AAAP white paper on:
ENRICHED HOUSING SYSTEMS FOR LAYING HENS
Prepared by the AAAP Animal Welfare and Management Committee
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A review of the currently available scientific reports and recently-obtained production-scale data indicates that enriched colony housing may result in some improvements in bird health and increases in the behavioral repertoire of laying hens, while retaining the production, avian health, and egg sanitation advantages for birds housed in conventional cages.

Enriched colony housing is a housing system for laying hens that utilizes cages, but adds enrichments such as nest boxes, perches, and dust bathing/scratching areas. It is not a cage-free system.

As compared to non-cage systems (floor or outdoor housing), both enriched colony housing and conventional cage housing systems have significant advantages in protecting hens and maintaining optimal health conditions. For example, due to the design of these housing systems, hens will be protected from external temperature extremes and predators, will have less flock hierarchy social pressures, and will have reduced exposure to parasites, insects and other avian species that may carry disease. Furthermore, hens in caged-systems are enabled to have a more balanced daily intake of nutrients needed for well-being, body maintenance and egg production.

Enriched colony housing for laying hens has the potential to improve animal welfare since it provides health benefits and greater opportunities for hens to express natural behaviors. Specifically, a review of current production and scientific data shows:

- **Health**
  - Lower mortality for White Leghorn hens(**) in enriched colony housing compared to the same breed of hens kept in conventional cages.
  - Improved skeletal health and increased physical movement due to the use of perches in enriched colony housing which has resulted in less osteoporosis.

- **Behavior**
  - Enriched colony housing provides opportunities for hens to express natural behaviors such as nesting, perching, foraging, and dust bathing as compared to hens kept in conventional cages.
  - Hens in enriched colony housing have greater freedom of movement than hens in conventional cages, allowing them greater opportunities to stretch, flap their wings, and walk.
  - Hens in enriched colony housing, as compared to non-cage (floor) systems, are kept in smaller groups and exhibit less harmful behaviors such as aggressive/traumatic pecking that can occur due to flock hierarchy social pressures.

In summary, while there is limited published scientific and practical evidence available currently for the long-term welfare and production outcomes of hens kept in enriched cage systems, early data indicates that this housing system can be beneficial to the health and well-being of laying hens. More research is needed regarding the effect of different types of cage systems, the enrichment materials utilized in enriched cages, and the ideal stocking density that should be utilized for commercially-available enriched cage systems. This research will hopefully help provide scientific guidance for the poultry industry and veterinarians with regards to animal welfare, avian behavior, food safety, employee safety, and production management practices.

**Note: Based on a small study using this breed of hens. When using other breeds in enriched cages and during farm trials conducted in commercial layer houses, results have not shown advantages for life-of-flock mortality.**