Green Muscle Disease in Poultry

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Green muscle disease is also known as Oregon disease, but it is more correctly referred to as deep pectoral myopathy (DPM). This degenerative muscle disease affects the breast tenderloin (minor pectoral muscle) found deep within the breast. The breast muscles are responsible for the up and down strokes of the wings. During flapping, the muscles expand with the increased blood supply required for the activity. This expansion can be problematic for the breast tenderloin because the muscle is confined to a space between the breast bone and the large breast fillet (major pectoral muscle). The increased pressure of the expanding muscle cuts off the blood supply to the breast tenderloin, and the muscle dies. Affected muscles appear discolored, ranging from pinkish and hemorrhagic to grey-green. There is no evidence that a pathogenic organism is involved in the development of DPM.

The condition was first reported in mature breeder turkeys and broiler breeders. Raising broiler chickens to heavy market weights has resulted in an increased incidence of DPM among meat-type chickens. The disease is also on the rise in pasture-based systems where birds flap their wings when startled. To reduce incidence of DPM, it is important minimize stress to the birds to reduce wing flapping. Pasture-raised chickens exposed to a variety of different stresses may need to be raised to a smaller weight to counteract the possibility of DPM.

For More Information


Green Muscle Disease in broilers increasing. Drs. Bilgili and Hess, Auburn University. Published in World Poultry.