

Increase Grade A Carcass Yield

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Breast blisters may be the number one cause of B or lower grade carcasses in some meat birds. This problem may cause consumer rejection.

If too many breast blisters appear on meat birds, try one or more of the following: (Emphasis here on 1,000- to 5,000-bird flocks.)

- Purchase chicks or poults bred with a smooth keel bone with little or no unevenness on the bottom of the keel bone. A bone projection may cause excess pressure on skin and other tissue while the bird is sitting down, which may cause a blister to form. A breeder may be able to select for a large, smooth keel in some species. Use cool room brooding and improved rations from one to 10 weeks old to encourage feathers on breast to grow. Feathers cannot stop breast blisters but they do help cushion the breast when breast is on the lit-

ter. Feathers also protect skin from direct contact with litter pathogens. Some breast blisters appear to start from within the skin, not externally.

- Handle live birds to determine at what age breast blisters occur. Breast blisters before the bird is half grown may be started by contaminated, hard, sharp, wet, anaerobic litter or infective or invasive organisms in litter. Deep, soft, dry litter seems to help in areas where birds rest on their breasts. Breast blisters after birds are about half-way to market age (9 weeks in turkeys, 3 weeks in broilers, 4 weeks in roasters, 8 weeks in capons) may be caused by too much pressure on keel when bird is sitting too long. This can be remedied by keeping fat or finish off birds until 10 days before market, exercising birds several times a day by walking through birds (causing them to walk, not sit), and increasing the depth of soft litter two weeks before breast blisters are normally first seen. Many breast blisters start as an abnormal color on the skin.

- Rarely, some producers find it is best to start with 4 inches of litter, then rototill it once every 3-6 weeks and use it again with new chopped straw or shavings on top after a rototilling for new birds. Deep straw litter may compost when tilled. If old deep litter is rototilled and found to be dusty, the dust may be settled before reuse with a spray treatment of 1.0 pint of chlorine bleach in 9 gallons of water, then put new litter down. This solution is poisonous, so do not breathe it or expose hands or eyes to it. Reuse of old litter is not recommended for best health of bird but sometimes in 4-inch to 6-inch deep chopped straw litter, a black compost may develop that seems to be free of most pathogens. Shallow, dirty wood byproduct litter should not be reused if it is not composted.

- Allowing birds to have granite grit from 12 days of age on may help them digest whole oats fed up to 20 percent of the ration. (Granite grit needs to be purged from gizzard before processing.) Oats is believed to cause skin, fat and muscle to be more firm and be able to withstand impact without injury in sitting, loading, and processing. Replacing 100 pounds of corn with high quality oats in a diet may also

help reduce excess waste visceral fat that is lost in processing.

- Vitamin-mineral-electrolytes (VME) fed in the water at 1/2 strength for only 3 days a week may help marginal birds stand up more and reduce wet litter problems. This program is quantitatively critical and can be damaging if VME mixtures are fed too high concentration or too long a period of time. All water treatments may be flushed from a line after use to prevent unwanted buildup of pollution in the line.

- Wood chips with splinters or sharp hard edges may cause injury to gizzard, duodenum, foot, or breast. In some loads of birds managers have seen, breast blisters are reported high when foot injury is high. Detoeing surgery is not recommended — some birds appear to get ascending leg or foot infections from it. Study ways to prevent downgrades without detoeing.

- Leg weakness and breast blisters in turkeys may occur when flock's size or weight is uneven. Prevent extreme unevenness in flocks of any meat birds. At 3 weeks of age in broilers, 4 weeks in roasters, 8 weeks in capons, or 9 weeks of age in turkeys, handle 100 birds and examine foot and hock health. If hock is swollen and fevered, call a fieldman and react to it accordingly. If toe, footpad, or foot has any swelling, fever, chill, tremor, scaliness, or lesion, react to it even if you must take one day a week to treat individual birds in a hospital pen. (Use a hospital pen.)

- Examine feather growth on 30 birds in a flock every two weeks. If feather growth is too slow, uneven, twisted, soiled, or abnormal, react to the feather growth. Normal feathers and health go together. After 1-2 weeks of age in any meat bird, it is more expensive but better to have better quality feather growth and a cooler environment than to have air in the pen that is too warm, or hot, stuffy, stale, dusty, or full of ammonia and microbes. Warm, stale, humid, polluted air causes birds to severely pick at each other more. The bottom line in this program is tons of meat sold as Grade A.

- On selective loading, we find birds left on the farm and never sent to slaughter can lose several hundred to several thousand dollars per flock.

- Accompany your birds to the processing plant, record all quality faults, and work back to the day-old bird. From day-old to market, work out each problem as it needs corrected. Most problems we have with meat birds are caused by their inability to adapt to captivity, such

as inadequate quality in living space, litter, water, oxygen (ventilation), lighting, surgery, care, breeding, or handling. Placing weak birds in the hospital pen is essential to market high risk weak birds later. Necropsy fresh, dead birds or take fresh refrigerated dead to the lab.

- Pick up and examine 30 to 50 day-old birds when they arrive; look for leg weakness, navel health, eye or respiratory disorder, abnormal skin or feather, abnormal droppings, tremor, vigor, normal eating and drinking behavior, picking behavior, as well as anything that appears abnormal. If anything is abnormal, seek help — you may only have one to three days to correct it. Contact the hatchery and breeder.

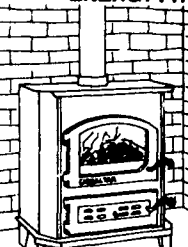
- Breast blisters do not just happen. They are caused by something. Some causes may be elusive. However, the causes that can be found and corrected may improve performance and well-being as well as income. Time, money, labor, meat, water, electricity, and managerial services in the processing plant are all wasted on a condemned or downgraded bird, so do not grow them or ship them. Those who believe they can market parts profitably from a downgraded bird may be deceiving the customer and themselves.

A bird with a defective part may be accompanied by low quality in the entire carcass, so cutting it off gains little. This question — can a profit be made by selling parts from a downgraded bird? — deserves study independently and collectively.

- Select a few well-experienced people in your firm and have them study downgrades 100 to 1,000 hours a year. Learn cause and effect by keeping records. It would be interesting to compare condemnation body weights with the average weight of the flock to see what price would have been obtained if the birds had been sold as whole birds rather than parts.

- A study may result in new information such as adult turkeys need only 26 square inches of floor space per pound of live weight, whereas a one week old turkey may need 360 square inches of floor space per pound of live bird. At early ages, floor space is more of a behavioral living space question than one of adequate physical space because of age or size of bird. A happy bird is a productive bird in many cases. Give young birds plenty of space. Remember that energy expended, movement seen, and efficiency measured is greater in younger birds, so they need space to grow.

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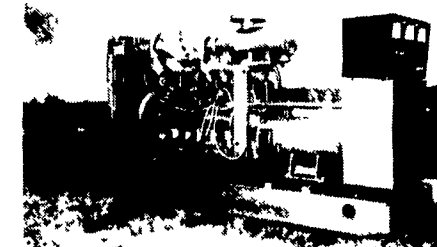
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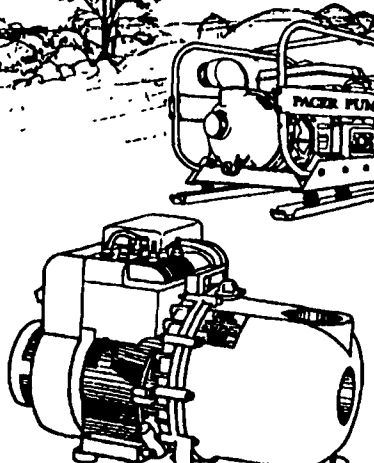
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