations
3rd party services

Farms

Distributors

Transporters

Processors

Cheesecake
Factory

Red Robin

Carrabba's
Italian Grill

DoorDash

GrubHub

Yelp

UberEats

Mapping
Technology

Order Systems

Smart Phone
Apps

**Time to Prepare
Driver Arrival**

Direct Delivery

Pricing

**INTEGRATED
ONLINE ORDERING**

Monthly Plan

\$149 /mo

+\$399 Setup Fee

PER LOCATION

GET STARTED

Annual Plan

MOST POPULAR

\$119 /mo

+\$199 Setup Fee

PER LOCATION

GET STARTED

Two-Year Plan

\$99 /mo

+\$199 Setup Fee

PER LOCATION

GET STARTED

<https://www.chownow.com/>

<http://www.RyanSystems.com>



43 billion dollar business going to \$76 billion by 2022

Baskin-Robbins 600 stores in 22 cities

Partnerships between McDonald's, Wendy's, Jack in the Box, Red Robin, Cheesecake factory Outback Steakhouse and Buffalo Wild Wings with third-party services.

DoorDash's delivery for Baskin-Robbins = 12-13 minutes

Direct Delivery Restaurants

The American Grilled Cheese Kitchen

Tasty Burger Emporium Thai Cuisine

Malibu Fish Grill Smoke Daddy

Peacefood Cafe XOCO

**Sandwiches
Burgers
Seafood
Mexican
Vegan
BBQ
Thai
Deli
Cafe**

Walmart

Blue Apron

Target

Tom Brady (meal kit service)

UPS Drone Delivery

Amazon

Dunkin' Donuts

Cinnabon

Some Quality Issues

**Short Shelf Life – steam – sogginess – overcooking
defrosting, melting**

Tacos

Thin crust Pizza

Grilled sandwiches

French fries

Ice Cream

Some Business Impact Issues

Delivery time

Routing

Distance

Traffic

Tight margins (per-order fees)

Mapping Technology



Tom Brady launches meal kit service so you can eat like him

Mar 7, 2017



Smart home tech unlocks homes for grocery delivery

Apr 25, 2016



DoorDash rides food delivery app craze home



Because baking is hard, Cinnabon will soon deliver to you

<https://www.usatoday.com/search/home%20delivery%20of%20food/>

<http://www.RyanSystems.com>





Washington, DC area

**Authentic Multicultural Meals, Crafted by Emerging Immigrant Chefs,
Delivered to Your Door**

Foodhini was founded on the idea that food can be used to create new opportunities for our immigrant and refugee communities, and also satisfy the appetites of hungry foodies in search of authentic multicultural meals.



Chicken ChuMok (Pan Fried Tibetan Dumplings)

CHEF DORJEE



Red Coconut Curry Beef w/ Turmeric Rice

CHEF DORJEE



Ginger Glazed Lamb

CHEF DORJEE



Chilled Sichuan Eggplant Salad w/ Black Grape Pickles

CHEF DORJEE

<https://foodhini.com/>

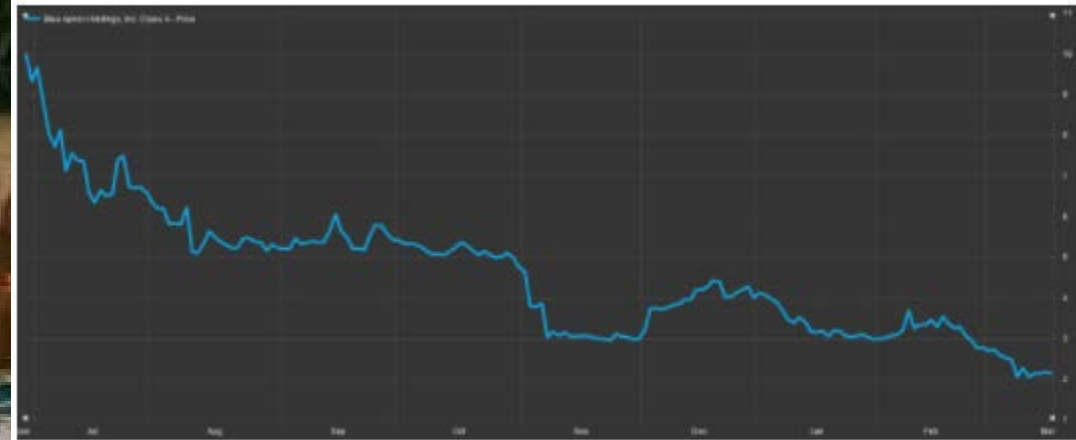


Going Public



Blue Apron files stock offering

Blue Apron shares since IPO



Order Online

UPS, USPO or FedEx Delivery

<http://www.RyanSystems.com>



IAFP 2017 (JULY, Tampa, FL)

International Association For Food Protection

Perishable Foods Delivered to Homes via Common Carriers: Safe or Sorry?

The rise of e-commerce and ubiquity of online ordering has dramatically increased the prevalence of home-delivered perishable foods. These foods include groceries, fresh produce, meat, poultry, seafood, cheese, meal preparation kits and prepared meals. As demand grows, both providers and consumers can benefit from developing a better understanding of the particular food safety requirements for online ordering of food and the food safety challenges involved with shipment of perishable foods. This symposium will bring together food safety experts from various backgrounds with extensive experience in the area of home delivered food products.

Rutgers and Tennessee State University (Online Sales - Home Delivery)

Meat
Poultry
Game
Seafood

500 vendors and counting



Rutgers and Tennessee State University

684 samples arrived as “unsafe to consume”

Temperature controls thawing (improper packaging)

47% delivered above 40 deg F

Potential for pathogens

Disclaimers (shippers/suppliers)

Delivery to the front porch

No or incorrect food safety information (labeling)

Incorrect information (“cool to the touch”)

FedEx, USPS, UPS - Avg=32.35 hours

Frozen or fresh

Container size versus product size

Packaging integrity and dirt

Dunnage and Coolants (gel packs, dry ice, wet ice)

Unlabeled products

FSIS

Records to be Kept by Official Establishment and Retail Stores
That Grind Raw Beef Products
(April 1, 2017 Full Enforcement)

Protect public health by correct record keeping for recalls

Cross Contamination and Traceability

Grinding and failing to keep records sufficient for trace back

Yiannas' 4 Megga Trends

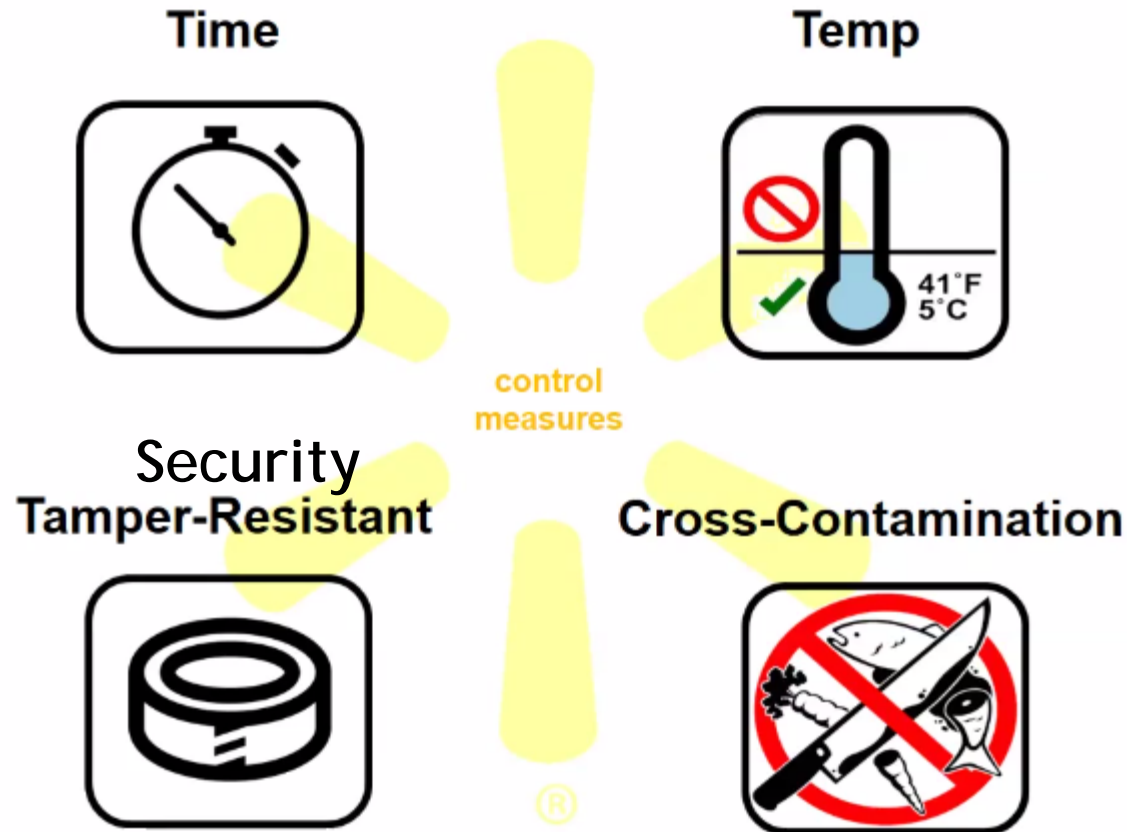
1. The World is the grocery store
2. The last mile from farm to fork is changing
3. Food packaging Requires more innovation and validation
4. Digital as primary form of communication

Frank Yiannas, Walmart

The last mile

Prevent cross contamination, maintain cold storage
and identification?

Frank Yiannas, Walmart



Other Food Safety Issues

Special Dietary Needs

Allergens

Recalls

Fraud

Grocerant Food Service Distribution Challenges

Changing customer demands and patterns – numerous small meals per day,
eat at home, concern for what is in the food and food safety

New data demands – collection, analysis and access, people, software

New technology

Labor shortages

Changes in the fast food labor market – more older people due to employment needs

Changes in pay

Need for visibility into the food supply chain – data from chains, distributors, suppliers

Need for validation compliance – in all areas – food safety, food quality, etc.

All implies changes in the food supply chain with great emphasis on systematic approach

Questions for The Food Industry

What industry controls will be adopted to establish safe food practices?

Who will be the first to get hit by a Chipotle-like outbreak?

How do you feel about food safety issues in current delivery systems?

- A. I am not at all worried**
- B. Consumers need to be careful**
- C. Completely untrustworthy**

Getting Control of Grocerants

Changing customer demands and patterns – numerous small meals per day, eat at home, concern for food and food safety

Disruption to the extended supply chain

New data demands – collection, analysis and access

New data people, technology, software

Recall

Sanitation and temperature controls

Training

Labor shortages

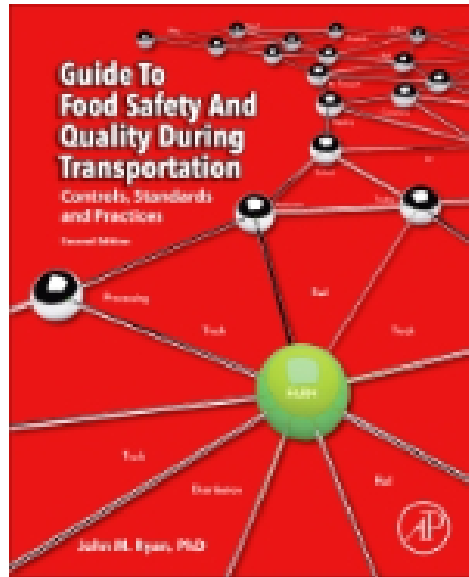
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Guide to Food Safety and Quality during Transportation

2nd Edition

Controls, Standards and Practices

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<http://www.RyanSystems.com>

End

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