From Field to Frozen: Protecting Your Economy & the Environment



Riviana Foods IQF PO Box 2636 Houston, Texas 77252

rivianaindustrial.com/iqf/ industrialsales@riviana.com





A Shift Toward Frozen Food

According to IRI®, which specializes in data and market research, frozen food sales increased by 21% in 2020. This shift in grocery shopping patterns is mostly tied to the recent socio-economic changes as a result of the Covid-19 pandemic. However, it may also be related to an increased self-awareness in environmental welfare. These are just a couple of the reasons that many people are turning more to frozen foods.

Studies show that more people are choosing frozen goods across different categories. The demand-led growth for plant-based meals and meat-free alternatives have also had an impact on the sales uptick of IQF foods. One of the biggest growing concerns for consumers is the need to reduce food and product waste.

Cutting Back on Food Waste: A Growing Concern for Consumers

AFFI, The American Frozen Food Institute, published in a recent report that frozen food generates less waste than nonfrozen food. Based on data published by the Nutrition Journal, the yearly costs of wasted food is estimated at over \$1,000 per capita. In the efforts to address the environmental impact, seek financial flexibility and minimize the effects of consumers consumption habits, frozen foods present an opportunity.

Total daily per capita food expenditure was \$13.27 representing:



Source: Nutrition Journal 2020





Frozen Food Statistics

Purchasing and consuming frozen food, in turn, works to generate 47% less food waste if compared to ambient and chilled food consumed at home.



Did you know?

Frozen food generates **47%** less food waste compared to ambient and chilled food consumed at home.

Reduce Your Food Waste With Frozen Food

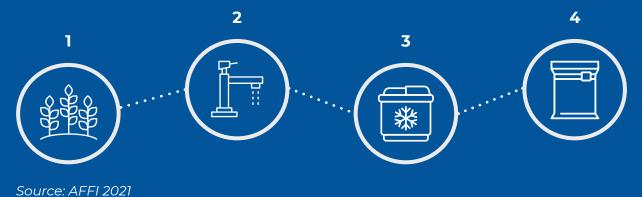
- \$162 billion worth of food is wasted per year.
- **40%** of all food produced in the US is not eaten.
- The average American throws out an estimated **25%** of the food and beverages they buy.
- 89% of Americans think that food waste is a concern.
- **72%** of Americans say they would purchase frozen food or frozen prepared meals.

From Field to Frozen

- 1. Produce is harvested at peak freshness
- **2.** The food items are then cleaned, washed and prepared before they are frozen.

3. Food Items are frozen to preserve key vitamins, minerals and taste.

4. Finally, food items are conveniently packaged allowing consumers to reduce waste by preparing only what is needed and storing the rest for later.





Myths/Facts of Frozen Food

Myth:

Frozen food is less nutritious than non-frozen food.

Fact:

Recent studies confirm that the nutritional profile of many foods does not experience any changes when frozen.

Myth:

Non-frozen food contains less added preservatives than frozen.

Fact:

Food such as rice and other grains can be cooked and frozen without the addition of preservatives, synthetic colors, or other additives.

Myth:

.

Freezing changes the taste and texture of food.

Fact:

Cutting edge technology like IQF (Individual Quick Frozen) allows for preserving the flavor and texture of grains and pulses as if it were freshly made.

Myth:

Only non-frozen food can be Certified Organic.

Fact:

Riviana Foods IQF offers organic, non-GMO Project verified, SQF-certified, Kosher and Halal rice, grains and pasta.

Additional Advantages of Frozen Food

1. The lifespan of frozen foods helps to decrease food waste.

2. Frozen foods are easily adapted to single-serving and family meals without leftovers, allowing consumers to prepare and eat what is needed and the rest stored.

3. Frozen food is packed at peak freshness.

Consumers can save time in the kitchen with frozen food as there is no need to wash, peel or chop for use. It can be used as individual ingredients or in ready-made meals.

4. Frozen food is often lower in cost per serving.

5. The variety of quality frozen products help consumers keep a balanced diet with extensive alternatives in entrees, side dishes, appetizers and snacks.







About USDA Certified Organic - Riviana Foods IQF Products

IQF Ingredients in Everyday Life

Research shows that as consumers are demanding more premium products with safer production standards, IQF is especially relevant. The technology for IQF is becoming increasingly more popular due to the complex lifestyle changes in today's society that are shifting towards frozen products of higher quality and convenience.

IQF Process

The IQF process uses quality ingredients that have been harvested at peak freshness and precooked. Riviana Foods IQF, who supplies and processes cuttingedge rice, grains and pasta, does so without the addition of preservatives, synthetic colors, or other additives.

IQF Grains and Pulses

With reliable methods and the application of good manufacturing practices (GMPs), foods can be cooked and then frozen to offer superior products. IQF rice and other grains like chickpeas and lentils are available in a wide range of colors, with diverse flavors and textures. This technique is implemented by Riviana Foods IQF and is a pillar in cutting-edge practices for next level innovation and food quality.

The applications for IQF grains are endless, conveying consumer demands for convenience. Also, the products are also NON-GMO Project Verified, SQF Certified, Kosher and Halal. All products are cooked and frozen without the addition of preservatives, synthetic colors or additives.



IQF at Mealtime

Studies show that using IQF food sources can help reduce stress at mealtime in 6 different ways.

Reduce Mealtime Stress With Frozen Food (6 Ways):



1. Speed up prep time for meals: convenient frozen foods allow for more quality time around the table.



4. Cut food waste by using only what you need and leaving the rest in the freezer for later.



2. Get necessary nutrients needed each day.



5. Manage serving sizes by only defrosting the needed amount.



3. Simplify cooking with prepared and pre-frozen items.



6. Save time meal planning.

Source: Frozen Advantage



Increased Consumption of Grains and Legumes in Meals

According to IFIC research, the majority of Americans tried at least one new type of plant protein in 2020, demonstrating that the growing trend has staying power. Also, studies show that around 40% of Americans are shifting toward eating more plant-based foods.

In light of this information, IQF items are an ideal choice when it comes to mealtime needs. It supports the growing trend toward more plant-based items alongside the desire to reduce food waste.



40% of Americans are shifting toward eating more plant-based foods.





About Riviana Foods IQF

Riviana Foods IQF is a subsidiary of Riviana Foods Inc and a proud member of the Ebro Foods Group, the largest rice manufacturer in the world. Drawing on a rich history of innovation, the company has spent years perfecting the science of cooking and freezing conventional and organic goods in a single continuous process. The result is our high-quality and delicious IQF rice and grain products. A fully-automated cold store provides customers the flexibility of mixed-loads and industry-leading fast response to orders.

There are numerous reasons why consumers continue to purchase and enjoy IQF products from Riviana Foods IQF:

 \checkmark

A dedicated cold-store facility holds safety stock of any product in the portfolio, allowing to secure supplies and keep lead times low.



Flexible ordering options that accommodate full pallets, single truckloads, and even mixed loads.



On-site demonstration kitchen and training centers that help qualify products quickly.

Internationally-recognized quality and food safety programs that give customers peace of mind.

References:

1. AFFI. 2021. New Study Pinpoints Frozen Food to Gain 3 P's. https://affi.org/new-study-pinpoints-frozen-food-gain-to-three-ps/

2. AFFI. 2021.6 Ways Frozen Foods Can Help Reduce Mealtime Stress - Affi Frozen Advantage - Frozen Food Education." Frozen Advantage, https:// frozenadvantage.org/6-ways-frozen-foods-can-helpreduce-mealtime-stress/

3. Conrad, Z. Daily cost of consumer food wasted, inedible, and consumed in the United States, 2001–2016. Nutr J 19, 35 (2020). https://nutritionj. biomedcentral.com/articles/10.1186/s12937-020-00552-w

4. Rivianaindustrial.com/iqf/. 2022. https://rivianaindustrial.com/iqf/

5. Illinois.edu .2020. What's The best diet? plant-based eating trend growing. University of Illinois Extension.

Retrieved February 7, 2022, from https://extension. illinois.edu/news-releases/whats-best-diet-plantbased-eating-trend-growing.

6. Plotean, S., n.d. Design and Technical Features Increasing Food Safety of an IQF Freezer. Journal of Hygienic Engineering and Design. https://octofrost. com/media/full_paper_-_svetlana_plotean_-_design_ and_technical_features_increasing_food_safety_of_an_ iqf_freezer.pdf

7. Prepared Foods.2022..Tracking shifts in consumer eating habits. Prepared Foods RSS. https://www. preparedfoods.com/articles/125275-tracking-shifts-inconsumer-eating-habits

8. Statista. Leading planned diet changes for the coming year in the United States as of January 2020. https://www.statista.com/statistics/1098492/top-planned-diet-change-us/

From Field to Frozen: Protecting Your Economy & the Environment



Riviana Foods IQF PO Box 2636 Houston, Texas 77252

rivianaindustrial.com/iqf/ industrialsales@riviana.com

