



Access Control: Your Food's First Line of Defense





The last thing a food facility manager wants to hear is that intentional adulteration or tampering involving their products, machines, or warehouses has occurred on the premises. To assist the industry and protect the food supply, the U.S. Food and Drug Administration continually provides guidance and tools for preventing intentional food tampering and adulteration.

If food adulteration occurred on your watch, would you know exactly who was on the premises during the occurrence?

As outlined in the FDA's Food Safety Modernization Act, physical security is one of the basic rules required to maintain compliance with FDA food defense guidelines. A foolproof biometric access control system will reduce the chance for unauthorized access to your entire facility—including vulnerable product and inventory areas—by both employees and visitors. Access control systems are necessary for companies to maintain compliance with FDA food defense guidelines. Compliance with FDA food defense guidelines is not optional.

In this eBook, we discuss the use of access control systems as the first line of defense against acts of deliberate contamination in food processing companies.

Access Control in Food Processing

As defined by the FDA, food defense is the process of safeguarding the food supply from intentional attempts to cause wide-scale public harm. One of the most efficient ways to protect food products from malicious contamination is to limit physical access only to users with the appropriate authorization. This method of access control requires a system that can accurately and reliably identify authorized users.

Biometric recognition technology is one of the most dependable and accurate methods for verifying a user's credentials. A biometric access system establishes an immediate barrier between vulnerable food production operations and entry attempts from unauthorized users.

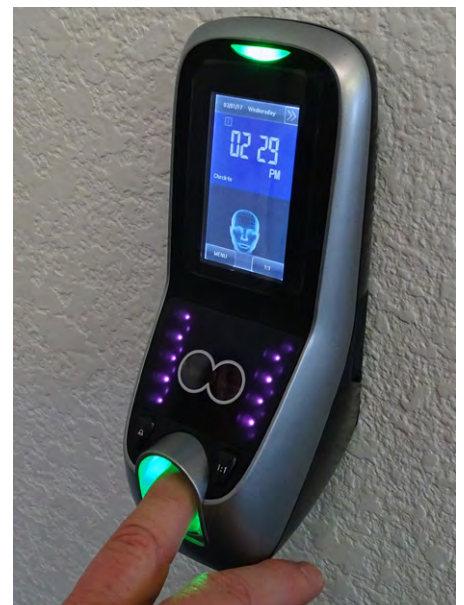
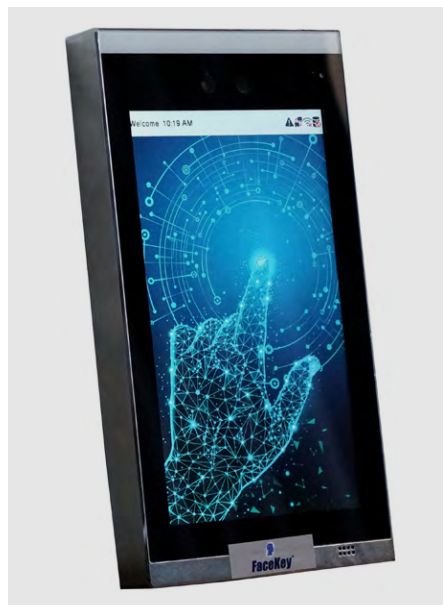
Benefits of Access Control Systems in the Food Industry

Face and fingerprint-based access control systems are essential for maximizing the safety of food production operations while keeping facility protection costs to a minimum. Formerly many operators utilized card reader access control systems which cannot reliably identify an authorized user.

When designed and implemented properly, the face and fingerprint access control systems provide the following benefits:

- **Customer reassurance and quality maintenance:** With a reliable access control system, food processing facilities can strengthen customer confidence in the quality and integrity of their products.
- **Advanced identification technology:** Biometric-based access control systems allow users to quickly and conveniently identify themselves using unique biometric identifiers such as the face or a fingerprint. The system can then verify the provided biometric data by ensuring it matches the approved template stored in the database. Conversely, card reader-based access control systems use a card credential which cannot be restricted to its owner.

- **Easily managed hierarchical access areas:** Access control systems make it easy to manage multiple users with different levels of access privilege.
- **Gate access control:** Entrances such as gates can be combined with biometric access control systems to prevent unauthorized vehicles from entering the facility.
- **Two-man rule enforcement:** Access control systems can be used to enforce the two-man rule, which prevents fraud or collusion by ensuring that at least two authorized users are present during certain critical operations.
- **Encryption:** Advanced encryption techniques are incorporated into biometric access control systems to protect user profiles and sensitive data during transmission.
- **Muster control:** Muster systems are integrated with access control to provide a real missing person report in the event of an emergency evacuation.
- **Visitor access management:** Access control systems offer a simple and effective solution for managing visitor traffic and lessening the need for escorts.
- **Access to audit trails:** With access control systems, a searchable and readily accessible electronic trail is recorded for each user and event.
- **Enhanced protection during distribution:** Access control systems help ensure that food products or raw materials are handled only by authorized personnel as they move through various steps in the distribution chain.



Access Control Applications

When it comes to protecting the food supply, safety measures must be built into every step of the supply chain to keep consumers safe. Food production is a complex process that involves everything from preparing and processing raw materials to assembling, packaging, and distributing the final product. Access control plays a significant role in maintaining the safety and integrity of food items as they move through each step in the production process.

Examples of food production applications that benefit from access control include:

Food packers



Food research and development



Food processors



Distribution facilities



Food manufacturers



Warehouses



Food Safety Modernization Act (FSMA)

Passed in 2011, the U.S. Food Safety Modernization Act (FSMA) was the first food security legislation to address deliberate acts of contamination by shifting the focus from response to outbreaks of foodborne illness to prevention. This law changed the culture of food safety by requiring all domestic and foreign food processing facilities to establish a written plan aimed at strengthening food defense efforts. Each plan must define the specific measures implemented by facilities to mitigate adulteration attempts with the potential for causing large-scale harm. Since noncompliance with FSMA regulations can be treated as a criminal act, adherence to these policies is imperative.

Developing an effective food defense plan requires a general understanding of how and where malicious activities take place. By analyzing vulnerability assessments conducted over a 15-year period, the FDA has identified the following food processing activities as being particularly susceptible to adulteration:

- Coating, mixing, grinding, and reworking
- Ingredient staging, preparation, and addition
- Bulk liquid receiving and loading
- Liquid storage and holding



**Food Safety
Modernization Act**

Checklist for Ensuring Food Safety

Access control systems help food processing facilities comply with FDA and FSMA guidelines by preventing unauthorized users from accessing protected spaces or processes. To maximize the system's capabilities, the following questions should be considered during the implementation process:

- Which specific areas of the facility require protection against unauthorized access?
- Are there high-security spaces and processes that should be accessed only by thoroughly vetted or high-level users?
- Who will be in charge of assigning access privileges to the secured spaces?
- How should suspected malicious activities be tracked and/or reported?
- How will facility entrances and exits be monitored and recorded?
- Will physical security barriers such as gates be utilized in facility parking lots? If so, how will these barriers be managed during non-working hours?
- Will visitors require escorts or badges for entry into protected areas and critical processes?
- How will visitor activities be directed, recorded, and monitored?
- What is the protocol for reporting visitor accidents?
- What are the company's safety policies and procedures? Will they be applicable to visitors as well as employees?
- How should employees handle the presence of unfamiliar individuals in various areas of the facility?

The key to achieving effective access control is absolute identification of authorized users. This means using biometrics which is the only identification method that "cements" a person's credentials solely to the user.



Biometric Access Control Solutions from FaceKey

Growing concerns within food processing facilities over the tampering of food by criminal or terrorist organizations have led to a rising need for effectively designed access control systems at vulnerable points in the food supply chain. An effective access control system is critical for protecting consumers as well as the company's reputation. To be effective, the system must be able to accurately, without fail, allow or reject entry of authorized or unauthorized persons. The safety of consumers and protection of a company's reputation is essential.

At FaceKey, we design and manufacture a range of biometric access products and solutions that ensures companies maintain safe, FDA-compliant food production operations. FaceKey biometric access control solutions utilize fingerprints and/or faces to identify users and assist facility managers with keeping track of personnel and visitors, by electronically recording who and when, as they enter and exit the facility. This way, managers can know who is present should food adulteration or other nefarious events occur.

To learn more about FaceKey biometric access solutions and how they can maximize the safety of your food production and distribution operations, please **contact us** today and **request a quote or meeting**.

About Us

At FaceKey, we've provided superior business security and access control and time and attendance solutions since 1999. Headquartered in San Antonio, our company has pioneered and patented a family of biometric products and solutions that utilize face recognition or fingerprints for identification. From small businesses to global enterprises, FaceKey's family of products has a proven record with employee time and attendance tracking as well as mustering systems, visitor management and access control systems.

[CONTACT US](#)

[REQUEST A QUOTE](#)



900 NE Loop 410, Suite D401
San Antonio, TX 78209