

# Preparing the Meat Industry for a Waste Free Future

**Karl Deily**



FOUNDATION FOR  
MEAT & POULTRY  
RESEARCH & EDUCATION

[www.meatconference.com](http://www.meatconference.com)

# Who We Are

Sealed Air  
Re-imagine™

Create a more efficient, secure and less wasteful global food supply chain

COUNTRIES SERVED

123

GLOBAL EMPLOYEES

~15,500

ANNUAL REVENUE

\$4.7B



33%

According to current estimates  
of the food  
produced globally  
is **never eaten.**

And that's enough food to feed...

# 3 BILLION PEOPLE

which is the combined population of

North America  
579 MILLION

Europe  
738 MILLION

Africa  
1.2 BILLION

South  
America  
422 MILLION



# FOOD WASTE

contributes

**4.4**

**GIGATONS**

of CO<sub>2</sub> equivalents  
to the atmosphere  
each year...





# FOOD WASTE

is about more than just wasted food.

# Food Must Travel



Increasing global demand  
for **fresh protein**

# 10%

increase in consumption in 10 years.

**Growth of U.S. Exports**



Beef: 6.5%  
Poultry: 4.1%  
Pork: 2.6%

*\*Source- FAO 2018*

# Protect What's Inside

The carbon footprint of **1kg of beef** is **370x** the carbon footprint of the packaging used to protect it

Packaging technology extends food freshness - Packaging shifts from days to weeks

Proper storage conditions prolongs shelf life





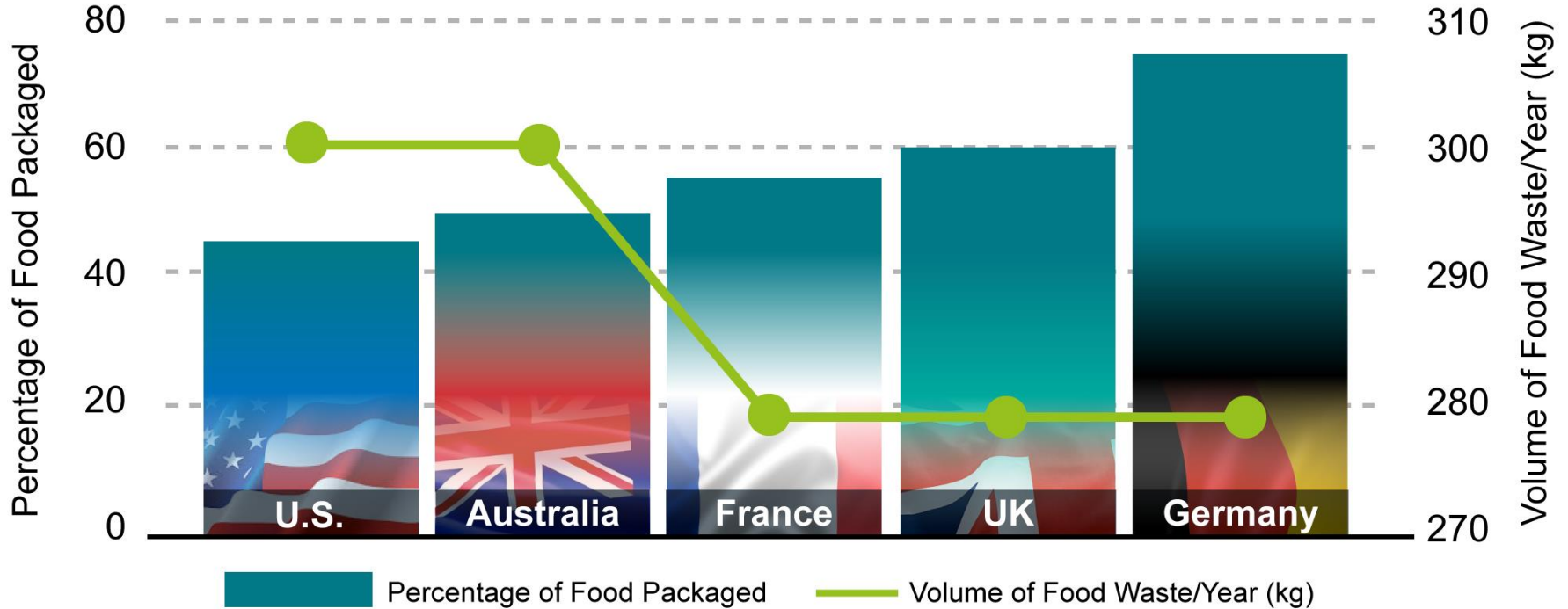
# Retail Case Study



- >350 tons waste reduction (food and packaging)
- \$1MM in operational efficiencies
- 8,000 tons CO2 reduction
- \$19MM total annual benefit

# Packaging and Food Waste

Countries with highest levels of packaging have lowest food losses




# 2017

## Tesco promises to end edible food waste by March 2018

“Innovations in packaging that make the food fresher for longer are obvious, and there’s an awful lot of marketing activity in order to give tips on reuse, recipes, all the ways of avoiding food waste in the home.”

- *Dave Lewis, Tesco CEO*



An underwater photograph showing a sea turtle and a stingray swimming in clear blue water. The water is filled with various pieces of plastic debris, including a white plastic bag, a brown stick, and other unidentifiable fragments. The scene illustrates the impact of plastic pollution on marine ecosystems.

**By 2050, there will be more plastic by weight than fish in the ocean**

sky ocean  
rescue

Plastic pollution  
we can make things better

Recycling  
breakthrough

06.2018  
NATIONAL  
GEOGRAPHIC



WAR  
ON WASTE

Meghan, 15, tries on a diamond ring. Another exclusive picture of a princess in the making  
SEE PAGE 2

**Daily Mail**  
WEDNESDAY 20 NOVEMBER 2017  
www.dailymail.co.uk MEMBERSHIP OF THE YEAR 6500

As a report reveals beaches are getting worse and two supermarket chains back our bottle deposit campaign...

**LET'S TURN THE TIDE ON PLASTIC**

REPORT: BEACHES ARE GETTING WORSE AND TWO SUPERMARKET CHAINS BACK OUR BOTTLE DEPOSIT CAMPAIGN...  
PAGES 6-7

**Daily Mail CAMPAIGN**

# Global Attention on Plastic Waste

**1. China (2017 & 2018)** National Sword policy restricts import of waste materials into China, initially plastics and fiber.

**2. European Union (Jan 2018 & May 2018)** Strategy to promote recycling, reuse and recycle content. Single Use Plastics ban and tax proposed.

**3. India (Mar 2018)** Plastic Waste Management Rules implemented to encourage recovery and reuse of plastics

**4. United Kingdom (April 2018)** UK Plastics Pact introduced to increase recycling, reuse, redesign and recycle content in packaging.

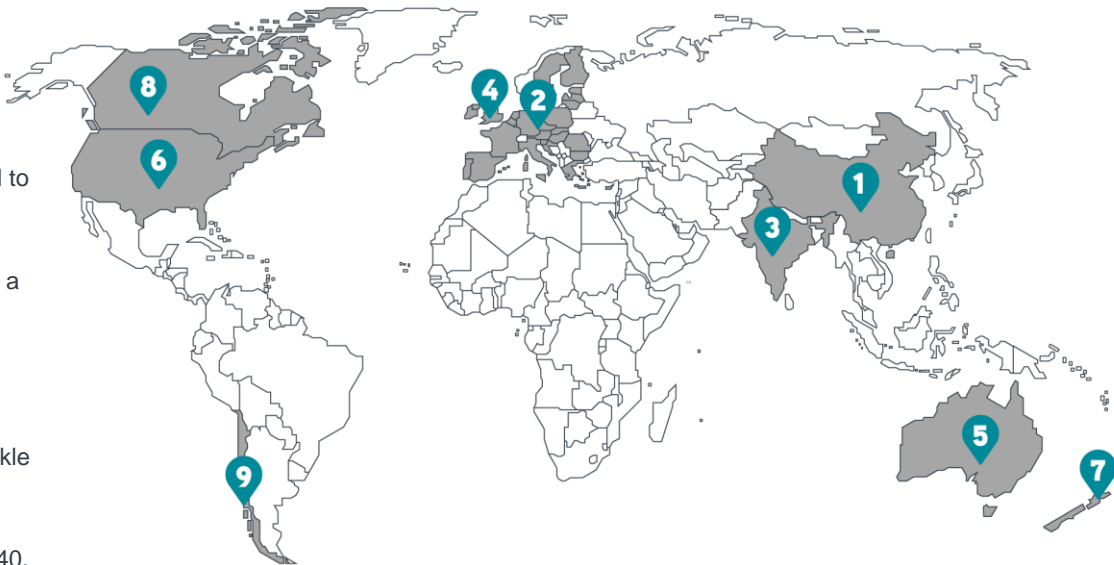
**5. Australia (April 2018)** Ministers of Environment announce a target for all packaging to be reusable, recyclable or compostable

**6. US (May 2018)** American Chemistry Council pledge to recycle or recover 100% of plastics packaging by 2040.

**7. New Zealand (June 2018)** Companies make pledge to tackle plastic waste by 2025 with Ministry of Environment.

**8. Canada (June 2018)** Plastics industry sets goal for all plastics packaging to be reused, recycled or recovered by 2040.

**9. Chile (Aug 2018)** A second national pact, similar to UK, is being developed.



# EU Circular Economy Pledge

- 
1. The Circular Economy Pledge says by 2030:
    - a) All plastic packaging is reusable or recyclable
    - b) 55% of plastic packaging waste is recycled
    - c) Sorting and recycling capacity increased four fold
  2. The European Commission moving away from voluntary approaches to influence plastic waste management. Initiatives anticipated:
    - a) Mandatory use of recycled plastics
    - b) New tax on use of virgin plastics (in addition to EPR fees and bottle bills)
    - c) Targeted actions to restrict or ban certain “single use plastics”

# 2018

“Tesco has announced it will ban all non-recyclable plastic by 2019, in a move campaigners have cautiously welcomed as “raising the bar on problem plastics.”

The supermarket giant has called on the government to help establish a consistent recycling infrastructure that would enable a “closed loop” system in which waste is avoided altogether.”

- *The Independent*

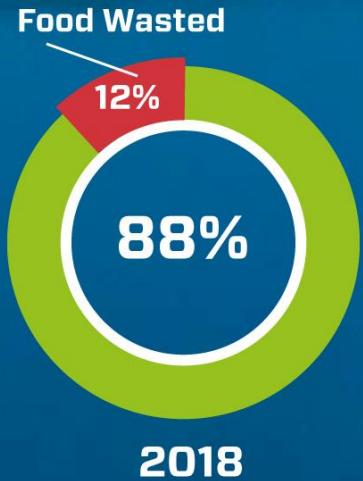




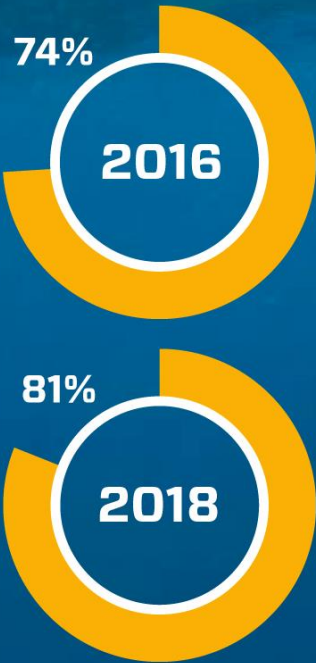
# Consumer Sustainability Concerns: Plastic vs. Food Waste



The amount of plastic in oceans



The amount of food waste in the country



Source: Harris Poll on Consumer Food Waste (2016-2018) Average result across 11 European countries





*New  
fresh for longer*

*Best Selection*



SAIMAA  
**TUORE**

**TUORE KIRJOLOHIFILE 170 G**



**1**  
TUNNISSA  
ALTAASTA  
PAKETTIIN

**1**  
HENGEN  
ANNOS  
170 G

**5**  
MINUUTISSA  
VALMISTA

SAIMAA  
**TUORE**



**7 PK**

**NO ADDED HORMONES**

| ENERGY | FAT     | SAT FAT | SUGARS | SODIUM |
|--------|---------|---------|--------|--------|
| 667kJ  | 10g     | 3.6g    | <1g    | 40mg   |
| 8% DI* | 12% DI* | 14% DI* | 6% DI* | 2% DI* |

PER 100g SOLWE

**coles**



**NO ADDED HORMONES  
AUSTRALIAN BEEF**

**LEAN  
MINCE**

**4 STAR**  
★★★★

TYPICALLY 10% FAT

**NO ADDED  
HORMONES**

**NUTRITION INFORMATION:**

|               | Quantity & Daily Intake* | Per 100g | Quantity Per 100g |
|---------------|--------------------------|----------|-------------------|
| Energy        | 667kJ (158kcal)          | 6%       | 1632kJ (388kcal)  |
| Protein       | 17.4g                    | 6%       | 75.4g             |
| Tot. Fat      | 10g                      | 12%      | 40g               |
| - saturated   | 3.6g                     | 9%       | 14g               |
| Carbohydrates | 0.25g THRU 1g            | 0%       | 1.0g THRU 4g      |
| - sugars      | 0.15g THRU 0g            | 0%       | 0.6g THRU 0g      |
| Sodium        | 40mg                     | 2%       | 160mg             |

Note: All values are rounded averages unless otherwise indicated and may be unrounded product.  
\* When compared to Coles Brand Best Beef 1.0% Fatpastr Mince

**PRESERVATIVE FREE**

\* Percentage daily intakes are based on an average adult diet of 8700kJ. Your daily intakes may be higher or lower depending on your energy needs.

**Storage:**

Keep refrigerated. Store at or below 2°C.

**BEST BEFORE:**



**Information:**

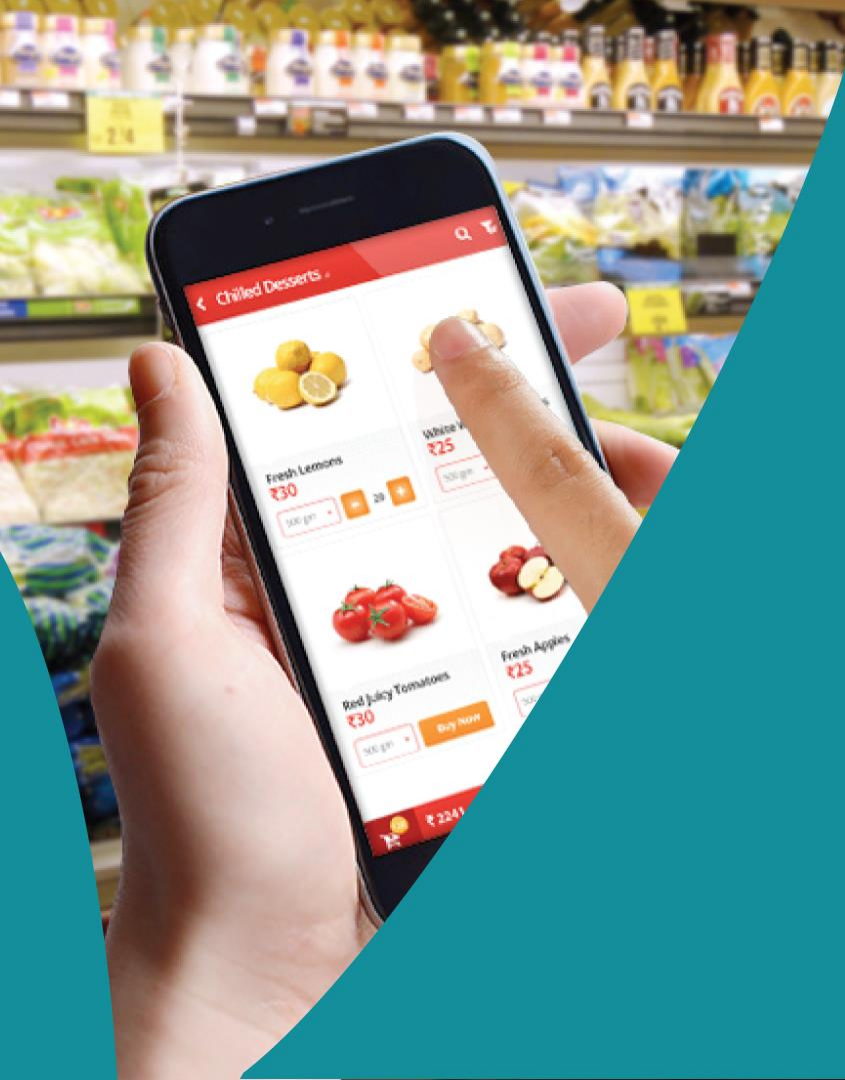
**Product of Australia**

Coles and the Red Ribbon logo are trade marks of Coles Supermarkets Australia Pty Ltd, 800 Torrens Road, Brentwood East, VIC 3120. Call 190 861 582 www.coles.com.au



**500g e**





# Merchandising & Digital





## PERDUE® unveils new packaging to resonate with millennials and convenience shoppers





SHENANDOAH VALLEY, VA

# FARMER FOCUS

SUPPORTING LOCAL FAMILY FARMS



*Organic & Free Range*  
HANDCUT PREMIUM  
BONELESS SKINLESS  
**CHICKEN THIGHS**

FED AN ALL VEGETABLE DIET

100% FARMER OWNED CHICKEN



NO ANTIBIOTICS EVER



MEET YOUR FARMER

KEEP REFRIGERATED OR FROZEN  
MAY CONTAIN UP TO 5% RETAINED WATER



**WEGMAN'S ORGANIC  
BEEF IN SUSTAINABLE  
VACUUM-SEALED  
PACKAGING**



save  foods

## OUR SEAL OF APPROVAL

**AAA Beef**  
New vacuum-sealed packaging,  
naturally aged for maximum  
flavour and freshness

### FRESH

- Airtight packaging locks in premium taste, tenderness and quality
- Product returns to its bright red colour within moments of being opened

### 100% NATURAL

- No preservatives

### CONVENIENT

- Stays fresher longer, giving you more flexibility to schedule meal preparation
- Freezer ready and leak proof—no need for freezer bags



### FRESH SEALED VACUUM-SEALED FRESHNESS

#### WHY VACUUM-SEALED?

Preserving meat's natural flavour and locking in premium quality. That's why we use vacuum-sealed packaging that prevents oxidation and keeps your beef as fresh as the day it was cut.

#### BENEFITS FOR YOU

- Longevity
- Ready to Prepare
- Easy to Open
- Stay 100% Freezeable
- Longer Shelf Life
- Full Flavor When Cooked
- Available in Bulk Sizes

# Foster Farms Introduces QR Code



## QR Code Virtual Assistant

DORI connects consumers to exclusive savings, fresh chicken recipes, a guide to poultry labeling terms and more. DORI is accessible via smartphones wherever Foster Farms fresh chicken is sold.



# Benefits of Digital Technology



## Food Safety

Identify source of problem  
Food recall management



## Verify Authenticity

Country of origin  
Sustainable production



## Consumer Communication

Quality assurance  
Confirmation of claims



## Brand Differentiation

Consumer engagement  
Trustworthiness



## Supports International Trade

Food fraud  
Import / export requirements



## Value Chain Alignment

Inventory management  
Improved logistics





# Omnichannel



# Food & Beverage E-commerce to Double in 5 Years

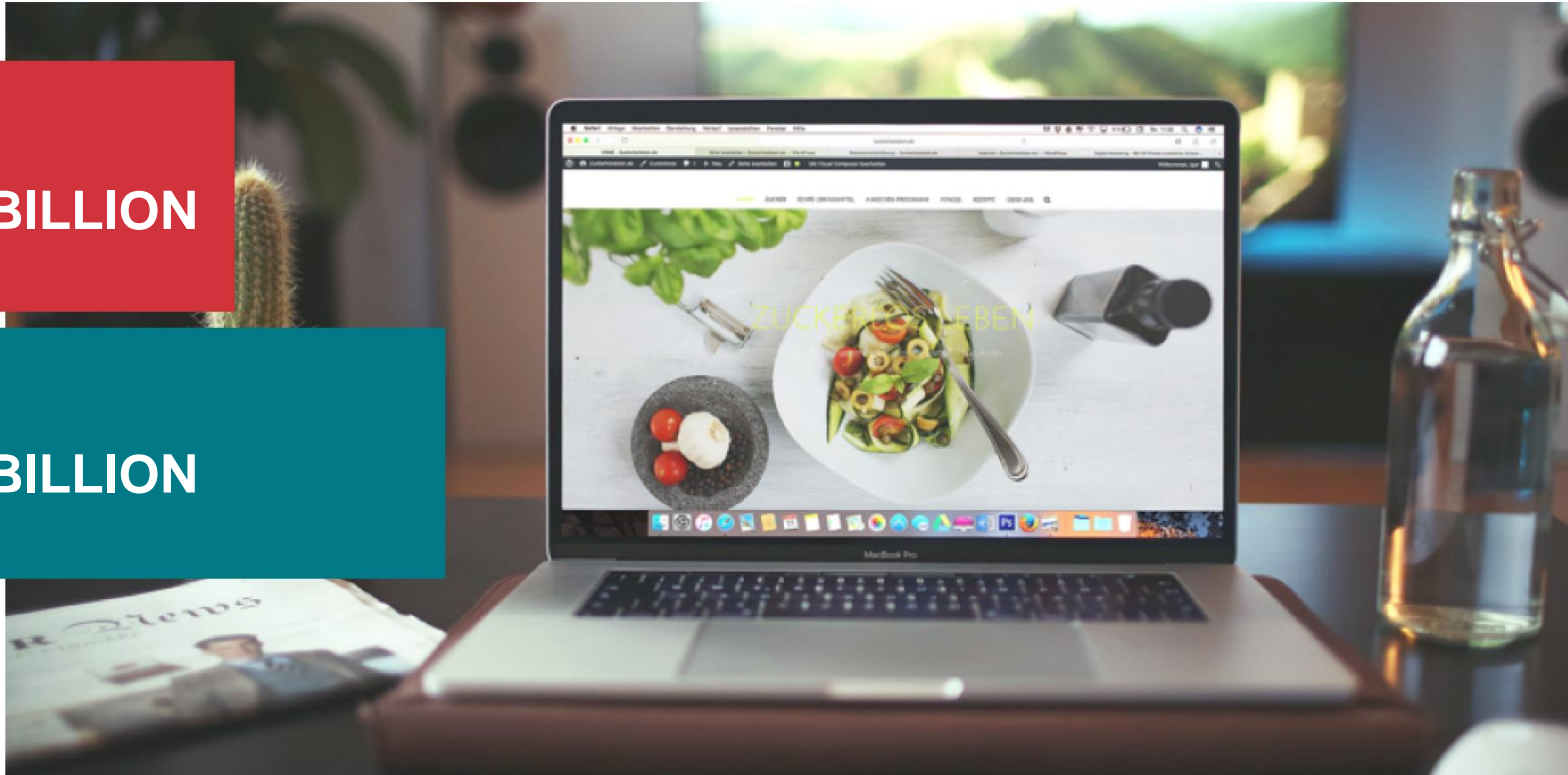
GLOBAL

2017

**\$46.4 BILLION**

2022

**\$91.9 BILLION**



# E-Commerce Grocery

**70%**

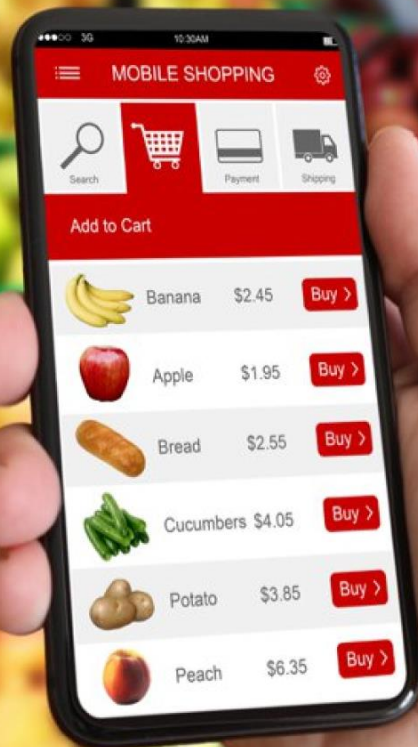
Buying groceries online by 2024

**50%**

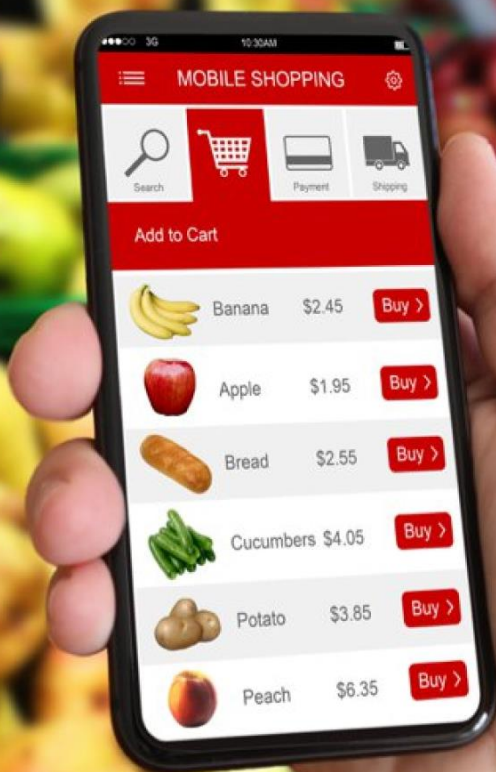
Increasing online grocery purchases in 2019

**\$29.7B**

Projected U.S. sales by 2021



# Average Basket Size



**\$55.18**

Brick and Mortar

**\$71.76**

Click and Collect

**\$90.61**

Click and Deliver

# SUPERMARKET



# CONVENIENCE STORE



# ONLINE STORE



[On The Menu](#) [Pricing](#) [Our Vision](#) [Wine](#) [Gifts](#) [Shop](#)

\$50 Offer - Get \$25 Off Each of Your First Two Boxes

REDEEM OFFER

Food is better when  
you start from scratch

Choose Your Plan

# FUTURE STORE





- Leak Proof
- Damage Resistance
- Temperature Assurance
- Dim Weight
- Brand/Opening Experience
- Recyclable



# TAKEAWAYS

1. Sustainability. If you're not thinking about sustainable packaging, you should.
2. Don't ignore the importance of packaging and graphics for merchandising and communication with consumers.
3. Omnichannel strategies, including packaging, are critical.



An aerial photograph of a vast rural landscape during the golden hour of sunset. The sky is filled with dramatic, layered clouds, with the sun low on the horizon to the left, casting a warm, golden glow across the scene. Below, a patchwork of vibrant green agricultural fields is visible, separated by thin lines of trees and fences. A single, winding asphalt road cuts through the fields, leading the eye from the foreground towards the horizon. The overall mood is peaceful and expansive.

Together, we're a part of  
something important.





# Thank you!

Questions?  
Want to be in the know?

# Q&A

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[www.sealedair.com](http://www.sealedair.com)



@KarlDeily



Karl Deily