

Guyana's ongoing commitment to food safety: Protecting public health everyday

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The significance of food safety within the domain of global environmental public health cannot be overstated. It serves as a linchpin for preserving human health, maintaining economic stability, and fostering public trust. The reliability of our food supply chain is pivotal to achieving these objectives. Every year, millions of individuals worldwide grapple with the consequences of foodborne illnesses, resulting in significant health challenges and, tragically, fatalities. To mitigate these risks, regulatory agencies bear the responsibility of establishing and enforcing standards, overseeing the intricate web of food production and distribution, and conducting thorough assessments of potential hazards. This article delves into the regulatory aspects of food safety, highlighting the challenges, strategies, and initiatives dedicated to preserving and maintaining the safety of our food supply.

Foodborne illnesses are a global public health concern. According to the World Health Organisation (WHO), around 600 million people fall ill, and 420,000 die from foodborne diseases each year (Havelaar et al., 2015). These illnesses result from consuming contaminated food, water, or beverages and can lead to various symptoms, ranging from mild gastrointestinal discomfort to severe infections and death. Beyond the immediate health impact, foodborne illnesses also have substantial economic implications. The cost of medical treatment, lost productivity, and legal actions associated with foodborne outbreaks can burden healthcare systems and businesses. Additionally, food recalls, lawsuits, and damage to a company's reputation can result in substantial financial losses.

Food safety incidents can significantly damage public trust in the food supply chain. Consumers rightfully anticipate that the food they buy and consume is safe, and any breach of this trust can

result in enduring repercussions. The assurance of food safety isn't solely a public health concern; it also has major significance in preserving consumer confidence within the food industry.

Regulatory Framework for Food Safety

Food safety is a global concern, there are international organisations whose responsibility is to set standards and guidelines to facilitate safe food production and trade. The Codex Alimentarius Commission (CAC), established by the WHO and the Food and Agriculture Organisation (FAO), is the primary international body responsible for developing food standards, guidelines, and codes of practice. These standards and guidance documents provide a foundation for national regulatory systems.

Food safety regulations are pivotal to ensuring the quality and safety of food products consumed by the public. While the specifics of food safety regulation can vary from country to country, the fundamental principle remains the same: the existence of a national regulatory agency tasked with enforcing food safety standards and regulations. These agencies are responsible for monitoring, inspecting, and ensuring compliance with food safety standards at various stages of the food supply chain.

In the United States, key agencies responsible for food safety oversight include the Food and Drug Administration (FDA) and the United States Department of Agriculture (USDA). Their roles are complementary, with the FDA concentrating on the regulation of processed foods, dairy products, fruits, vegetables, and more, while the USDA takes charge of ensuring the safety of meat, poultry, and egg products. Together, these agencies work to enforce stringent standards that govern the safety and excellence of the nation's food supply.

In the context of Guyana, the approach to food safety regulation differs slightly. Currently, rather than relying on a single, centralised regulatory agency, Guyana employs a collaborative framework involving multiple agencies under various government ministries. These agencies work together harmoniously to ensure the production, distribution, and sale of safe food products from the farm to the table. This coordinated effort involves a network of agencies responsible for various aspects of food safety under specific ministries. The Ministries directly involved are the Ministry of Health, the Ministry of Agriculture, and the Ministry of Tourism, Industry and Commerce. Each

institution has a distinct role and responsibility in the oversight of food safety throughout the supply chain continuum.

To strengthen and enhance this collaborative approach, several initiatives have been implemented in Guyana. These initiatives aim to improve coordination among the different agencies involved in food safety regulation. They also seek to streamline processes, share information, and establish clear communication channels to facilitate effective oversight of food safety. Guyana's collaborative initiatives underscore a strong dedication to guaranteeing the availability of safe food, whether produced domestically or imported for public consumption. Through the synergistic efforts of these institutions, the country aspires to forge a robust and all-encompassing regulatory framework for food safety. This framework is designed to safeguard the health and overall welfare of its population.

Food Safety Legislation and Enforcement

In Guyana, the assurance of food safety is a comprehensive and multifaceted endeavour that encompasses a wide range of critical aspects. The foundation of this effort lies in the establishment and enforcement of comprehensive food safety legislation, which extends across the entire food supply chain. This includes inspections and regulatory compliance measures to maintain safety standards.

Moreover, Guyana places significant emphasis on promoting good hygiene practices, ensuring access to safe drinking water, and maintaining sanitation standards in food handling and preparation. Laboratory testing and surveillance systems are in place to monitor food products for contaminants and pathogens, enabling the early detection of potential risks.

In an effort to empower both consumers and those involved in food handling, Guyana places significant emphasis on educational and training programs. Essentially, the country conducts public awareness campaigns aimed at educating consumers about safe food practices. Furthermore, Guyana adopts sophisticated management systems like Hazard Analysis and Critical Control Points (HACCP) along with traceability measures to enhance its food safety management practices. Importantly, stringent import and export controls are diligently enforced to ensure adherence to both local and international food safety standards.

Furthermore, capacity-building programs equip local food safety professionals with the requisite skills ensuring the effective enforcement of regulations. Ongoing monitoring and evaluation processes facilitate program enhancement and adaptation to emerging risks. Collectively, these measures reflect Guyana's dedication to ensuring the safety of its food supply and the well-being of its citizens.

Challenges in Food Safety Regulation

The globalisation of the food supply chain presents a significant challenge for food safety regulation. As food travels across borders, it encounters diverse production environments, transportation systems, and regulatory regimes. Ensuring the safety of imported foods is complex and requires coordination among multiple stakeholders.

New foodborne hazards continue to emerge, driven by factors such as changes in food production practices, climate change, and evolving pathogens. For example, the rise of antibiotic-resistant bacteria in livestock and the emergence of novel foodborne pathogens present ongoing challenges to food safety.

Many regulatory agencies face resource constraints, including limited budgets and personnel. This can impact their ability to conduct inspections, monitor compliance, and respond effectively to food safety incidents. Adequate resources are essential for maintaining a robust food safety system. As such, Guyana has taken a significant stride in fortifying its food control system through collaboration with PAHO/WHO. This step involved the utilisation of the FAO/WHO Food Control System Assessment Tool, marking a substantial enhancement in the country's food safety measures (Greene, 2022). This evidence-based assessment, rooted in Codex principles and guidelines, provided a structured framework for evaluating the country's food control mechanisms. It allowed Guyana to identify areas of strength and areas needing improvement within its food control system. This assessment served as a valuable roadmap for the government to make informed decisions and implement targeted measures to protect consumer health and enhance its food export capabilities.

Strategies for Ensuring Food Safety

Adopting a risk-based approach to food safety regulation is a strategic and resource-efficient way to ensure the safety of food products. This approach prioritises regulatory efforts, such as inspections, testing, and enforcement, based on a thorough assessment of potential hazards and the associated risks. The central idea is to allocate limited resources where they are most needed, focusing on areas and hazards with the highest likelihood of causing harm and the most severe consequences.

Guyana has been actively embracing the concept of a risk-based approach to food safety regulation. To accomplish this goal, the Ministry of Health has partnered with the Inter-American Institute for Cooperation on Agriculture (IICA) in a collaborative effort to build the capacity of the regulators in risk-based food inspections across the entire food supply chain. This ongoing training effort aims to prepare regulators to effectively implement risk-based inspection systems and proficiently assess food businesses using this approach. In addition, this collaborative effort also aims to strengthen and modernise local food safety systems by transitioning from a reactive and corrective approach to a proactive and preventive one.

The main thrust of this initiative is to create a more dynamic and responsive food safety regulatory framework. By assessing and addressing potential risks systematically, Guyana seeks to enhance its ability to prevent food safety issues before they occur, rather than merely responding to them after the fact. This proactive shift not only ensures the safety of food products but also optimises the utilisation of limited regulatory resources.

Fundamentally, the introduction and implementation of a risk-based approach to food safety regulation in Guyana is a progressive step towards safeguarding public health. It reflects a commitment to modernising regulatory practices, enhancing prevention measures, and aligning with international best practices in food safety. By embracing this approach, Guyana is better equipped to adapt to the evolving challenges and complexities of the food supply chain while ensuring the consistent delivery of safe and quality food products to its citizens.

In the interconnected global food supply chain, international collaboration is indispensable to ensure food safety. Regulatory agencies from various nations join forces to establish shared standards, exchange critical information, and guarantee the safety of both imported and exported

food commodities. This joint endeavour is facilitated through bilateral and multilateral agreements designed to enhance global food safety. Guyana actively engages in international collaboration by partnering with notable organisations, including PAHO/WHO, IICA, FAO, among others. This collaboration extends to its participation in the Codex Alimentarius committee. Guyana, as a recipient of support from the Codex Trust Fund since 2019 for a three-year duration, is committed to strengthening its national capacity in food safety. This includes fostering heightened awareness and building robust capabilities in food safety management.

Guyana recognises the significance of international partnerships and support in advancing its food safety agenda. Through collaboration with both governmental and non-governmental entities, the nation is actively working towards enhancing its food safety infrastructure and ensuring the well-being of its citizens in the context of an increasingly interconnected global food system.

In Guyana, bolstering consumer trust through transparent food safety regulation is paramount. This commitment is evident through various avenues, including open communication where local regulatory agencies promptly share information on food safety risks and regulatory actions with the public, ensuring consumers stay informed. Public reporting of inspection results and compliance data allows consumers to access safety information about food establishments, assisting them to make informed choices. The nation also invests in consumer education initiatives, empowering individuals to practice safe food handling. Collaboration with stakeholders and adherence to international best practices further underscore Guyana's dedication to transparent food safety regulation, ultimately fostering trust in the food supply chain.

Efforts to Enhance Food Safety

The Codex Alimentarius Commission (CAC) is a key player in establishing international food safety standards, encompassing risk assessments, food hygiene guidelines, and limits for pesticide and veterinary drug residues. Guyana's active involvement with the CAC and its subsidiary bodies has provided valuable benefits to local food regulatory agencies over the years, promoting safer food production, import, and export practices. Additionally, Guyana is a member of the International Food Safety Authorities Network (INFOSAN), established by WHO and FAO. The INFOSAN facilitates rapid information exchange during food safety emergencies, aiding in the containment and management of foodborne threats. Guyana joined INFOSAN in 2015 and has

since maintained an effective response system for food safety emergencies, participated in regional activities, and engaged in training and capacity-building efforts through the network.

Guyana has embraced the WHO's "Five Keys to Safer Food" initiative, a global campaign promoting safe food handling at the consumer level. These five keys encompass practices such as keeping food clean, separating raw and cooked items, thorough cooking, maintaining safe food temperatures, and using safe water and raw materials. Local food safety entities have employed these principles as an educational tool to enhance food safety practices across the country.

Recent Developments in Food Safety Regulation

The Food Safety Modernisation Act (FSMA) has substantial implications for countries like Guyana that export food products to the United States. FSMA introduces increased regulatory requirements, including the Foreign Supplier Verification Program (FSVP), which necessitates foreign suppliers, including those in Guyana, to comply with specific safety standards and provide comprehensive documentation. Furthermore, FSMA grants the FDA the authority to conduct mandatory inspections of foreign food facilities more frequently, potentially subjecting Guyanese food producers to rigorous oversight. The Act promotes preventive measures, such as Hazard Analysis and Critical Control Points (HACCP), encouraging exporting countries to adopt similar safeguards.

Additionally, FSMA underscores the importance of robust documentation and record-keeping, demanding that food producers in Guyana and elsewhere establish comprehensive systems to meet U.S. regulatory expectations. U.S. importers now bear the responsibility of ensuring foreign suppliers' compliance, possibly leading them to seek more stringent assurances from Guyanese suppliers. The Food Safety Modernisation Act's (FSMA) focus on capacity building and global harmonisation highlights its influence on aligning international food safety standards with Guyana's practices, ensuring that compliance becomes essential for maintaining or expanding access to the lucrative U.S. market.

In Guyana, the One Health approach has risen to prominence as a strategic response to the recognition of the intricate interplay between human, animal, and environmental health, including the realm of food safety. This comprehensive approach underscores the importance of collaborative endeavours aimed at mitigating foodborne diseases, many of which stem from

zoonotic sources, emphasising the critical nexus of human and animal health within the broader environmental context.

A significant development took place in Guyana when the Ministry of Health, in collaboration with the Pan American Health Organisation (PAHO), introduced Guyana's One Health Initiative in 2023 (Stabroek News, 2023). This initiative's foremost goal is to take a proactive approach in tackling current and potential health issues that emerge at the intersection of human, animal, and environmental health. It is streamlined to achieve this by promoting a cohesive system of governance that encompasses programs related to human, animal, plant, and environmental health.

The inaugural meeting of this initiative was instrumental in charting the course forward. The core focus revolved around the formulation of Guyana's One Health Policy. During this forum, participants delved into the One Health concept, its manifold benefits, and the practical possibilities of its implementation within the country. The Honourable Dr. Frank Anthony, Guyana's Minister of Health, highlighted the imperative of a collective approach, urging the active participation of stakeholders, international collaborators, and health workers ("Ministry, PAHO Launch Guyana's One Health Initiative," 2023). The One Health approach is envisaged as a model that not only enhances food safety but also mitigates the risks of future pandemics and health challenges, both within Guyana and the broader region.

In a concrete effort to propel the One Health initiative forward, Guyana has embarked on substantial initiatives, including a partnership with the Inter-American Institute for Cooperation on Agriculture (IICA). This partnership places specific emphasis on enhancing capacity and conducting assessments in the realm of food safety. Key personnel from the ministries of Agriculture, Health, and Natural Resources are actively engaged in these initiatives. The Health Minister emphasised the country's imperative to strengthen its capabilities, especially in the timely detection of diseases, highlighting the crucial role of a comprehensive monitoring system that seamlessly aligns health endeavours across diverse sectors.

Underpinning this collaboration, IICA is poised to conduct field assessments and engage professionals in distinct regions of Guyana, thereby cementing the nation's commitment to the One Health approach (Department of Public Information Guyana, 2023). This approach mirrors

the World Health Organisation's definition of One Health, signifying an integrated effort across multiple sectors to enhance public health outcomes, with a particular emphasis on addressing health threats within the intersection of human, animal, and environmental factors, including the realm of food safety.

Conclusion

Food safety is indeed a critical component of global environmental public health. Food regulatory agencies play a vital role in safeguarding food safety by implementing standards, conducting risk assessments, and monitoring compliance. However, these agencies face ongoing challenges, including the globalisation of the food supply chain, emerging hazards, resource constraints, and rapidly changing technologies.

In response to these challenges, local regulatory agencies in Guyana have shifted towards adopting a risk-based approach and implementing preventive controls, all while maintaining a strong commitment to international collaboration. Recent developments, such as the Food Safety Modernisation Act and the One Health approach, underscore the dynamic evolution of food safety regulation in the country.

From a Guyana perspective, the dedication to ensuring global food safety is unmistakable, as evidenced by active involvement in initiatives such as WHO's Five Keys to Safer Food, membership in the Codex Alimentarius Commission, and the International Food Safety Authorities Network. In the grander scheme of safeguarding public health through effective food safety regulation, it is imperative to continually adapt, foster collaboration, and uphold the principles of prevention, transparency, and consumer education. By standing up for food safety, we can significantly lessen the burden of foodborne illnesses, bolster economies, and instill trust in the safety of the food we consume on a daily basis.

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