



## Poultry processing

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<b>Product Category</b>	<ul style="list-style-type: none"> <li>● FDA-certified Peracetic Acid for poultry processing</li> <li>● Food Additive Peracetic Acid for poultry processing</li> <li>● Peracetic Acid for white meat</li> </ul>
<b>Application</b>	<ul style="list-style-type: none"> <li>● Poultry process decontamination</li> </ul>
<b>Key Function(s)</b>	<ul style="list-style-type: none"> <li>● Decontaminate Salmonella and Campylobacter</li> <li>● Food safety</li> <li>● FDA compliance</li> </ul>

### What is Poultry Processing?

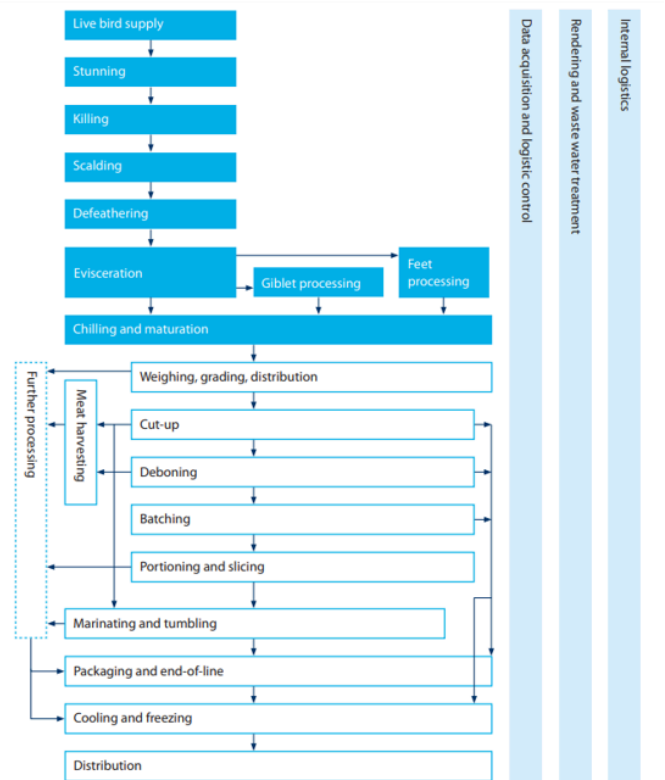
Poultry processing refers to the method of preparing meat from different types of poultry for human consumption. It often involves using sharp-bladed poultry processing equipment to debone, trim, and cut the birds into various parts.

To improve the poultry meat's quality for consumers, these parts may be processed with seasonings, spices, marinades, and other ingredients. As needed, secondary processing may also be conducted. This is where parts are converted to ready-to-eat products such as hotdogs, sausages, or nuggets.

The Occupational Safety and Health Administration (OSHA) recognizes that the poultry processing industry is exposed to many serious safety and health hazards. This is why industry standards and regulations are set out to guide the employers, workers, and managers of processing plants in observing safe and quality operations.

### 9 Main Steps of Poultry Processing

**Receiving:** Once the crates of poultry arrive at the processing plant, they are transported to the shackling area via conveyors and then placed in holding cages or modular bins to prevent them from injuring other birds and for proper air circulation. Crates are disinfected after use.



Process Diagram

For more information of product



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**Slaughtering:** In the US, electrical stunning and the use of carbon dioxide are the most common methods to make broilers unconscious or render birds insensible prior to this process. Often, slaughtering is done manually by severing the jugular vein at the ventrolateral base of the bird's head (sometimes referred to as the modified kosher method).

**Scalding:** Using hot water set to 53°C, the birds are scalded for 2 to 3 minutes. It's important to avoid over and under scalding so that the outer layer of skin and feathers are completely and smoothly removed.

**De-feathering:** Poultry pluckers (or pickers) remove the loose feathers from the scalding process. Also, the carcasses are passed by through flame to remove the filoplumes or hairlike feathers.

**Evisceration:** Throughout the process, meat inspectors conduct thorough visual inspections to spot bruising, fecal matter, and diseases. While the remaining viscera are discarded, the liver and gizzard are retained; and the latter is also cut, opened, and cleaned. The lungs, kidneys, trachea, esophagus, and crop are all removed manually, while the head is removed using a V-shaped knife or manually as well.



**Insidie-Out Washing:** Poultry carcasses are spray-washed with cold water to remove blood, loose tissues, and other foreign substances from the surface. If these aren't removed, contamination may occur.

**Chilling:** Rapid cooling, done in less than 40 minutes, prevents microbial growth. Also, this process is key to enabling the maximum shelf life of the final product. This chilling will keep the taste and meat appearance.

**Packaging:** Poultry carcasses are weighed on a pan balance and divided into parts using a knife. The parts are then packed and wrapped, with the legs and giblets in separate trays. After wrapping, inspections are done to verify that the final product is up to par with consumer expectations.

**Freezing and preservation:** These steps, along with safe food storage, are done to prevent spoilage and deterioration caused by microbes and fat oxidation. Some factories make added value to the meat by marinating it.

**These days, Peracetic Acid (PA)** is commonly used as an antimicrobial aid during poultry processing to reduce the pathogen load on poultry and poultry products. Therefore, customers can determine the efficacy of PA in reducing the two pathogens namely *Salmonella* and *Campylobacter* populations on chicken products. In different stages of poultry processing, Peracetic Acid 15%, food grade certified, there are suggestions as below. *Campylobacter* is hard to decontaminate but PA has some studies about it.

Stellar Unity has long been in the poultry processing industry with process experiences and could be able to adapt all PA dosages, together with dosing-monitoring equipment to meet the food safety target. Stellar Unity can provide guided dosage as below. PA products for the use to decontaminate photogenic microorganisms have been duly and legally registered, with direct or indirect contacts.



**Defeathering stage**  
**Dosage:** 20-30 ppm PA



**Inside-Outside Washing**  
**Dosage:** 80-100 ppm PA



**Chilled water**  
**Dosage:** 30-60 ppm PA



**Marinating**  
**Dosage:** 40-50 ppm PA

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