

Hormones in Our Poultry: Is It for Real?

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Poultry products are some of the most economical meat protein sources available to consumers. Currently, chicken prices remain a bargain for the nutritional value, and this has held true for the last 40 years. The ability to efficiently use foodstuffs with minimal time to market size is the primary reason chickens and turkeys lead as primary meat sources. Often this efficiency is misinterpreted as unsafe because there is a myth that poultry are given hormones in order to achieve the growth rate with so little feed. The real story of poultry production does not include hormones but rather attention to the details to produce a protein source that is keeping pace with the world's expanding population. The following outlines why there are no hormones used in chickens and turkeys or poultry products:

1. **They don't need them.** For 60-plus years, scientists from several institutions around the world have carefully studied the genetics of poultry along with their nutritional, environmental and health needs, and the results of this intensive effort are high-quality protein sources produced in an abundant and efficient manner. Through careful genetic selection for desired traits, the



FIGURE 1. New chicks in the poultry house learn quickly where the feed and water are located and will develop well with temperature controlled for their comfort and growth.



FIGURE 2. Modern broiler (on left) as compared to 1970s broiler (right).

Photo courtesy of Dr. Sara Goodgame

modern meat bird has been steadily selected so that it is now significantly larger than the broiler chicken from the 1950s. Table 1 below depicts the improvements in broiler efficiency

TABLE 1. Chicken performance improvements through the last century are attributed to genetics, nutrition and environment.

Year	Average Weight (lb)	Weeks Market Size	Pounds of Feed Make a Pound of Bird
1925	2.2	16	4.7
1945	3.1	12	4.0
1965	3.5	7	2.4
1985	4.2	7	2.0
2005	5.3	6	1.8
2010	5.7	6	1.75

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FIGURE 3. Chickens near market age benefit from a life free of predators, disease agents and environmental extremes while spending flock time with other birds in environmentally controlled poultry barns.



FIGURE 4. Disease diagnostics and prevention play a critical role in keeping modern broilers healthy and productive.

since 1925. Increased efficiency has resulted in less feed needed for meat production, less manure production and a significant food production sustainability. From the 1950s through today, poultry nutrition remains an intensive field of study where requirements for amino acids, minerals and vitamins are better known than for any other species. Plus chickens and turkeys turn ingredients which are not suitable for human consumption into high-quality meat and eggs, putting these species on track to become the leading protein source for an increasing world population.

2. **Growth hormones must be injected to work.** They do not work when added in the feed or water. If fed, hormones are digested into their basic amino acids which destroy their function as hormones. The only way to maintain their action as a growth-stimulating steroid is to inject them into each bird almost daily.

3. **Hormones are too expensive to use even if they did work.** In addition to hormone costs, injecting millions of chickens would take intensive labor, further adding to the expense. In order to remain competitive, the poultry industry keeps costs minimal with modest average annual profits (2 percent).
4. **Hormone use in poultry is illegal.** The Food and Drug Administration banned the use of hormones in poultry production by 1960.

Printed by University of Arkansas Cooperative Extension Service Printing Services.

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FSA8007-PD-10-12N

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