Key Takeaways

Rethink Priorities conducted a survey to see how live shackle slaughter resonates with consumers to engender support for reforming this practice. We also tested whether controlled atmosphere systems are a popular alternative.

We found that clear majorities of Americans (including among those who eat chicken) agree that live-shackle slaughter is inhumane and would switch brands to avoid live-shackle slaughter or pay more for meat produced using controlled atmosphere systems instead.

- 66% of Americans agree that live-shackle slaughter is inhumane
- 68% of Americans would change the brand of meat they buy to one that does not use live-shackle slaughter
- 58% of Americans would sign a petition to ban live-shackle slaughter
- 71% of Americans prefer controlled atmosphere systems over live-shackle slaughter
- 81% of Americans would buy meat produced using controlled atmosphere systems
- 63% of Americans would pay more for meat produced using controlled atmosphere systems rather than live-shackle slaughter
Live-shackle Slaughter vs. CAS Survey

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Last updated: 24 September 2020
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Study Methodology

On August 28th 2020, Rethink Priorities conducted an online web-based survey on SurveyMonkey of 2,000 adult Americans recruited via the Prolific platform. Rethink Priorities ran the survey to present respondents with information about live-shackle slaughter and then asked questions to gauge attitudes. Enough information was presented to respondents so that they could form an opinion. Information was presented neutrally, using wording from a range of academic and industry sources, so as to not bias the respondent to respond in a particularly favorable way.

Within the survey, half of participants were also asked about controlled atmosphere systems. This was to see whether consumers support this as a viable alternative. However, half of the participants were not asked about controlled atmosphere systems so as to be able to get opinions about live-shackle slaughter in isolation without invoking consideration of an alternative. Participants were also asked a series of demographic questions, including their food consumption. The sample was weighted to be representative of Americans by age, gender, education, race, political ideology, income, and urban/rural residence. The survey was conducted in English. The margin of error for the weighted sample statistics ranges from ±4 to ±8 percentage points depending on if the text described live-shackle slaughter only or both live-shackle slaughter and controlled atmosphere systems.

Participants were presented with a description of live-shackle slaughter alone or alongside a description of controlled atmosphere systems and the pros and cons of each system:

*Live-shackle slaughter* involves unloading conscious chickens from their crates, hanging them upside down from shackles and passing them through an electrified waterbath to stun them before their throats are cut and they are immersed in boiling water for feather removal and finally they are processed into various meat products.

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1 An additional test survey was run with 50 participants to identify any comprehension problems beforehand. No such problems arose.
**Controlled atmosphere systems** involve using nonpoisonous gases that slowly render the chickens unconscious and/or cause death while still in their crates, unloading the dead or unconscious birds, hanging them upside down from shackles before their throats are cut and they are immersed in boiling water for feather removal and finally they are processed into various meat products.

Supporters of live-shackle slaughter argue the practice is humane and produces quality meat for consumers at an affordable price. Controlled atmosphere systems require expensive machinery that will increase meat prices for consumers.

Opponents of live-shackle slaughter argue that electric waterbath stunning is ineffective meaning many chickens are boiled alive and have their throats cut open while conscious. Shackling live chickens causes them to struggle violently which reduces the quality of the meat and creates dangers for workers who often end up covered in scratches, feces, blood, and pathogens. Controlled atmosphere systems reliably stun chickens thus offering quality meat and safe conditions for workers because the chickens do not struggle violently while being shackled.

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**Study Results**

We find that there is a majority agreement that live-shackled slaughter is inhumane and that Americans would be willing to change brands to avoid live-shackle slaughter and pay more for meat produced using an alternative method.
Our survey also asked respondents about the food they had eaten in the last month. 93% of the weighted sample reported having eaten chicken in the past month. Of these, we also found majorities agreeing that live-shackle slaughter is inhumane and willing to sign petitions, change brands, or pay more to avoid this practice (see cross tabs here). We should note that we were not able to adjust the sample to account for any under or oversampling of chicken consumers specifically, although this is likely to cover the vast majority of Americans.

For respondents who received information about both controlled atmosphere systems and live-shackle slaughter, we found that a majority preferred controlled atmosphere systems as a method of production, including among those who ate chicken recently and rural Americans.

A majority of Americans would prefer their chicken meat to be produced using controlled atmosphere systems

Replies to the question Which method of meat production do you prefer?, from a Rethink Priorities survey asked of 986 adults in the United States recruited through the Prolific platform.
Predictors of attitudes

We conducted a series of regressions to assess what characteristics are associated with higher or lower agreement with each of the above statements.

Women appear more likely than men to agree that live-shackle slaughter is inhumane and be willing to take actions to avoid it (switching brands, signing petitions, or paying more for CAS). This is somewhat unsurprising since women are also more likely than men to agree that animal welfare is more important than the taste or healthiness of the meat.

Respondents who identified as Black or African American appear somewhat less likely than White respondents to view live-shackle slaughter as inhumane and less likely to switch brands to avoid it or pay more for meat produced using controlled atmosphere systems. This may be related to this demographics’ preference for taste over animal welfare, but this is only speculative.

Notably, there was no significant effect of providing the pro/con information about controlled atmosphere systems versus live-shackle slaughter on most attitudinal questions, except for willingness to buy meat produced using live-shackle slaughter. Descriptive statistics suggest the additional information shifted people from disagreement to agreement i.e. the information actually made them more likely to be willing to buy meat produced using live-shackle slaughter, or to neither disagree nor agree with the statement. The models only explain 3%-7% of the variance and so there are clearly a lot of other factors missing that could help explain attitudinal responses.

Live-shackle slaughter is inhumane

- Women are ~3 times more likely to be in a higher agreement category that live-shackle slaughter is inhumane than men are
- Black Americans are ~2 times less likely to be in a higher agreement category that live-shackle slaughter is inhumane than White Americans are
- Those restricting their meat consumption (pescatarians, vegetarians, vegans) are 4 to 12 times more likely to be in a higher agreement category that live-shackle slaughter is inhumane than unrestricted meat eaters.
- Conservatives are ~2 times less likely to be in a higher agreement category that live-shackle slaughter is inhumane than Moderates are.

Willing to buy meat produced using live-shackle slaughter

- Those who received information about controlled atmosphere systems are ~1.7 times more likely to be in a higher agreement category of willing to buy meat produced using live-shackle slaughter than those who did not receive this information.
Women are ~3.4 times less likely to be in a higher agreement category of willing to buy meat produced using live-shackle slaughter than men.

Asian Americans are ~1.7 times less likely to be in a higher agreement category of willing to buy meat produced using live-shackle slaughter than White Americans.

Those restricting their meat consumption (pescatarians, vegetarians, vegans) are overwhelmingly less likely to be in a higher agreement category of willing to buy meat produced using live-shackle slaughter than unrestricted meat eaters.

**Change brands to avoid meat produced using live-shackle slaughter**
- Women are ~2.5 times more likely to be in a higher agreement category with changing brands than men.
- Black Americans are ~1.8 times less likely to be in a higher agreement category with changing brands than White Americans.

**Sign a petition to ban live-shackle slaughter**
- Women are ~3.4 times more likely to be in a higher agreement category with signing a petition than men.
- Those restricting their meat consumption (pescatarians, vegetarians, vegans) are 4 to 10 times more likely to be in a higher agreement category with signing a petition than unrestricted meat eaters.

**CAS is inhumane**
- Vegans and vegetarians overwhelmingly more likely to be in a higher agreement category that CAS is inhumane than unrestricted meat eaters.

**Willing to buy meat produced using controlled atmosphere systems**
- Vegans and vegetarians are less likely (~9x or more) to be in a higher agreement category of willingness to buy CAS than unrestricted meat eaters.

**Pay more for meat produced using controlled atmosphere systems than live-shackle slaughter**
- Women are ~1.8 times more likely to be in a higher agreement category than men.
- Black Americans are ~2.4 times less likely to be in a higher agreement category than White Americans.
- Vegans are much less likely (~18x) to be in a higher agreement category than unrestricted meat eaters.

**Method of production**
- Rural Americans are more likely to be unsure than chose live-shackle slaughter compared to suburban and urban Americans.
- Those restricting their meat consumption (pescatarians, vegetarians, vegans) are more likely to be unsure or to prefer controlled atmosphere systems than to prefer live-shackle slaughter compared to unrestricted meat eaters.
Black Americans are less likely to prefer controlled atmosphere systems than live-shackle slaughter than White Americans.

**Endnotes on Methodology**

Surveys only capture a sample of the population, so we know that the result probably won’t exactly match the “true” result that we would get if we surveyed everyone in the population. The margin of sampling error describes how close we can reasonably expect a survey result to fall relative to the true population value. A margin of error of plus or minus 3 percentage points at the 95% confidence level means that if we fielded the same survey 100 times, we would expect the result to be within 3 percentage points of the true population value 95 of those times. The margin of error for drawing an inference from a sample of 2,000 to the US adult population is around ±2.1%. For example, when we estimate that 66% agree live-shackle slaughter is inhumane, the true population estimate could be 60%-72% because the margin of error for this weight sample statistic is ±6%. Tables of the margins of error are in the cross tabs here.

Without adjustment, surveys tend to overrepresent people who are easier to reach and underrepresent those types of people who are harder to reach. In order to make the results more representative we weight the data so that it matches the population – based on a number of demographic measures. Weighting is a crucial step for avoiding biased results, but it also has the effect of making the margin of error larger. Using US Census data; Population by Sex, Race, and Ethnicity for the United States and Regions: 2010 and Annual Estimates of the Resident Population for Selected Age Groups by Sex: April 1, 2010 to July 1, 2019, we can get a rough sense of the proportions of gender, race, and age we would expect to see in a sample of 2,000. Our raw survey data heavily undersampled (>15% off) those aged 45 years and older, and those who ended their education after high school and slightly undersampled (5-14%) those who identified as Black or Hispanic, those with less than high school education, and those earning over $100K. Our raw survey data heavily oversampled 18-44 year olds and college graduates, and slightly oversampled those who identified as White and those earning under $15K. There was only 1 respondent who identified as Native Hawaiian or Other Pacific Islander so inference about this subgroup should not be drawn. We slightly oversampled men. We created weights to adjust for race, gender, age group, education, income, rural/urban/suburban, and liberal/conservative/moderate ideology.