Issues and Challenges in Broiler Production

Richard L. Lobb
Director of Communications
National Chicken Council
National Chicken Council

- National trade association for the integrated broiler producer-processor industry
- Broilers are meat chickens. We don’t do table eggs or turkeys
- Companies with 95% of broiler production are members
- We lobby, address issues, serve as central industry forum
“Integrated” Industry

- Chicken company (e.g., Pilgrim’s Pride, Tyson Foods,) manages the process and owns the animal all the way through.
- Owns hatcheries, feed mills, processing plants, distribution facilities.
- 90% of production takes place on privately owned farms under contract with integrated companies.
## Key Economic Indicators

<table>
<thead>
<tr>
<th></th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009 (est.)</th>
<th>2010 (proj.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Production (billion pounds)</td>
<td>35.37</td>
<td>35.5</td>
<td>36.5</td>
<td>35.2</td>
<td>35.7</td>
</tr>
<tr>
<td>U.S. Broiler Consumption</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(pounds per capita)</td>
<td>86.5</td>
<td>85.2</td>
<td>83.5</td>
<td>80.5</td>
<td>81.7</td>
</tr>
<tr>
<td>Wholesale value ($ billion)</td>
<td>37.5</td>
<td>44.5</td>
<td>46.5</td>
<td>45</td>
<td>46.5</td>
</tr>
<tr>
<td>Exports (billion pounds)</td>
<td>5.2</td>
<td>5.9</td>
<td>7</td>
<td>6.6</td>
<td>6.3</td>
</tr>
<tr>
<td>Value of exports ($ billion)</td>
<td>2.13</td>
<td>3.15</td>
<td>3.99</td>
<td>3.75</td>
<td>3.5</td>
</tr>
</tbody>
</table>
Origin of Intensive Production

- Essentially there was no broiler industry before 1920’s
- Meat chickens were offshoot of layer industry (unneeded males)
- Mrs. Steele of Delaware often cited as mother of industry – started with 500 birds in 1923, built a house for 10,000 by 1926
- Long-distance shipment by 1930’s
Roots of Integrated System

- Many small, independent companies by 1940’s
- Hatcheries or feed millers typically had capital that farmers lacked and could finance flocks based on note paid back when flock was sold
- Processors needed greater uniformity of product to allow automation and eventually “integrated” hatchery, feed mill, and processing plant under one ownership
- Integration essentially completed by 1970
Contract Grower

- Independent family farmer holds contract with company; usually stays with same company for years regardless of specific length of contract
- Owns farm and growout houses; provides water, utilities, labor, management skill
- Is paid on the basis of his/her success in raising chickens to desired market weight
Contract growers

- Approximately 30,000 contract broiler farms in U.S.; some have other animals or row crops, while some have only broilers
- Production of broilers has always been large-flock oriented; there has never been a “backyard” or small-flock broiler industry
- System allows many farm families to stay on land
Impact on Farm/Rural Economy (2004 data)

- Direct pay to growers: $2.1 billion
- Plant, hatchery, feed mill payrolls: $3.7 billion
- Purchase of corn and soybean meal: $7.9 billion
Antibiotics

- Used as coccidiostats, health promotants, and therapeutically
- Most coccidiostats (anti-parasitical) are not true antibiotics and are not used in human medicine
- Trend has been towards less usage as overall animal health improves due to better breeding, better husbandry (such as tunnel ventilation)
Below are listed all hormones used in broiler production:

(None)
NCC has adopted and published an animal welfare program that is widely used in the industry. May be obtained from www.nationalchickencouncil.com

Approved by Food Marketing Institute and National Council of Chain Restaurants
Differences from other species

- Chicken farmers:
  - do NOT own the animals – the company owns them
  - do NOT sell in an open market – there is no open market
  - Do NOT negotiate with the companies – the pay is fixed in the contract
  - Do NOT raise as many animals as they want. The company delivers as many animals as the company wants.
Life Cycle

- Begins here – in a hatchery
Typical broiler farm

This particular farm is in the Shenandoah Valley of Virginia
Brooders and feeders in house

Note: Cages are NOT used in broiler production
Typical modern broiler house
Interior -- tunnel-ventilated house
Processing plant
Impact of confined production on animal health

- Provides protection from predators and extremes of heat and cold
- Water provided continuously; feed provided frequently
- Health of flock nationwide is extremely good; nutritional status also excellent
Improvements in recent years

- Tunnel ventilation has improved atmosphere (removes ammonia) and condition of litter (keeps it drier).
- Improved ventilation brings immediate production gains (lesser mortality, better feed efficiency)
- Better foot and eye health
- Nipple drinkers also keep litter dry and water cleaner
Outdoor access/free range

- Niche market for “free range” poultry allowed access to outdoors
- Has never been typical in industry
- Most producers would rather not expose birds to predators and wildlife
- However, some manage this successfully and obtain premium price
Food safety

- Raw product sometimes has potentially pathogenic bacteria at very low levels; cooking kills bacteria
- Interventions on farm and at plant are used to improve microbiological quality of processed meat
- Scientific studies and government reports show great improvement, from 30% positive in 1980’s for Salmonella to less than 10% today
Food quality

- Quality = conformance to specifications
- In food, that means consistency so consumer will trust and demand brand name
- Company controls process by breeding and hatching birds and providing feed to growers. No open market – farmer never owns the birds. Company gets exactly what it wants for particular customers or markets (foodservice, fresh retail, etc.)
Product mix

- “Customer” is foodservice company, supermarket chain, distributors, other large buyers.
- Customer specifications must be met
- Shift from fresh, whole-bird sales to cut-up parts and convenience products
Consumption in Pounds per Capita, 1972

- Pork: 55
- Chicken: 42
- Beef: 85

Chicken was 23% of the Big 3
Consumption in Pounds per Capita, 2009

Chicken is 43% of the Big 3
Per Capita Consumption
Chicken, Beef, and Pork
1975 to projected 2010

Beef
Chicken
Pork
Five factors in popularity of chicken

- Value/price compared to other foods
- Good nutritional profile/low in fat
- Convenience/ease of preparation
- Versatility
- Good fit with quick-service and casual dining menus
Environmental considerations

- On-farm: growers are encouraged to do nutrient management planning for use of litter as fertilizer to ensure that litter is applied in accord with agronomic needs of crop
- Litter can also be processed for commercial fertilizer or sold/exchanged to other farmers
- In-plant: Wastewater treatment facilities are permitted by EPA or state equivalent
Sustainability

- Broiler industry raises more food on less land with less input than any other terrestrial food animal industry
- Land: Intensive production means little land is used
- Input: Feed conversion ratio is 2:1 or less, best among terrestrial species
- Highly sustainable model that has worked well for many years
Thanks!

Richard L. Lobb
Director of Communications
National Chicken Council
1015 15th St NW, Suite 930
Washington DC  20005

www.nationalchickencouncil.com