

Reducing supply chain risk with ambient food

Steps to minimise the threat to ambient food quality throughout logistical transportation.

Logistics doesn't have to be a maze.



Mastering ambient food transportation

When people discuss the risks of transporting food and drink, they immediately consider cold chain logistics. However, much food and drink transportation happens at ambient temperature, which carries its own set of risks.

One look round a supermarket reveals that the fridge/freezer aisles only make up a small percentage of the shop.

Ambient goods need certain criteria to be met to ensure product quality is maintained, just like other perishable goods. The only difference is they perhaps don't need it quite as cold, which should mean transport is cheaper for you.

Here we will explore the key considerations for minimising the risks to ambient food during transportation through your supply chain.



An estimated 1.4 billion tons of perishable food is wasted globally each year due to inefficiencies in the supply chain. (J Gustavsson et al, 2011)

Let's change that.



Temperature fluctuations and extremes

Ambient foodstuffs, just like other categories of food and drink, need to be protected from temperature fluctuations and extremes to ensure pristine product quality.

It goes without saying that extreme heat or freezing cold during transportation and warehousing can accelerate spoilage, reduce shelf life, or damage the food. Excessive heat can accelerate decomposition by denaturing proteins and fats, while cold can cause freezing and thawing cycles that damage texture and functionality.

There are plenty of studies which confirm how temperature extremes damage ambient goods, including a report which highlighted increased discoloration, reduced cooking quality, and a higher chance of insect infestation in rice stored at higher temperature (P, Krishnan et al, 2007).

Mitigation strategies

Thermal packaging

By investing in thermal packaging, the temperature of the food and drink within will be more resistant to external changes. This can be particularly beneficial for heat-sensitive goods such as chocolate or confectionary.

Whilst the outlay here will be higher than regular packaging, it's significantly less than the cost of spoiled cargo.

“Across a supply chain there are countless touchpoints where the cargo is vulnerable to temperature fluctuations. It's our responsibility to analyse your supply chain and highlight these, so you can take mitigations to ensure goods maintain pristine condition.”



Keri Barton, Sales and Marketing Director, WTA



Real-time container monitoring

With the **WTA Platform**, you have real-time, detailed monitoring of your goods in transit.

This involves tracking key data points live such as location, temperature, lighting, shocks, and humidity. It provides complete transparency into the conditions of your goods on route, so you have absolute certainty over their condition. Any issues are highlighted with automatic alerts, so problems can be mitigated against promptly.

Coverage extends across air, sea, road and rail transportation, so all parts of your supply chain are covered.

API links allow for our system to integrate with your existing software. You can provide customers with the complete picture of the atmospheric conditions your food and drink has been subject to.

It really is logistics as a competitive advantage.

[Book a demo](#)

Delays and disruptions

“My number one piece of advice to any food and drink producer, is to take extra time, a week if necessary, to ensure all documentation is in place, before transportation.

When new business comes in, there can be a rush to ship the goods as soon as possible. But I can promise you, taking the extra few days before shipping could potentially save you far longer at the other end in avoided delays.”

Samantha Mitchell, Key Account Director, WTA



Delays can happen for a whole manor of reasons, at any stage of an international shipment. Often unavoidable too, such as weather events, unforeseen port congestion, or a shock geopolitical conflict like the 2024 Red Sea Crisis.

However, there are some supply chain delays and disruptions that can be mitigated against. Documentation or labelling errors, poor route planning, insufficient communication and inaccurate bookings all pose a risk to the transportation of ambient food. All can be avoided.

Mitigation strategies

Contingency planning

Work with your freight forwarding partner to build a detailed contingency plan for your logistics. A good contingency plan must include the following elements:

Risk identification and assessment.

- Pinpoint potential threats and how they could disrupt your supply chain.

Mitigation tactics.

- Develop specific strategies to deal with each threat outlined.

Communication.

- Establish clear protocol for communication in the event of crisis.

Plan implementation and testing.

- Outline the roles and responsibilities of individuals in times of disruption.
- Test implementation with simulations.

Monitor and update.

- Continually update the contingency document to reflect changing risks.



Develop your freight forwarder relationship

In times of increasing supply chain risks and delays, it's more important than ever to develop a deeper relationship with your freight forwarder.

Demanding industry insights and regular information about legislation changes leaves you with the tools to mitigate against disruption and delay.

There's just no reason for a freight forwarder to resist this type of relationship. It's important across every sector to prepare for supply chain challenges, but particularly in food and drink.

Did you know?

At WTA, we love building this kind of relationship with clients. We offer weekly Market Updates, monthly Freight Rate Forecasts and plenty of other bespoke advice for customers. Start a conversation today.

[Contact us](#)





Improper handling and packaging

Ambient foods can be fragile. Correct handling and packaging is essential to avoid damage to produce.

Rough handling at supply chain pinch points, such as loading or unloading can cause spoilage. Equally, improper stacking or failure to follow weight restrictions can also cause crushing or damage to containers.

The National Cargo Security Council estimates that £40bn in cargo value is lost every year to damage.

Countless studies have confirmed how poor quality or damaged packaging can impact the quality of ambient foodstuffs:

- *Migration of organic contaminants into dry powdered food in paper packaging materials and the influencing factors (2019).*
- *Modified Atmosphere Packaging Failure and Its Effect on the Microbiological Quality of the Product (2012).*
- *Food packaging's materials: A food safety perspective (2021).*
- *Influence of protective characteristics of packaging material on packed dried fruits (2007).*
- *And many, many more...*

Mitigation strategies

Reliable logistics partners

Only by working with highly reputable logistics providers in the food and drink space can you mitigate against improper handling damage.

Look for companies with a proven track record of careful handling and adherence to best practices for food safety. Ask about their training policies for staff. If exploring warehousing, make sure it has a BRCGS accreditation.

Clear labelling

Ensure all packages are clearly labelled with handling instructions, such as “fragile” or “keep upright.”

Proper labelling helps to communicate the importance of careful handling throughout the supply chain.

Clear labels with product names, descriptions, and brand information allow for easy identification during transportation and storage. This simplifies inventory management, sorting, and order fulfilment processes.

Not to mention, good practice with labelling will only enhance your reputation as a trustworthy trader. Customers rate it highly.



Explore best practice

Ensure your policies for packaging food and drink adhere to best practices for the industry.

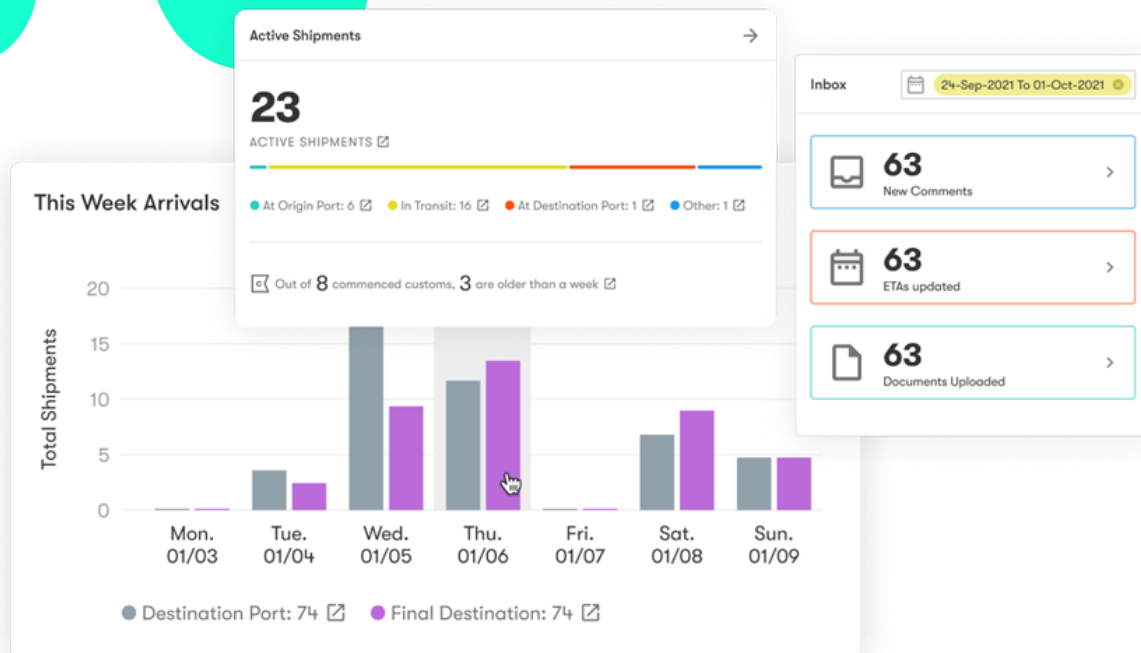
As environmental legislation progresses in the coming years, your requirements on packaging could change. Researching into the best practices here, rather than the cheapest option, could be vital for securing product safety. Speak to industry peers, trade organisations or your freight forwarder for guidance.

Key deadline: All packaging on the EU market must be recyclable by 2030.



In the loop logistics.

The WTA Platform



The industry-leading WTA visibility platform offers real-time data, so you can always make key supply chain decisions correctly.

Our tool brings the management of all your freight into a modern, user-friendly interface. Easily manage inventory levels and enjoy total transparency on the estimated arrival time of imports.

Analytical reports allow you to make crucial cost and time saving decisions, without compromising lead time. Meanwhile the ISO compliant CO2 tracker enables you to monitor and reduce the environmental impact of your logistics, so you can hit vital sustainability targets.

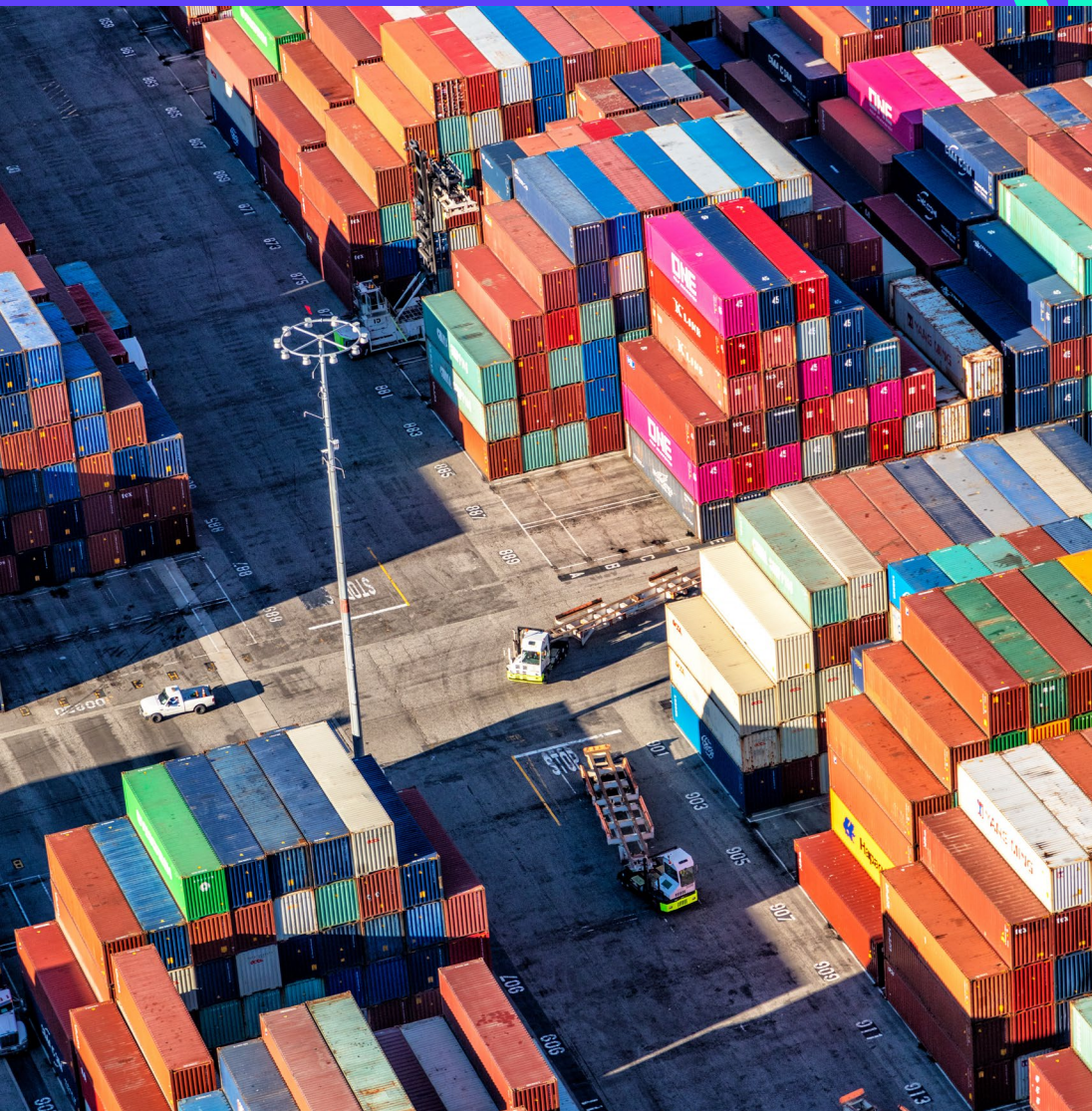
Boost ROI across the supply chain

Anticipate delays ahead of time giving you a vital window to mitigate disruption.

Transform stakeholder communication

Critically analyse the performance of every supply chain partner.

[Book a demo](#)



Pest infestation

Long international journeys increase the risk of unwanted pests like insects or rodents entering containers. You don't need us to tell you that these pests can contaminate food products, posing a serious health risk to consumers and potentially leading to product recalls. They can also chew through product packaging leaving goods vulnerable to further spoilage.

Mitigation strategies

Preventative measures

Eliminating entry points for rodents and other animals is the most effective mitigation strategy. Use strong, rodent-resistant packaging materials like thick cardboard with a plastic lining.

Finding wider optimisations in your supply chain further minimises your goods' exposure to pests and other contamination threats.

Do your best to maintain a clean and hygienic environment for your goods to minimise potential food sources for rodents. Speak to your haulier or logistics provider to get their suggestions.

Inspection and monitoring

Conduct regular inspections of transportation conditions where possible to ensure best practices are being followed.

Look for signs of rodent activity, including droppings, gnaw marks, or nesting materials.

Work with logistics providers who have these kind of measures in place. Again, storage facilities with BRCGS accreditations have been independently awarded for their storage practices.

Document your rodent protection measures and ensure all relevant parties both internally and externally are aware of them. Adapt as necessary.

“It’s impossible to completely eliminate risks to food and drink, that is just part of international transportation. But you’d be surprised how resistant your supply chain can be with the correct measures in place.”

“With business risk registers only growing for a whole host of reasons, those with the strongest supply chains will win in the years to come.”



Keri Barton, Sales and Marketing Director, WTA





Reduce your ambient food risks today.

Meet Keri Barton



Group Sales & Marketing
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Keri is loved by our clients at WTA for her super friendly and honest approach. She has built her expertise in the food and drink industry over many years and consequently is able to expertly advise businesses of all sizes in the sector.

[Get in touch](#)