



Perdue Foods

COMMITMENTS TO
ANIMAL
care
2018



WE'RE CHANGING THE WAY WE RAISE CHICKENS

We're going beyond what they "need" to give our chickens what they "want"

OUR PROGRESS FORWARD



Our Perdue Commitments to Animal Care is also a commitment to transparency, and we hope this update contributes to increased trust with all our stakeholders.

When we announced the Perdue Commitments to Animal Care in 2016, it was revolutionary. It changed the way we think about raising chickens, moving us beyond measurements associated primarily with their health and performance. We started to ask: what allows the chicken to express normal behaviors in the company of its own kind, and what can we do to further minimize fear and distress?

We also reached out to a diverse range of stakeholders, including some of our harshest critics.

We committed to further strengthen relationships with the farmers who raise our chickens.

Two years later, the Perdue Commitments to Animal Care remains a journey of continuous improvement. We are moving forward deliberately, ensuring that the changes we make have a measurable impact on improving animal welfare – not doing things just because they look or sound good.

- We installed a controlled atmosphere stunning system at our Milford, Del., chicken harvest plant.
- We are the only major poultry company actively studying alternative breeds, both to meet growing customer demand for higher welfare chickens, and to identify the traits that contribute to healthier chickens.
- We implemented video monitoring in our harvest plants, and piloted it in the catching process.
- We continued to increase the number of chicken houses with windows, and learned that natural light is important to chickens.
- We launched a dedicated website to improve communication with the farmers who raise our chickens.
- We held our second Animal Care Summit, bringing together animal care experts and advocates, customers, farmers, and our leadership, in July 2017. Our third will be held in July 2018.





Our Perdue Commitments to Animal Care, launched in 2016, is a four-part program to accelerate our progress in animal care by giving our chickens what they want, strengthening our relationships with our farmers, building trust with multiple stakeholder groups and creating an animal care culture for continuous improvement.

Each year, we report on our progress, and the initiatives we're undertaking to continue our advancements.

This report covers key achievements from 2017, and the steps we are taking in 2018.

In 2016 we announced a Four-Part Plan to accelerate our progress in poultry care. We promised to:



PART 1

Our Chickens' Needs and Wants

Perdue will evaluate and implement production systems specifically designed to go beyond just the "needs" of our chickens to also include what our chickens "want." We will chart our progress against the "Five Freedoms."



PART 2

Farmer Relationships

We are recommitted to our efforts to transform our relationship with the farmers who raise our chickens. We will listen and communicate effectively, evaluate our pay structures to incent best practices, and also consider their well-being when implementing production systems.



PART 3

Transparency

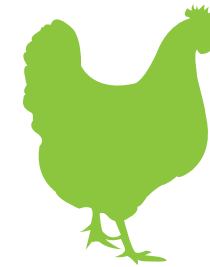
We will be transparent in our programs, goals and progress in order to build lasting trust and relationships with our stakeholders.



PART 4

Continuous Improvement

We believe raising animals should be a journey of continuous improvement. We will continue to build an Animal Care Culture within Perdue.



PART 1

OUR CHICKENS' NEEDS AND WANTS

As we progress from meeting the needs of our chickens to providing for their wants, we are charting our progress using the Five Freedoms, a globally accepted standard for animal husbandry.

We invite you to see how our Commitments to Animal Care key initiatives are advancing our animal care program by supporting the Five Freedoms.

The Five Freedoms, as defined by the Farm Animal Welfare Council:

- 1**

Freedom from Hunger and Thirst by ready access to fresh water and diet to maintain health and vigor.
- 2**

Freedom from Discomfort by providing an appropriate environment including shelter and a comfortable resting area.
- 3**

Freedom from Pain, Injury or Disease by prevention or rapid diagnosis and treatment.
- 4**

Freedom to Express Normal Behaviors by providing sufficient space, proper facilities and company of the animal's own kind.
- 5**

Freedom from Fear and Distress by ensuring conditions and treatment which avoid mental suffering.

Originally developed in Europe in 1965, and formalized by the UK Farm Animal Welfare Council in 1979, the Five Freedoms are a globally accepted standard for animal husbandry. The Five Freedoms have been endorsed by The World Organisation for Animal Health, the Royal Society for the Prevention of Cruelty to Animals and the American Society for Prevention of Cruelty to Animals.



PART 1

Our Chickens' Needs and Wants

1 FREEDOM FROM HUNGER AND THIRST

Initiative: Better food, especially for very young chickens

The importance of fiber in a chicken's diet receives very little attention in the US, as it has minimal nutritional value. However, research from Europe suggests fiber can have positive effects on gastrointestinal tract development and growth.

We initiated our own research, and found that adding fiber:

- Had positive benefits on gastrointestinal tract development.
- Had an improvement in overall health.
- Provided a small but consistent improvement in feed conversion (less feed to reach the same weight).

We'll continue to research ways to improve nutrition, especially for chicks.



PART 1

Our Chickens' Needs and Wants

2 FREEDOM FROM DISCOMFORT

Initiative: Improve paw health

Last year, we set a goal to work with our farmers to improve paw (foot) quality scores by 10% over winter (December through March). Despite added husbandry challenges from significantly colder weather, we achieved a 12.7% improvement.

To maintain this improvement, we:

- Implemented a mandatory 72-hour "pre-heat" of chicken houses before the chicks are placed.
- Improved the chicken house environment with increased ventilation and supplemental heat.
- Supported better litter conditions through increased composting and the use of litter amendments.

For this year, we are targeting 10% further improvement over the same winter period.

Initiative: Temperature Profiling of Live Haul Trailers (introduced 2018)

The trailers on which our chickens are transported from the farm are sometimes not consistent in their level of comfort. Temperature profiling will help provide a framework for future initiatives to improve the comfort of our birds during transport.



PART 1

Our Chickens' Needs and Wants

3 FREEDOM FROM PAIN, INJURY & DISEASE

Initiative: More Space

Too many chickens per area can limit access to feed and water, negatively impact the poultry house conditions and limit natural behavior. *However, the number of chickens raised in each barn directly impacts farmer income, and too few chickens per area is economically unviable.*

- We initiated a project to determine the viability of increasing space by 10% compared to typical practices in the US.
- Results indicate that all chickens have higher weight gain with more space, indicating greater access to feeders.
- However, smaller birds frequently used more feed to gain weight, as more space may mean greater activity.
- Larger chickens were consistently more efficient at gaining weight, and that may help the farmer offset some of the higher cost of raising fewer birds per barn.

Initiative: Third-party video auditing of chicken catching

As part of our efforts to continue the growth of our animal care culture, we are piloting third-party video monitoring during catching. *Third-party monitoring will check specific audit points related to how our birds are handled during the catching process.*

- We successfully tested new-to-market mobile video monitoring and auditing on farms associated with two of our harvest operations.
- We are engaged in a long-term trial at another facility to refine the process.



FREEDOM 3



PART 1

Our Chickens' Wants and Needs

Initiative: Third-party video monitoring of live-bird handling at our harvest plants

We now have third-party video monitoring at all of our chicken harvest facilities.

- Over a 12-month period, the third-party audited more than 10 million chickens in 223,000 audit events.
- *During that time, we achieved a compliance rate of 99.83%.*
- The system includes scheduled reporting and self-service reporting.
- Escalation and feedback processes ensure that we address any welfare issues through re-training and/or disciplinary actions.
- This contributed to an average 29.5 percent improvement in live bird handling across all of our chicken harvest plants.

Initiative: Unannounced Video Reports (introduced 2018)

As an added level of assurance, we will pick four areas to do our own video audits of our Animal Care Program. We will review these internally for compliance to our program. The video reports will also be presented to our Senior Animal Care Steering Committee.





PART 1

Our Chickens'
Wants and Needs**Initiative: Alternative Breeds**

We recognize the health and welfare challenges associated with today's fast-growing chickens, including leg and muscle issues. *We are also committed to supporting customer demand for higher-welfare breeds.*

To gain a better understanding, we tested a total of 11 different breeds over the past year, gathering information on activity, welfare and production (including amount of feed consumed and meat produced).

We identified breeds that exhibited improved activity traits, better leg health, lower incidents of muscle myopathies and with feed conversion (amount of per pound gained) and yield numbers that made them economically viable alternatives for customers who want higher welfare, slower-growing chickens.

Our next step is to develop a behavior rating system. We now have capability to identify behaviors of the breeds we are studying, which will help us describe each breed's tendencies.

Initiative: Mechanical Catching (introduced 2018)

We will review the poultry care metrics from those areas where we've replaced hand catching of chickens with mechanical catching. This will help us identify if mechanical catching is capable of providing the same – or better – results than traditional hand catching, and what needs to be done to improve mechanical catching.



PART 1

Our Chickens'
Wants and Needs**Initiative: Live bird-handling incentives to encourage farmers and others**

We want to connect pay to animal welfare outcomes, and not just productivity.

- We have live haul crew incentives; that is a good start.
- Our video monitoring of catching will give us opportunities to recognize both individuals and crews based on audit scores.
- We are going to pilot a farmer-centric program in one of our growing areas, which will include animal care metrics.
- We will continue to explore other ways to incentivize farmers around animal care.

Initiative: Improve our culling programs (introduced 2018)

Culling is an important part of our Animal Care Program. While we have focused on the appropriate culling process for those birds unable to get to feed and water, we will develop clearer expectations of when culling is required, how to audit culling and identifying when farms need assistance with culling.

Initiative: Assess leg health (introduced 2018)

Gait scoring is part of our Poultry Care Program, but we have not charted results associated with this important area of animal care. We will begin tracking our progress (or the need to improve).





PART 1

Our Chickens' Needs and Wants

4 FREEDOM TO EXPRESS NORMAL BEHAVIORS

Initiative: Increase bird activity

We believe that active chickens — those that can express normal behaviors such as perching and play — are healthier chickens. That's why, in 2016, we announced a goal to double bird activity over three years.

- We had to first address the question: "How do we measure activity?"
 1. We worked with the University of Delaware over the past year to develop a method to measure motion and activity.
 2. The university developed a process that uses Passive Infrared Detectors (PIDs) in the ceiling to track bird motion and activity.
 3. We completed two trials using farms that have both houses with windows and houses without windows, and added video monitoring to validate the results in a third trial.
- We proved that installing windows to provide natural light in the chicken houses not only increases activity during the daylight hours, but also encourages birds to rest during the "lights-out" periods.
- *Our next step is to add enrichments to see if we can further increase activity.*



FREEDOM 4



PART 1

Our Chickens' Wants and Needs

Initiative: Continue to install windows in our existing houses

We believe that windows and natural sunlight create a better environment for the chickens, and for the people who care for them.

- *We set a 2017 goal to have windows in 25% of the houses raising our chickens. We now have windows in 27%.*
- We will continue to increase that over the next three years:
 1. Approximately 50% by summer of 2019.
 2. Approximately 75% by summer of 2020.
 3. 100% by summer of 2021.
- At the same time, we are continuing to work with our farmers to improve the small gap in productivity in houses with windows.





Initiative: Expand outdoor access/free-range

We fell short of our goal to expand outdoor access by 200 chicken houses in 2018, but expect to achieve that in 2019.

- We will continue to increase the number of farms with pasture areas to keep pace with demand for PERDUE® HARVESTLAND® organic and free-range chicken.
- Free-range farms will be set up similar to range facilities used in our Organic program, including pasture areas equal in size to the chicken house and access from the chicken house every 50 feet.
- We discussed the change to free-range with our Farmer Councils, gaining valuable feedback on concerns and recommendations.



Initiative: Hold a farmer participation contest to design a better enrichment for the birds

Who better to design a better chicken enrichment than the farmers, who spend more time with our chickens than anyone else? *We kicked off on June 1 a contest* that has a \$5,000 first-place prize for a new chicken enrichment, and \$2,000 for the runner-up.*

- The enrichment should:
 1. encourage chickens to act like chickens, increasing normal and beneficial behaviors,
 2. enhance comfort and better use of space,
 3. increase the chickens' ability to cope with physical and behavioral challenges, such as exposure to humans.
- We want the farmers to describe why their enrichments would be better for the chickens, and possibly the farmer.
- We will have the winner at our next Animal Care Summit (2019) to explain the enrichment.



*Official contest rules (including specific judging criteria) have been communicated to our farmers.



FREEDOM 5



PART 1

Our Chickens' Wants and Needs



PART 1

Our Chickens' Needs and Wants

5 FREEDOM FROM FEAR AND DISTRESS

Initiative: Controlled Atmosphere Stunning

We are committed to moving all of our harvest operations away from using electrical shocks to “stun” birds before harvest, to using a multi-stage, dual-gas technology Controlled Atmosphere Stunning (CAS) system to induce insensibility with minimal trauma.

We successfully implemented CAS at our Milford, Del., harvest plant in November 2017. The system uses varying mixtures of carbon dioxide and oxygen to relax, then sedate the chickens, before bringing about an irreversible state of unconsciousness that renders the chickens insensible to pain. This eliminates shackling of conscious chickens. We’ve seen significant advantages:

- 100% of the birds are insensitive to pain when presented to the harvest knife.
- Bruising associated with electrical stunning has been eliminated.
- *The process is much easier on both the birds and our associates.*

This is Phase 1 of a two-phase project.

- By December 1, 2018, we will switch to higher-welfare catching drawers that reduce stress during the catching process and eliminate the step of transferring conscious birds from the transport modules to a moving conveyor.

Initiative: Lairage evaluation

Phase Two of the Milford Controlled Atmosphere Stunning process also includes an environmentally controlled de-stressing “lairage” area. Lairage has proven successful in reducing stress in large animal processing, and we want to assess its potential benefits for chickens.

- The lairage area is designed to provide a comfortable space for animals to rest and recover following transport to the plant. The process provides up to two hours of rest time.
- We will begin evaluating the welfare benefits of lairage in January 2019.





FARMER RELATIONSHIPS

We are committed to building stronger relationships with the farmers who care for our chickens

Initiative: Farmer Program for Installing Windows

We developed a program for including windows in all new houses and a program to help existing farmers install windows. This includes contract changes, a loan process and window specifications.

- Under the program, Perdue pays for the cost of converting existing houses. The farmer signs a promissory note for the cost, then the farmer is paid extra by Perdue over a three-year period to offset the loan amount.

Initiative: Farmer Website

Our farmers made it clear we needed to improve communications; one of their suggestions was to have a website dedicated to the farmers who raise our birds.

- Phase One of the website went live in January 2018 and includes the ability to reach farmers directly with key messages.
- The website features species-specific articles, broiler farmer index scores, company news and updates, merchandise sales and information on where to buy our products.
- Phase 2, scheduled to go live in 2019, will provide location-specific information for farmers, making communications from their respective live production offices more consistent and timely.



Initiative: Share our Farmer Relationship Index

To help better understand what is important to our farmers and improve communication, we have established a farmer relationship index, based on conversations with our farmers.

- We are publishing the index score on our farmer website so that farmers can see how we're doing, and let us know if we're measuring the right things.
- The index measures things such as chick quality, feed mill service, communication and farmer feedback on chick delivery, catching and live haul.
- ***We finished FY18 with a score of 81 against a goal of 80.***





PART 3

TRANSPARENCY

We want to build lasting trust with stakeholders

Sharing results from our third-party audits allows our stakeholders to see both our successes, and where we need to improve. We have started reporting annually, including:

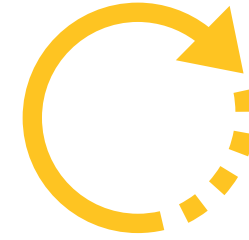
- The Meriux/NutriSciences annual audit of all 12 of our harvest operations,
- USDA Process Verified Program audits of our harvest and live production operations,
- Global Animal Partnership audits of farms raising our chickens,
- National Organic Program audits of farms raising our USDA certified organic chickens, and
- Customer audits.

Initiative: Establish a certification program for the "Class of 2024" (introduced 2018)

Last year, we promised current and future customers a sustainable supply of chicken that meets all the 2024 animal welfare criteria outlined in the "Joint Animal Protection Agency Statement on Broiler Chicken Welfare Issues." Working with stakeholders, we will develop a certification, audited to match the "2024" criteria.



Perdue Animal Care Summit 2017 farm tour



PART 4

CONTINUOUS IMPROVEMENT

We want to create a culture of animal care

We want to influence and change the culture around animal care within our associates, farmers and anyone else who comes into contact with our live poultry. A first step is identifying behaviors.

Initiative: Publish evidence of behavioral changes in animal care.

We are keeping a log of both positive and negative behaviors, and publishing it.

- In May of 2018, we added a report on Poultry Care Incidents to the Animal Care section of the Perdue Farms website.
- The Incident report includes positive and negative behaviors, and responses and action plans.
- The report will be updated quarterly.



SHARING OUR 2017 AUDIT RESULTS

Perdue Foods Broiler Audit Results 2017

Mérieux NutriSciences Audit Results

Criteria for this audit are based on the “National Chicken Council Animal Welfare Guidelines” published by the National Chicken Council (2014) and “Poultry Slaughter Plant and Farm Audit: Critical Control Points for Bird Welfare, August 2005,” published by Temple Grandin, PhD, at www.grandin.com.

NutriSciences conducted annual audits at all 12 of our poultry live production and harvesting operations, including hatchery, growout (farms), catching and transportation, and processing. The audit covers a total of 65 audit points, scored on a scale of 1-5, for a maximum possible score of 325 points. Operations are rated on a percentage basis.

- 11 of the 12 locations audited received an “Excellent” Rating (97% or higher).
- One location received a “Good” Rating (93-96.9%) with a 96.9%.
- We had zero major non-conformances.

USDA Process Verified Program Audit Results

Our USDA Process Verified Program covers all of our live-production and harvesting operations. The audit tool combines the principles from the National Chicken Council and our “Best Practices.” Participation in this program is approved by the Agricultural Marketing Service of the USDA. Companies that operate under a Process Verified Program must comply with criteria outlined in the program requirements, and that are audited annually. Since the AMS audits were developed utilizing ISO 19001 Guides for Quality Management Systems audits, they are not “scored.” Instead, they only identify non-conformances, which are classified as “major” or “minor” and “continuous improvement.”

The past year, the USDA Livestock, Poultry, and Seed Program’s Quality Assessment Division conducted annual audits of all 11 of our chicken live-production and harvesting operations for conformance to our USDA Process Verified Program Poultry Care. Each audit covers a minimum of 188 audit points in more than 50 areas. Over the last 12 months, our PVP audits:

- Identified a total 14 minor non-conformances, defined as “low potential for bird injury” or requiring the establishment of a documented procedure. All were adequately addressed and cleared.
- Identified one major non-conformance, for which Perdue submitted a corrective action that adequately addressed and cleared the issue.
- Confirmed conformance to our USA Process Verified Programs for Raised Cage Free, All Vegetarian Diet with No Animal By-Products and No Antibiotics Ever.

Global Animal Partnership

Some of our customers require Global Animal Partnership (GAP) certification, which applies to the farms raising chickens for those products. GAP certified farms are audited every 15 months.

- Over the past 12 months, GAP audited 184 farms, all of which passed GAP certification. GAP identified 18 minor and 1 major non-conformance, all of which were resolved.

USDA Certified Organic

Every farm raising organic chickens for us is third-party audited for meeting the requirements of the National Organic Program for USDA Certified Organic. Farms are inspected annually by third-party organic certifiers.

- All 166 farms raising organic chickens passed their audit. The audits identified three minor non-conformances.

Customer Welfare Audits

Our operations are regularly subject to audits by our customers to ensure adherence to their standards. We passed all customer audits.

Third-Party Video Monitoring

We use third-party video monitoring in live-bird handling areas of all 11 of our broiler harvest facilities. This includes random reviews of video, covering 10 million birds in 223,000 audit events over the past 12 months. During that time, we achieved a compliance rate of 99.83 percent and have seen a reduction of more than 29 percent of audit non-conformances across all audited facilities.





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