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Consumer Perceptions of Labeling Claims on Poultry Products

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CONSUMER PERCEPTIONS OF LABELING CLAIMS ON POULTRY PRODUCTS

A thesis submitted in partial fulfillment of
the requirements for the University of
Arkansas Honors College

By
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University of Arkansas

ABSTRACT

An increasing number of consumers wants more knowledge of how the food they eat is produced, and specifically, how animals used in the production of their food are raised. One method consumers use to become more aware of production practices behind the food they purchase and consume is simply reading food labels. Labeling claims can be defined as textual, pictorial, graphic, or symbolic representation that either explicitly states or implies that a food product has a specific set of properties supported by a certification process. The purpose of this study is to gather data regarding consumer knowledge and understanding of these labeling claims with two specific goals: (1) Determine consumers' perceptions of the meanings of these claims, and (2) determine factors that affect consumers' perceptions of the claims' trustworthiness. In this study, strong language such as "no" and "ever" made claims more believable to consumers, especially those who are Perceivers. Consumers who employed a judging approach to decision making tended to be more critical of the information and factors involved, whereas those who employed a perceiving approach tended to be more trusting. Consumers with a judging personality were more likely to notice and pay attention to process-related labeling claims than those with a preference for perceiving.

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CHAPTER I

INTRODUCTION

An increasing number of consumers wants more knowledge of how the food they eat is produced, and specifically, how animals used in the production of their food are raised (Bowman et al., 2016). In addition to physical aspects, consumers are increasingly interested in the social, ethical, and environmental impacts of food production. Consumers are actively seeking “sustainable” food products. “The most common sustainability claims on the food market are organic food labels” (Van Loo, et al., 2013, p. 138).

Overall, organic food sales constitute 4% of all US food sales (USDA, 2017a). Fruits and vegetables make up 43% of organic food sales, making it the most purchased category. Meat, fish, and poultry make up 3% of organic food sales (USDA, 2017a). At \$40 billion in 2016, the U.S. organic food retail sales amount to more than 5% of at-home food consumption. Millennials are largely responsible for the recent rise in organic food consumption, with over half resolving to incorporate organic food into their diets (Greene, 2017). Many university studies have researched consumer demographics and evaluated their correlation with the likelihood of a grocery shopper buying an organic food product. Some of the most common factors include income, educational level, race/ethnicity, marital status, and household size (Dimitri, 2012).

Although females make up over half of primary household grocery shoppers (FMI, 2014), studies have shown that this makes no difference on purchasing habits. Females tend to look upon organic foods more favorably, however, males are more likely to be willing to pay more money for organic foods (Van Loo et al., 2011). Typical characteristics of organic grocery shopper demographics include households with higher education levels, households with higher income, married households, and households located in close proximity of a store where organic

foods are readily sold (e.g., households within a 5-mile radius of a Whole Foods store have a much higher probability of purchasing organic food more often than households located farther away) (Dimitri, 2012). According to a study performed by Tonkin et al. (2016), individuals with young children tend to be more conscious of potential risks involved in relation to purchasing and preparing food.

One method consumers use to become more aware of potential food risks is simply reading food labels. Labeling claims can be defined as textual, pictorial, graphic, or symbolic representation that either explicitly states or implies that a food product has a specific set of properties supported by a certification process (Van Loo, et al., 2013). The United States Department of Agriculture (USDA) Food Safety and Inspection Service (FSIS) explicitly lists which labeling claims do and do not require approval from the FSIS Labeling and Program Delivery Staff (LPDS). In addition, the FSIS lists which changes/additions to previously approved labeling claims do and do not require further approval. Some of the labeling claims requiring LPDS approval are organic claims, animal production claims (e.g. antibiotic, hormone, steroid, or feeding statements), cage-free, or “natural” claims (USDA 2017b).

LPDS *must* approve labels that fall into the Special Statements and Claims category. These include, but are not limited to, the following: allergen warning statements from meat/poultry processing facilities, *free from allergen* claims (concerning the “big eight” allergens [dairy, eggs, peanuts, tree nuts, fish, shellfish, wheat, and soy]), cage free claims, *certified* claims (e.g., certified organic, certified gluten free), farm raised claims, humanely raised claims, “natural” claims (100% natural, all natural), organic claims, pasture raised claims, sustainability claims, and animal production claims. A second category called Factual Statements and Claims that are Generically Approved contains statements and claims that “may be generically approved

if the label complies with all regulatory requirements and the statement or claim is truthful and not misleading.” These differ from Special Statements and Claims because they do not require approval before entering commerce. Some examples of these are allergen and/or “contains” statements after a list of ingredients, general “contains” statements for an ingredient, green/environmental claims, and the nutrition facts panel (USDA 2017b, p. 13-19).

Certain changes can be made to previously approved special statements and claims without further review from FSIS. For example, an approved certified organic label would not require approval for the addition of a “non-GMO” claim. Other instances of additions/changes not requiring approval include addition of/changes within the nutrition facts panel, additional meat/poultry cut not on an existing approved label, and replacing one approved claim with a synonymous claim (for example, replacing “no antibiotics ever” with “raised without antibiotics”) (USDA 2017b). Some changes may *not* be made to special statements and claims without further LPDS review. These include, for example, additional animal raising claims, additional special statements and claims, “changes to the establishment number of labels with an organic claim,” and changing the organic certifier on a previously approved label (USDA 2017b, p. 22).

Three other categories that require LPDS approval include religious exempt products (e.g., Halal, Kosher), export labels with requirements that differ from domestic labeling requirements, and labels for temporary approval. Labels may be approved for export if the variations meet the importing country’s stipulations with supporting documentation showing the acceptability of the variation. Exceptions to this rule include: deviations entirely in a foreign language, net weight statements, the layout of the nutrition information, and “need for safe handling instructions” on raw/not ready to eat products (USDA 2017b, p. 25). Labels for

temporary approval may be granted for a maximum of 180 days, and facility extensions (granted via application) may only be for an additional 180 days (USDA 2017b).

While the situations and regulations related to food labeling are diverse and complex, one purpose of the labels is to help consumers feel informed about perceived risks associated with the food products they purchase. Tonkin et al. (2016) explained that “traditional” risks are those existing in nature and not present as a result of human behavior or circumstances. These include foodborne illness and spoilage. On the other hand, “modern” risks are those presented as a result of human technologies, interventions, and decisions. These include modern technologies such as food additives, preservatives, pesticides, and other chemicals used in food production.

Consumers pay attention to labeling claims because they tend to be more concerned about risks they cannot control themselves. Consumers tend to be most concerned about food risks related to carcinogens and unsafe additives, although studies have shown that consumers trust information they perceive to be “government mandated” (p. 243-249).

Nearly half of participants in a study performed by Hoogland et al. (2006) believed they had a thorough comprehension of food label meanings, yet only 27.2% of these participants received a high score on a survey about food labels. The concept of dual processing theories helps to explain how consumers process information, and how that information processing affects their perception of food labels. Peripheral processing occurs when consumers have a lack of knowledge which leads to a lack of motivation. A lack of motivation creates a less-stable attitude toward the issue at hand – in this case, food labels. Central processing, a strong and thorough processing of an issue, can transpire if a consumer has a concrete knowledge about the issue and, therefore, a strong motivation to process the information (Samant et al., 2015). This

theoretical approach has its roots in the oft-cited Elaboration Likelihood theory developed by Petty and Cacioppo (1986).

“Label claims can help consumers form their own opinions about food products and increase expectations to product quality” (Samant et al., 2015, p. 152). Even so, consumers tend to base their understanding of food labels on their own experiences, which can lead to a misinterpretation or lack of knowledge about the true meaning of a labeling claim (Samant et al., 2015.) According to Samant et al. (2015), passive learning about labeling claims increased consumers’ level of trust in a labeling claim, while active learning decreased positive trust. Participants in the study were less influenced by fellow participants’ opinions about a food label as their own knowledge of the claims became stronger.

Nearly 10% of consumers’ disposable income went to purchasing food in 2010; therefore, studying consumers’ food purchases is important to the agriculture and food industry, and it is to the advantage of industry to study the things that influence consumers’ Willingness to Buy (WTB) and Willingness to Pay (WTP). “In 2005, the U.S. food industry spent \$32 billion on advertising and \$66.5 billion on packaging to effectively provide consumers with essential product information (Samant et al., 2015, p. 146).” As consumers grow more attentive to the way the food they eat is produced, they are more aware of food labels. Over the last few years, sustainability and animal process food labels have become more prominent in response to this growing concern.

Nearly every year since the 1990s, consumer demand for organic products has grown by double-digit figures (USDA, 2017). Additionally, many labeling claims regarding production have been introduced to poultry products in recent years, such as “Raised Without Antibiotics” (RWA). RWA is a voluntary, process-based label, meaning that no “well-defined, consistent

standard” is required for use of the label, although *all* labels must be approved by FSIS (Bowman et al., 2016, p. 264). Studies have shown that nearly half of U.S. participants would be willing to pay 5% more for “humanely raised” animals; 20% were willing to pay as much as 10% more (Van Loo et al., 2016, p. 139).

Previous research on consumer perceptions of poultry labeling claims has demonstrated that the effects of sustainability-related label claims on quality perception and acceptability of chicken meat becomes significantly more pronounced when consumers understand and trust the claims (Samant & Seo, 2016a). Therefore, developing an understanding of how consumers formulate their understanding of these claims and develop trust in them is necessary to inform decisions about to best use labels and labeling claims as consumer education and marketing tools.

A study by Samant & Seo (2016a) used an integrated eye-tracker and a monitor to study how labeling claims affect a participant’s chicken purchasing decisions. A group considered High Label-Understanding (HLU), when compared against a control group, gave more visual attention to sustainability and process-related claims. Individuals who have a higher understanding of labeling claims on meat products tend to have a higher overall trust and liking for such products. Additionally, consumers with a high level of label understanding tend to derive their perceptions of meat quality based upon sustainability and process-related claims. The more consumers trust a labeling claim, the more likely they are to consider a product high-quality or fresh. Consumers react most positively to the “USDA Organic” claim and tend to rate poultry products with this label as higher overall quality. Organic claims are the most widely recognized; studies have not shown any notable impact of other lesser-known labeling claims on consumer’s perceptions of quality and acceptability (Samant & Seo 2016b).

Gould (1991) suggests that an individual's personality type is an extremely viable way of explaining his or her decisions and behavior as a consumer. This is best explained according to the format laid out in the Myers-Briggs type indicator (MBTI), which was derived from Jung's Typology of psychological types. A personality type, according to Myers-Briggs, consists of some combination of four dimensions of a person's personality: extroverted (E) or introverted (I), sensing (S) or intuiting (N), thinking (T) or feeling (F), and judging (J) or perceiving (P) (Myers, 1962).

According to Myers (1962), an individual's judging or perceiving preference is the foundation for how they deal with their environment. This is an approach for dealing in one's extraverted part of life. People's perceptions are described as their awareness to things existing and occurring in their environment, whereas a people's judgement is their conclusion-making skills regarding their perception. A preference for a judging attitude is marked by a decision-making process that temporarily "shuts off" taking in new or seemingly irrelevant information and reaching a conclusion. A preference for perceiving "shuts off" judgement for a period of time, believing that taking in more information and opening up possibilities for new developments is critical to the decision-making process (Myers, 1962).

Personality type is a critical indicator of consumer trust in a product. According to the 16 Personalities profile, the thinking/feeling dimension shows the most correlation between personality type and trust level. Those with feeling preferences tend to trust others more than those with thinking preferences (NERIS Analytics Limited, 2018). Additionally, MBTI type can be used as a guide to establish how much attention to detail a consumer may be employing when choosing products. The Judging/Perceiving and Sensing/Intuiting dimensions are both correlated with an individual's level of detail in planning and evaluating. SJ types are most likely to be very

detail-oriented (Roberts, 2013). Thus, it benefits those in a given industry to understand how consumers with different personalities may react to how products are marketed.

CHAPTER II

PURPOSE AND OBJECTIVES

As consumers' knowledge of and engagement with food production decreases in society, more responsibility is placed on industry professionals to provide consumers with information about food risks and production processes through labeling claims. "Labelling is the central communication pathway between consumers and the food system" (Tonkin et al., 2016, p. 242-243). Despite the increasing knowledge gap, labeling claims enable consumers to make informed purchasing decisions on an ethical and environmental basis (Van Loo et al., 2016, p. 137).

This study focuses on evaluating consumer perceptions of data behind various process-based labeling claims on fresh poultry products, as well as perception of these claims' credibility and trustworthiness. The types of claims this study examines are *organic* (e.g., USDA Organic) and *antibiotic* (e.g., antibiotic-free, no antibiotics ever, no growth-promoting antibiotics). The purpose of this study is to gather data regarding consumer knowledge and understanding of these labeling claims with two specific goals: (1) Determine consumers' perceptions of the meanings of these claims, and (2) determine factors that affect consumers' perceptions of the claims' trustworthiness. These research objectives examine consumers' perceptions and trustworthiness as individuals who prefer either a judging or perceiving way of interacting with their environment with the purpose of evaluating how these approaches to decision-making correlate to purchasing decisions.

CHAPTER III METHODS

This study followed the qualitative research paradigm and employed focus group methodology. Data were collected during focus group discussions, where consumers were presented with poultry product packaging bearing various labeling claims. Focus groups are, in essence, group interviews. This methodological approach allows the members of the research team to guide the discussion to focus on topics they want to hear about (Morgan, 1998a) and typically leads to a deeper understanding of subjects' feelings, perceptions and motivations. Focus group research seeks to determine general consensuses of the participants, which emerge through the synergy of group discussion, guided and kept on topic by a moderator following a semi-structured questioning route (Morgan, 1998a).

The first steps in recruiting members for a focus groups consist of defining the target population, defining segments within that population, and identifying the appropriate composition for each focus group that will be conducted (Morgan, 1998b). In the case of this study, the target population is individuals who are the primary grocery shopper for their household. A study by Christoph, An, & Ellison (2015) identified a need for researching the label reading habits of college students and young adults (aged 18-30) as a subgroup rather than as a part of the general adult population. Individuals in this age group are transitioning from adolescence and the provision of their parents to adulthood, and represent the future population of average consumers. The young adult age bracket has seen a recent increase in being overweight and having poor diet quality, and research about this group's label reading behavior could lead to improvements in overall nutritional and dietary health.

According to Food Marketing Institute (FMI) data, 85% of consumers regularly shop at a full-service grocery store, while 11% of consumers regularly shop at a natural or organic food

store. However, in recent years, more consumers have indicated that they do not have a “primary” store for grocery shopping. Females comprise 57% of “primary” food shoppers, and 43% are males. Eighteen percent of grocery shoppers say they are seeking certified organic food products (FMI, 2014).

Two focus group discussions were conducted, each group consisting of 8-12 members. A strategy often used to recruit members of the target population is contacting organizations and groups that contain members of that population (Morgan, 1998b). The study operated under the approval of the University of Arkansas Internal Review Board human subjects review process (protocol #1809142768). Focus group subjects were recruited in October 2018 from two large University of Arkansas service courses—Communicating Ag to the Public (AGED 3143) and Fundamentals of Nutrition (NUTR 1213) through email to faculty. Because focus groups are demanding of participants’ time and require them to travel, incentives at an approximate value of \$25 per participant were offered, and a meal was provided prior to the evening focus group meetings (Morgan, 1998b).

The faculty email contained two screener questions for interested participants to respond with: (1) results from a free Meyers-Briggs personality test at www.16personalities.com and (2) the last occasion that the participant purchased fresh chicken breasts. Participants were sorted into two focus groups based upon their results for the fourth personality dimension (judging [J] or perceiving [P]). This constituted “J Group” and “P Group.” All participants selected reported having purchased fresh chicken breasts for themselves and/or their families within a month of the time they were recruited.

Students in AGED 3143 and NUTR 1213 are a part of the Dale Bumpers College of Agricultural, Food, and Life Sciences (Bumpers College) at the University of Arkansas (U of A).

The majority of students in NUTR 1213 major in Nutrition and Dietetics or Hospitality. Though AGED 3143 reaches a diverse range of Bumpers College students as an elective for their degree program, many students in the course are Agricultural Education, Communications, and Technology majors, since the course is required for the degree program. Other majors commonly represented in the two courses include Agricultural Business, Poultry Science, Animal Science, Apparel Merchandising and Product Development, Environmental, Soil, and Water Sciences, Crop Science, and Food Science.

Sixty-eight students responded with complete prescreening information. A total of 39 students were eligible for the study; twenty-four were judging types, and fifteen were perceiving types. From each personality type group, twelve participants were randomly selected using an online random name generator. By the response deadline, nine judging-type and six perceiving-type participants had responded with attendance confirmation. At that point, eligible participants were contacted to participate, if needed, as alternates. At the time of the focus group sessions, nine J Group and ten P Group members were present.

Chicken breast packages were purchased from Harp's grocery store approximately two hours before the study was conducted and were kept fresh until the sessions began. Participants were given approximately three minutes for the group to look at each package. After each person in the group viewed the package, discussion began, and participants were allowed to view any package they had already viewed during the discussion. Because the chicken was packaged, the risk to participants was low; however, hand sanitizer was available to all participants at any time during the study. Participants were asked to discuss aspects of the package and make decisions as a group.

Data collection methods included notes taken during the discussion on flip charts and the use of audio recording devices. The entire focus group session followed a semi-structured discussion route, which included introduction, questioning, and debriefing. Questions related directly to the objectives of the study but were open-ended to encourage group discussion about labeling claims without initially introducing bias into the discussion. These sessions were considered moderately structured: the moderator had control over the questions and directed the discussion, meanwhile allowing participants an adequate amount of time to discuss the question as well as subsequent questions/comments within the discussion (Morgan, 1998b).

Data consisted of the groups' collective answers to questions, which were recorded on flip charts during the discussion. Transcripts of the audio recording were also analyzed for themes to provide further support for the results. A debriefing session followed each of the discussions to either confirm group consensus on topics and themes or to confirm a lack of consensus (Morgan, 1998a). The qualitative, thematic analysis of these group discussion and decisions constituted the results of the study.

CHAPTER IV

RESULTS

The findings of this study are presented in the same order they were collected during the research. Emergent themes are identified parallel with the research question they pertain to.

Findings are reported in conjunction with two research objectives:

- (1) Determine consumers' perceptions of the meanings of these claims
- (2) Determine factors that affect consumers' perceptions of the trustworthiness of packages containing certain claims

For each package viewed, participants were given approximately three minutes to view each package. First, participants were asked to report which components of the packaging they noticed first as a method of evaluating consumers' valuation of the claims the researchers were evaluating in relation to other factors (e.g., brand name, colors and graphics, safe handling instructions, etc.). They were then asked to discuss their perception of the meanings of each of these factors, the requirements for placing certain labeling claims on the packaging, and rank their level of trust, as a group, on a scale from 1-10.

Table 1

Emergent Themes from Introductory Questioning

Question/Topic	J Group	P Group	Key Findings
Background	3 ag background, 6 non-ag	6 ag background, 4 non-ag	P Group contained a higher number of those identifying as having an agricultural background
Label reading habits	LABEL READERS	LABEL READERS	J Group offered specific examples of

(table continues)

Question/Topic	J Group	P Group	Key Findings
	<ul style="list-style-type: none"> Ingredients, price, who made it, certifications, organic vs. non (specific examples) 		things they look for on a label
Level of trust	Trust in the food industry: <i>very high</i>	Trust in the food industry <ul style="list-style-type: none"> “everybody does, because everybody eats” Noted that they “didn’t want to think about it” Trusting, but not as high level as J Group Some thought it was more about money than quality	J Group initially identified as having a very high trust in the food industry, but was very critical throughout the discussion, reflecting a lower level of trust. P Group initially identified as having a moderate level of trust, primarily out of necessity, yet reflected a very high level of trust throughout the discussion.

One-third of participants in J Group identified as having some level of background experience in the agriculture industry, whereas over half of P Group participants had some type of agricultural background. This background knowledge could explain the groups’ respective levels of trust expressed throughout the duration of the study. In the introduction, groups were asked to describe their level of trust in the food industry. J Group stated that their level of trust was high. P Group expressed a moderate level of trust in the industry, but their trust came mostly from necessity, stating that everybody trusts the food industry because everybody eats. They agreed that they “didn’t want to think about” how much they should trust their food.



Figure 1. Control package (Harp's).

A package of chicken from the meat counter at a Harp's grocery store location was selected as a control package because it did not contain any process-related claims. The packaged contained the brand name, sell-by date, safe handling information, price, and a graphic advertising the "5 for \$25" sale (see Figure 1). Participants' collective observations are displayed in Table 2.

Table 2

Participants' Observations Related to the Control Package (Harp's)

Question/Topic	J Group	P Group	Key Findings
Time to View Package	11:30-14:15, 2 min. 45 sec.	11:45-13:26, 2 min. 41 sec.	Groups took nearly the same amount of time to view the package
Things That Stand Out	<ul style="list-style-type: none"> • 5/\$25; advertising; graphics 	<ul style="list-style-type: none"> • 5/\$25 • Off-brand status 	Both groups noted the “5-for-\$25” sale graphic as the first thing they noticed.
Meaning of Harp's	<i>Did not address</i>	<ul style="list-style-type: none"> • Lack of consensus: some thought more expensive (compared to Walmart), some thought more of a discount • Associated it with “local” business/food • Some associated it with “lower quality” than big brand names (ex: Tyson) because they specialize in chicken (ex: research, experience) 	<p>P Group valued the importance of the brand more than J Group in this case.</p> <p>Group lacked consensus on the meaning of the brand; some associated it with higher cost, some associated it with discount.</p> <p>Some members of the group associated the brand with lower quality.</p>
Level of Trust in The Product	<ul style="list-style-type: none"> • 6/10 • All would purchase the product because of student/financial situation, but not if parents were purchasing • Noted that the “off-brand” status was off-putting 	<ul style="list-style-type: none"> • 9/10 • Not a lot of dissention in this discussion; some ranked as high as 10 individually • One member said he would “give it an 11” if he could 	Both groups came to an easy consensus in this case; J Group trusted the brand far less due to the “off-brand” status. P Group trusted the brand very strongly.

(table continues)

Both groups noticed the 5 for \$25 promotional sale label first. Both groups noted that they disliked the “off-brand” status of the product. Ultimately, P Group ranked a much higher level of trust in the brand than J Group.

A package of Smart Chicken brand chicken was selected as a package displaying an organic claim. The packaged contained much of the same information as the control package, as well as the organic claim, a Raised Without Antibiotic Claim, and identification of the product as “air-chilled” (see Figure 2). Participants’ collective observations are displayed in Table 3.



Figure 2. Organic package (Smart Chicken).

Table 3

Participants' Observations Related to the Organic Package (Smart Chicken)

Question/Topic	J Group	P Group	Key Findings
Notice of Back-Side Label	Noticed back-side label; requested permission to view	Didn't notice the back of the package at all	J Group noticed back-side label and requested to look at it; P Group did not notice the sticker at all.
Time to View Package	19:45-23:25, 3 min. 20 sec.	18:00-19:30, 1 min. 30 sec.	J Group took longer to view this package than other packages; P Group took the least amount of time viewing this package.
What Stands Out Most	<ul style="list-style-type: none"> • Organic • Color of the tray and package; POSITIVE; the green certifications/graphics • Price was VERY high 	<ul style="list-style-type: none"> • Price (high) • Organic label • Color of package • Air-chilled 	Organic label was noticed first by J Group and second by P Group. Price was noticed first by P Group and last by J Group. Both groups noticed difference in package color.
Meaning Of "Organic"	<ul style="list-style-type: none"> • Ag folks: would turn down organic, it shows less stewardship for animals; less productive • Non-ag: associate with "healthy" or "clean"; they would be attracted to the organic label, cleaner choice of meat; agreed that at this point in life, price mattered 	<ul style="list-style-type: none"> • Expensive • "no antibiotics" • Production practices <ul style="list-style-type: none"> ○ Some believed RWA was a lie • Couldn't reach a conclusion because the group mainly thought organic 	J Group was split on organic meaning. Non-ag group associated organic with "clean" or "healthy." Ag group was less attracted to organic due to disagreement with production practices.

(table continues)

Question/Topic	J Group	P Group	Key Findings
	<p>more than buying organic</p> <ul style="list-style-type: none"> • GROUP RESPONSE: they agreed it was split. <ul style="list-style-type: none"> ○ Ag folks: Insufficient, less productive, more susceptible to disease ○ Non-ag: clean, healthy • Are there any requirements for organic label? <ul style="list-style-type: none"> ○ Organic vs. certified organic, there is a difference ○ Organic (~95% organic), certified organic (~100% organic ingredients) 	<p>was a marketing ploy</p>	<p>J Group believed there is a difference in the terms “organic” and “certified organic.” P Group could not establish a meaning because they could not get past the expense and belief that organic food is a marketing ploy.</p>
<p>Meaning of RWA</p>	<p><i>Did not address</i></p>	<ul style="list-style-type: none"> • Believed NO antibiotics used at all: 5/10 • Believed there were antibiotics used at some point in the bird’s life: 5/10 • Dependent on USDA definition of the term 	<p>Only addressed by P Group. Half of the group believed no antibiotics were ever given, and half of the group believed antibiotics could have been given at some point in the bird’s life.</p>
<p>Meaning Of Air-Chilled</p>	<p><i>Did not address</i></p>	<ul style="list-style-type: none"> • “fancy term” • Some thought it meant “never frozen” 	<p>Briefly addressed; group (table continues)</p>

Question/Topic	J Group	P Group	Key Findings
Level of Trust In Product	<ul style="list-style-type: none"> Group was split As a group, a 7.5/10 6 non-ag participants: 9/10 3 ag participants: 6/10 	<ul style="list-style-type: none"> Ambiguous term to consumers 6/10 Level of consensus – PRICE, claims – thought it was a marketing ploy Debated on what they trusted; thought the chicken quality was good, but didn't trust and/or buy into the label 	<p>agreed it was an ambiguous term and didn't know what it meant.</p> <p>P Group was able to come to a consensus based upon the price and the belief that organic food is a marketing ploy. Stated the chicken quality wouldn't affect their trust; they just didn't buy into the label.</p> <p>J Group was split and came to a very rough consensus; ag and non-ag groups came to very different levels of trust.</p>
		Color of The Package	<ul style="list-style-type: none"> Group agreed that the green color of the package (vs. the yellow of the other two) made a positive impact (ex: nature)

The Smart Chicken package contained an additional label on the back side of the package. J Group noticed the back-side label and requested (and was allowed) to view the back label. P Group did not notice the back-side label at all. This resulted in the J Group viewing the

organic package significantly longer than the other packages; however, P Group viewed this package for a significantly shorter time than both other packages.

The “organic” label was the first thing noticed overall by J Group, and the second thing noticed by P Group. The J Group agreed that their opinions of the meaning of organic were split between the people with and without agricultural backgrounds. Though they agreed that the price outweighed the desire to buy organic, the non-ag group associated organic with “clean” or “healthy.” The ag group was less attracted to organic due to disagreement with production practices. J Group expressed believing there is a difference in the terms “organic” and “certified organic” in terms of ingredients and requirements. P Group could not establish a meaning because they could not get past the expense and belief that organic food is a marketing ploy.

The P Group was the only group to address the phrase “raised without antibiotics.” Half of the group believed that antibiotics were never used at any point, and the other half of the group believed that there could have been antibiotics used at some point during the chicken’s life and noted that it could be dependent on whatever is the USDA’s definition of the claim.

J Group struggled far more to come up with a consensus for level of trust than P Group. P Group noted that the price was a large factor in their consensus and though they believed quality of the product itself was good, they did not trust the product because they did not buy into the label. P Group ranked their overall trust in the product as 6/10, and J Group ranked their trust as 7.5/10. When polled, J Group’s members with agricultural backgrounds ranked their trust in the product as 6/10; the non-ag group ranked their trust as 9/10.

Both groups noted the difference in the color of the package. The organic package had a green tray, whereas the other two packages had yellow trays. J Group favored the color,

associating it with words like “fresh” and “nature.” P Group disliked the color, and associated it with words such as “nasty,” “vegetables,” and “mold.”

A package of Tyson Foods brand chicken selected as a package containing a No Antibiotics Ever claim. The packaged contained many of the same claims from the first packages, as well as the No Antibiotics Ever claim, a No Added Hormones or Steroids Claim, and a All Natural Fresh claim (see Figure 3). Participants’ collective observations are displayed in Table 4.



Figure 3. No Antibiotics Ever (Tyson Foods).

Table 4

Participants’ Observations Related to the No Antibiotics Ever Package (Tyson Foods)

Question/Topic	J Group	P Group	Key Findings
Time To View Package	37:50-40:35, 2 min. 45 sec.	33:30-36:00, 2 min. 30 sec. <i>Asked to compare packages</i>	Both groups took moderate amount of time to view the packages
What Stands Out	<ul style="list-style-type: none"> • Tyson Foods • No antibiotics ever! <ul style="list-style-type: none"> ○ EVER was a significant word • No added hormones and steroids 	<ul style="list-style-type: none"> • All natural • Appearance of package, content quality • Tyson brand • No antibiotics ever 	<p>J Group noticed the Tyson Foods brand first; P Group noticed this third.</p> <p>P Group noticed the “all natural” claim first; J group did not notice this at all.</p>
Meaning of “Tyson Foods”	<ul style="list-style-type: none"> • Value of having a brand name, trustworthiness (not consensus) 	<ul style="list-style-type: none"> • Majority believed it meant quality food • Some noted it sometimes gets a negative “big ag” corporate name 	<p>P Group greatly favored Tyson Foods chicken, and the majority of the group believed it meant quality food because Tyson is a company who “does chicken.”</p> <p>J Group mostly expressed positive feelings toward the Tyson brand, and associated it with trustworthiness. Two outliers were staunchly against the Tyson brand.</p>
Meaning Of “All-Natural”	<i>Did not address</i>	<ul style="list-style-type: none"> • Considered it an equivalent claim to “no antibiotics ever” 	<p>“All-natural” was the first thing P Group noticed about the</p>

(table continues)

Question/Topic	J Group	P Group	Key Findings
		<ul style="list-style-type: none"> Believed this claim is a marketing ploy 	<p>package; they believed the claim is a marketing ploy with no real meaning behind it.</p>
Meaning Of “No Antibiotics Ever”	<ul style="list-style-type: none"> Around half of the group was unclear of meaning in the beginning Group took a literal interpretation of the phrase 	<ul style="list-style-type: none"> EVER is a strong word More believable than RWA Took a literal interpretation 	<p>Both groups believed in a literal interpretation of the phrase: no antibiotics were ever used in the life of the bird.</p>
Meaning of “No Added Hormones or Steroids”	<ul style="list-style-type: none"> Nothing extra added to improve bird’s growth 	<ul style="list-style-type: none"> 3 read the asterisk next to the claim regarding federal law Believed that it was a marketing ploy to make the average consumer think added hormones/steroids are the norm, and that product was “special” 	<p>Both groups believed it means no hormones or steroids were ever added to improve bird growth.</p> <p>3 members of P Group read the asterisk. Group stated that they believed the phrase was another marketing ploy.</p>
Production Practices	<ul style="list-style-type: none"> One concern over overfeeding 		
Level Of Trust In Product	<ul style="list-style-type: none"> 2 didn’t trust, and initially ranked 2/10 Without those 2, group ranked 8/10 Ag background: 8/10 	<ul style="list-style-type: none"> 10/10 No dissention; easy rank of 10 	<p>P Group easily came to a consensus of 10/10 with no dissention. J Group had two outliers, who ranked their trust as 2/10. The rest of the group and</p>

(table continues)

Question/Topic	J Group	P Group	Key Findings
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members with an ag background both ranked 8/10.

NOTE: Tyson Foods world headquarters is located in Springdale, AR – 7.8 miles from the location of the study.

J Group noticed the Tyson Foods label on the package first; P Group noticed this third. Both groups expressed strong feelings toward the brand. The majority of participants associated the Tyson Foods brand with trustworthiness, research, and being an authority in the poultry industry. This was not a consensus for either group, however; J Group had two outliers who were very strongly opposed to the Tyson brand. P Group noticed the all-natural claim first, but said they believed it was a marketing ploy with no real meaning behind it.

Both groups noticed the “no antibiotics ever claim” as standing out on the package. The consensus for both groups was that the phrase clearly means no antibiotics were ever given during the lifespan of the bird. P Group compared this to the “raised without antibiotics” claim on the Smart Chicken Package, stating that the verbiage is much more clear and believable.

While only J Group listed the “no added hormones or steroids” claim as something they noticed about the package, both groups addressed the claim, stating that they believed it means no hormones or steroids were ever added to improve bird growth. Three members of P Group read the asterisk, and the group stated that they believed the phrase was a marketing ploy to make consumers believe that hormones and steroids are the norm, and that the phrase about federal law was optional.

P Group was very trusting of this package, ranking it 10/10 with no dissent. Excluding the two outliers, J Group reached a consensus of 8/10. The outliers ranked their trust in this package as 2/10, explaining that their low scores were a result of distrust of the brand name.

CHAPTER V

CONCLUSIONS AND RECOMMENDATIONS

The overarching purpose of this study was to provide agricultural industry leaders with insight into consumers' perceptions, valuation, and trust of labeling claims that appear on poultry packages. The research is intended to benefit agricultural communicators, food scientists, and poultry scientists, as well as many other facets of the industry. This section presents the conclusions reached as a result of the findings as they relate to the specific research objectives, as well as recommendations for practice and future research.

RO1: Determine consumers' perceptions of the meanings of these claims

Strong language such as “no” and “ever” made claims more believable to consumers, especially those who are Perceivers. Consumers in P Group noticed “Raised Without Antibiotics” (RWA) on the Smart Chicken package and connected it as a part of the “organic” claim meaning. The group was evenly split concerning its beliefs about RWA's meaning. One half of the group believed that the RWA claim meant that the chicken was truly *never* given antibiotics at any point in its lifetime. The other half of the group believed that the phrase was ambiguous enough that the bird might have received antibiotics during some point in its life.

J Group did not address RWA. They did, however, notice the “No Antibiotics Ever” claim earlier than P Group. Initially, around half of the group was unclear about the meaning of the claim; then, one of the participants with an agricultural background explained her understanding of poultry antibiotic requirements. At that point, J Group came to the consensus that the phrase “No Antibiotics Ever” literally means that birds were never given antibiotics during their lifespans. P Group members, having discussed their perceptions of RWA's meaning, expressed a belief that the word “EVER” is a very strong term, and that the phrase “No

Antibiotics Ever” is a much more believable term than RWA. Members of P Group, like those of J Group, came to the consensus that they believed in a literal interpretation of the claim.

According to USDA (2016, p. 11), in order to use the RWA claim, producers cannot give poultry antibiotics in feed, water, or injections. This includes ionophores – drugs that increase cell membrane permeability – since FSIS categorizes them as antibiotics. The USDA identifies RWA and No Antibiotics Ever as synonymous claims. To use either claim, the following documentation is required:

1. A detailed written description explaining controls for ensuring that the animals are not given antibiotics from birth to harvest or the period of raising being referenced by the claim;
2. A signed and dated document describing how the animals are raised to support that the claims are not false or misleading;
3. A written description of the product tracing and segregation mechanism from time of slaughter or further processing through packaging and wholesale or retail distribution; and
4. A written description for the identification, control, and segregation of nonconforming animals/product (e.g., if beef raised without the use of antibiotics need to be treated with antibiotics due to illness) (USDA, 2016, p. 11).

Poultry antibiotics claims also require an official, signed company letter [on letterhead] outlining any and all use of antibiotics/vaccines in ovo or pre-hatch (for products bearing claims such as “No Antibiotics Administered in Last __ Days,” etc.), as well as verification that products bearing claims for RWA or No Antibiotics Ever were not derived in any way from eggs or poultry treated with antibiotics (USDA, 2016).

Personality differences did not appear to play a role in the consumers’ understanding of the “No Antibiotics Ever” labeling claim. However, the P group was actually more discerning when discussing the RWA claim and questioned its believability in relation to the NAE claim. In their efforts to “adapt to life and understand it rather than control it” (Gould, 1991, par. 8), the

P's questioned whether the RWA claim was strong enough to have the same meaning as the No Antibiotics Ever claim (Gould, 1991)

Consumers believed that the phrase “certified organic” bears different meaning – and requirements – than the word “organic” alone. While both groups were asked to address what they thought the meaning of “organic” meant, only J Group members formulated thoughts about the processes and requirements behind the labeling claim. P Group members frequently returned to the idea that products labeled as organic are purely labeled as such for marketing purposes.

Members of J Group agreed that there were varying levels of organic labeling with varying requirement for ingredients and processing. One J Group member who described her understanding of organic labeling was not perfectly accurate in describing the requirements (ex: used “certified organic” and “100% organic” interchangeably, described different levels and percentages of organic ingredients), but showed a high level of understanding of organic labeling. Other group members agreed with this member's assessment that there are different levels of organic labeling and requirements. This group's level of label understanding is consistent with Samant & Seo's (2016a) finding that a higher level of label understanding correlates with a longer fixation upon certain claims such as organic, as the organic package was viewed the longest by this group at 3 minutes and 20 seconds.

According to the USDA's Agricultural Marketing Service (AMS) (n.d.), in order for a product itself to be labeled as organic on the principal display panel (the part most likely to be viewed by consumers) or display the USDA Organic seal, the product must be USDA Certified Organic. This includes the phrases “organic” and “100% organic.” Products simply labeled as organic are required to contain all-organic *agricultural* products, and may contain up to 5% non-organic ingredients, excluding salt and water. Products labeled as 100% organic must contain *all*

organic ingredients, including processing agents. Products may also be labeled as “made with organic ingredients” with lesser requirements, and specific organic ingredients that a product contains may be labeled as well under certain [less strict] requirements.

Discerning [judging] consumers were more likely to notice these differences in specific claims within a certain claim type. Judges are known for being organized and having things well planned out. J Group was comfortable coming to terms with defining the organic labeling claim(s) using the information they had already acquired. As individuals who are orderly and express ideas that are well thought out, acknowledging the details in the claims’ wording supports literature describing how J’s and P’s think and interact with the world around them. Perceivers “tend to resist coming to a final decision that shuts the door on other options.” Many were unsure about what “organic” truly meant, therefore delaying a decision as long as possible, which is characteristic of Perceivers (Leigh & Miller, 2006, p. 2-3).

Consumers who trusted “organic” claims tended to react most positively to that claim than other claims on poultry packaging. J Group opinions were split—those with ag backgrounds saw the organic claim as connotating a lack of production efficiency resulting in a higher price, while those with non-ag backgrounds equated the term with the concepts of cleanliness and healthiness. P Group connected the organic claim with expense as well and viewed it as a marketing approach, while also recognizing that it referred to stricter production standards.

Out of the total nineteen focus group participants, the six non-ag participants from J Group were the only ones who ranked their trust in the organic product as 9/10. The remaining thirteen participants—the participants with agricultural backgrounds in the J group and all the P Group—ranked their trust in the product as 6/10. The three members from J Group identifying as

having an agricultural background had distrust in the claim as a result of disagreement with production practices. The ten members of P Group did not identify any type of meaning behind the organic claim and expressed a distrust in the product, primarily as a result of their opinions that the claims on the packaging were marketing ploys, supported by the fact that the price of the package was more expensive than the others.

This conclusion is consistent with Myers' (1962) description of judging or perceiving personality types, and how this affects an individual's interactions with his or her environment. P Group did not define any meaning behind the organic claim because perceiving personality types heavily value access to knowledge and keeping an open mind before making a decision. Likewise, J Group members made solid decisions during the focus group session based upon knowledge they already had concerning the labeling claims. Adhering to previously established judgements, according to Gould (1991), is a common characteristic of Judgers.

This conclusion also aligns, somewhat, with the findings from a study by Samant & Seo (2016b), which identified organic claims as the ones that consumers tend to react the most positively to. Among the six members who rated the Smart Chicken product with very high trustworthiness, much more strong feelings were expressed towards this claim than others observed during the study. These six participants stated that they would be more attracted to the organic product than a non-organic product, and associated the word "organic" with words such as "clean" and "healthy."

RO2: Determine factors that affect consumers' perceptions of the trustworthiness of packages containing certain claims.

Consumers who employed a judging approach to decision making tended to be more critical of the information and factors involved, whereas those who employed a perceiving

approach tended to be more trusting. Meyers (1962) described how J's and P's "shut off" decision-making processes characteristic of the opposite approach, and how that affects their decision making. The study supported this theory consistently throughout the duration each focus group.

During the Basic Introductory Questions (*Table 1*), participants were asked to rank their level of trust in the food industry. J Group initially ranked their trust in the industry as high and did not offer much explanation or reasoning for the answer the group decided on, even when pressed to provide more detail. P Group expressed a moderate level of trust in the food industry but agreed that they "didn't want to think about" whether they trusted their food, or how much.

Throughout viewing and discussing packages, participants in J Group expressed very strongly held opinions toward packages, and adamantly defended these opinions. Even those who expressed strong opinions that were opposite to one another stood by their decision through the end. Therefore, J Group had a much more difficult time reaching consensus than P Group; in fact, J Group was split on many occasions, whereas P Group always reached a consensus when asked to rank trust in a product or agree on a statement.

Samant & Seo (2016a) found that the more consumers understood a labeling claim, the more likely they were to trust a product displaying that claim. Findings regarding J's and P's understandings and decision-making styles exemplify the difference in the two personality dimensions and explain how this factor affects trust in a product. Judges feel more comfortable when decisions are made. Perceivers prefer to keep their minds open to new information that may be important to the decision making process. The most important part of J's and P's expressions of understanding and trust stems from the definition of the J and P dimension: an individual's preference for judging or perceiving is simply determined by whether they are more

extraverted (acting in the outside world) during judging or perceiving. On the inside, and individual's inner world, or how they act on the inside, may be more orderly or adaptable than they display in the outer world. Even if they are still weighing information on the inside, a Judger's expression will likely be decided and structured. Likewise, Perceivers may act more indecisive and adaptive in their interactions with others and their environment, but be more decisive internally (Martin, 1997).

Consumers made decisions based upon whether or not they “buy into” the label.

Members of P Group brought up the concept of “buy-in” during its discussion of the organic package. One participant stated, “My trust level is very low because I don't buy into the label,” although the group indicated that the chicken itself was “probably fine.” Many members of the P group expressed trusting the quality and safety of the chicken, but said they were unwilling to pay a higher price to purchase that chicken because they didn't trust and/or value the label. This is a strong statement reflecting a strongly held opinion among the P Group because, according to Leigh and Miller (2006), Perceivers are people who enjoy being flexible, adaptable, and spontaneous, who prefer to be open to new experiences and information, and who are most comfortable exploring options. Yet, this group was not interested in paying a higher price for a product bearing a label they did not trust.

Many factors contribute to consumer trust in meat labels. As previously mentioned, understanding of the labeling claims leads to greater trust in the product. A large portion of understanding comes from accessibility and usefulness of the information behind the claim. Consumers frequently misunderstand or misinterpret information, which commonly leads to perceptions of a product's quality, regardless of whether the claim addresses a quality assurance issue. A lack of accessibility to information regarding labeling claims impedes consumers'

abilities to make choices in conjunction with their preferences (Gellynck, Verbeke, & Vermeire, 2006).

NERIS Analytics Limited (2018) has developed a credible system to describe individuals’ trustworthiness toward other people using MBTI terminology. This was measured using test takers’ agreement or disagreement with the statement “You think most people are trustworthy,” in the personality assessment test.

Table 5

*Trust in Others by Personality Type**

Personality Type Name	Type Dimensions	E/I	S/N	F/T	J/P
Campaigners	ENFP	E	N	F	P
Consuls	ESFJ	E	S	F	J
Entertainers	ESFP	E	S	F	P
Protagonists	ENFJ	E	N	F	J
Adventurers	ISFP	I	S	F	P
Defenders	ISFJ	I	S	F	J
Mediators	INFP	I	N	F	P
Advocates	INFJ	I	N	F	J
Debaters	ENTP	E	N	T	P
Commanders	ENTJ	E	N	T	J
Executives	ESTJ	E	S	T	J
Entrepreneurs	ESTP	E	S	T	P
Virtuosos	ISTP	I	S	T	P
Logicians	INTP	I	N	T	P

(table continues)

Personality Type Name	Type Dimensions	E/I	S/N	F/T	J/P
Logisticians	ISTJ	I	S	T	J
Architects	INTJ	I	N	T	J

*Results are given in descending order, from finding others most trustworthy to least trustworthy.

According to these test results, there is no clear pattern concerning the J/P dimension and trustworthiness. The strongest correlation is drawn from the T/F dimension. Types who tend towards feeling tend to use emotions to govern their sense of trust and are more likely to believe in the goodness of human nature. Those who are Thinkers use logic to determine if there is a reason to trust another person (NERIS Analytics Limited, 2018). Though not consistent with the responses to this test question from 16 Personalities, this study found correlations between common decision-making traits of Judgers and Perceivers and the trust they have in food labels. Personality type can explain why consumers make decisions in the manner they do, and explains the process of consumer buy-in.

Consumers with a judging personality were more likely to notice and pay attention to process-related labeling claims than those with a preference for perceiving. In the cases of the two packages containing the labeling claims being researched, both groups listed the claims as something they noticed about the package after a few minutes of viewing. However, in both cases, J Group members noticed those claims earlier than P Group members.

Additionally, when observing the packages for the Smart Chicken brand, J Group noticed the package's back-side label and asked for permission to read it. When given time to read the package, P Group did not even notice the back-side label. Thus, where J Group took time to

discuss aspects of the package's back-side label (e.g.: the meaning of "air-chilled"), P Group did not have discussions related to any of these aspects.

This closely follows Roberts's (2013) description of personality types in light of how they may be relevant to product advertisement. The Judging/Perceiving and Sensing/Intuiting dimensions both correlate to a person's ability to notice detail. Those with SJ types are most likely to be critical of a given object of a situation, therefore often carefully scrutinizing down to the letter. Specific MBTI types known for paying close attention to detail include ESTJ, ISTJ, and INTJ. ENFPs are known for being prone to neglect details.

Judgers, typically more critical in their interactions with their environment, enjoy structure and are satisfied by making decisions, "settling" things, and creating order in their lives. These types like having life planned out and thinking sequentially. Perceivers often find an abundance of detail to be "boring," and enjoy the freedom that comes with spontaneity (Leigh and Miller, 2006). Those with judging personalities are more likely to notice labeling claims and details than those employing perceiving.

Recommendations for Practice and Research

The conclusions clearly provide information outlined in the research objectives. Based on the conclusions gathered, there are observations that poultry companies should take to create products that appeal to all types of consumers. Additionally, there are many ways that industry researchers could develop a greater understanding of personality types and dimensions and their relation to poultry purchasing decisions.

- Companies employing the RWA and the NAE claims should be aware that the claims, because of the connotations of the words, may have different meanings to certain

consumer segments. Even typically less discerning consumers (Perceivers) may interpret the RWA claim to mean something other than “no antibiotics ever.”

- Consumer segments with a stronger connection to agricultural production may actually be negatively influenced by “organic” claims because they may view it as a marketing ploy; therefore, companies using this claim may reconsider its use in certain markets.
- The correlation between personality type and trust is far greater in the Sensing/Intuiting and Thinking/Feeling dimensions than in the Judging/Perceiving dimension; therefore, consumer trust could be more effectively researched if these dimensions were studied.
- Though there is value in researching the perceptions of future consumer populations, current grocery shopper populations should be researched to evaluate relevant purchasing patterns. College students tend to be more cost-conscious; the participants in this study expressed that they would make different purchasing decisions given access to more funds.

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APPENDIX A
MODERATOR'S GUIDE

QUESTIONING ROUTE

Moderator reads:

Hello, thank you for agreeing to participate in this study. My name is Jeff Miller and I represent the University of Arkansas Agricultural Education, Communications, and Technology Department.

Assisting me is Sarah Townley, also from the U of A Agricultural Education, Communications, and Technology Department. The purpose of this meeting is to find out more about how labeling claims affect consumers' purchasing decisions when it comes to poultry products.

Today we will be looking at 3 packages of fresh chicken breasts and discussing certain aspects of the packages. You were chosen to participate because we feel that you meet the demographic we would like to observe. We feel that you will be the consumers who will be important for the agricultural industry to communicate this information to in the near future. Your views are important because they could be close to others your age.

Before we start our discussion, I would like to let you know that there are no right or wrong answers. Everyone is encouraged to share their point of view, even if it is different from others. Please make sure to voice your opinion, and only one person should speak at a time. We are audio recording the discussion and will be gathering group consensus opinions on a flipchart to allow us to later transcribe data that you are providing. Your names will not be associated with the opinions collected.

My role is only to moderate discussion and will not be participating in conversation, but please feel free to talk to one another. I'll be asking a number of questions and helping move the discussion between questions. It is important for us to hear everyone's opinion, so if a person is sharing a lot, I may ask you to let others speak. If you are not saying very

much, I may ask you for your opinion.

This session should last no more than an hour. If you must have your cell phone on, please leave to answer and return as soon as possible. We have placed name cards on the table to help us remember each other's names.

I will be reading from a script to ensure consistency among groups. Let's begin.

Introductory:

Let's start with introducing yourselves. What is your name? Where are you from? How old are you? What is your job? Do you have spouse/children? We'll just go around the table.

Moderator reads: Now, I have some questions for the group. Anyone can answer, and anyone can comment in any order.

Transition:

How familiar are you with the agricultural industry? Did you grow up around farming?

How much of a "label reader" do you consider yourself?

How well-informed do you consider yourself about food and agricultural issues?

How much do you trust the food industry to provide you with healthy, nutritious, safe food?

Moderator Reads:

We have selected 3 packages of fresh chicken that contain sustainability and process-related labeling claims. We will now give you each a chance to view the first package. Examine all parts of the package, including labeling claims, health and nutrition information, and visuals. You have 3 minutes.

Key: **CONTROL PACKAGE** – *Harp's Meat Counter Package*

What part of the packaging stands out to you?

What does the phrase (consumer responses) mean to you?

Do you think there are any requirements in order to label a package with this phrase? What do you think they are?

What would you rank your level of trust in this product? Work together to rank this on a scale of 1 to 10.

1	2	3	4	5
Not at all trustworthy	Not very trustworthy	Neutral	Somewhat trustworthy	Very trustworthy

We will now give you each a chance to view the second package. You have 3 minutes.

Key: ORGANIC PACKAGE – Smart Chicken

What part of the packaging stands out to you?

What does the phrase (consumer responses) mean to you?

Do you think there are any requirements in order to label a package with this phrase? What do you think they are?

What does the phrase “certified organic” mean to you?

Do you think there are any requirements in order to label a package with this phrase? What do you think they are?

What would you rank your level of trust in this product? Work together to rank this on a scale of 1 to 10.

1	2	3	4	5
Not at all trustworthy	Not very trustworthy	Neutral	Somewhat trustworthy	Very trustworthy

We will now give you each a chance to view the third package. You have 3 minutes.

Key: *HORMONE/STEROID PACKAGE* – Tyson Foods

What part of the packaging stands out to you?

What does the phrase (consumer responses) mean to you?

Do you think there are any requirements in order to label a package with this phrase? What do you think they are?

What does the phrase “no added hormones or steroids” mean to you?

Do you think there are any requirements in order to label a package with this phrase? What do you think they are?

What would you rank your level of trust in this product? Work together to rank this on a scale of 1 to 10.

1	2	3	4	5
Not at all trustworthy	Not very trustworthy	Neutral	Somewhat trustworthy	Very trustworthy

Moderator reads:

As I explained at the beginning of the discussion, the purpose of this meeting was to discuss how consumers perceive and understand poultry labeling claims, and how that affects trustworthiness. Your comments and opinions are assisting us in a research project that aims to aid the agricultural industry in communicating important information to consumers who are unfamiliar with the topics. Your examinations of these packages of fresh chicken have helped us

understand how consumers feel about labeling claims, and ways that it affects trust in a product. We will now look at the conclusions we gathered in notes from group consensus.

(Show notes)

Concluding:

Is there anything you feel that we have missed or any other comments you would like to add?

Moderator reads:

Thank you for taking time out of your day to assist us with this project. Your participation has been helpful. As you leave, you will receive your incentive for participation. Thank you, once again.

APPENDIX B
INFORMED CONSENT FORM

Consumer Perceptions of Labeling Claims on Poultry Products
Consent to Participate in a Research Study

Principal Researcher: Sarah Townley

Faculty Advisor: Jefferson Miller

INVITATION TO PARTICIPATE

You are invited to participate in a research study about poultry labeling claims. You are being asked to participate in this study because you are within the target demographic for this research.

WHAT YOU SHOULD KNOW ABOUT THE RESEARCH STUDY

Who is the Principal Researcher?

Sarah Townley
sctownle@uark.edu

Who is the Faculty Advisor?

Jefferson Miller
jdmiller@uark.edu

What is the purpose of this research study?

The purpose of this study is to evaluate consumers perceptions, understanding, feelings, and trust of poultry products based upon certain labeling claims.

Who will participate in this study?

Approximately 24 young to middle-aged adults who are grocery shoppers in their household; many participants will have children under the age of 18

What am I being asked to do?

Your participation will require the following:

- Attend one of two focus group research sessions.
- Handle [unopened] packages of fresh, raw chicken breasts.
- Participate in discussions with other participants regarding the labels on the chicken breast packages.

What are the possible risks or discomforts?

Participants will be asked to handle packages of fresh chicken breast. Participants will *not* be asked to handle the raw breasts themselves, *only* the packages. However, hand sanitizer will be readily available for participant use during the study.

What are the possible benefits of this study?

Participants can request information regarding results of the study, providing participants with more understanding of labeling claims on poultry products. This results in the ability to make more informed purchasing decisions. Additionally, participant feedback regarding perceptions of labeling claims and product trustworthiness allows the food industry to ensure products that consumers trust and value.

How long will the study last?

The study will be conducted through two focus group sessions; each participant will only be required to choose one focus group session. Each session will last approximately one hour.

Will I receive compensation for my time and inconvenience if I choose to participate in this study?

You will receive a meal from Subway at the focus group session, as well as a \$25 gift card.

Will I have to pay for anything?

No, there will be no cost associated with your participation.

What are the options if I do not want to be in the study?

If you do not want to be in this study, you may refuse to participate. Also, you may refuse to participate at any time during the study.

How will my confidentiality be protected?

All information will be kept confidential to the extent allowed by applicable State and Federal law.

Data will be taken and reported anonymously.

Will I know the results of the study?

At the conclusion of the study you will have the right to request feedback about the results. You may contact the faculty advisor, Jefferson Miller at jdmiller@uark.edu or Principal Researcher, Sarah Townley at sctownle@uark.edu. You will receive a copy of this form for your files.

What do I do if I have questions about the research study?

You have the right to contact the Principal Researcher or Faculty Advisor as listed below for any concerns that you may have.

Sarah Townley
sctownle@uark.edu

Jefferson Miller
jdmiller@uark.edu

You may also contact the University of Arkansas Research Compliance office listed below if you have questions about your rights as a participant, or to discuss any concerns about, or problems with the research.

Ro Windwalker, CIP
Institutional Review Board Coordinator
Research Compliance
University of Arkansas
109 MLKG Building
Fayetteville, AR 72701-1201
479-575-2208
irb@uark.edu

I have read the above statement and have been able to ask questions and express concerns, which have been satisfactorily responded to by the investigator. I understand the purpose of the study as well as the potential benefits and risks that are involved. I understand that participation is voluntary. I understand that significant new findings developed during this research will be shared with the participant. I understand that no rights have been waived by signing the consent form. I have been given a copy of the consent form.

APPENDIX C

IRB APPROVAL LETTER



To: Sarah C. Townley
From: Douglas James Adams, Chair
IRB Committee
Date: 10/10/2018
Action: **Exemption Granted**
Action Date: 10/10/2018
Protocol #: 1809142768
Study Title: Consumer perceptions of labeling claims on poultry products

The above-referenced protocol has been determined to be exempt.

If you wish to make any modifications in the approved protocol that may affect the level of risk to your participants, you must seek approval prior to implementing those changes. All modifications must provide sufficient detail to assess the impact of the change.

If you have any questions or need any assistance from the IRB, please contact the IRB Coordinator at 109 MLKG Building, 5-2208, or irb@uark.edu.

cc: Jefferson Davis Miller, Investigator