

Food Safety Standards in the Aviation Industry: An Analysis of Legal Protection for Airline Passengers in Indonesia

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Abstract

Ideally, every airline passenger has the right to safe, hygienic, and standardized food as part of consumer protection in the aviation industry. However, in reality, incidents such as food poisoning still occur, indicating weak implementation of food safety standards and suboptimal legal protection of passenger rights. This study aims to analyze food safety standards in the aviation industry and evaluate the effectiveness of legal protection for airline passengers in Indonesia. The research method used is a normative-juridical approach with qualitative analysis, based on a literature review of relevant laws and regulations. The findings show that although regulations such as Law No. 1 of 2009, Ministry of Transportation Regulation PM 78/2017, and the HACCP standard are in place, their implementation remains inconsistent and oversight is still weak. Strengthening monitoring systems and legal enforcement is essential to ensure passenger rights to safe food in air travel.

Keywords: *Safety Standards, Airline Passengers, Food*

Abstrak

Idealnya, setiap penumpang pesawat berhak memperoleh makanan yang aman, higienis, dan sesuai standar sebagai bagian dari perlindungan konsumen dalam industri penerbangan. Namun realitasnya, masih terjadi

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insiden seperti keracunan makanan yang menunjukkan lemahnya penerapan standar keamanan pangan serta belum optimalnya perlindungan hukum terhadap hak penumpang. Penelitian ini bertujuan untuk menganalisis standar keamanan pangan dalam industri penerbangan serta mengevaluasi efektivitas perlindungan hukum bagi penumpang pesawat di Indonesia. Metode yang digunakan adalah yuridis-normatif dengan pendekatan kualitatif, melalui studi kepustakaan terhadap peraturan perundang-undangan dan literatur yang relevan. Hasil penelitian menunjukkan bahwa meskipun regulasi seperti UU No. 1 Tahun 2009, Permenhub PM 78/2017, dan standar HACCP telah tersedia, implementasinya belum merata dan pengawasan masih lemah. Diperlukan penguatan sistem pengawasan dan penegakan hukum untuk menjamin hak penumpang atas pangan yang aman dalam penerbangan.

Kata Kunci: *Standar Keamanan, Penumpang Pesawat, Pangan*

Introduction

In this era of globalization that demands efficiency, speed, and high mobility, the aviation industry has emerged as one of the backbones of modern transportation systems. People around the world increasingly rely on air transportation not only for business purposes but also for personal travel, tourism, and emergencies. Along with the growing volume of air travel, the demands for service quality in aviation have become more complex and multidimensional. These demands extend beyond the technical safety of flights to include comfort, excellent service, and the protection of passengers' fundamental rights (Nandari et al., 2019). One crucial aspect that is often overlooked but plays a vital role is the provision of food during flights. In this context, food is not merely a service accessory but a fundamental right directly linked to the health and safety of passengers on board.

Furthermore, the provision of food and beverages in the aviation industry presents unique challenges not found in other modes of transportation. Aircraft are enclosed spaces with air pressure and temperatures that differ from normal environments, making it essential to ensure that everything consumed by passengers is completely safe. The processes of preparing, storing, and distributing food on a large scale for flights carry a high risk of contamination, both microbiological and chemical. When negligence occurs, the impact can be compounded due to the limited availability of medical assistance in the air (Fatchoelqorib & Aqshani, 2019). Therefore, food safety should not be regarded merely as a technical issue but as a matter of consumer protection that must be legally guaranteed. Passengers' right to safe and consumable food is an inherent form of protection that cannot be compromised in the aviation context.

Ideally, all airlines and catering service providers in Indonesia must implement standardized and proven food safety systems. Systems such as the Hazard Analysis Critical Control Point (HACCP) should be mandatory at every stage of food processing for air travel—from production and packaging to storage

and in-flight service. In addition, national legal provisions such as the Ministry of Transportation Regulation No. PM 78 of 2017 on Airline Catering Services and the regulations issued by the National Agency for Drug and Food Control (BPOM) provide a strong regulatory framework to ensure food safety in flight (Wulandari et al., 2024). These regulations are designed to ensure that every meal served to passengers has passed through rigorous quality control processes, including labeling that lists nutritional information and allergen content for passengers with special dietary needs.

However, in reality, violations of food safety standards in aviation are still frequently found. These violations are largely due to weak implementation of regulations, insufficient oversight by aviation authorities, and a lack of awareness among airlines and catering providers. Cases of food poisoning on board, though not always made public, have been reported and have had serious health consequences for passengers. This situation raises concern and critical questions about the effectiveness of the existing legal protection system (Waty, 2020). Has the right of passengers to safe food truly been comprehensively guaranteed? Do legal accountability mechanisms function properly when incidents occur? These issues point to a gap between the ideal legal norms and actual practice in the field.

Based on this background, the present study aims to analyze in depth how food safety standards are implemented in Indonesia's aviation industry, and to what extent legal protection for passengers has been enforced—particularly in the context of the right to safe and proper food. This study will examine relevant legal instruments such as Law No. 1 of 2009 on Aviation, Ministerial Regulations, BPOM regulations, and consumer protection laws. The research will also explore the practices carried out by airlines and catering providers to ensure food safety for passengers, and the accountability mechanisms in place when violations of rights occur.

The contribution of this study is expected to go beyond academic discourse by providing practical insights for policymakers and aviation industry stakeholders. This research may serve as a reference in formulating more proactive policies to ensure food safety on flights and in strengthening consumer protection systems in aviation. Moreover, the study aims to raise public awareness of the importance of the right to safe food during air travel and to encourage airlines to take greater responsibility in their operations. In doing so, passenger safety and comfort will be safeguarded not only from a technical flight perspective but also through legally guaranteed access to safe and proper food.

Literature Review

The study of aviation safety standards and legal protection for passengers is not entirely new. Several previous researchers have discussed this issue, although with different approaches and areas of focus. Puan Maharani Kusumadewi et al., in their article titled; *"Analisis Standar Penerbangan di Indonesia Berdasarkan Hukum Udara Internasional,"* discussed the alignment of Indonesia's national aviation standards with the principles of international air law. This work emphasizes the importance of harmonizing national regulations with applicable international provisions, such as ICAO Annexes and the Chicago Convention, especially

concerning flight safety. The findings of the study indicate that Indonesia still faces challenges in strengthening the full implementation of international standards (Kusumadewi et al., 2024). The similarity between this work and the present study lies in the attention to legal regulation and aviation safety standards, while the difference is that Kusumadewi's research focuses more on the macro aspects of the aviation legal system and does not specifically address food safety in aircraft cabins or the protection of passengers in relation to catering incidents.

Dasti Anditiarina et al., through their work titled; *"Pencegahan Foodborne Disease Selama Penerbangan dengan Penerapan Prinsip Keamanan Pangan (Food Safety) oleh Awak Kabin dalam Pesawat,"* examined the application of food safety principles by cabin crew as the frontline defense in preventing foodborne disease incidents during flights. The focus of the study is on food handling practices, the implementation of HACCP principles, and preventive efforts by airlines and cabin crews. The findings of this study assert that the knowledge and skills of cabin crew in managing food play a crucial role in ensuring passengers' safety from a food safety perspective (Anditiarina et al., 2020). The similarity with the current research lies in the shared emphasis on the importance of food safety standards in aviation. However, Anditiarina's study does not address the aspect of legal consumer protection or airline liability in the event of violations of the right to safe food during flights.

Gannis Indra Setyawan et al., in their article titled; *"Perlindungan Hukum Terhadap Hak Konsumen Penumpang Pesawat Udara Dalam Pembelian Premi Asuransi Melalui Situs Traveloka,"* examined consumer legal protection in the context of purchasing flight insurance online. This research highlights the legal position of consumers in electronic transactions and how rights violations may occur if information is not transparently provided or if consumers are not given rational choices. Their findings reveal an information imbalance that disadvantages consumers (Setyawan et al., 2019). The similarity with the present study lies in the shared broader theme of legal protection for airline passengers as consumers, while the difference is that their focus is not on in-flight services such as food or health but rather on the purchase of insurance services.

Based on the above review, it can be concluded that the research gap this study aims to fill is the absence of a study that simultaneously examines food safety standards in the aviation industry while linking them to an analysis of legal protection for passengers in Indonesia. This study attempts to bridge the technical and medical aspects (food safety) with the normative and juridical aspects (legal protection), which have thus far been discussed only partially in existing literature. This approach is expected to offer a new contribution to the study of consumer law and aviation regulation that is more oriented toward the holistic safety and rights of passengers.

Research Methodology

This study employs a normative juridical approach, which is a legal research method based on the examination of existing positive legal norms and conceptual analysis of legal principles. The main focus of this approach is to assess how laws, regulations, and food safety standards are implemented within the

aviation industry, and how legal protection for passengers in relation to safe food is realized (Benuf & Azhar, 2020). The primary data sources consist of primary legal materials such as Law Number 1 of 2009 on Aviation, Minister of Transportation regulations, BPOM (Food and Drug Supervisory Agency) regulations, and the Consumer Protection Act. In addition, secondary legal materials such as scholarly journals, books, and relevant official documents are also used to strengthen the legal analysis and argumentation.

The data collection technique used is library research, which involves gathering and reviewing various legal sources and academic literature relevant to the research topic. The collected data is analyzed qualitatively, with an emphasis on legal interpretation of applicable norms and their relevance in the context of protecting passengers' rights to food safety. This analysis aims to identify the strengths, weaknesses, and implementation gaps in the existing regulations, while also providing normative recommendations to strengthen the legal protection system within Indonesia's aviation industry, particularly in relation to the provision of safe food for passengers.

Air Passenger Rights

In today's modern world, which heavily relies on speed and mobility, air transportation has become the primary choice for many people. Behind the convenience and efficiency it offers lies a set of fundamental rights that every airline passenger is entitled to. These rights serve as consumer protection in aviation services and are guaranteed by both national and international regulations. This protection is essential considering the high-risk nature of air travel and the complex technical and administrative interactions involved. One of the most basic rights of passengers is the right to safety. This includes not only physical security onboard but also protection from all types of risks throughout the travel process—from boarding, during the flight, until arrival at the destination (Setyawan et al., 2019). Airlines are obliged to meet international safety standards set by the ICAO (International Civil Aviation Organization) and monitored by the Directorate General of Civil Aviation. Aircraft must be airworthy, pilots and crew must be certified and fit to operate, and emergency procedures must be available and understood by all passengers.

In addition to safety, the right to transparent and accurate information is also a crucial aspect. Passengers are entitled to know all relevant details regarding flight schedules, departure terminals, flight numbers, and any delays or cancellations. This information must be provided promptly and in an accessible manner, whether through digital media or directly at the airport. In practice, many passenger complaints revolve around the lack of information during flight disruptions, causing confusion and psychological or material losses (Sany et al., 2024). Furthermore, the right to comfort during the flight is a non-negotiable right that airlines must fulfill. Comfort encompasses not only physical aspects such as seating, legroom, ventilation systems, and cabin cleanliness but also the quality of service provided by the cabin crew. Passengers have the right to courteous, respectful, and professional service without any form of discrimination (Celine & Sudiro, 2024). This obligation is especially emphasized when it involves

passengers requiring special assistance, such as persons with disabilities, the elderly, or pregnant women.

Another key right is the right to compensation and reimbursement in the event of flight disruptions such as cancellations, delays, overbooking, or lost baggage. Ministry of Transportation Regulation No. PM 89 of 2015 provides clear guidelines on the airline's obligation to compensate passengers. For instance, if a delay exceeds four hours, passengers are entitled to a full refund or transfer to another flight. In the case of lost or damaged baggage, airlines are required to compensate according to the maximum value per kilogram as regulated (Farnesty et al., 2025). In the digital age, the right to privacy and protection of personal data has also become a critical issue. Passengers provide a significant amount of personal information when booking tickets, including names, addresses, ID numbers, and financial details. Airlines have both a legal and ethical responsibility to protect this information and not exploit it for commercial purposes without consent. The Personal Data Protection Law being reinforced in Indonesia also offers legal grounds for passengers to take action if their data is misused.

The right to equal and non-discriminatory treatment is another fundamental right that must not be violated. All passengers, regardless of race, religion, gender, age, physical condition, or nationality, are entitled to the same level of service. Airlines are prohibited from engaging in any form of discrimination, whether explicit or subtle. This is vital to ensuring that air travel is inclusive and fair for all, and reflects human rights principles in public service. Passengers also have the right to file complaints and receive an appropriate response. Airlines must provide a transparent complaint procedure with effective communication channels—whether in person, via email, phone, or social media (Nugraha & Marwanto, 2024). Complaints must be handled professionally and in a way that does not make passengers feel ignored. This system not only protects consumers but also serves as a performance evaluation tool for airlines.

Accessibility rights are also important, especially for passengers with special needs. Airlines and airport operators must provide facilities such as special lanes for wheelchairs, accessible restrooms, and staff assistance for those who require it. In practice, accessibility remains a challenge, and special attention from regulators and airlines is needed to prevent discrimination against vulnerable groups. Additionally, passengers have the right to refunds in certain conditions, such as when a flight is unilaterally canceled by the airline or the schedule is changed unfavorably. Refunds must be processed within a reasonable timeframe and without unexplained deductions. This is meant to protect the passenger's financial rights and prevent unfair business practices (Akyuwen, 2021). Passengers also have the right to insurance coverage during air travel, as stipulated in Ministry of Transportation Regulation No. PM 77 of 2011 concerning carrier liability. In the event of accidents resulting in injury or death, passengers or their heirs are entitled to compensation covered by the airline or its partnered insurance company. This is a form of legal protection against the unavoidable risks of air travel.

Beyond these general rights, passengers also have the right to safe and proper food, which is the central focus of this study. This includes the airline's obligation to provide food and beverages that meet health standards, hygiene

requirements, and take into account passengers' specific needs, such as allergies, religious dietary restrictions, or medical conditions. In the enclosed environment of an aircraft cabin, mistakes in food handling or preparation can have fatal consequences due to the limited availability of emergency medical services (Anditiarina et al., 2020). The importance of protecting passengers' food rights is not just a matter of excellent service—it is part of flight safety itself. Regulations such as Ministry of Transportation Regulation No. PM 78 of 2017 and food safety systems like HACCP emphasize that every airline must manage its food supply chain with full responsibility. This study, therefore, will specifically examine how the right to safe food on board is implemented, legally protected, and what consequences follow when this right is violated.

Food Safety Standards

Food is one of the most fundamental necessities in human life and is non-negotiable. In physiological terms, food serves not only as the primary source of energy to support daily activities but also plays a crucial role in maintaining the immune system, supporting the function of vital organs, and assisting in the recovery of body cells and tissues (Yunita et al., 2015). Therefore, food safety becomes a critical aspect that must be carefully addressed, especially in contexts involving mass consumption and confined environments, such as the aviation industry. In the enclosed space of an aircraft—where medical facilities are limited and access to emergency response is restricted—food safety is an issue that cannot be overlooked.

The aviation industry has highly complex operational characteristics, including in its food provision for passengers. The meals served onboard go through a lengthy process involving production, storage, transportation, and distribution—all under strict temperature and time controls. Given the high risk of contamination at each of these stages, the implementation of food safety standards is an absolute necessity (Bakreen et al., 2022). Contaminated food, even if only at one stage, can cause serious health impacts for passengers, including the risk of food poisoning, which could endanger the overall safety of the flight. Foodborne illness during flights can be caused by various contaminants, ranging from pathogenic bacteria like *Salmonella* and *Listeria monocytogenes* to chemical contamination from inappropriate food additives. Systemic reactions to contaminated food can vary from mild digestive issues to life-threatening anaphylactic shock. In the air—where medical response is limited and emergency aid is difficult to access—such incidents are extremely high-risk. Therefore, food safety standards are not just technical procedures, but also an integral part of the aviation safety management system.

In the Indonesian regulatory context, consumer protection regarding airline food has been addressed through several legal instruments. Government Regulation No. 86 of 2019 on Food Safety and Ministry of Transportation Regulation No. PM 78 of 2017 on the Provision of Inflight Catering are two key regulations that form the foundation for food safety in this sector (Barinda & Ayuningtyas, 2022). These regulations require all aviation industry stakeholders—

from catering providers to airline operators—to adopt integrated and documented food safety systems. One of the main approaches used to ensure food safety is the application of Good Manufacturing Practices (GMP). GMP classifies requirements into three levels: critical, important, and supportive. Critical-level requirements must be met without compromise as they directly relate to consumer safety. The important and supportive requirements strengthen the system, although their impact is not immediate. Non-compliance with any of these—especially at the critical level—can lead to serious violations that may trigger a public health crisis (Farahdiba et al., 2023).

In addition to GMP, inflight catering companies are also required to implement systematic risk management approaches. According to the Indonesian FDA (BPOM) Regulation No. 11 of 2019 concerning Food Additives, food risk management includes three key elements: hazard identification, risk assessment, and risk control. In the aviation industry, this spans the entire supply chain, from raw material intake, processing, cold storage, refrigerated transport, to inflight serving. These processes must be tightly monitored and regularly evaluated to ensure that each critical control point functions as intended. Food safety systems are evaluated through periodic internal and external audits (Putri, 2022). Internal audits are conducted by the company as part of internal quality control, while external audits are carried out by independent bodies to objectively verify compliance with regulations. These audit results are used to assess the system's effectiveness and formulate continuous improvement measures. This kind of oversight is essential, as the reputation and credibility of an airline can be destroyed by a single foodborne incident.

Along with technological advancements, Indonesia's inflight catering sector has begun adopting digital systems to improve monitoring and food traceability. Real-time monitoring systems allow companies to directly track storage and transportation temperatures, enabling rapid corrective action in case of deviation. Additionally, data management and digital tracking systems simplify audits and investigations in the event of food safety issues (Yahanan et al., 2024). Technological applications go beyond monitoring to include the use of sustainable raw materials and energy-efficient food processing. Many catering providers in Indonesia are beginning to adopt environmentally friendly ingredients and sustainable practices, aligning with global trends demanding not only food safety but also industry-wide sustainability.

Aviation is one of the industries with the highest operational standards, including food provision. Therefore, synergy among government regulations, technological innovation, and industry commitment is essential to ensuring high food safety standards. Failure to guarantee food safety not only endangers consumer health but can also severely damage a country's reputation in global aviation. With rising public awareness of food safety and increasing global competition, food safety standards in Indonesia's aviation industry must continuously be reinforced. This process is not static—it must constantly adapt to new risk dynamics, technological developments, and changing consumption patterns. Through collaboration among regulators, industry players, and the public, a resilient food safety system can be established to ensure the safety and comfort of every airline passenger in Indonesia.

Legal Protection and Service Standards for Passengers' Rights in Air Travel

Air travel is one of the transportation modes with the highest safety and service standards compared to other modes. In this era of globalization, marked by increasingly dynamic human mobility, public demand for air transportation continues to grow. Aviation not only offers speed and efficiency but also promises comfort and security for its passengers (Celine & Sudiro, 2024). Behind this service lies a significant responsibility on the part of aviation service providers, especially airlines, to ensure that passengers' rights are fulfilled. In practice, passengers are entitled to accurate information, proper service, and legal protection in the event of violations. The main challenge is ensuring that these service standards are genuinely implemented on the ground and not merely formalities in regulatory documents.

One of the more common violations of passenger rights pertains to food consumption onboard. Although meals may seem like a supplementary service, their quality and safety are critical. When food served does not meet standards—whether in hygiene, storage, or ingredient quality—it poses a risk of food poisoning. In the confined space of an aircraft cabin, a passenger suffering from foodborne illness will find it difficult to obtain prompt medical assistance. Such conditions can endanger lives and disrupt flight operations (Palupi et al., 2024). Therefore, strict and continuous supervision of in-flight catering is essential. Legally, the relationship between a passenger and an airline is governed by a carriage contract that carries legal consequences for both parties. The airline is obligated to transport passengers safely and on time, while the passenger is required to pay the agreed fare. This legal relationship is comprehensively regulated under Law Number 1 of 2009 concerning Aviation (Monoarfa, 2020). This law includes articles that govern flight safety, security, and service—outlining the rights and responsibilities of both the airline and the passenger. With this legal foundation, any violation can be addressed through administrative or judicial means.

Passenger rights extend beyond the flight itself and encompass the entire travel experience. These rights are categorized into three stages: pre-flight, in-flight, and post-flight. At the pre-flight stage, passengers are entitled to clear and accurate information regarding flight schedules, baggage policies, and other terms and conditions. During the flight, passengers should be provided with appropriate seating, safe food and beverages, and fair, non-discriminatory treatment (Kusumadewi et al., 2024). Post-flight, passengers are entitled to proper baggage handling, a complaint resolution process, and compensation in cases of delays or cancellations. Regarding food and beverage safety, Minister of Transportation Regulation Number PM 78 of 2017 provides a legal basis ensuring passengers are served meals that meet nutritional standards, hygiene requirements, and are free from harmful substances. This regulation is especially important for passengers with allergies or specific health conditions (Hanafi, 2024). Airlines are obligated to provide transparent information about the ingredients used in all meals served. Failure to meet this obligation can result in complaints, lawsuits, and even sanctions against the airline. Therefore, compliance with food safety rights is a crucial indicator of an airline's service quality.

To guarantee food safety, airlines are required to implement the Hazard Analysis Critical Control Point (HACCP) system—an international standard in the food industry. This system helps identify potential contamination risks and applies critical control points throughout food processing. HACCP is not only intended to prevent poisoning but also ensures strict supervision over the entire food supply chain. In the event of incidents such as food poisoning, Minister of Transportation Regulation Number PM 77 of 2011 stipulates that passengers are entitled to medical assistance and compensation. Compensation may include a ticket refund, medical expenses, or other equivalent remedies.

Passengers also have the right to file complaints if they feel aggrieved or dissatisfied with the services provided. Minister of Transportation Regulation Number PM 185 of 2015 specifically outlines the passenger complaint-handling mechanism. Airlines are required to provide accessible complaint services and to ensure that every complaint is addressed transparently and professionally (Hanafi, 2024). This system is vital for building public trust and serves as a participatory oversight mechanism involving the public in improving service quality. Special attention must also be given to passengers with special needs—such as the elderly, pregnant women, children, or persons with disabilities. In terms of food provision, passengers requiring special diets—vegetarian, halal, or gluten-free—must be accommodated. Ignoring such requests violates the principle of non-discrimination and can result in administrative or legal penalties.

Oversight of passenger rights enforcement falls under the authority of the Directorate General of Civil Aviation. This body is mandated to conduct audits, inspections, and evaluations of airline performance in delivering services. If violations are discovered, administrative sanctions such as warnings, fines, or even revocation of operational licenses can be imposed. This supervisory function is crucial to ensuring that legal provisions are genuinely upheld and not merely formalities. Indonesia's legal system also adopts the principle of strict liability, as outlined in Article 19 of the Consumer Protection Law. In the context of aviation, this principle holds airlines accountable for passenger losses without requiring proof of negligence (Nugraha & Marwanto, 2024). This means that if a passenger suffers harm—such as from delays, cancellations, or food poisoning—the airline is still obligated to compensate them. Compensation must be fair, timely, and in accordance with existing laws and regulations.

Ultimately, legal protection and service standards for passengers' rights are not merely regulatory issues—they reflect a philosophy of service grounded in values of justice and business ethics. Airlines that prioritize passenger rights protection will earn trust and loyalty from consumers. In the highly competitive aviation industry, service quality is a key differentiator. Therefore, collaboration among the government, industry players, and civil society is essential to create an aviation system that guarantees safety, comfort, and fairness for all passengers. Legal protection and the enforcement of high service standards are foundational to building a sustainable, customer-oriented aviation industry. Passengers' rights must not only be recognized normatively but also tangibly realized in every aspect of service. Raising legal awareness, strengthening regulations, and enforcing penalties for violations are strategic steps necessary to achieve a fair and accountable air transportation system.

Conclusion

The right to safe and consumable food is an integral part of legal protection for airline passengers in Indonesia. In the complex and high-risk system of air transportation, food should not be viewed merely as an auxiliary service but as a fundamental right that directly concerns the safety, health, and comfort of passengers. The implementation of standards such as HACCP, along with national regulations—including Minister of Transportation regulations and BPOM provisions—emphasizes the airline's obligation to ensure the quality and safety of food from the production process to in-flight service.

Furthermore, the legal protection of passengers' food rights is supported by the principle of strict liability in consumer protection law, as well as the obligation for airlines to provide compensation if harm results from unsafe food. However, the effectiveness of this protection still heavily relies on supervision, reporting systems, and the airline's commitment to service quality. Therefore, synergy among regulators, catering service providers, and airlines is crucial in establishing an air travel system that is not only efficient and fast but also fully guarantees the fundamental rights of passengers, including the right to safe food.

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