

# Perceptions of Mississippians Concerning the Poultry Industry

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The poultry industry in Mississippi has undergone dramatic changes. What began as backyard flocks has now become a highly integrated agribusiness generating \$6.6 billion in total economic activity annually (Malone and Morgan, 1995). The state is the fifth largest producer of broilers, and ranks fifteenth nationally in egg production. The poultry industry provides opportunities for farm families as well as for the large work force in the processing and manufacturing sectors of its integrated food industry. More than 69,000 jobs are related to the poultry industry, making it the most important food commodity produced in this state (Malone and Morgan, 1995).

As important as the poultry industry is to the state, educators must gain an understanding of consumer knowledge and attitudes concerning the health and welfare of poultry. America has the distinction of having the first recorded laws to protect animals from cruel treatment. "No man shall exercise any tirrany or crueltie towards any creature which are kept for man's (sic) use" was included in *The Body of Liberties*, which was the first legal code of the Puritans of the Massachusetts Bay Colony.

Over time, other laws, including the Animal Transportation Act of 1906, the Humane Slaughter Act of 1958, and the Animal Welfare Act of 1970, have been passed by Congress to assure the humane treatment of animals (Albright, 1986). In the Brambell (1965) report, welfare was defined as "a state of mental and physical well-being of the animal." The greatest problem for agriculturists is the difficulty of measuring what constitutes deprivation and inhumane treatment of animals.

Agricultural educators must realize that the animal welfare issue is not going away. Positive answers are needed in response to questions being raised about animal welfare. According to Albright (1986), "it is important for agriculture to be united and for its advocates to speak with one clear voice from enlightened self interest and an objective but compassionate concern for the welfare of animals while dealing with activism,

protests, and pickets." It is imperative that the poultry industry have an understanding of people's beliefs concerning the animal welfare issue in order to ward off poor publicity and create positive publicity concerning the poultry industry.

## Purpose of the Study

Because it is such an important component of Mississippi's agricultural economy, the poultry industry must have an understanding of consumer knowledge and attitudes in order to design an effective proactive campaign to ward off unwarranted poor publicity about the industry.

The problem is that no information is available about the perceptions consumers in Mississippi have concerning the importance of the industry, or their perceptions of how the birds are handled or treated.

The purpose of this study was to determine those perceptions.

## **Objectives of Study**

The specific objectives of this study were the following:

- 1. To determine consumer perceptions of the economic importance of the poultry industry in Mississippi.
- 2. To determine consumer perceptions of the treatment and handling of birds within the poultry industry.
- 3. To determine if selected demographic factors (age, gender, geographic location (urban/rural), past association with the industry, educational level, etc.) influence consumer perceptions.

#### Methods and Procedures

In order to meet the objectives, a special two-part questionnaire was designed. The first section was prepared to collect demographic data. The second was designed to collect data concerning consumer perceptions about the humane treatment of poultry.

The validity of the survey was established using a panel of experts from Mississippi State University's Agricultural Education and Experimental Statistics Department, Poultry Science Department, Social Science Research Center, and representatives of the poultry industry in the state.

The data collection was done via telephone interviews with a simple random sample of adults living in households with telephones. Households were selected using random digit dialing procedures. Within a household, an adult was selected and interviewed using the Hagen-Collier technique. Of the households contacted, 608 completed the interview and 130 refused to participate. The sampling error (binomial questions with 50/50 split) for this data set is no larger than  $\pm 4\%$  (95% confidence level).

## Findings

## Demographics

Of the 608 respondents, 60% were married, 37% were male, and 63% were female (<u>Tables 1</u> and <u>2</u>). Eighty-six percent lived in a household of four or less members with the median age of respondents being 41 (<u>Tables 3</u> and <u>4</u>).

<u>Table 5</u> indicates that 12% of respondents had less than a high school diploma, 35% had received a high school diploma, 17% had a bachelors degree, and 10 percent had education beyond a bachelors degree, and 10 percent had education beyond a bachelors degree. The racial makeup of the respondents consisted of 72% white, 26% black, and 2% other ethnic group (<u>Table 6</u>). The data was not weighted based on state demographics.

Respondents to the study indicated that only 5.4% had family members employed in the poultry industry. However, 46.7% correctly identified poultry as the agricultural industry in Mississippi employing the most workers (<u>Table 7</u>).

#### Knowledge of the Poultry Industry

Respondents primarily expressed little knowledge of the data related to poultry industry productivity. Respondents were asked to rank from 1-4 the agricultural industries that generated the most income in Mississippi. Forestry was ranked first by 26.3%, cotton was ranked first by 26.0%, poultry was ranked first by 25.3%, and beef was ranked first by 16.6%. Poultry was correctly ranked second for 1994 by 34.0% of respondents (Table 8).

Fourteen respondents indicated they knew how many eggs were produced in Mississippi in 1994. Ten indicated less than a billion while two identified each 1-2 billion and more than 3 billion. When asked to estimate the number of eggs produced, 56.2% did not even want to try. Less than a billion was the response selected by 28.1% of the respondents. <u>Table 9</u> indicates respondents' estimates.

Mississippi's rank in egg production was an additional question. Of the respondents, 16.1% (98) indicated that they thought they knew where Mississippi ranked. None of the respondents correctly identified the seventeenth place (1992) ranking. The majority of those responding (83.7%) ranked Mississippi between one and five. Those who responded that they did not know the ranking were asked to estimate the ranking. Table 10 indicates that 10 people (0.6%) correctly identified the ranking while 56.3% ranked it higher and 10.2% ranked it lower or did not want to even guess (33.3%).

When asked if they knew where Mississippi ranked nationally in broiler production, 18.1% indicated "yes." Of those saying "yes," 2% (12) correctly identified Mississippi's ranking as fifth. Those who indicated they did not know were asked to estimate Mississippi's rank. <u>Table 11</u> indicates the fifth-place ranking was correctly identified by 8.4% of respondents while 31.9% ranked it higher and 25.6% ranked it lower.

## Poultry Consumption and Health Perceptions

When asked about their poultry consumption, 24.2% indicated that they ate poultry less than twice a week while 24.0% indicated that they ate poultry four or more times a week (<u>Table 12</u>).

Eggs were consumed fewer than two times a week by 36.7% of respondents, while 34.0% ate eggs four or more times a week (<u>Table 13</u>).

When asked the question "As a whole, do you think the poultry industry has an image of providing quality products to the consumer?," 90.1% of the respondents said "yes." The others were fairly evenly divided between "no" and "don't know." Open-ended responses from those who answered "no" were categorized as misinformation from the media (10), the lack of cleanliness in poultry houses (7), and trouble with purchased/eaten products (5).

Seventy-eight percent of the respondents indicated that they thought poultry raised in Mississippi was healthy when processed, 5% indicated no, while 17% said they didn't know. Open-ended responses from those indicating "no" were categorized as some of the unsanitary practices by workers on the processing line (9), negative opinions about the growing process (too fast, drugs in feed) (5), and procedures for transportation(3).

Respondents were asked to compare the health value of poultry to beef and pork. Poultry was considered better for their health than beef by 65% of the respondents and better than pork by 74% of the respondents. Nearly 93% felt that poultry was a good buy for their food dollar. <u>Tables 14</u>, <u>15</u>, and <u>16</u> show the data related to these questions.

"Do you think that the poultry products you purchase are clean, fresh, and free of bacteria and disease?" received a "yes" response from 76.5% of the respondents. Of the remaining respondents, 13.3% said "no" and 10.2% said they "didn't know."

#### Perceptions of Poultry Management

A majority of the respondents (55.1%) were not concerned about the waste (manure, feathers, dead birds, etc.) that the poultry industry produces. Waste was a concern for 35.5% of the respondents.

The signs outside of poultry houses indicating no visitors allowed had not been seen by 86.0% of the respondents. The 12.8% who had seen the signs were asked what they thought the reason was for having the signs. Most who had seen the signs thought that the signs were up: (1) to prevent the spread of diseases to chickens (28), (2) because of health concerns for people (11), (3) to keep from disturbing the chickens (7), and (4) to keep the public from seeing unsavory things that were taking place inside the houses (5).

Respondents were asked to identify the ways that they thought were appropriate to raise poultry. Pens or cages were considered appropriate by 52.5%, open houses were considered appropriate by 68.8%, and free-range poultry raising was considered appropriate by 38.2%.

When asked if the poultry in Mississippi was being raised properly, 61.5% of the respondents said "yes," while 31.3% said they did not know. Only 7.2% of the respondents indicated that they felt the poultry was not being raised properly. Open-ended responses ranged from "The chickens are grown too fast," to "Most (of the) chicken houses I have seen are real clean and nice." Other concerns regarded the odor from chicken houses. Table 17 shows the categorized responses.

Television reports had influenced the way 27.6% of the respondents viewed the poultry industry. The views of 70.1% of the respondents had not been influenced by television according to their response. Open-ended responses dealt with people simply being made aware of the industry. Several mentioned being concerned because of reports on **60 Minutes** and **20/20**. Others mentioned they have become more aware of the health benefits of poultry over other meats (Table 18).

#### **Relationships Between Demographics and Perceptions**

Appropriate correlational statistics were employed to determine if relationships existed between the selected demographic factors and consumer perceptions. None were found to be significant.

#### **Conclusions and Recommendations**

The people in Mississippi have a positive perception of the poultry industry as a whole. They perceive that the poultry products they consume are healthy and disease-free.

The respondents' knowledge of the industry was limited and few had an accurate perception of the economic value of the poultry industry to the state.

Animal welfare did not seem to be a major concern of Mississippi respondents. The majority felt the pens, cages, and confinement housing were appropriate ways to raise poultry. The respondents generally were not concerned about poultry waste.

Most respondents who had seen the signs indicating visitors are not allowed in poultry growing facilities correctly identified the reason for the signs as a health issue.

Respondents' perceptions about the poultry industry were influenced more by personal experiences or by those of other individuals than they were by television and other media. Because perceptions seem to stem from personal experience, the poultry industry should consider providing opportunities for positive personal experiences such as field days, tours, exhibits, and displays. Agricultural educators can play a vital role in this endeavor, through publication of reports and journals, and assistance in conducting field trips, tours, and displays.

Perceptions also were influenced by visual observations of the poultry facilities. Growers should be encouraged to make an effort to provide facilities that are well maintained and visually appealing.

Mass media was not considered a major factor in perceptions of the poultry industry, but media should not be discounted as a future source of information. The poultry industry in the state should continue to work toward positive publicity and openness with the media.

Agricultural education and extension should serve as a bridge between agricultural industries and the public. This study identifies areas in which agricultural educators, communicators, and poultry representatives can work together in informing consumers of the facts concerning the industry and issues related to animal welfare. Consumer education already has had an influence and will continue to clarify the misconceptions consumers have concerning the poultry industry.

Agricultural educators can develop instructional materials to supplement industry reports for use in secondary agricultural classrooms and Farm Bureau's "Agriculture in the Classroom." Through education, misconceptions concerning the poultry industry can be overcome.

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