Animal Welfare - Broiler Chickens

Key Performance Indicators

Version 01.02





About the Animal Welfare - Broiler Chickens Key Performance Indicators

This THESIS Performance Assessment provides in-depth key performance indicators for animal welfare issues for broiler chickens raised for consumption.

The information you collect for these KPIs should cover all production you source from the U.S. and should not be specific to any buyer (e.g., retailer).

Remember to download the assessment documents to help you in completing the KPIs. Make sure to review the detailed guidance and resources for each KPI. Your work is saved automatically but not shared until you are ready.

Introduction

The Sustainability Insight System, THESIS, from The Sustainability Consortium (TSC) is a comprehensive and holistic solution for understanding environmental and social performance in consumer goods supply chains. These key performance indicators (KPIs) can be used to assess action, transparency, and continuous improvement on the material sustainability issues for brands, manufacturers, and producers.

TSC created this KPI set using its science-based, multi-stakeholder, and full life-cycle development process. TSC members and partners, including manufacturers, retailers, suppliers, service providers, NGOs, civil society organizations, governmental agencies, and academics, contributed valuable perspectives and expertise.

TSC is a global organization dedicated to improving the sustainability of consumer products that also offers a portfolio of services to help drive effective implementation. For more information please visit www.sustainabilityconsortium.org

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Key Performance Indicators

QUESTION	RESPONSE OPTION
1. Animal Welfare Policy Does your organization publish a farm animal welfare policy?	 A. We do not publish a formal policy statement on farm animal welfare. B. We publicly disclose a policy statement that contains a broad commitment to farm animal welfare. C. In addition to B, we publicly disclose how our commitment to farm animal welfare is implemented.
2. Animal Welfare Certifications and Audits - Broiler Breeder and Broiler Chicken Farms What percentages of your chicken meat supply came from farms that were covered by a current comprehensive animal welfare certification or by verifiable and regularly conducted second- or third-party animal welfare audits at the broiler breeder and broiler chicken farm stages?	 A. We are unable to determine at this time. B. We are able to report the following for our chicken meat supply: B1% of our chicken meat supply was covered by a current comprehensive animal welfare certification OR had regular and verifiable second- or third-party audits at the hatchery stage. B2% of our chicken meat supply had regular and verifiable third-party audits at the hatchery stage. B3% of our chicken meat supply was covered by a current comprehensive animal welfare certification OR had regular and verifiable second- or third-party audits at the broiler farm stage. B4% of our chicken meat supply had regular and verifiable third-party audits at the broiler farm stage.
3. Animal Welfare Certifications and Audits - Broiler Transport and Slaughter What percentages of your chicken meat supply were covered by a current comprehensive animal welfare certification or by verifiable and regularly conducted second- or third-party animal welfare audits at the transportation and slaughter stages?	 A. We are unable to determine at this time. B. We are able to report the following for our chicken meat supply: B1% of our chicken meat supply was covered by a current comprehensive animal welfare certification OR had regular and verifiable second- or third-party audits at the transportation stage. B2% of our chicken meat supply had regular and verifiable third-party audits at the transportation stage. B3% of our chicken meat supply was covered by a current comprehensive animal welfare certification OR had regular and verifiable second- or third-party audits at the transportation stage. B3% of our chicken meat supply was covered by a current comprehensive animal welfare certification OR had regular and verifiable second- or third-party audits at the slaughter stage. B4% of our chicken meat supply had regular and verifiable third-party audits at the slaughter stage.
4. Stockperson Training - Broiler Chickens What percentages of your chicken meat supply came from broiler farms, transporters, and slaughter facilities that have documentation that those who are in contact with animals are competent and trained in proper handling procedures?	 A. We are unable to determine at this time. B. We are able to report the following for our chicken meat supply: B1% of our chicken meat supply came from broiler farms that have documentation that those who are in contact with broilers are competent and trained in proper handling procedures. B2% of our chicken meat supply came from transporters that have documentation that those who are in contact with broilers are competent and trained in proper handling procedures. B2% of our chicken meat supply came from transporters that have documentation that those who are in contact with broilers are competent and trained in proper handling procedures. B3% of our chicken meat supply came from slaughter facilities that have documentation that those who are in contact with broilers are competent and trained in proper handling procedures.





5. Hatching Management - Broiler Chickens What percentages of your chicken meat supply came from broiler farms that use hatcheries with standard operating procedures for culling chicks and spraying of newly-hatched chicks, assess the broilers physical condition and have housing prepared at the time of delivery and placement, maintain an adequate temperature during unloading, and handle broiler chickens carefully to minimize injuries and stress during unloading?	 A. We are unable to determine at this time B. We are able to report the following for our chicken meat supply: B1% of our chicken meat supply came from broiler farms that use hatcheries with standard operating procedures for culling chicks. B2% of our chicken meat supply came from broiler farms that use hatcheries with standard operating procedures for spraying of newly-hatched chicks. B3% of our chicken meat supply came from broiler farms that assess the broilers' physical condition and have housing prepared at the time of delivery and placement. B4% of our chicken meat supply came from broiler farms that maintain an adequate temperature during unloading. B5% of our chicken meat supply came from broiler farms that handle broiler chickens carefully to minimize injuries and stress during unloading.
6. Animal Health Management – Broiler Farms What percentages of your chicken meat supply came from broiler farms that have a verified veterinary-client-patient relationship, designated individual(s) in place to evaluate animal health and welfare, and an animal health performance monitoring system in place?	 A. We are unable to determine at this time. B. We are able to report the following for our chicken meat supply: B1% of our chicken meat supply came from broiler farms with a verified veterinary-client-patient relationship. B2% of our chicken meat supply came from broiler farms with designated individual(s) in place to evaluate animal health and welfare. B3% of our chicken meat supply came from broiler farms that have an animal health performance monitoring system in place.
7. Daily Weight Gain Potential Transparency - Broiler Chickens What percentages of broiler chickens in your supply chain had a daily weight gain potential that was lower than 45 grams, between 45 and 50 grams, 50 and 55 grams, or 55 and 60 grams, or higher than 60 grams?	 A. We are unable to determine at this time. B. We are able to report the following for our supply: B1% of broiler chickens in our supply chain had a daily weight gain potential that was lower than 45 grams. B2% of broiler chickens in our supply chain had a daily weight gain potential that was equal to or between 45 and 49 grams. B3% of broiler chickens in our supply chain had a daily weight gain potential that was equal to or between 50 and 54 grams. B4% of broiler chickens in our supply chain had a daily weight gain potential that was equal to or between 55 and 59 grams. B5% of broiler chickens in our supply chain had a daily weight gain potential that was equal to or between 55 and 59 grams. B5% of broiler chickens in our supply chain had a daily weight gain potential that was equal to or higher than 60 grams.
8. Housing System Specifications - Broiler Chickens What percentages of the broiler chickens in your supply chain were provided access to clean and friable litter, adequate light levels, outdoor access, roughage, scattering grains or pecking blocks, and elevated platforms?	 A. We are unable to determine at this time. B. We are able to report the following for our broiler chicken supply: B1% of broiler chickens in our supply chain were provided access to clean and friable litter. B2% of broiler chickens in our supply chain were provided adequate light levels. B3% of broiler chickens in our supply chain were provided outdoor access. B4% of broiler chickens in our supply chain were provided daily access to roughage, scattered grains, or pecking blocks. B5% of broiler chickens in our supply chain were provided access to elevated platforms.
9. Lameness - Broiler Chickens What percentage of broiler chickens in your supply chain showed an adequate gait score?	 A. We are unable to determine at this time. B. We are able to report the following for our supply: B1% of broiler chickens showed an adequate gait score. B2% of our chicken meat supply is represented by the number reported in B1
 Stocking Density Transparency - Broiler Chickens What was the average stocking density for broilers at broiler farms in your supply chain? 	 A. We are unable to determine at this time. B. We are able to report the following for our supply: B1kg/m2. B2% of our chicken meat supply is represented by the number reported in B1.





11. Culling Management - Broiler Chickens What percentages of your chicken meat supply came from broiler farms that have a standard operating procedure for culling, and that track reasons for culling?	 A. We are unable to determine at this time. B. We are able to report the following for our chicken meat supply: B1% of our chicken meat supply came from broiler farms that have a standard operating procedure for culling. B2% of our chicken meat supply came from broiler farms that track reasons for culling.
12. Mortality Rate - Broiler Chickens What was the average mortality rate at the broiler farms in your supply chain?	 A. We are unable to determine at this time. B. We are able to report the following for our supply: B1 mortality rate in the most recently completed flock cycle. B2% of our chicken meat supply is represented by the number reported in B1.
13. Transportation to Slaughter – Broiler Chickens What percentage of your chicken meat suppliers publicly disclose a transportation plan that covers animal welfare and what was the average dead-on-arrival rate for broiler chickens at slaughter facilities in your supply chain?	 A. We are unable to determine at this time, or our supply is not covered by a transportation plan that covers animal welfare. B. We are able to report the following for our supply: B1% of our chicken meat suppliers publicly disclose a transportation plan that specifies how animal welfare is covered during transportation to slaughter. B2% of our chicken meat supply is represented by the number reported in B1. B3 dead-on-arrival rate. B4% of our chicken meat supply is represented by the number reported in B3
14. Pre-Slaughter Stunning Transparency – Broiler Chickens What percentages of your chicken meat supply came from broilers that were effectively stunned before slaughter using low atmospheric pressure system stunning, electric water bath stunning, controlled atmosphere stunning, or other methods of stunning?	 A. Not applicable. The broilers in this supply chain are ritually slaughtered. B. We are unable to determine at this time. C. We are able to report the following for our chicken meat supply: C1% of our chicken meat supply came from broilers that were effectively stunned with a low atmospheric pressure system. C2% of our chicken meat supply came from broilers that were effectively stunned with an electric water bath. C3% of our chicken meat supply came from broilers that were effectively stunned in a controlled atmosphere using carbon dioxide. C4% of our chicken meat supply came from broilers that were effectively stunned in a controlled atmosphere using a mixture of inert gases and carbon dioxide, or inert gases only. C5% of our chicken meat supply came from broilers that were effectively stunned prior to slaughter using other methods.
15. Assessment at Slaughter - Broiler Chickens What was the average percentage of broiler chickens that had no or mild foot pad dermatitis and no or mild hock lesions at slaughter?	 A. We are unable to determine at this time. B. We are able to report the following for our chicken meat supply: B1% of broiler chickens with no or mild foot pad dermatitis at slaughter. B2% of our chicken meat supply is represented by the number reported in B1. B3% of broiler chickens with no or mild hock lesions at slaughter. B4% of our chicken meat supply is represented by the number reported in B3.





Key Performance Indicators with Guidance

1. ANIMAL WELFARE POLICY

Question

Does your organization publish a farm animal welfare policy?

Response Options

A. We do not publish a formal policy statement on farm animal welfare.

- **B.** We publicly disclose a policy statement that contains a broad commitment to farm animal welfare.
- **C.** In addition to B, we publicly disclose how our commitment to farm animal welfare is implemented.

Calculation & Scope	Respond with the option that most closely reflects your company's animal welfare policy.
	For B, your company must publicly disclose a policy statement that contains a broad commitment to farm animal welfare. The policy must include no tolerance for abuse and a commitment to internationally recognized farm animal welfare principles, for example the OIE principles.
	For C, in addition to B, your company must publicly disclose how your commitment to farm animal welfare is implemented and the policy must include the following: A clear statement on why animal welfare is important for your company, a commitment to comply with relevant legislation, a statement on expected farm animal welfare standards, a commitment to continuous improvement and public disclosure of animal welfare performance, and a description of the processes to ensure the effective implementation of your policy, for example senior management oversight, performance monitoring, or corrective actions.
	This question aligns with the Business Benchmark on Farm Animal Welfare, listed in the Certifications, Standards & Tools. Other standards or tools may also be applicable.
Certifications, Standards & Tools	BBFAW Methodology Report 2015: The Business Benchmark on Farm Animal Welfare (BBFAW) Methodology Report 2015 provides an independent assessment of how 90 of the world's largest food companies are managing and reporting on farm animal welfare and assesses the progress that has been made for the period 2015 - 2016. BBFAW is designed to improve corporate reporting on farm animal welfare and drive tangible improvements in the farm animal welfare practices and performance. http://www.bbfaw.com/media/1318/bbfaw-methodology-report-2015.pdf
Background Information	World Organisation for Animal Health (OIE) Terrestrial Animal Health Code: Chapter 7 of the OIE Terrestrial Health Code outlines the internationally recognized principles of animal welfare, commonly known as "The Five Freedoms". http://www.oie.int/en/standard-setting/terrestrial-code/access-online/
Definitions	Animal welfare: Animal welfare refers to the well-being of an animal and how an animal is coping with the conditions in which it lives. A good state of welfare varies substantially between different contexts, but in general an animal is in a good state of welfare if it is healthy, comfortable, well-nourished, safe, able to express innate behavior, and not suffering from pain, fear, and distress. Ensuring animal welfare is a human responsibility that requires treatments such as good housing, good care, good feed, humane handling and humane slaughter/killing. The treatments that an animal receives is covered by other terms such as animal care, animal husbandry, and humane management (adapted from The World Organisation for Animal Health (OIE)).
Hotspots Addressed	1. Supply Chain Transparency





2. ANIMAL WELFARE CERTIFICATIONS AND AUDITS - BROILER BREEDER AND BROILER CHICKEN FARMS

Question

What percentages of your chicken meat supply came from farms that were covered by a current comprehensive animal welfare certification or by verifiable and regularly conducted second- or third-party animal welfare audits at the broiler breeder and broiler chicken farm stages?

Response Options

- A. We are unable to determine at this time.
- **B.** We are able to report the following for our chicken meat supply:

B1.____% of our chicken meat supply was covered by a current comprehensive animal welfare certification OR had regular and verifiable second- or third-party audits at the hatchery stage.

B2.____% of our chicken meat supply had regular and verifiable thirdparty audits at the hatchery stage.

B3.____% of our chicken meat supply was covered by a current comprehensive animal welfare certification OR had regular and verifiable second- or third-party audits at the broiler farm stage.

B4.____% of our chicken meat supply had regular and verifiable thirdparty audits at the broiler farm stage.

Calculation & Scope	Calculate B1 as the mass of your chicken meat supply that was covered by a current comprehensive animal welfare certification OR had regular and verifiable second- or third-party audits at the hatchery stage, divided by the total mass of your chicken meat supply, then multiply by 100.
	Calculate B2 as the mass of your chicken meat supply that had regular and verifiable third-party audits at the hatchery stage, divided by the total mass of your chicken meat supply, then multiply by 100.
	Calculate B3 as the mass of your chicken meat supply that was covered by a current comprehensive animal welfare certification OR had regular and verifiable second- or third-party audits at the broiler farm stage, divided by the total mass of your chicken meat supply, then multiply by 100.
	Calculate B4 as the mass of your chicken meat supply that had regular and verifiable third-party audits at the broiler farm stage, divided by the total mass of your chicken meat supply, then multiply by 100.
	Perform these calculations using data from a 12-month period that ended within 12 months of the date you respond to this question.
	Government regulations or parties in the supply chain can initiate these audits. Regulations, audits, and certifications that align with the animal welfare standards as described in Section 7 of the World Organisation for Animal Health (OIE) Terrestrial Animal Health Code and are well-enforced by the implementation of auditing systems can be included in your calculations. See the Certifications, Standards & Tools for more information.
	To be included in B1 through B4, as described by OIE, efforts should be taken to achieve minimization of pain, risk of injury, and transmission of diseases or parasites to broiler chickens; a physical environment in which the air quality, temperature, and humidity supports good broiler chicken health; a structural and social environment that allows broiler chicken to rest comfortably, provides opportunities for physical and cognitive activity, and allows for the opportunity to perform beneficial innate and positive behaviors. Broiler chickens should have access to sufficient water and appropriate feed and be free from hunger and thirst. The handling of broilers should foster a positive relationship between humans and broiler chickens and should not cause injury, panic, lasting fear, or avoidable stress.
	Genetic selection should take into account the health and welfare of broiler chickens.





Certifications, Standards & Tools	American Humane Certified Animal Welfare: American Humane Certified Animal Welfare is a third-party certification program for animal welfare in the United States. American Humane Certified Animal Welfare Standards are available for broilers, laying hens, turkeys, dairy cattle, beef cattle, and swine. http://www.humaneheartland.org/index.php?option=com_content&view=article&id=3&Itemid=106&jsmallfib=1&dir=JSROOT/Animal+Welfare+Full+Standards+%2B+Supplements
	Animal Welfare Approved: Animal Welfare Approved provides standards for all commonly domesticated farmed animals. All standards address every aspect of each species' lifecycle needs from birth to death. https://agreenerworld.org/certifications/animal-welfare-approved/
	Certified Humane Raised and Handled: Humane Farm Animal Care provides standards for all commonly domesticated farmed animals. https://certifiedhumane.org/how-we-work/our-standards/
	Global Animal Partnership: The Global Animal Partnership provides a five-step animal welfare rating program that facilitates continuous improvement in farm animal agriculture. https://globalanimalpartnership.org/
	GlobalG.A.P. Integrated Farm Assurance Checklist for Poultry: GlobalG.A.P. provides a checklist with control points and compliance criteria on various issues in poultry supply chains (broilers and laying hens) including the issue of animal welfare. https://www.globalgap.org/uk_en/for-producers/globalg.a.p./integrated-farm-assurance-ifa/livestock/PY/
	List of Animal Welfare Programs: TSC has compiled a list of animal welfare standards, certifications, and programs. This list may assist users in choosing a program that fits their needs. https://www.sustainabilityconsortium.org/tsc-downloads/animal-welfare-organizations-and-programs/
	National Chicken Council (NCC) Animal Welfare Guidelines and Audit Checklist: The NCC provides Animal Welfare Guidelines and Audit Checklist for the animal welfare of broiler chickens. https://www.nationalchickencouncil.org/policy/animal-welfare/
	Poultry Products Quality Assurance Scheme (PPQAS): The Irish Bord Bia Poultry Products Quality Assurance Scheme (PPQAS) is an integrated scheme involving the producer and the processing plant working in partnership to provide the customer with quality assured product. https://www.bordbia.ie/farmers-growers/get-involved/become-quality-assured/poultry-products-quality-assurance- scheme-ppqas/
	Royal Society for the Prevention of Cruelty to Animals (RSPCA) Animal Welfare Standards for Broiler Chickens: The RSPCA provides a scheme for the rearing, handling, transport, and slaughter of broiler chickens taking into account legislation, government welfare codes, scientific research, veterinary advice, recommendations of the Farm Animal Welfare Council (FAWC), and practical experience in the farming industry. http://science.rspca.org.uk/sciencegroup/farmanimals/standards/chickens
	World Organisation for Animal Health (OIE) Terrestrial Animal Health Code: Chapter 7 of the OIE Terrestrial Health Code outlines the internationally recognized principles of animal welfare, commonly known as "The Five Freedoms". http://www.oie.int/en/standard-setting/terrestrial-code/access-online/
Background Information	Code of Practice for the Care and Handling of Hatching Eggs, Breeders, Chickens, and Turkeys: The Canadian National Farm Animal Care Council provides a code of practice for the welfare of poultry. http://www.nfacc.ca/pdfs/codes/poultry_code_EN.pdf
	Code of Practice for the Welfare of Broiler Chickens: The Irish Farm Animal Welfare Advisory Council provides a code of practice for the welfare of broiler chickens. http://www.fawac.ie/media/fawac/content/publications/animalwelfare/BroilerChickens.pdf
	Code of Recommendations for the Welfare of Meat Chickens and Breeding Chickens: The UK Department of Environment, Food, and Rural Affairs provides a recommended code of practice for the welfare of meat chickens and breeding chickens. https://www.gov.uk/government/publications/poultry-on-farm-welfare







Definitions	Animal welfare: Animal welfare refers to the well-being of an animal and how an animal is coping with the conditions in which it lives. A good state of welfare varies substantially between different contexts, but in general an animal is in a good state of welfare if it is healthy, comfortable, well-nourished, safe, able to express innate behavior, and not suffering from pain, fear, and distress. Ensuring animal welfare is a human responsibility that requires treatments such as good housing, good care, good feed, humane handling and humane slaughter/killing. The treatments that an animal receives is covered by other terms such as animal care, animal husbandry, and humane management (adapted from The World Organisation for Animal Health (OIE)).
	Second-party audit: An audit conducted by a party having an interest in the organization, such as customers, or by another entity on their behalf.
	Third-party audit: An audit conducted by external, independent auditing organizations, such as those providing certification of conformity to a standard.
	Verifiable: Having the ability to demonstrate, through a reputable assessor, the truth or accuracy of a claim.
Hotspots Addressed	 Supply Chain Transparency Animal Handling - Farm Stage







3. ANIMAL WELFARE CERTIFICATIONS AND AUDITS - BROILER TRANSPORT AND SLAUGHTER

Question **Response Options** What percentages of your chicken meat supply were covered by A. We are unable to determine at this time. a current comprehensive animal welfare certification or by B. We are able to report the following for our chicken meat supply: verifiable and regularly conducted second- or third-party animal B1.____ _% of our chicken meat supply was covered by a current welfare audits at the transportation and slaughter stages? comprehensive animal welfare certification OR had regular and verifiable second- or third-party audits at the transportation stage. B2. % of our chicken meat supply had regular and verifiable thirdparty audits at the transportation stage. B3. % of our chicken meat supply was covered by a current comprehensive animal welfare certification OR had regular and verifiable second- or third-party audits at the slaughter stage. % of our chicken meat supply had regular and verifiable third-B4. party audits at the slaughter stage.

Calculate B1 as the mass of your chicken meat supply that was covered by a current comprehensive animal welfare certification OR had regular and verifiable second- or third-party audits at the transportation stage, divided by the total mass of your chicken meat supply, then multiply by 100.
Calculate B2 as the mass of your chicken meat supply that had regular and verifiable third-party audits at the transportation stage, divided by the total mass of your chicken meat supply, then multiply by 100.
Calculate B3 as the mass of your chicken meat supply that was covered by a current comprehensive animal welfare certification OR had regular and verifiable second- or third-party audits at the slaughter stage, divided by the total mass of your chicken meat supply, then multiply by 100.
Calculate B4 as the mass of your chicken meat supply that had regular and verifiable third-party audits at the slaughter stage, divided by the total mass of your chicken meat supply, then multiply by 100.
Perform these calculations using data from a 12-month period that ended within 12 months of the date you respond to this question.
Government regulations or parties in the supply chain can initiate these audits. Regulations, audits, and certifications that align with the animal welfare standards as described in Section 7 of the World Organisation for Animal Health (OIE) Terrestrial Animal Health Code and are well-enforced by the implementation of auditing systems can be included in your calculations. See the Certifications, Standards & Tools for more information.
To be included in B1 and B2, as described by OIE, broiler chickens should not be transported if they are not fit to travel. For those broiler chickens fit to travel, the number of journeys and the length of time should be minimized. Loading and unloading procedures should minimize broiler chicken stress, prevent injury, and use facilities that promote calm and safe broiler chicken movement. Protection from extreme temperatures and other extreme weather conditions is provided. Adequate feed and water is available when required.
To be included in B3 and B4, as described by OIE, broiler chickens should be treated humanely before and during all slaughter procedures, including pre-slaughter stunning for non-ritual slaughter. The pre-slaughter stunning must render the broiler chicken insensible to pain until death occurs. The minimization of fear, stress, and pain is included in humane treatment.





Certifications, Standards & Tools	American Humane Certified Animal Welfare: American Humane Certified Animal Welfare is a third-party certification program for animal welfare in the United States. American Humane Certified Animal Welfare Standards are available for broilers, laying hens, turkeys, dairy cattle, beef cattle, and swine. http://www.humaneheartland.org/index.php?option=com_content&view=article&id=3&Itemid=106&jsmallfib=1&dir=JSROOT/Animal+Welfare+Full+Standards+%2B+Supplements
	Animal Welfare Approved: Animal Welfare Approved provides standards for all commonly domesticated farmed animals. All standards address every aspect of each species' lifecycle needs from birth to death. https://agreenerworld.org/certifications/animal-welfare-approved/
	Australian Animal Welfare Standards and Guidelines for Land Transport: The Australian Department of Agriculture, Fisheries and Forestry provides a standard for land transport of livestock. http://www.animalwelfarestandards.net.au/land-transport/
	Certified Humane Raised and Handled: Humane Farm Animal Care provides standards for all commonly domesticated farmed animals. https://certifiedhumane.org/how-we-work/our-standards/
	Global Animal Partnership: The Global Animal Partnership provides a five-step animal welfare rating program that facilitates continuous improvement in farm animal agriculture. https://globalanimalpartnership.org/
	GlobalG.A.P. Integrated Farm Assurance Checklist for Poultry: GlobalG.A.P. provides a checklist with control points and compliance criteria on various issues in poultry supply chains (broilers and laying hens) including the issue of animal welfare.
	https://www.globalgap.org/uk_en/for-producers/globalg.a.p./integrated-farm-assurance-ifa/livestock/PY/
	List of Animal Welfare Programs: TSC has compiled a list of animal welfare standards, certifications, and programs. This list may assist users in choosing a program that fits their needs. https://www.sustainabilityconsortium.org/tsc-downloads/animal-welfare-organizations-and-programs/
	National Chicken Council (NCC) Animal Welfare Guidelines and Audit Checklist: The NCC provides Animal Welfare Guidelines and Audit Checklist for the animal welfare of broiler chickens. https://www.nationalchickencouncil.org/policy/animal-welfare/
	Poultry Products Quality Assurance Scheme (PPQAS): The Irish Bord Bia Poultry Products Quality Assurance Scheme (PPQAS) is an integrated scheme involving the producer and the processing plant working in partnership to provide the customer with quality assured product. https://www.bordbia.ie/farmers-growers/get-involved/become-quality-assured/poultry-products-quality-assurance- scheme-ppqas/
	Royal Society for the Prevention of Cruelty to Animals (RSPCA) Animal Welfare Standards for Broiler Chickens: The RSPCA provides a scheme for the rearing, handling, transport, and slaughter of broiler chickens taking into account legislation, government welfare codes, scientific research, veterinary advice, recommendations of the Farm Animal Welfare Council (FAWC), and practical experience in the farming industry. http://science.rspca.org.uk/sciencegroup/farmanimals/standards/chickens
	World Organisation for Animal Health (OIE) Terrestrial Animal Health Code: Chapter 7 of the OIE Terrestrial Health Code outlines the internationally recognized principles of animal welfare, commonly known as "The Five Freedoms". http://www.oie.int/en/standard-setting/terrestrial-code/access-online/
Background Information	Code of Practice for the Care and Handling of Hatching Eggs, Breeders, Chickens, and Turkeys: The Canadian National Farm Animal Care Council provides a code of practice for the welfare of poultry. http://www.nfacc.ca/pdfs/codes/poultry_code_EN.pdf
	Code of Practice for the Transport of Animals: The Canadian National Farm Animal Care Council provides a recommended code of practice for the care and handling of farm animals during transport. https://www.nfacc.ca/pdfs/codes/pig_code_of_practice.pdf
	Code of Practice for the Welfare of Broiler Chickens: The Irish Farm Animal Welfare Advisory Council provides a code of practice for the welfare of broiler chickens.







	http://www.fawac.ie/media/fawac/content/publications/animalwelfare/BroilerChickens.pdf
	Code of Recommendations for the Welfare of Meat Chickens and Breeding Chickens: The UK Department or Environment, Food, and Rural Affairs provides a recommended code of practice for the welfare of meat chickens and breeding chickens. https://www.gov.uk/government/publications/poultry-on-farm-welfare
	Online Guide on Transport of Livestock: The Humane Slaughter Organization in the United Kingdom provides information on issues, considerations, and best practices in transport and slaughter of livestock. http://www.hsa.org.uk/transport-of-livestock-introduction/introduction-8
Definitions	Animal welfare: Animal welfare refers to the well-being of an animal and how an animal is coping with the conditions in which it lives. A good state of welfare varies substantially between different contexts, but in general an animal is in a good state of welfare if it is healthy, comfortable, well-nourished, safe, able to express innate behavior, and not suffering from pain, fear, and distress. Ensuring animal welfare is a human responsibility that requires treatments such as good housing, good care, good feed, humane handling and humane slaughter/killing. The treatments that an animal receives is covered by other terms such as animal care, animal husbandry, and humane management (adapted from The World Organisation for Animal Health (OIE)).
	Second-party audit: An audit conducted by a party having an interest in the organization, such as customers, or by another entity on their behalf.
	Third-party audit: An audit conducted by external, independent auditing organizations, such as those providing certification of conformity to a standard.
	Verifiable: Having the ability to demonstrate, through a reputable assessor, the truth or accuracy of a claim.
Hotspots Addressed	1. Supply Chain Transparency
	7. Animal Handling - Slaughter Stage
	8. Animal Handling - Transportation Stage





4. STOCKPERSON TRAINING - BROILER CHICKENS

Question

What percentages of your chicken meat supply came from broiler farms, transporters, and slaughter facilities that have documentation that those who are in contact with animals are competent and trained in proper handling procedures?

Response Options

- A. We are unable to determine at this time.
- **B.** We are able to report the following for our chicken meat supply:

B1._____% of our chicken meat supply came from broiler farms that have documentation that those who are in contact with broilers are competent and trained in proper handling procedures.

B2.____% of our chicken meat supply came from transporters that have documentation that those who are in contact with broilers are competent and trained in proper handling procedures.

B3.____% of our chicken meat supply came from slaughter facilities that have documentation that those who are in contact with broilers are competent and trained in proper handling procedures.

Calculation & Scope	Calculate B1 as the mass of your chicken meat supply that came from broiler farms that have documentation that those who are in contact with broilers are competent and trained in proper handling procedures, divided by the total mass of your chicken meat supply, then multiply by 100.
	Calculate B2 as the mass of your chicken meat supply that came from transporters that have documentation that those who are in contact with broilers are competent and trained in proper handling procedures, divided by the total mass of your chicken meat supply, then multiply by 100.
	Calculate B3 as the mass of your chicken meat supply that came from slaughter facilities that have documentation that those who are in contact with broilers are competent and trained in proper handling procedures, divided by the total mass of your chicken meat supply, then multiply by 100.
	The training program and accompanying documentation must include, but not be limited to: facility requirements, humane animal handling, animal behavior, and injury and disease detection. Examples of implementation of these criteria by all stockpersons are understanding the physical and environmental requirements for a broiler chicken, understanding the relation between litter condition and welfare outcomes such as hock burn or footpad dermatitis, recognizing normal flock activity and broiler behavior. Additional training may need to be required for catching crews, transport crews, or euthanasia crews, and outside workers like vaccination crews, or depopulation crews. See the Certifications, Standards & Tools for examples of initiatives that meet these requirements.
	Initial training is necessary to perform job duties. Training must be renewed as appropriate to maintain competency and implementation of good practices (not necessarily on an annual basis) and to prevent training exhaustion. See the Background Information for further reading on the relation between stockperson training and animal welfare.
	If you are unable obtain data or otherwise determine your response to a response option, enter zero percent. Perform these calculations using data from a 12-month period that ended within 12 months of the date you respond to this question.
Certifications, Standards & Tools	American Humane Certified Animal Welfare: American Humane Certified Animal Welfare is a third-party certification program for animal welfare in the United States. American Humane Certified Animal Welfare Standards are available for broilers, laying hens, turkeys, dairy cattle, beef cattle, and swine. http://www.humaneheartland.org/index.php?option=com_content&view=article&id=3&Itemid=106&jsmallfib=1&dir=JSROOT/Animal+Welfare+Full+Standards+%2B+Supplements
	Animal Welfare Approved: Animal Welfare Approved provides standards for all commonly domesticated farmed animals. All standards address every aspect of each species' lifecycle needs from birth to death. https://agreenerworld.org/certifications/animal-welfare-approved/
	Certified Humane Raised and Handled: Humane Farm Animal Care provides standards for all commonly domesticated farmed animals. https://certifiedhumane.org/how-we-work/our-standards/







Global Animal Partnership: The Global Animal Partnership provides a five-step animal welfare rating program that facilitates continuous improvement in farm animal agriculture. Hips://globalianimalpartnership.org/ GlobalG.A.P. Integrated Farm Assurance Checklist for Poultry: GlobalG.A.P. provides a checklist with control points and compliance criteria on various issues in poultry supply chains (broilers and laying hens) including the issue of animal welfare. Hip://www.folas.provide_entforce.provideers/globalg.a.p.integrated-farm-assurance-failwestock/PY/ National Chicken Council (NCC) Animal Welfare Guidelines and Audit Checklist. The NCC provides Animal Welfare Guidelines and Audit Checklist for the animal welfare of troller chickens. https://www.nationalchickencouncil.org/policy/animal.welfare/ Poultry Products Quality Assurance Scheme (PPCAS): The Inhis Bord Bia Poultry Products Quality Assurance Scheme (PPCAS): The Inhis Bord Bia Poultry Products Quality Assurance Scheme (PPCAS): The Inhis Poulter Chickens Inhital Auditor Certification Organization in the United States. PAACO provides a cheme provide the customer with quality assured/poultry-products-quality-assurance scheme (PPCAS): The Inhis Poultry Trollessional Animal Auditor Certification Organization (PAACO): Professional Animal Auditor Certification Organization in the United States. PAACO provides a cheme for the rearing, handing, transport, and sking the review andor certification of an innel auditing and certification organization in the United States. PAACO provides a cheme prove of the Farm Assurance Media Scheme for the rearing, handing, transport, and sking terrescheme provide the review andor certification organization in the United States. PAACO provides a cheme for the rearing, handing, transport, and sking ter		
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National Chicken Council (NCC) Animal Welfare Guidelines and Audit Checklist: The NCC provides Animal Welfare Guidelines and Audit Checklist for the animal welfare of broiler chickens. https://www.animal.auditor.council.org/policy/animal-welfare/ Poultry Products Quality Assurance Scheme (PPQAS): The Irish Bord Bia Poultry Products Quality Assurance Scheme (PPQAS) is an integrated scheme involving the producer and the processing plant working in partnership to provide the customer with quality assured product. https://www.brotbia.le/farmers-growers/get-involved/become-quality-assured/poultry-products-quality-assurance-scheme.ppqas/ Professional Animal Auditor Certification Organization (PAACO): Professional Animal Auditor Certification Organization in the United States. PAACO promotes the humane trainment of animal strough education and certification of animal auditors as well as the review and/or certification of Crueity to Animal (RSPCA) Animal Welfare Standards for Broiler Chickens: The RSPCA provides a scheme for the rearing, handling, transport, and slaughter of broiler chickens and fuer farming industry. http://science.rspca.org.uk/sciencegroup/farmanimals/standards/chickens The Poultry Passport: The British Poultry Training Scheme developed the Poultry Passport, a secure and consistent online training recording system for poultry workers in the UK. Companies can view the Poultry Passport.org/ Background Information Code of Practice for the Care and Handling of Hatching Eggs, Breeders, Chickens, and Turkeys: The Canadian National Farm Animal Care Council provides a code of practice for the welfare of poultry. http://www.rfaecc.ae/pdfs/codes/pig_code_0f_ordice.pdf Code of Practice for the Care and Handling of Hatching Eggs, Breeders, Chickens, and Turkeys: The		points and compliance criteria on various issues in poultry supply chains (broilers and laying hens) including the issue of animal welfare.
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https://www.nfacc.ca/pdfs/codes/pig_code_of_practice.pdf Code of Practice for the Welfare of Broiler Chickens: The Irish Farm Animal Welfare Advisory Council provides a code of practice for the welfare of broiler chickens. http://www.fawac.ie/media/fawac/content/publications/animalwelfare/BroilerChickens.pdf Code of Recommendations for the Welfare of Meat Chickens and Breeding Chickens: The UK Department of Environment, Food, and Rural Affairs provides a recommended code of practice for the welfare of meat chickens and breeding chickens. https://www.gov.uk/government/publications/poultry-on-farm-welfare Online Guide on Transport of Livestock: The Humane Slaughter Organization in the United Kingdom provides information on issues, considerations, and best practices in transport and slaughter of livestock. http://www.hsa.org.uk/transport-of-livestock-introduction/introduction-8 Stockperson Training and Animal Welfare: This Revue Scientifique et Technique provides a paper titled: Training to improve stockperson beliefs and behavior towards livestock enhances welfare and productivity.	Background Information	Canadian National Farm Animal Care Council provides a code of practice for the welfare of poultry. http://www.nfacc.ca/pdfs/codes/poultry_code_EN.pdf
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Training to improve stockperson beliefs and behavior towards livestock enhances welfare and productivity.		······································
		Online Guide on Transport of Livestock: The Humane Slaughter Organization in the United Kingdom provides information on issues, considerations, and best practices in transport and slaughter of livestock.





	World Organisation for Animal Health (OIE) Terrestrial Animal Health Code: Chapter 7 of the OIE Terrestrial Health Code outlines the internationally recognized principles of animal welfare, commonly known as "The Five Freedoms". http://www.oie.int/en/standard-setting/terrestrial-code/access-online/
Definitions	Stockperson: A professional manager of animals. A stockperson's attitude and behavior effects animal welfare and productivity.
Hotspots Addressed	 Animal Handling - Farm Stage Animal Handling - Slaughter Stage Animal Handling - Transactorian Otomore
	8. Animal Handling - Transportation Stage







5. HATCHING MANAGEMENT - BROILER CHICKENS

Question

What percentages of your chicken meat supply came from broiler farms that use hatcheries with standard operating procedures for culling chicks and spraying of newly-hatched chicks, assess the broilers physical condition and have housing prepared at the time of delivery and placement, maintain an adequate temperature during unloading, and handle broiler chickens carefully to minimize injuries and stress during unloading?

Response Options

- A. We are unable to determine at this time
- B. We are able to report the following for our chicken meat supply:
 - **B1**.____% of our chicken meat supply came from broiler farms that use hatcheries with standard operating procedures for culling chicks.

B2.____% of our chicken meat supply came from broiler farms that use hatcheries with standard operating procedures for spraying of newly-hatched chicks.

B3.____% of our chicken meat supply came from broiler farms that assess the broilers' physical condition and have housing prepared at the time of delivery and placement.

B4.____% of our chicken meat supply came from broiler farms that maintain an adequate temperature during unloading.

B5.____% of our chicken meat supply came from broiler farms that handle broiler chickens carefully to minimize injuries and stress during unloading.

Guidance

Calculation & Scope

Calculate B1 as the mass of your chicken meat supply that came from broiler farms that use hatcheries with standard operating procedures for culling chicks, divided by the total mass of your chicken meat supply, then multiply by 100. To be included in B1, the hatcheries' standard operation procedure must cover the method of euthanasia, the skills of an employee and verification and documentation. To be included in B1, the method of euthanasia must be approved by the American Veterinary Medical Association in the United States, or its equivalent in other geographies. Rapid maceration or displacement of oxygen with nitrogen, carbon dioxide, argon, or other approved gas are preferred methods of cull chick and pipped egg euthanasia.

Calculate B2 as the mass of your chicken meat supply that came from broiler farms that use hatcheries with standard operating procedures for spraying of newly-hatched chicks, divided by the total mass of your chicken meat supply, then multiply by 100. To be included in B2, the hatcheries' standard operation procedure must cover the type of disinfectant used, the skills of an employee and verification and documentation. Additionally, the chicks must either not be sprayed with disinfectant or sprayed with a disinfectant that is not toxic or irritant.

Calculate B3 as the mass of your chicken meat supply that came from broiler farms that assess the broilers physical condition and have housing prepared at the time of delivery and placement, divided by the total mass of your chicken meat supply, then multiply by 100. To be included in B3, the housing must be heated, cleaned, and water, feed, and bedding material must be available before the broiler chickens are received; farm personnel must be available to inspect the broiler chickens at the moment of arrival; problems must be documented and provided as feedback to the hatchery. Examples of assessment criteria are alertness, vigor, condition, and behavior.

Calculate B4 as the mass of your chicken meat supply that came from broiler farms that that maintain an adequate temperature during unloading, divided by the total mass of your chicken meat supply, then multiply by 100. To be included in B4, recommended practices for the holding areas for boxes of chicks should be in a temperature range of 21-27 degrees Celsius (70-80 degrees Fahrenheit) and a relative humidity ranging from 40-60%.

Calculate B5 as the mass of your chicken meat supply that came from broiler farms that handle broiler chickens carefully to minimize injuries and stress during unloading, divided by the total mass of your chicken meat supply, then multiply by 100. To be included in B5, broiler chickens, including the boxes with chicks, must not be dropped from heights that may cause injuries.

If you are unable obtain data or otherwise determine your response to a response option, enter zero percent. Perform these calculations using data from a 12-month period that ended within 12 months of the date you respond to this question.

Certifications, Standards & Tools

National Chicken Council (NCC) Animal Welfare Guidelines and Audit Checklist: The NCC provides Animal Welfare Guidelines and Audit Checklist for the animal welfare of broiler chickens.





	https://www.nationalchickencouncil.org/policy/animal-welfare/
	Royal Society for the Prevention of Cruelty to Animals (RSPCA) Animal Welfare Standards for Broiler Chickens: The RSPCA provides a scheme for the rearing, handling, transport, and slaughter of broiler chickens taking into account legislation, government welfare codes, scientific research, veterinary advice, recommendations of the Farm Animal Welfare Council (FAWC), and practical experience in the farming industry. http://science.rspca.org.uk/sciencegroup/farmanimals/standards/chickens
Background Information	Code of Practice for the Care and Handling of Hatching Eggs, Breeders, Chickens, and Turkeys: The Canadian National Farm Animal Care Council provides a code of practice for the welfare of poultry. http://www.nfacc.ca/pdfs/codes/poultry_code_EN.pdf
	Code of Practice for the Welfare of Broiler Chickens: The Irish Farm Animal Welfare Advisory Council provides a code of practice for the welfare of broiler chickens. http://www.fawac.ie/media/fawac/content/publications/animalwelfare/BroilerChickens.pdf
	Code of Recommendations for the Welfare of Meat Chickens and Breeding Chickens: The UK Department of Environment, Food, and Rural Affairs provides a recommended code of practice for the welfare of meat chickens and breeding chickens. https://www.gov.uk/government/publications/poultry-on-farm-welfare
Definitions	Pipped egg: An egg prior to hatching where the chick has started to find a way with its beak to the air cell within the egg shell.
Hotspots Addressed	1. Supply Chain Transparency
	3. Animal Handling - Farm Stage
	6. Health Management - Farm Stage
Definitions	Environment, Food, and Rural Affairs provides a recommended code of practice for the welfare of meat chickens and breeding chickens. https://www.gov.uk/government/publications/poultry-on-farm-welfare Pipped egg: An egg prior to hatching where the chick has started to find a way with its beak to the air cell within
	a code of practice for the welfare of broiler chickens. http://www.fawac.ie/media/fawac/content/publications/animalwelfare/BroilerChickens.pdf Code of Recommendations for the Welfare of Meat Chickens and Breeding Chickens: The UK Department of Environment, Food, and Rural Affairs provides a recommended code of practice for the welfare of meat chickens and breeding chickens.
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6. ANIMAL HEALTH MANAGEMENT - BROILER FARMS

Question

What percentages of your chicken meat supply came from broiler farms that have a verified veterinary-client-patient relationship, designated individual(s) in place to evaluate animal health and welfare, and an animal health performance monitoring system in place?

Response Options

- A. We are unable to determine at this time.
- **B.** We are able to report the following for our chicken meat supply:
 - **B1**.____% of our chicken meat supply came from broiler farms with a verified veterinary-client-patient relationship.

B2.____% of our chicken meat supply came from broiler farms with designated individual(s) in place to evaluate animal health and welfare.
B3.____% of our chicken meat supply came from broiler farms that have an animal health performance monitoring system in place.

Calculation & Scope	Calculate B1 as the mass of your chicken meat supply that came from broiler farms with a verified veterinary- client-patient relationship, divided by the total mass of your chicken meat supply, then multiply by 100. To be included in B1, a veterinary-client-patient relationship must meet the criteria of the American Veterinary Medical Association or the European Platform for the Responsible Use of Medicines in Animals. See Certifications, Standards & Tools for more details.
	Calculate B2 as the mass of your chicken meat supply that came from broiler farms with designated individual(s) in place to evaluate animal health and welfare, divided by the total mass of your chicken meat supply, then multiply by 100. A designated individual must have the skills to evaluate animal health and welfare and be verifiably trained and experienced in managing broiler health and welfare. Evaluation of animal health and welfare includes flock activity and behavior, prevalence of diseases, injury detection, and availability of water and feed.
	Calculate B3 as the mass of your chicken meat supply that came from broiler farms with an animal health performance monitoring system in place, divided by the total mass of your chicken meat supply, then multiply by 100. Animal health monitoring systems should include monitoring the prevalence of disease and incidence of injuries and evaluation of data for information to integrate into management and communication with animal care teams (including veterinarians). An animal health performance monitoring system includes production performance, incidence of common injuries, and prevalence of diseases. See the Background Information for factsheets that include a list of common diseases and injuries in broiler chickens.
	If you are unable obtain data or otherwise determine your response to a response option, enter zero percent. Perform these calculations using data from a 12-month period that ended within 12 months of the date you respond to this question.
Certifications, Standards & Tools	American Humane Certified Animal Welfare: American Humane Certified Animal Welfare is a third-party certification program for animal welfare in the United States. American Humane Certified Animal Welfare Standards are available for broilers, laying hens, turkeys, dairy cattle, beef cattle, and swine. http://www.humaneheartland.org/index.php?option=com_content&view=article&id=3&Itemid=106&jsmallfib=1&dir=JSROOT/Animal+Welfare+Full+Standards+%2B+Supplements
	American Veterinary Medical Association: The American Veterinary Medical Association (AVMA) licenses and regulates the Veterinarian-Client-Patient Relationship (VCPR), which is defined in AVMA Principles of Veterinary Medical Ethics. The VCPR is an essential basis for interaction between veterinarians, their clients, and their patients and is critical to providing quality veterinary care. https://www.avma.org/resources-tools/pet-owners/petcare/veterinarian-client-patient-relationship-vcpr
	Animal Welfare Approved: Animal Welfare Approved provides standards for all commonly domesticated farmed animals. All standards address every aspect of each species' lifecycle needs from birth to death. https://agreenerworld.org/certifications/animal-welfare-approved/
	Certified Humane Raised and Handled: Humane Farm Animal Care provides standards for all commonly domesticated farmed animals. https://certifiedhumane.org/how-we-work/our-standards/





	European Platform for the Responsible Use of Medicines in Animals: The European Platform for the Responsible Use of Medicines in Animals is a multi-stakeholder platform linking best practice with animal health and public health and aims to promote the responsible use of medicines in animals in the European Union. https://www.epruma.eu/
	Global Animal Partnership: The Global Animal Partnership provides a five-step animal welfare rating program that facilitates continuous improvement in farm animal agriculture. https://globalanimalpartnership.org/
	GlobalG.A.P. Integrated Farm Assurance Checklist for Poultry: GlobalG.A.P. provides a checklist with control points and compliance criteria on various issues in poultry supply chains (broilers and laying hens) including the issue of animal welfare. https://www.globalgap.org/uk_en/for-producers/globalg.a.p./integrated-farm-assurance-ifa/livestock/PY/
	National Chicken Council (NCC) Animal Welfare Guidelines and Audit Checklist: The NCC provides Animal Welfare Guidelines and Audit Checklist for the animal welfare of broiler chickens. https://www.nationalchickencouncil.org/policy/animal-welfare/
	Poultry Products Quality Assurance Scheme (PPQAS): The Irish Bord Bia Poultry Products Quality Assurance Scheme (PPQAS) is an integrated scheme involving the producer and the processing plant working in partnership to provide the customer with quality assured product. https://www.bordbia.ie/farmers-growers/get-involved/become-quality-assured/poultry-products-quality-assurance- scheme-ppqas/
	Royal Society for the Prevention of Cruelty to Animals (RSPCA) Animal Welfare Standards for Broiler Chickens: The RSPCA provides a scheme for the rearing, handling, transport, and slaughter of broiler chickens taking into account legislation, government welfare codes, scientific research, veterinary advice, recommendations of the Farm Animal Welfare Council (FAWC), and practical experience in the farming industry. http://science.rspca.org.uk/sciencegroup/farmanimals/standards/chickens
	Welfare Quality, Science and Society Improving Animal Welfare: The European Welfare Quality project provides protocols for measuring animal welfare for cattle, pigs, and poultry.
	http://www.welfarequalitynetwork.net/en-us/reports/assessment-protocols/
Background Information	http://www.welfarequalitynetwork.net/en-us/reports/assessment-protocols/ Code of Practice for the Care and Handling of Hatching Eggs, Breeders, Chickens, and Turkeys: The Canadian National Farm Animal Care Council provides a code of practice for the welfare of poultry. http://www.nfacc.ca/pdfs/codes/poultry_code_EN.pdf
Background Information	Code of Practice for the Care and Handling of Hatching Eggs, Breeders, Chickens, and Turkeys: The Canadian National Farm Animal Care Council provides a code of practice for the welfare of poultry.
Background Information	Code of Practice for the Care and Handling of Hatching Eggs, Breeders, Chickens, and Turkeys: The Canadian National Farm Animal Care Council provides a code of practice for the welfare of poultry. http://www.nfacc.ca/pdfs/codes/poultry_code_EN.pdf Code of Practice for the Welfare of Broiler Chickens: The Irish Farm Animal Welfare Advisory Council provides a code of practice for the welfare of broiler chickens.
Background Information	 Code of Practice for the Care and Handling of Hatching Eggs, Breeders, Chickens, and Turkeys: The Canadian National Farm Animal Care Council provides a code of practice for the welfare of poultry. http://www.nfacc.ca/pdfs/codes/poultry_code_EN.pdf Code of Practice for the Welfare of Broiler Chickens: The Irish Farm Animal Welfare Advisory Council provides a code of practice for the welfare of broiler chickens. http://www.fawac.ie/media/fawac/content/publications/animalwelfare/BroilerChickens.pdf Code of Recommendations for the Welfare of Meat Chickens and Breeding Chickens: The UK Department of Environment, Food, and Rural Affairs provides a recommended code of practice for the welfare of meat chickens and breeding chickens.
Background Information	 Code of Practice for the Care and Handling of Hatching Eggs, Breeders, Chickens, and Turkeys: The Canadian National Farm Animal Care Council provides a code of practice for the welfare of poultry. http://www.nfacc.ca/pdfs/codes/poultry_code_EN.pdf Code of Practice for the Welfare of Broiler Chickens: The Irish Farm Animal Welfare Advisory Council provides a code of practice for the welfare of broiler chickens. The Irish Farm Animal Welfare Advisory Council provides a code of practice for the welfare of broiler chickens. http://www.fawac.ie/media/fawac/content/publications/animalwelfare/BroilerChickens.pdf Code of Recommendations for the Welfare of Meat Chickens and Breeding Chickens: The UK Department of Environment, Food, and Rural Affairs provides a recommended code of practice for the welfare of meat chickens and breeding chickens. https://www.gov.uk/government/publications/poultry-on-farm-welfare Federation of Veterinarians of Europe - Herd Health Plan: The Federation of Veterinarians of Europe provides a policy paper that outlines objectives and benefits of a Herd Health Plan (HHP) for farms. A HHP aims to enhance animal health and welfare and quality of products by decreasing the use of veterinary medicinal products and feed additives and properly planning preventative healthcare. This paper also provides guidelines for the prevention of epizootics and zoonotic diseases and information about good husbandry practices.





	Poultry Health and Disease Factsheets: Inventory of most common poultry health and diseases in Australia. https://www.dpi.nsw.gov.au/animals-and-livestock/poultry-and-birds/health-disease
	World Organisation for Animal Health (OIE) Terrestrial Animal Health Code: Chapter 7 of the OIE Terrestrial Health Code outlines the internationally recognized principles of animal welfare, commonly known as "The Five Freedoms". https://www.oie.int/en/standard-setting/terrestrial-code/access-online/
Definitions	 Animal health program: A farm-specific plan for how to maintain and improve animal health and welfare written and regularly updated by the farmer together with a veterinarian and other relevant technical advisors. Veterinarian-Client-Patient Relationship (VCPR): A cooperative relationship between a veterinarian, a client and the patient. A VCPR is an essential basis for interaction between veterinarians and their clients and is critical to providing quality veterinary care. Veterinarians and their clients may choose to establish a VCPR, and to decide on veterinary medical care under the terms of the VCPR. The American Veterinary Medical Association (AVMA) licenses and regulates the VCPR in the US, which is defined in AVMA Principles of Veterinary Medical Ethics.
Hotspots Addressed	 Supply Chain Transparency Animal Handling - Farm Stage Health Management - Farm Stage







7. DAILY WEIGHT GAIN POTENTIAL TRANSPARENCY - BROILER CHICKENS

Question What percentages of broiler chickens in your supply chain had a daily weight gain potential that was lower than 45 grams, between 45 and 50 grams, 50 and 55 grams, or 55 and 60 grams, or higher than 60 grams?	 Response Options A. We are unable to determine at this time. B. We are able to report the following for our supply: B1% of broiler chickens in our supply chain had a daily weight gain potential that was lower than 45 grams. B2% of broiler chickens in our supply chain had a daily weight gain potential that was equal to or between 45 and 49 grams. B3% of broiler chickens in our supply chain had a daily weight gain potential that was equal to or between 50 and 54 grams. B4% of broiler chickens in our supply chain had a daily weight gain potential that was equal to or between 55 and 59 grams. B5% of broiler chickens in our supply chain had a daily weight gain potential that was equal to or between 55 and 59 grams.
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Certifications, Standards & Tools	Animal Welfare Approved: Animal Welfare Approved provides standards for all commonly domesticated farmed animals. All standards address every aspect of each species' lifecycle needs from birth to death.
	If you are unable obtain data or otherwise determine your response to a response option, enter zero percent. Perform these calculations using data from a 12-month period that ended within 12 months of the date you respond to this question.
	Calculate B5 as the average percentage of broiler chickens in your supply chain that had a daily weight gain potential equal to or higher than 60 grams per day, weighted by the mass of chicken meat supplied by each broiler farm. For each broiler farm, calculate the number of broiler chickens that had a growth rate potential equal to or higher than 60 grams per day, the total number of broiler chickens, then multiply by 100.
	Calculate B4 as the average percentage of broiler chickens in your supply chain that had a daily weight gain potential that was equal to or between 55 and 59 grams per day, weighted by the mass of chicken meat supplied by each broiler farm. For each broiler farm, calculate the number of broiler chickens that had a growth rate potential that was equal to or between 55 and 59 grams per day, divided by the total number of broiler chickens, then multiply by 100.
	Calculate B3 as the average percentage of broiler chickens in your supply chain that had a daily weight gain potential that was equal to or between 50 and 54 grams per day, weighted by the mass of chicken meat supplied by each broiler farm. For each broiler farm, calculate the number of broiler chickens that had a growth rate potential that was equal to or between 50 and 54 grams per day, divided by the total number of broiler chickens, then multiply by 100.
	Calculate B2 as the average percentage of broiler chickens in your supply chain that had a daily weight gain potential that was equal to or between 45 and 49 grams per day, weighted by the mass of chicken meat supplied by each broiler farm. For each broiler farm, calculate the number of broiler chickens that had a growth rate potential that was equal to or between 45 and 49 grams per day, divided by the total number of broiler chickens, then multiply by 100.
	Calculate B1 as the average percentage of broiler chickens in your supply chain that had a daily weight gain potential lower than 45 grams per day, weighted by the mass of chicken meat supplied by each broiler farm. For each broiler farm, calculate the number of broiler chickens that had a growth rate potential lower than 45 grams per day, divided by the total number of broiler chickens, then multiply by 100.
Calculation & Scope	The question addresses transparency for the daily weight gain potential of broiler chickens. Daily weight gain potential is an indirect measure of animal welfare. It adds value to the interpretation of other key performance indicators. The daily weight gain potential is based on the breed's weight gain potential. For conversion purposes, 1 lb = 0.454 kg.





	https://agreenerworld.org/certifications/animal-welfare-approved/
	GlobalG.A.P. Integrated Farm Assurance Checklist for Poultry: GlobalG.A.P. provides a checklist with control points and compliance criteria on various issues in poultry supply chains (broilers and laying hens) including the issue of animal welfare. https://www.globalgap.org/uk_en/for-producers/globalg.a.p./integrated-farm-assurance-ifa/livestock/PY/
	Royal Society for the Prevention of Cruelty to Animals (RSPCA) Animal Welfare Standards for Broiler Chickens: The RSPCA provides a scheme for the rearing, handling, transport, and slaughter of broiler chickens taking into account legislation, government welfare codes, scientific research, veterinary advice, recommendations of the Farm Animal Welfare Council (FAWC), and practical experience in the farming industry. http://science.rspca.org.uk/sciencegroup/farmanimals/standards/chickens
Background Information	Paper on broiler breeding and relation to welfare: The Journal Animal Welfare provides a peer reviewed paper with the title: Breeding for better welfare: genetic goals for broiler chickens and their parents. http://users.ox.ac.uk/~snikwad/resources/GeneticsAW.pdf
	Paper on chicken welfare and the relation with stocking density and housing conditions: Nature provides a peer-reviewed paper with the title: Chicken welfare is influenced more by housing conditions than by stocking density. https://www.nature.com/articles/nature02226
	Paper on density allowances for broilers: Poultry Sciences provides a peer-reviewed paper with the title: Density allowances for broilers: where to set the limits? https://dx.doi.org/10.1093/ps/86.6.1265
	Scientific opinion on the influence of genetic parameters on the welfare of commercial broilers: The European Food and Safety Authority provides a scientific opinion on the influence of genetic parameters on the welfare and the resistance to stress of commercial broilers. https://www.efsa.europa.eu/en/efsajournal/pub/1666
	Scientific opinion on welfare of broilers and broiler breeders: The European Food and Safety Authority (EFSA) provides a scientific report that gives an update of the EFSA opinions on the welfare of broilers and broiler breeders. https://efsa.onlinelibrary.wiley.com/doi/abs/10.2903/sp.efsa.2012.EN-295
Hotspots Addressed	1. Supply Chain Transparency
	5. Health & Injuries - Farm Stage
	6. Health Management - Farm Stage





8. HOUSING SYSTEM SPECIFICATIONS - BROILER CHICKENS

Question What percentages of the broiler chickens in your supply chain were provided access to clean and friable litter, adequate light levels, outdoor access, roughage, scattering grains or pecking blocks, and elevated platforms?	 Response Options A. We are unable to determine at this time. B. We are able to report the following for our broiler chicken supply: B1% of broiler chickens in our supply chain were provided access to clean and friable litter. B2. % of broiler chickens in our supply chain were provided
	adequate light levels.
	B3% of broiler chickens in our supply chain were provided outdoor access.
	 B4% of broiler chickens in our supply chain were provided daily access to roughage, scattered grains, or pecking blocks. B5% of broiler chickens in our supply chain were provided access to elevated platforms.

Guidance

Calculation & Scope

Insights in production systems are important for animal welfare assessments as they determine the preconditions for adequate welfare. From the perspective of transparency and data availability, information on housing is often easier to assemble than data on the actual outcome, measured at the animal. However, information on the production system alone cannot be used as a complete proxy for animal welfare. Amongst others, factors such as the farmers' management, training and education, climate, and genetics affect animal welfare as well. This THESIS KPI set aims to provide a set of KPIs that is balanced between management, housing, and animal-based metrics.

Calculate B1 as the average percentage of broiler chickens in your supply chain that were provided daily access to clean and friable litter, weighted by the mass of chicken meat supplied by each broiler farm. For each broiler farm, calculate the number of broiler chickens that were provided daily access to clean and friable litter, divided by the total number of broiler chickens, then multiply by 100. To be included in B1, the litter must meet the criteria set by initiatives listed in the Certifications, Standards & Tools. These criteria include, but are not limited to: the litter must be loosely compacted when squeezed in the hand; the litter must be permanently available and must be well-maintained, well-drained, dry and friable.

Calculate B2 as the average percentage of broiler chickens in your supply chain that were provided access to adequate light levels, weighted by the mass of chicken meat supplied by each broiler farm. For each broiler farm, calculate the number of broiler chickens that were provided access to adequate light levels, divided by the total number of broiler chickens, then multiply by 100. To be included in B2, an adequate light level must be arranged with a lighting program that meets with the criteria set by the standards listed in the Certifications Standards & Tools. These criteria include that all buildings must have sufficient light levels that allow broilers to see each other. The lighting system in houses must be designed and maintained to regulate a natural daily cycle for all hens to support a circadian rhythm, with transitional periods to mimic dust and dawn, uninterrupted period of darkness of four hours, and meet with applicable legislation. Lightings programs may need to be adjusted to account for differences in breeds, disease conditions and environmental changes. For natural light, light apertures must be arranged so that light is distributed evenly within the housing. The minimum light intensity level at daytime must be at least ten lux and meet with applicable legislation. For example, in Europe a minimum light intensity level of 20 lux and uninterrupted period of darkness of six hours is required by law.

Calculate B3 as the average percentage of broiler chickens in your supply chain that were provided outdoor access, weighted by the mass of chicken meat supplied by each broiler farm. For each broiler farm, calculate the number of broiler chickens that were provided outdoor access, divided by the total number of broiler chickens, then multiply by 100. To be included in B3, the area should be designed and managed to ensure it is in good condition and protected against parasites, rodents or insects, provide substantial cover of living vegetation, drinking water, and must have a perimeter that extends no more than 400 yards (366 meters) from the broiler house or provide a mobile shelter that has a well-drained area and overhead cover.







	Calculate B4 as the average percentage of broiler chickens in your supply chain that were provided daily access to roughage, scattered grains, or pecking blocks, weighted by the mass of chicken meat supplied by each broiler farm. For each broiler farm, calculate the number of broiler chickens that were provided daily access to roughage, scattered grains, or pecking blocks, divided by the total number of broiler chickens, then multiply by 100. Calculate B5 as the average percentage of broiler chickens in your supply chain that were provided access to elevated platforms, weighted by the mass of chicken meat supplied by each broiler farm. For each broiler farm, calculate the number of broiler chickens that were provided access to elevated platforms, divided by the total number of broiler chickens, then multiply by 100. Examples of elevated platforms are straw bales, or short perches. If you are unable obtain data or otherwise determine your response to a response option, enter zero percent. Perform these calculations using data from a 12-month period that ended within 12 months of the date you respond to this question.
Certifications, Standards & Tools	American Humane Certified Animal Welfare: American Humane Certified Animal Welfare is a third-party certification program for animal welfare in the United States. American Humane Certified Animal Welfare Standards are available for broilers, laying hens, turkeys, dairy cattle, beef cattle, and swine. http://www.humaneheartland.org/index.php?option=com_content&view=article&id=3&Itemid=106&jsmallfib=1&dir=JSROOT/Animal+Welfare+Full+Standards+%2B+Supplements
	Animal Welfare Approved: Animal Welfare Approved provides standards for all commonly domesticated farmed animals. All standards address every aspect of each species' lifecycle needs from birth to death. https://agreenerworld.org/certifications/animal-welfare-approved/
	European Council Directive 2007/43/EC: Provides minimum rules for the protection of chicken kept for meat production. https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A02007L0043-20191214
	Global Animal Partnership: The Global Animal Partnership provides a five-step animal welfare rating program that facilitates continuous improvement in farm animal agriculture. https://globalanimalpartnership.org/
	GlobalG.A.P. Integrated Farm Assurance Checklist for Poultry: GlobalG.A.P. provides a checklist with control points and compliance criteria on various issues in poultry supply chains (broilers and laying hens) including the issue of animal welfare. https://www.globalgap.org/uk_en/for-producers/globalg.a.p./integrated-farm-assurance-ifa/livestock/PY/
	National Chicken Council (NCC) Animal Welfare Guidelines and Audit Checklist: The NCC provides Animal Welfare Guidelines and Audit Checklist for the animal welfare of broiler chickens. https://www.nationalchickencouncil.org/policy/animal-welfare/
	Poultry Products Quality Assurance Scheme (PPQAS): The Irish Bord Bia Poultry Products Quality Assurance Scheme (PPQAS) is an integrated scheme involving the producer and the processing plant working in partnership to provide the customer with quality assured product. https://www.bordbia.ie/farmers-growers/get-involved/become-quality-assured/poultry-products-quality-assurance- scheme-ppqas/
	Royal Society for the Prevention of Cruelty to Animals (RSPCA) Animal Welfare Standards for Broiler Chickens: The RSPCA provides a scheme for the rearing, handling, transport, and slaughter of broiler chickens taking into account legislation, government welfare codes, scientific research, veterinary advice, recommendations of the Farm Animal Welfare Council (FAWC), and practical experience in the farming industry. http://science.rspca.org.uk/sciencegroup/farmanimals/standards/chickens





Code of Practice for the Care and Handling of Hatching Eggs, Breeders, Chickens, and Turkeys: The Canadian National Farm Animal Care Council provides a code of practice for the welfare of poultry. http://www.nfacc.ca/pdfs/codes/poultry_code_EN.pdf		
Code of Practice for the Welfare of Broiler Chickens: The Irish Farm Animal Welfare Advisory Council provides a code of practice for the welfare of broiler chickens. http://www.fawac.ie/media/fawac/content/publications/animalwelfare/BroilerChickens.pdf		
Code of Recommendations for the Welfare of Meat Chickens and Breeding Chickens: The UK Department of Environment, Food, and Rural Affairs provides a recommended code of practice for the welfare of meat chickens and breeding chickens. https://www.gov.uk/government/publications/poultry-on-farm-welfare		
Paper on chicken welfare and the relation with stocking density and housing conditions: Nature provides a peer-reviewed paper with the title: Chicken welfare is influenced more by housing conditions than by stocking density. https://www.nature.com/articles/nature02226		
World Organisation for Animal Health (OIE) Terrestrial Animal Health Code: Chapter 7 of the OIE Terrestrial Health Code outlines the internationally recognized principles of animal welfare, commonly known as "The Five Freedoms". http://www.oie.int/en/standard-setting/terrestrial-code/access-online/		
Adequate: Sufficient to satisfy a requirement or meet a need.		
1. Supply Chain Transparency		
2. Animal Housing - Farm Stage		
5. Health & Injuries - Farm Stage		





9. LAMENESS - BROILER CHICKENS

Question

What percentage of broiler chickens in your supply chain showed an adequate gait score?

Response Options

A. We are unable to determine at this time.

B. We are able to report the following for our supply:

B1.____% of broiler chickens showed an adequate gait score.
B2.____% of our chicken meat supply is represented by the number reported in B1

Calculation & Scope	Calculate B1 as the average percentage of broiler chickens in your supply chain that showed an adequate gait score, weighted by the mass of chicken meat supplied by each broiler farm. For each broiler farm, calculate the percentage of broiler chickens that showed an adequate gait score as the number of broiler chickens with an adequate gait score, divided by the total number of broiler chicken scored, then multiply by 100.
	Under the U.S. Gait Scoring System from the National Chicken Council in the United States, an adequate gait scores are 0 or 1. In other geographies, equivalent programs should be referenced. A gait score of 0 indicates normal walking behavior, a score of 1 indicates moderately lameness, where birds are able to walk 150 centimeters (5 feet). Globally, multiple mobility, lameness, or locomotion scoring systems are applied. The essence of all these scoring systems is that an animal's lameness injury is monitored. See the Certifications, Standards & Tools for examples of gait scoring models.
	If primary farm data are unavailable for any of your supply, you may use a regional estimate to answer B1. Do not combine primary data and regional estimates. To answer B1 using regional estimates, you should only use estimates from a sub-country area such as an agricultural zone or region, eco-region, or geo-political boundary (e.g., state, county, department) where the animal farm operations are located. A regional estimate must be based on a study that is representative of the production system, based on production data not older than 3 years and published in a publicly available document.
	Calculate B2 as the mass of chicken meat supply for which you were able to obtain data, divided by the total mass of your chicken meat supply, then multiply by 100. If you have reported regional estimates for B1, then report 0% for B2.
	Perform these calculations using data from a 12-month period that ended within 12 months of the date you respond to this question.
Certifications, Standards & Tools	American Humane Certified Animal Welfare: American Humane Certified Animal Welfare is a third-party certification program for animal welfare in the United States. American Humane Certified Animal Welfare Standards are available for broilers, laying hens, turkeys, dairy cattle, beef cattle, and swine. http://www.humaneheartland.org/index.php?option=com_content&view=article&id=3&Itemid=106&jsmallfib=1&dir=JSROOT/Animal+Welfare+Full+Standards+%2B+Supplements
	Animal Welfare Approved: Animal Welfare Approved provides standards for all commonly domesticated farmed animals. All standards address every aspect of each species' lifecycle needs from birth to death. https://agreenerworld.org/certifications/animal-welfare-approved/
	Certified Humane Raised and Handled: Humane Farm Animal Care provides standards for all commonly domesticated farmed animals. https://certifiedhumane.org/how-we-work/our-standards/
	Code of Practice for the Care and Handling of Hatching Eggs, Breeders, Chickens, and Turkeys: The Canadian National Farm Animal Care Council provides a code of practice for the welfare of poultry. http://www.nfacc.ca/pdfs/codes/poultry_code_EN.pdf
	Code of Practice for the Welfare of Broiler Chickens: The Irish Farm Animal Welfare Advisory Council provides







	Code of Recommendations for the Welfare of Meat Chickens and Breeding Chickens: The UK Department of Environment, Food, and Rural Affairs provides a recommended code of practice for the welfare of meat chickens and breeding chickens. https://www.gov.uk/government/publications/poultry-on-farm-welfare
	Global Animal Partnership: The Global Animal Partnership provides a five-step animal welfare rating program that facilitates continuous improvement in farm animal agriculture. https://globalanimalpartnership.org/
	GlobalG.A.P. Integrated Farm Assurance Checklist for Poultry: GlobalG.A.P. provides a checklist with control points and compliance criteria on various issues in poultry supply chains (broilers and laying hens) including the issue of animal welfare. https://www.globalgap.org/uk_en/for-producers/globalg.a.p./integrated-farm-assurance-ifa/livestock/PY/
	How to Score Walking Ability in Broiler Chickens: Factsheet on Lameness and Lameness Scoring in Broiler Chickens. https://www.semanticscholar.org/paper/Lameness-in-Poultry-%3A-Evaluating-Gait-Scores/44db07fab45703b6590036b0f2ffe06fff1ed201?p2df
	National Chicken Council (NCC) Animal Welfare Guidelines and Audit Checklist: The NCC provides Animal Welfare Guidelines and Audit Checklist for the animal welfare of broiler chickens. https://www.nationalchickencouncil.org/policy/animal-welfare/
	Royal Society for the Prevention of Cruelty to Animals (RSPCA) Animal Welfare Standards for Broiler Chickens: The RSPCA provides a scheme for the rearing, handling, transport, and slaughter of broiler chickens taking into account legislation, government welfare codes, scientific research, veterinary advice, recommendations of the Farm Animal Welfare Council (FAWC), and practical experience in the farming industry. http://science.rspca.org.uk/sciencegroup/farmanimals/standards/chickens
	Welfare Quality, Science and Society Improving Animal Welfare: The European Welfare Quality project provides protocols for measuring animal welfare for cattle, pigs, and poultry. http://www.welfarequalitynetwork.net/en-us/reports/assessment-protocols/
Background Information	Preventing Lameness in Broiler Chickens: The EU Welfare Quality Program provides a factsheet on preventing lameness in broiler chickens. http://www.welfarequality.net/media/1119/wqr13.pdf
Definitions	Adequate: Sufficient to satisfy a requirement or meet a need.
Hotspots Addressed	2. Animal Housing - Farm Stage
	5. Health & Injuries - Farm Stage
	6. Health Management - Farm Stage







10. STOCKING DENSITY TRANSPARENCY - BROILER CHICKENS

Question

What was the average stocking density for broilers at broiler farms in your supply chain?

Response Options

- A. We are unable to determine at this time.
- ${\bf B}. \ \ \, \mbox{We are able to report the following for our supply:}$
 - **B1.____** kg/m2.

B2.____% of our chicken meat supply is represented by the number reported in B1.

Calculation & Scope	This question addresses transparency in production systems that are used in your supply chain. Insights in production systems are important for animal welfare assessments as they determine the preconditions for adequate welfare. From the perspective of transparency and data availability, information on housing is often easier to assemble than data on the actual outcome, measured at the animal. However, information on the production system alone cannot be used as a complete proxy for animal welfare. Amongst others, factors such as the farmers' management, training and education, climate, and genetics affect animal welfare as well. This THESIS KPI set aims to provide a set of KPIs that is balanced between management, housing, and animal-based metrics.
	Calculate B1 as the average stocking density at broiler farms in your supply chain, weighted by the mass of chicken meat supplied by each broiler farm. For each broiler farm, calculate the stocking density as the maximum mass of broiler live weight present in the last completed batch, divided by the total house area in square meters. Exclude feed- and drinking equipment and internal structural elements from the calculation of total house area. For conversion purposes, 1 lb = 0.454 kg, 1 square meter = 10.764 square foot. Multiply by 4.88 to convert a number expressed in pounds per square feet into kilograms per square meters.
	If primary farm data are unavailable for any of your supply, you may use a regional estimate to answer B1. Do not combine primary data and regional estimates. To answer B1 using regional estimates, you should only use estimates from a sub-country area such as an agricultural zone or region, eco-region, or geo-political boundary (e.g., state, county, department) where the broiler farms are located. A regional estimate must be based on a study that is representative of the production system, based on production data not older than 3 years and published in a publicly available document.
	Calculate B2 as the mass of chicken meat supply you were able to obtain data, divided by the total mass of your chicken meat supply, then multiply by 100. If you have reported regional estimates for B1, then report 0% for B2.
	Perform these calculations using data from a 12-month period that ended within 12 months of the date you respond to this question.
Certifications, Standards & Tools	American Humane Certified Animal Welfare: American Humane Certified Animal Welfare is a third-party certification program for animal welfare in the United States. American Humane Certified Animal Welfare Standards are available for broilers, laying hens, turkeys, dairy cattle, beef cattle, and swine. http://www.humaneheartland.org/index.php?option=com_content&view=article&id=3&Itemid=106&jsmallfib=1&dir=JSROOT/Animal+Welfare+Full+Standards+%2B+Supplements
	Animal Welfare Approved: Animal Welfare Approved provides standards for all commonly domesticated farmed animals. All standards address every aspect of each species' lifecycle needs from birth to death. https://agreenerworld.org/certifications/animal-welfare-approved/
	Certified Humane Raised and Handled: Humane Farm Animal Care provides standards for all commonly domesticated farmed animals. https://certifiedhumane.org/how-we-work/our-standards/
	European Council Directive 2007/43/EC: Provides minimum rules for the protection of chicken kept for meat production. https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A02007L0043-20191214







	Global Animal Partnership: The Global Animal Partnership provides a five-step animal welfare rating program that facilitates continuous improvement in farm animal agriculture. https://globalanimalpartnership.org/
	GlobalG.A.P. Integrated Farm Assurance Checklist for Poultry: GlobalG.A.P. provides a checklist with control points and compliance criteria on various issues in poultry supply chains (broilers and laying hens) including the issue of animal welfare. https://www.globalgap.org/uk_en/for-producers/globalg.a.p./integrated-farm-assurance-ifa/livestock/PY/
	National Chicken Council (NCC) Animal Welfare Guidelines and Audit Checklist: The NCC provides Animal Welfare Guidelines and Audit Checklist for the animal welfare of broiler chickens. https://www.nationalchickencouncil.org/policy/animal-welfare/
	Poultry Products Quality Assurance Scheme (PPQAS): The Irish Bord Bia Poultry Products Quality Assurance Scheme (PPQAS) is an integrated scheme involving the producer and the processing plant working in partnership to provide the customer with quality assured product. https://www.bordbia.ie/farmers-growers/get-involved/become-quality-assured/poultry-products-quality-assurance- scheme-ppqas/
	Royal Society for the Prevention of Cruelty to Animals (RSPCA) Animal Welfare Standards for Broiler Chickens: The RSPCA provides a scheme for the rearing, handling, transport, and slaughter of broiler chickens taking into account legislation, government welfare codes, scientific research, veterinary advice, recommendations of the Farm Animal Welfare Council (FAWC), and practical experience in the farming industry. http://science.rspca.org.uk/sciencegroup/farmanimals/standards/chickens
	Welfare Quality, Science and Society Improving Animal Welfare: The European Welfare Quality project provides protocols for measuring animal welfare for cattle, pigs, and poultry. http://www.welfarequalitynetwork.net/en-us/reports/assessment-protocols/
Background Information	Code of Practice for the Care and Handling of Hatching Eggs, Breeders, Chickens, and Turkeys: The Canadian National Farm Animal Care Council provides a code of practice for the welfare of poultry. http://www.nfacc.ca/pdfs/codes/poultry_code_EN.pdf
	Code of Practice for the Welfare of Broiler Chickens: The Irish Farm Animal Welfare Advisory Council provides a code of practice for the welfare of broiler chickens. http://www.fawac.ie/media/fawac/content/publications/animalwelfare/BroilerChickens.pdf
	Code of Recommendations for the Welfare of Meat Chickens and Breeding Chickens: The UK Department of Environment, Food, and Rural Affairs provides a recommended code of practice for the welfare of meat chickens and breeding chickens. https://www.gov.uk/government/publications/poultry-on-farm-welfare
	Paper on chicken welfare and the relation with stocking density and housing conditions: Nature provides a peer-reviewed paper with the title: Chicken welfare is influenced more by housing conditions than by stocking density. https://www.nature.com/articles/nature02226
	Paper on density allowances for broilers: Poultry Sciences provides a peer-reviewed paper with the title: Density allowances for broilers: where to set the limits? https://dx.doi.org/10.1093/ps/86.6.1265
	Scientific opinion on welfare of broilers and broiler breeders: The European Food and Safety Authority (EFSA) provides a scientific report that gives an update of the EFSA opinions on the welfare of broilers and broiler breeders. https://efsa.onlinelibrary.wiley.com/doi/abs/10.2903/sp.efsa.2012.EN-295
	World Organisation for Animal Health (OIE) Terrestrial Animal Health Code: Chapter 7 of the OIE Terrestrial Health Code outlines the internationally recognized principles of animal welfare, commonly known as "The Five Freedoms". http://www.oie.int/en/standard-setting/terrestrial-code/access-online/
Hotspots Addressed	1. Supply Chain Transparency
	2. Animal Housing - Farm Stage





11. CULLING MANAGEMENT - BROILER CHICKENS

track reasons for cuiling.	B2	re able to report the following for our chicken meat supply: % of our chicken meat supply came from broiler farms that a standard operating procedure for culling. % of our chicken meat supply came from broiler farms that reasons for culling.
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Calculation & Scope	Calculate B1 as the mass of your chicken meat supply that came from broiler farms that have a standard operating procedure for culling, divided by the total mass of your chicken meat supply, then multiply by 100. To be included in B1, a standard operating procedure for culling must be aligned with the euthanasia guidelines from the National Chicken Council (NCC) in the United States, or equivalent in other geographies. The NCC guidelines include, but are not limited to: proper handling around catching, flock inspection, euthanasia method, and feed and water withdrawal. See the Certifications, Standards & Tools for more information. Calculate B2 as the mass of your chicken meat supply that came from broiler farms that track the reasons for culling, divided by the total mass of your chicken meat supply, then multiply by 100. To be included in B2, the method and reasons of culling must be tracked. If you are unable obtain data or otherwise determine your response to a response option, enter zero percent. Perform these calculations using data from a 12-month period that ended within 12 months of the date you
	respond to this question.
Certifications, Standards & Tools	American Humane Certified Animal Welfare: American Humane Certified Animal Welfare is a third-party certification program for animal welfare in the United States. American Humane Certified Animal Welfare Standards are available for broilers, laying hens, turkeys, dairy cattle, beef cattle, and swine. http://www.humaneheartland.org/index.php?option=com_content&view=article&id=3&Itemid=106&jsmallfib=1&dir=JSROOT/Animal+Welfare+Full+Standards+%2B+Supplements
	Animal Welfare Approved: Animal Welfare Approved provides standards for all commonly domesticated farmed animals. All standards address every aspect of each species' lifecycle needs from birth to death. https://agreenerworld.org/certifications/animal-welfare-approved/
	Certified Humane Raised and Handled: Humane Farm Animal Care provides standards for all commonly domesticated farmed animals. https://certifiedhumane.org/how-we-work/our-standards/
	Global Animal Partnership: The Global Animal Partnership provides a five-step animal welfare rating program that facilitates continuous improvement in farm animal agriculture. https://globalanimalpartnership.org/
	GlobalG.A.P. Integrated Farm Assurance Checklist for Poultry: GlobalG.A.P. provides a checklist with control points and compliance criteria on various issues in poultry supply chains (broilers and laying hens) including the issue of animal welfare. https://www.globalgap.org/uk_en/for-producers/globalg.a.p./integrated-farm-assurance-ifa/livestock/PY/
	National Chicken Council (NCC) Animal Welfare Guidelines and Audit Checklist: The NCC provides Animal Welfare Guidelines and Audit Checklist for the animal welfare of broiler chickens. https://www.nationalchickencouncil.org/policy/animal-welfare/
	Poultry Products Quality Assurance Scheme (PPQAS): The Irish Bord Bia Poultry Products Quality Assurance Scheme (PPQAS) is an integrated scheme involving the producer and the processing plant working in partnership to provide the customer with quality assured product.







	https://www.bordbia.ie/farmers-growers/get-involved/become-quality-assured/poultry-products-quality-assurance- scheme-ppqas/
	Royal Society for the Prevention of Cruelty to Animals (RSPCA) Animal Welfare Standards for Broiler Chickens: The RSPCA provides a scheme for the rearing, handling, transport, and slaughter of broiler chickens taking into account legislation, government welfare codes, scientific research, veterinary advice, recommendations of the Farm Animal Welfare Council (FAWC), and practical experience in the farming industry. http://science.rspca.org.uk/sciencegroup/farmanimals/standards/chickens
Background Information	Code of Practice for the Care and Handling of Hatching Eggs, Breeders, Chickens, and Turkeys: The Canadian National Farm Animal Care Council provides a code of practice for the welfare of poultry. http://www.nfacc.ca/pdfs/codes/poultry_code_EN.pdf
	Code of Practice for the Welfare of Broiler Chickens: The Irish Farm Animal Welfare Advisory Council provides a code of practice for the welfare of broiler chickens. http://www.fawac.ie/media/fawac/content/publications/animalwelfare/BroilerChickens.pdf
	Code of Recommendations for the Welfare of Meat Chickens and Breeding Chickens: The UK Department of Environment, Food, and Rural Affairs provides a recommended code of practice for the welfare of meat chickens and breeding chickens. https://www.gov.uk/government/publications/poultry-on-farm-welfare
	Guidelines for the Euthanasia of Animals: The American Veterinary Medical Association (AVMA) provides a policy document on euthanasia of animals. https://www.avma.org/sites/default/files/2020-02/Guidelines-on-Euthanasia-2020.pdf
	Welfare Quality, Science and Society Improving Animal Welfare: The European Welfare Quality project provides protocols for measuring animal welfare for cattle, pigs, and poultry. http://www.welfarequalitynetwork.net/en-us/reports/assessment-protocols/
	World Organisation for Animal Health (OIE) Terrestrial Animal Health Code: Chapter 7 of the OIE Terrestrial Health Code outlines the internationally recognized principles of animal welfare, commonly known as "The Five Freedoms". http://www.oie.int/en/standard-setting/terrestrial-code/access-online/
Definitions	Standard operating procedure: Standard operating procedures (SOPs) are written instructions to document how to perform a routine activity. SOPs document the steps of key processes to help ensure the consistency and quality of the output.
Hotspots Addressed	1. Supply Chain Transparency
	4. Culling Procedures - Farm Stage
	6. Health Management - Farm Stage







12. MORTALITY RATE - BROILER CHICKENS

Question

What was the average mortality rate at the broiler farms in your supply chain?

Response Options

A. We are unable to determine at this time.

B. We are able to report the following for our supply:

B1._____ mortality rate in the most recently completed flock cycle. B2.____% of our chicken meat supply is represented by the number reported in B1.

Calculation & Scope	Mortality rate is an indirect measure of animal welfare. It adds value to the interpretation of other key performance indicators concerning culling management, daily growth rate potential, broiler housing, animal welfare certification and audits, housing systems, and animal health management.
	Calculate B1 as the average mortality rate in the most recently completed flock cycle, weighted by the mass of chicken meat supplied by each broiler farm. For each broiler farm, calculate the mortality rate as the number of deceased broilers in the most recently completed flock cycle, divided by the total number of broilers that started in the most recently completed flock cycle, then multiply by 100. Mortality is defined as the uncontrolled death of a broiler as well as cases of euthanasia at the broiler farm.
	If primary farm data are unavailable for any of your supply, you may use a regional estimate to answer B1. Do not combine primary data and regional estimates. To answer B1 using regional estimates, you should only use estimates from a sub-country area such as an agricultural zone or region, eco-region, or geo-political boundary (e.g., state, county, department) where the broiler farms are located. A regional estimate must be based on a study that is representative of the production system, based on production data not older than 3 years and published in a publicly available document.
	Calculate B2 as the mass of chicken meat supply for which you were able to obtain data, divided by the total mass of your chicken meat supply, then multiply by 100. If you have reported a regional estimate for B1, then report 0% for B2.
	Perform these calculations using data from a 12-month period that ended within 12 months of the date you respond to this question.
Certifications, Standards & Tools	American Humane Certified Animal Welfare: American Humane Certified Animal Welfare is a third-party certification program for animal welfare in the United States. American Humane Certified Animal Welfare Standards are available for broilers, laying hens, turkeys, dairy cattle, beef cattle, and swine. http://www.humaneheartland.org/index.php?option=com_content&view=article&id=3&Itemid=106&jsmallfib=1&dir=JSROOT/Animal+Welfare+Full+Standards+%2B+Supplements
	certification program for animal welfare in the United States. American Humane Certified Animal Welfare Standards are available for broilers, laying hens, turkeys, dairy cattle, beef cattle, and swine. http://www.humaneheartland.org/index.php?option=com_content&view=article&id=3&Itemid=106&jsmallfib=1&dir=
	 certification program for animal welfare in the United States. American Humane Certified Animal Welfare Standards are available for broilers, laying hens, turkeys, dairy cattle, beef cattle, and swine. http://www.humaneheartland.org/index.php?option=com_content&view=article&id=3&Itemid=106&jsmallfib=1&dir=JSROOT/Animal+Welfare+Full+Standards+%2B+Supplements Animal Welfare Approved: Animal Welfare Approved provides standards for all commonly domesticated farmed animals. All standards address every aspect of each species' lifecycle needs from birth to death.
	 certification program for animal welfare in the United States. American Humane Certified Animal Welfare Standards are available for broilers, laying hens, turkeys, dairy cattle, beef cattle, and swine. http://www.humaneheartland.org/index.php?option=com_content&view=article&id=3&Itemid=106&jsmallfib=1&dir=JSROOT/Animal+Welfare+Full+Standards+%2B+Supplements Animal Welfare Approved: Animal Welfare Approved provides standards for all commonly domesticated farmed animals. All standards address every aspect of each species' lifecycle needs from birth to death. https://agreenerworld.org/certifications/animal-welfare-approved/ Certified Humane Raised and Handled: Humane Farm Animal Care provides standards for all commonly domesticated farmed animals.
	 certification program for animal welfare in the United States. American Humane Certified Animal Welfare Standards are available for broilers, laying hens, turkeys, dairy cattle, beef cattle, and swine. http://www.humaneheartland.org/index.php?option=com_content&view=article&id=3&Itemid=106&jsmallfib=1&dir=JSROOT/Animal+Welfare+Full+Standards+%2B+Supplements Animal Welfare Approved: Animal Welfare Approved provides standards for all commonly domesticated farmed animals. All standards address every aspect of each species' lifecycle needs from birth to death. https://agreenerworld.org/certifications/animal-welfare-approved/ Certified Humane Raised and Handled: Humane Farm Animal Care provides standards for all commonly domesticated farmed animals. https://certifiedhumane.org/how-we-work/our-standards/ Global Animal Partnership: The Global Animal Partnership provides a five-step animal welfare rating program that facilitates continuous improvement in farm animal agriculture.







	National Chicken Council (NCC) Animal Welfare Guidelines and Audit Checklist: The NCC provides Animal Welfare Guidelines and Audit Checklist for the animal welfare of broiler chickens. https://www.nationalchickencouncil.org/policy/animal-welfare/
	Poultry Products Quality Assurance Scheme (PPQAS): The Irish Bord Bia Poultry Products Quality Assurance Scheme (PPQAS) is an integrated scheme involving the producer and the processing plant working in partnership to provide the customer with quality assured product. https://www.bordbia.ie/farmers-growers/get-involved/become-quality-assured/poultry-products-quality-assurance- scheme-ppqas/
	Royal Society for the Prevention of Cruelty to Animals (RSPCA) Animal Welfare Standards for Broiler Chickens: The RSPCA provides a scheme for the rearing, handling, transport, and slaughter of broiler chickens taking into account legislation, government welfare codes, scientific research, veterinary advice, recommendations of the Farm Animal Welfare Council (FAWC), and practical experience in the farming industry. http://science.rspca.org.uk/sciencegroup/farmanimals/standards/chickens
	Welfare Quality, Science and Society Improving Animal Welfare: The European Welfare Quality project provides protocols for measuring animal welfare for cattle, pigs, and poultry. http://www.welfarequalitynetwork.net/en-us/reports/assessment-protocols/
Background Information	Code of Practice for the Care and Handling of Hatching Eggs, Breeders, Chickens, and Turkeys: The Canadian National Farm Animal Care Council provides a code of practice for the welfare of poultry. http://www.nfacc.ca/pdfs/codes/poultry_code_EN.pdf
	Code of Practice for the Welfare of Broiler Chickens: The Irish Farm Animal Welfare Advisory Council provides a code of practice for the welfare of broiler chickens. http://www.fawac.ie/media/fawac/content/publications/animalwelfare/BroilerChickens.pdf
	Code of Recommendations for the Welfare of Meat Chickens and Breeding Chickens: The UK Department of Environment, Food, and Rural Affairs provides a recommended code of practice for the welfare of meat chickens and breeding chickens. https://www.gov.uk/government/publications/poultry-on-farm-welfare
	World Organisation for Animal Health (OIE) Terrestrial Animal Health Code: Chapter 7 of the OIE Terrestrial Health Code outlines the internationally recognized principles of animal welfare, commonly known as "The Five Freedoms". http://www.oie.int/en/standard-setting/terrestrial-code/access-online/
Definitions	Mortality: The uncontrolled death of animals and cases of euthanasia and emergency slaughter at the farm.
Hotspots Addressed	1. Supply Chain Transparency
	4. Culling Procedures - Farm Stage
	6. Health Management - Farm Stage





13. TRANSPORTATION TO SLAUGHTER – BROILER CHICKENS

disclose a transportation plan that covers animal welfare and what was the average dead-on-arrival rate for broiler chickens at slaughter facilities in your supply chain? B. We are B1	Options e unable to determine at this time, or our supply is not covered by sportation plan that covers animal welfare. e able to report the following for our supply: % of our chicken meat suppliers publicly disclose a ortation plan that specifies how animal welfare is covered during ortation to slaughter. % of our chicken meat supply is represented by the number ed in B1. % of our chicken meat supply is represented by the number ed in B1. % of our chicken meat supply is represented by the number ed in B1. % of our chicken meat supply is represented by the number ed in B1.
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Calculation & Scope	Calculate B1 as the number of your suppliers that publicly disclose a transportation plan that specifies how animal welfare is covered during transportation to slaughter, divided by the total number of your suppliers, then multiply by 100. To be included in B1, your company should publicly disclose a transportation plan that specifies how animal welfare is covered during transportation to slaughter. The transportation plan must meet the guidelines provided by the National Chicken Council in the United States, or equivalent in other geographies. These guidelines include, but are not limited to: handling, transport conditions, training, record keeping, and equipment. See the Certifications, Standards & Tools for more information.
	Calculate B3 as the average dead-on-arrival rate per delivery at the slaughter facility, weighted by the mass of chicken meat supplied by each delivery. For each delivery at the slaughter facility, calculate the dead-on-arrival rate as the number of deceased broilers during transport, divided by the number of broilers that were transported, then multiply by 100.
	If primary data are unavailable for any of your supply, you may use a regional estimate to answer B1 and B3. Do not combine primary data and regional estimates. To answer B1 and B3 using regional estimates, you should only use estimates from a sub-country area such as an agricultural zone or region, eco-region, or geo-political boundary (e.g., state, county, department) where the broiler farms are located. A regional estimate must be based on a study that is representative of the production system, based on production data not older than 3 years and published in a publicly available document.
	Calculate B2 and B4 as the mass of chicken meat supply for which you were able to obtain data, divided by the total mass of your chicken meat supply, then multiply by 100. If you have reported regional estimate for B1 and B3, then report 0% for B2 and B4.
	Perform these calculations using data from a 12-month period that ended within 12 months of the date you respond to this question.
Certifications, Standards & Tools	American Humane Certified Animal Welfare: American Humane Certified Animal Welfare is a third-party certification program for animal welfare in the United States. American Humane Certified Animal Welfare Standards are available for broilers, laying hens, turkeys, dairy cattle, beef cattle, and swine. http://www.humaneheartland.org/index.php?option=com_content&view=article&id=3&Itemid=106&jsmallfib=1&dir=JSROOT/Animal+Welfare+Full+Standards+%2B+Supplements
	Animal Welfare Approved: Animal Welfare Approved provides standards for all commonly domesticated farmed animals. All standards address every aspect of each species' lifecycle needs from birth to death. https://agreenerworld.org/certifications/animal-welfare-approved/
	Australian Animal Welfare Standards and Guidelines for Land Transport: The Australian Department of Agriculture, Fisheries and Forestry provides a standard for land transport of livestock.





	Certified Humane Raised and Handled: Humane Farm Animal Care provides standards for all commonly domesticated farmed animals. https://certifiedhumane.org/how-we-work/our-standards/
	EU Regulation on Animal Welfare during transport: Council Regulation (EC) No 1/2005 on the protection of animals during transport and related operations. https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=LEGISSUM:f83007
	Global Animal Partnership: The Global Animal Partnership provides a five-step animal welfare rating program that facilitates continuous improvement in farm animal agriculture. https://globalanimalpartnership.org/
	GlobalG.A.P. Integrated Farm Assurance Checklist for Poultry: GlobalG.A.P. provides a checklist with control points and compliance criteria on various issues in poultry supply chains (broilers and laying hens) including the issue of animal welfare. https://www.globalgap.org/uk_en/for-producers/globalg.a.p./integrated-farm-assurance-ifa/livestock/PY/
	National Chicken Council (NCC) Animal Welfare Guidelines and Audit Checklist: The NCC provides Animal Welfare Guidelines and Audit Checklist for the animal welfare of broiler chickens. https://www.nationalchickencouncil.org/policy/animal-welfare/
	Poultry Products Quality Assurance Scheme (PPQAS): The Irish Bord Bia Poultry Products Quality Assurance Scheme (PPQAS) is an integrated scheme involving the producer and the processing plant working in partnership to provide the customer with quality assured product.
	https://www.bordbia.ie/farmers-growers/get-involved/become-quality-assured/poultry-products-quality-assurance- scheme-ppqas/
	Royal Society for the Prevention of Cruelty to Animals (RSPCA) Animal Welfare Standards for Broiler Chickens: The RSPCA provides a scheme for the rearing, handling, transport, and slaughter of broiler chickens taking into account legislation, government welfare codes, scientific research, veterinary advice, recommendations of the Farm Animal Welfare Council (FAWC), and practical experience in the farming industry. http://science.rspca.org.uk/sciencegroup/farmanimals/standards/chickens
Background Information	Code of Practice for the Care and Handling of Hatching Eggs, Breeders, Chickens, and Turkeys: The Canadian National Farm Animal Care Council provides a code of practice for the welfare of poultry. http://www.nfacc.ca/pdfs/codes/poultry_code_EN.pdf
	Code of Practice for the Transport of Animals: The Canadian National Farm Animal Care Council provides a recommended code of practice for the care and handling of farm animals during transport. https://www.nfacc.ca/pdfs/codes/pig_code_of_practice.pdf
	Code of Practice for the Welfare of Broiler Chickens: The Irish Farm Animal Welfare Advisory Council provides a code of practice for the welfare of broiler chickens. http://www.fawac.ie/media/fawac/content/publications/animalwelfare/BroilerChickens.pdf
	Code of Recommendations for the Welfare of Meat Chickens and Breeding Chickens: The UK Department of Environment, Food, and Rural Affairs provides a recommended code of practice for the welfare of meat chickens and breeding chickens. https://www.gov.uk/government/publications/poultry-on-farm-welfare
	Online Guide on Transport of Livestock: The Humane Slaughter Organization in the United Kingdom provides information on issues, considerations, and best practices in transport and slaughter of livestock. http://www.hsa.org.uk/transport-of-livestock-introduction/introduction-8
Definitions	Dead-on-arrival: Dead-on-arrival (DOA) or brought-in-dead (BID), is a term that indicates an animal is clinically dead upon the moment of arrival.
Hotspots Addressed	1. Supply Chain Transparency
	8. Animal Handling - Transportation Stage





14. PRE-SLAUGHTER STUNNING TRANSPARENCY – BROILER CHICKENS

Question

What percentages of your chicken meat supply came from broilers that were effectively stunned before slaughter using low atmospheric pressure system stunning, electric water bath stunning, controlled atmosphere stunning, or other methods of stunning?

Response Options

- A. Not applicable. The broilers in this supply chain are ritually slaughtered.
- B. We are unable to determine at this time.
- **C.** We are able to report the following for our chicken meat supply:
 - **C1**.____% of our chicken meat supply came from broilers that were effectively stunned with a low atmospheric pressure system.

C2.____% of our chicken meat supply came from broilers that were effectively stunned with an electric water bath.

C3.____% of our chicken meat supply came from broilers that were effectively stunned in a controlled atmosphere using carbon dioxide.

C4.____% of our chicken meat supply came from broilers that were effectively stunned in a controlled atmosphere using a mixture of inert gases and carbon dioxide, or inert gases only.

C5.____% of our chicken meat supply came from broilers that were effectively stunned prior to slaughter using other methods.

Calculation & Scope	Calculate C1 as the mass of your chicken meat supply that came from broilers that were effectively stunned with low atmospheric pressure, divided by the total mass of your chicken meat supply, then multiply by 100.
	Calculate C2 as the mass of your chicken meat supply came from broilers that were effectively stunned in an electric water bath, divided by the total mass of your chicken meat supply, then multiply by 100.
	Calculate C3 as the mass of your chicken meat supply came from broilers that were effectively stunned in a controlled atmosphere using carbon dioxide, divided by the total mass of your chicken meat supply, then multiply by 100.
	Calculate C4 as the mass of your chicken meat supply came from broilers that were effectively stunned in a controlled atmosphere using a mixture of inert gases and carbon dioxide, divided by the total mass of your chicken meat supply, then multiply by 100. Examples inert gases are argon, helium, nitrogen, and methane. Include your supply in C3, when you are unable to determine what the method of controlled atmosphere stunning has been used for stunning.
	Calculate C5 as the mass of your chicken meat supply came from broilers that were effectively stunned prior to slaughter using other methods, divided by the total mass of your chicken meat supply, then multiply by 100.
	The percentages reported for C1 through C4 are mutually exclusive and their sum must not exceed 100%. Perform these calculations using data from a 12-month period that ended within 12 months of the date you respond to this question.
Certifications, Standards & Tools	Guidelines for the Euthanasia of Animals: The American Veterinary Medical Association (AVMA) provides a policy document on euthanasia of animals. https://www.avma.org/sites/default/files/2020-02/Guidelines-on-Euthanasia-2020.pdf
Background Information	Animal Welfare Approved: Animal Welfare Approved provides standards for all commonly domesticated farmed animals. All standards address every aspect of each species' lifecycle needs from birth to death. https://agreenerworld.org/certifications/animal-welfare-approved/
	Behavioral responses of broiler chickens during low atmospheric pressure stunning: The journal Applied Animal Behaviour Science provides a peer-reviewed paper with the title: Behavioural responses of broiler chickens during low atmospheric pressure stunning. https://www.sciencedirect.com/science/article/abs/pii/S0168159115003056







	7. Animal Handling - Slaughter Stage
Hotspots Addressed	1. Supply Chain Transparency
Definitions	Stunning: Stunning is the process of rendering the animal unconscious prior to slaughter.
	Stunning Methods for Poultry: This review presents an overview of the modes of action and the technical aspects of poultry stunning methods including novel and emerging stunning technologies. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4693211/
	Health and Welfare provides a peer reviewed paper on the use of a low atmosphere pressure system (LAPS) for stunning poultry. https://www.efsa.europa.eu/en/efsajournal/pub/5056
	Royal Society for the Prevention of Cruelty to Animals (RSPCA) Animal Welfare Standards for Broiler Chickens: The RSPCA provides a scheme for the rearing, handling, transport, and slaughter of broiler chickens taking into account legislation, government welfare codes, scientific research, veterinary advice, recommendations of the Farm Animal Welfare Council (FAWC), and practical experience in the farming industry. http://science.rspca.org.uk/sciencegroup/farmanimals/standards/chickens Scientific opinion on LAPS for Stunning Poultry: The European Food and Safety Authority panel on Animal
	Recommended Animal Handling Guidelines & Audit Guide: The American Meat Institute provides a guide on recommended practices including transportation audit guidelines and stunning guidelines. http://animalhandling.org/producers/guidelines_audits
	Position Statement on Stunning of Poultry: The American Association of Avian Pathologists (AAAP) and the American College of Poultry Veterinarians (ACPV) provide a position statement on stunning of poultry. https://www.nationalchickencouncil.org/wp-content/uploads/2012/12/2012AAAPStunningof-Poultry.pdf
	National Chicken Council (NCC) Animal Welfare Guidelines and Audit Checklist: The NCC provides Animal Welfare Guidelines and Audit Checklist for the animal welfare of broiler chickens. https://www.nationalchickencouncil.org/policy/animal-welfare/
	FAO: Guidelines for Humane Handling, Transport and Slaughter of Livestock: Document describing basic principles for humane handling, transport, and slaughter of livestock. http://www.fao.org/docrep/003/x6909e/x6909e00.htm#Contents
	Electrical Water Bath Stunning of Poultry: The Humane Slaughter Association in the United Kingdom provides guidance on electrical water bath stunning of poultry. http://www.hsa.org.uk/downloads/hsagn7waterbathpoultryapril2016pdfoptimiser.pdf
	Code of Recommendations for the Welfare of Meat Chickens and Breeding Chickens: The UK Department of Environment, Food, and Rural Affairs provides a recommended code of practice for the welfare of meat chickens and breeding chickens. https://www.gov.uk/government/publications/poultry-on-farm-welfare
	Code of Practice for the Welfare of Broiler Chickens: The Irish Farm Animal Welfare Advisory Council provides a code of practice for the welfare of broiler chickens. http://www.fawac.ie/media/fawac/content/publications/animalwelfare/BroilerChickens.pdf
	Code of Practice for the Care and Handling of Hatching Eggs, Breeders, Chickens, and Turkeys: The Canadian National Farm Animal Care Council provides a code of practice for the welfare of poultry. http://www.nfacc.ca/pdfs/codes/poultry_code_EN.pdf
	Certified Humane Raised and Handled: Humane Farm Animal Care provides standards for all commonly domesticated farmed animals. https://certifiedhumane.org/how-we-work/our-standards/






15. ASSESSMENT AT SLAUGHTER - BROILER CHICKENS

B4. % of our chicken meat supply is represented by the number reported in B3.
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Guidance

Calculation & Scope	Calculate B1 as the average percentage of broiler chickens with no or mild foot pad dermatitis at slaughter, weighted by the mass of chicken meat supplied by each delivery at the slaughter facility. For each delivery, calculate the percentage of broiler chickens with no or mild foot pad dermatitis as the number of broilers chickens with no or mild foot pad dermatitis, divided by the total number of broilers delivered, then multiply by 100. To be included in B1, the foot pad must not show lesions, or mild lesions as discoloration of the foot pad, superficial lesions, dark papillae and hyperkeratosis. Do not include broilers that have a food pad where the epidermis is affected, have ulcers or scabs, or show signs of hemorrhages or swollen foot pads. See the Certifications, Standards & Tools for definitions on scoring footpad dermatitis.
	Calculate B3 as the average percentage of broiler chickens with no or mild hock lesions at slaughter, weighted by the mass of chicken meat supplied by each delivery at the slaughter facility. For each delivery, calculate the percentage of broiler chickens with no or mild hock lesions as the number of broilers chickens with no or mild hock lesions, divided by the total number of broilers delivered, then multiply by 100. To be included in B3, the hock must not show lesions, or less than 10% of the hock has a lesion. See the Certifications, Standards & Tools for definitions on scoring footpad dermatitis.
	If primary data are unavailable for any of your supply, you may use a regional estimate to answer B1 and B3. Do not combine primary data and regional estimates. To answer B1 and B3 using regional estimates, you should only use estimates from a sub-country area such as an agricultural zone or region, eco-region, or geo-political boundary (e.g., state, county, department) where the broiler farms are located. A regional estimate must be based on a study that is representative of the production system, based on production data not older than 3 years and published in a publicly available document.
	Calculate B2 and B4 as the mass of chicken meat supply for which you were able to obtain data, divided by the total mass of your chicken meat supply, then multiply by 100. If you have reported regional estimates for B1 and B3, then report 0% for B2 and B4.
	Perform these calculations using data from a 12-month period that ended within 12 months of the date you respond to this question.
Certifications, Standards & Tools	Factsheet on Foot Pad Dermatitis in Poultry: Animal Welfare Approved provides a factsheet on assessing footpad dermatitis. https://agreenerworld.org/wp-content/uploads/2018/05/TAFS-7-Foot-Pad-Dermatitis-in-Poultry-v2.pdf
	Management Tools to Reduce Footpad Dermatitis in Broilers: This document gives broiler farms management tools to help reduce footpad dermatitis in broilers. http://en.aviagen.com/assets/Tech_Center/Broiler_Breeder_Tech_Articles/English/AviaTech-FoodpadDermatitisSept2012.pdf
	Welfare Quality, Science and Society Improving Animal Welfare: The European Welfare Quality project provides protocols for measuring animal welfare for cattle, pigs, and poultry. http://www.welfarequalitynetwork.net/en-us/reports/assessment-protocols/







Background Information	Paper on chicken welfare and the relation with stocking density and housing conditions: Nature provides a peer-reviewed paper with the title: Chicken welfare is influenced more by housing conditions than by stocking density. https://www.nature.com/articles/nature02226
	Paper on factors that affect the prevalence of foot pad dermatitis and hock burn: British Poultry Science provides a peer-reviewed paper with the title: Factors affecting the prevalence of foot pad dermatitis, hock burn and breast burn in broiler chicken. https://pubmed.ncbi.nlm.nih.gov/17578688/
	Prevalence and Factors of Influence of Footpad Dermatitis: This article gives an overview of prevalence and factors of influence of footpad dermatitis in Dutch broiler flocks. This information can be used to develop tools to reduce footpad dermatitis in commercial flocks. https://pubmed.ncbi.nlm.nih.gov/22700500/
Hotspots Addressed	 Supply Chain Transparency Animal Handling - Slaughter Stage





Category Sustainability Profile

Hotspots

Hotspots are activities in a product's life cycle that have a documented environmental or social impact. TSC evaluates the quality and quantity of the scientific sources of evidence for each hotspot according to a defined decision tree before they are included in the CSP. Items marked with an asterisk (*) are *additional issues* that have not achieved the same level of evidence as a hotspot. For more information on the methodology TSC uses to identify hotspots visit: http://www.sustainabilityconsortium.org/toolkit-methodology

AGRICULTURE AND LIVESTOCK

Supply Chain Transparency References 1. A lack of supply chain transparency can inhibit the setting of actionable goals on the Bianchi, Petracci, & Cavani, 2006 issue of animal welfare. A higher level of supply chain transparency enhances Blokhuis, Jones, Geers, Miele, & Veissier, measurability and accountability of animal welfare hotspots and enables stakeholders 2003 such as non-governmental organizations, consumers, manufacturers, and de Jong, van Harn, Gunnink, Hindle, & governments to improve the understanding, monitoring, and evaluation of animal Lourens, 2012 welfare. Gentle, 2011 Gregory, 2008 **Related Improvement Opportunities** 11. Implement an animal welfare policy 12. Implement animal welfare best practices at broiler chicken farms, during transport, and at slaughter 13. Implement a data sharing system across the supply chain **KPIs** 1. Animal Welfare Policy 2. Animal Welfare Certifications and Audits - Broiler Breeder and Broiler Chicken Farms 3. Animal Welfare Certifications and Audits - Broiler Transport and Slaughter 5. Hatching Management - Broiler Chickens 6. Animal Health Management – Broiler Farms 7. Daily Weight Gain Potential Transparency - Broiler Chickens 8. Housing System Specifications - Broiler Chickens 10. Stocking Density Transparency - Broiler Chickens 11. Culling Management - Broiler Chickens 12. Mortality Rate - Broiler Chickens 13. Transportation to Slaughter – Broiler Chickens 14. Pre-Slaughter Stunning Transparency – Broiler Chickens 15. Assessment at Slaughter - Broiler Chickens 2. Animal Housing - Farm Stage References The physical environment affects the health and vigor of animals. A lack of readily de Jong, van Harn, Gunnink, Hindle, & accessible feed and water, a safe shelter, comfort around resting, adequate air Lourens, 2012 quality, temperature, and humidity, sufficient space allowance, and environmental Fraser et al., 2013 enrichment that fulfill an animal's basic needs lead to a decrease in animal health and Gentle, 2011 welfare. Guatteo & Guémené, 2014 **Related Improvement Opportunities** 7. Provide transparency in broiler chicken housing practices 8. Set minimum requirements for culling management at the broiler chicken farm 13. Implement a data sharing system across the supply chain **KPIs** 8. Housing System Specifications - Broiler Chickens

- 9. Lameness Broiler Chickens
- 10. Stocking Density Transparency Broiler Chickens





3.	 Animal Handling - Farm Stage A lack of skills and knowledge about the physical and environmental requirements that fulfill an animal's basic needs, stress factors, and recognizing common diseases, illnesses, and injuries and insufficient training to evaluate and assess animal welfare by animal caretakers may lead to improper handling of animals and result in animal injuries, panic, lasting fear, or stress. Related Improvement Opportunities Designate people at site that evaluate and assess broiler health and welfare Implement stockperson training programs for broiler chicken health and welfare at broiler chicken farms Implement a data sharing system across the supply chain KPIs Animal Welfare Certifications and Audits - Broiler Breeder and Broiler Chicken Farms Stockperson Training - Broiler Chickens Hatching Management - Broiler Farms 	 References Bessei, 2006 Dawkins, Cain & Roberts, 2012 de Jong, Gunnink & Hindle, 2015 de Jong, van Harn, Gunnink, Hindle, & Lourens, 2012 Gentle, 2011 Julian, 2005 van Horne et al., 2010
4.	 Culling Procedures - Farm Stage Improper culling management such as painful methods of euthanasia and lack of determination of unconsciousness and conformation of death affects animal welfare. Culling management also includes considerations prior to transport. Transport of non-marketable animals that have a terminal condition posing a threat to public health, are emaciated, or are not able to walk causes the animal pain and stress. Related Improvement Opportunities 8. Set minimum requirements for culling management at the broiler chicken farm 13. Implement a data sharing system across the supply chain KPIs 11. Culling Management - Broiler Chickens 12. Mortality Rate - Broiler Chickens 	 References Aerts et al., 2009 Dawkins, Cain & Roberts, 2012 de Jong, Gunnink & Hindle, 2015 Ellendorff & Klein, 2003 Fraser et al., 2013 Guatteo & Guémené, 2014
5.	 Health & Injuries - Farm Stage Improper nutritional management, poor housing conditions, and improper handling lead to metabolic, respiratory, or reproductive diseases and injuries such as footpad dermatitis and hockburn. Related Improvement Opportunities Implement best practices that pursue adequate nutritional management for broiler chickens Implement best practices to prevent lameness for broiler chickens Implement a data sharing system across the supply chain KPIs Daily Weight Gain Potential Transparency - Broiler Chickens Housing System Specifications - Broiler Chickens Lameness - Broiler Chickens 	 References Bessei, 2006 Dawkins, Donnelly & Jones, 2004 de Jong, Gunnink & Hindle, 2015 de Jong, van Harn, Gunnink, Hindle, & Lourens, 2012 Fraser et al., 2013 Gentle, 2011 Hashimoto et al., 2013 Julian, 2005 Kaukonen et al., 2016 Moyle et al., 2014 Shao et al., 2014 Xie et al., 2014





6. Health Management - Farm Stage

Lack of oversight by a professional may result in no or slow identification of health problems, diseases, and injuries and affect animal health and welfare. Absence of animal health monitoring and evaluation tools decreases the ability of the animal care taker to act in a timely manner.

Related Improvement Opportunities

2. Establish a veterinarian-client-patient relationship (VCPR) at broiler farms

3. Implement an animal health performance monitoring system at broiler farms

6. Implement stockperson training programs for broiler chicken health and welfare at broiler chicken farms

KPIs

- 5. Hatching Management Broiler Chickens
- 6. Animal Health Management Broiler Farms
- 7. Daily Weight Gain Potential Transparency Broiler Chickens
- 9. Lameness Broiler Chickens
- 11. Culling Management Broiler Chickens
- **12.** Mortality Rate Broiler Chickens

MANUFACTURING AND ASSEMBLY

7. Animal Handling - Slaughter Stage

A lack of skills and knowledge about effective stunning techniques and pre-slaughter handling and insufficient training to evaluate and assess animal welfare by animal caretakers may lead to improper handling of animals and result in animal injuries, panic, lasting fear, or stress. Ineffective stunning and inadequate handling of animals prior to slaughter also affects animal welfare.

Related Improvement Opportunities

 Designate people at site that evaluate and assess broiler health and welfare
 Implement stockperson training programs for broiler chicken health and welfare at the slaughter stage

13. Implement a data sharing system across the supply chain

KPIs

Animal Welfare Certifications and Audits - Broiler Transport and Slaughter
 Stockperson Training - Broiler Chickens
 Pre-Slaughter Stunning Transparency – Broiler Chickens
 Assessment at Slaughter - Broiler Chickens

References

- Bach et al., 2016
- Bessei, 2006
- Dawkins, Cain & Roberts, 2012
- Dawkins, Donnelly & Jones, 2004
- de Jong, Gunnink & Hindle, 2015
- Fraser, 2014
- Fraser et al., 2013
- Graaf, 2005
- Manning, Chadd & Baines, 2007
- Taira et al., 2014

References

- Compassion in World Farming, 2009
- Fraser et al., 2013
- Gentle, 2011
- Gregory, 2008
- Guatteo & Guémené, 2014





DISTRIBUTION

Animal Handling - Transportation Stage 8.

A lack of skills and knowledge about loading and unloading procedures and insufficient training to evaluate and assess animal welfare by animal caretakers may lead to improper handling of animals and result in animal injuries, panic, lasting fear, or stress. A lack of access feed and clean water, transport of animals that are not fit for travel, and long-lasting close confinement during transport also impact animal welfare.

Related Improvement Opportunities

1. Designate people at site that evaluate and assess broiler health and welfare 10. Implement stockperson training programs for broiler chicken health and welfare at the transportation stage

13. Implement a data sharing system across the supply chain

KPIs

3. Animal Welfare Certifications and Audits - Broiler Transport and Slaughter 4. Stockperson Training - Broiler Chickens 13. Transportation to Slaughter – Broiler Chickens

References

- de Jong, Gunnink & Hindle, 2015
- Fraser et al., 2013
- Gregory, 2008
- Jacobs et al., 2016
- Schwartzkopf-Genswein et al., 2012
- Speer, Slack & Troyer, 2001





Animal Welfare - Broiler Chickens Category Sustainability Profile Improvement Opportunities



Improvement Opportunities

Improvement opportunities are practices that address one or more environmental or social hotspots and are actionable by brand manufacturers or their suppliers. TSC evaluates the quality of the evidence supporting each improvement opportunity according to a defined decision tree before including it in the CSP. For more information on the methodology TSC uses to identify hotspots visit: http://www.sustainabilityconsortium.org/toolkit-methodology

AGRICULTURE AND LIVESTOCK Designate people at site that evaluate and assess broiler health and welfare References 1. Seek collaboration with supply chain partners to ensure that designated people American Humane Certified Animal Welfare evaluate and assess animal welfare at all life stages. A designated person should Standards have the skills to evaluate animal health and welfare and be verifiably trained and American Veterinary Medical Association, experienced in managing broiler chicken health and welfare. Evaluation of animal 2016 health and welfare includes flock activity and behavior, prevalence of diseases, - European Platform for the Responsible Use injury detection, and availability of water and feed. of Medicines in Animals Federation of Veterinarians of Europe **Related Hotspots** The Welfare Quality Network 3. Animal Handling - Farm Stage World Organisation for Animal Health, 2016a 7. Animal Handling - Slaughter Stage 8. Animal Handling - Transportation Stage 2. Establish a veterinarian-client-patient relationship (VCPR) at broiler farms References Establish a VPCR that sets goals to commit to farm animal health and welfare issues. Graaf, 2005 A VPCR is an essential basis for interaction between veterinarians and their clients and is critical to providing quality animal health care. A VCPR should meet the criteria of the American Veterinary Medical Association or the European Platform for the Responsible Use of Medicines in Animals. **Related Hotspots** 6. Health Management - Farm Stage 3. Implement an animal health performance monitoring system at broiler farms References Implement an animal health performance monitoring system that sets targets for Manning, Chadd & Baines, 2007 supply chain partners to commit to farm animal welfare issues. Animal health management systems should include monitoring the prevalence of disease and incidence of injuries and evaluation of the data for information to integrate into management and communication with animal care teams (including veterinarians). An animal health performance management system includes production performance, injuries, and diseases. Examples of production performance metrics are mortality and culling rates and feed intake. Examples of injuries are hock burn and footpad dermatitis. **Related Hotspots** 6. Health Management - Farm Stage Implement best practices that pursue adequate nutritional management for References 4. broiler chickens Julian, 2005 Use best practices in nutritional management. Broilers require access to feed and clean water according to their specific requirements for maintenance, health, and growth. Farmers can consult a nutritionist for advice on feeding programs. **Related Hotspots** 5. Health & Injuries - Farm Stage





Animal Welfare - Broiler Chickens Category Sustainability Profile Improvement Opportunities



5.	 Implement best practices to prevent lameness for broiler chickens Use best practices to prevent lameness and mobility problems in broiler chickens. Best practices include implementing gait scoring, litter management floor design, and feeding management. Related Hotspots Health & Injuries - Farm Stage 	 References de Jong, van Harn, Gunnink, Hindle, & Lourens, 2012 Manning, Chadd & Baines, 2007
6.	 Implement stockperson training programs for broiler chicken health and welfare at broiler chicken farms Seek collaboration with supply chain partners to implement stockperson training for animal health and welfare at broiler chicken farms. Document that those who are in contact with the chickens are competent and trained in proper handling procedures. The training program and accompanying documentation must include facility requirements, humane animal handling, animal behavior, and injury and disease detection. Examples of implementations of these criteria by all stockpersons are understanding the physical and environmental requirements for a broiler chicken and the relation between litter condition and welfare outcomes such as hock burn or footpad dermatitis and recognizing normal flock activity and broiler behavior. Additional training may need to be required for catching crews, transport crews, or euthanasia crews and outside workers such as vaccination crews or depopulation crews. Related Hotspots <i>Animal Handling - Farm Stage</i> <i>Health Management - Farm Stage</i> 	References Boivin & Ruis, 2011 Coleman & Hemsworth, 2014 Hemsworth, 2007
7.	Provide transparency in broiler chicken housing practices Insight into housing systems is important for animal welfare assessments as it determines the preconditions of adequate animal welfare. Information on the housing system should be evaluated in conjunction with other factors such as the farmers' management, training, and education, climate, or genetics for effects on animal welfare. Related Hotspots 2. Animal Housing - Farm Stage	 References Blokhuis, Jones, Geers, Miele, & Veissier, 2003 Manning, Chadd & Baines, 2007
8.	Set minimum requirements for culling management at the broiler chicken farm Seek collaboration with supply chain partners to set minimum requirements for culling management at the broiler chicken farm. These requirements include considerations for avoidance of transporting non-marketable animals that have a terminal condition, pose a public health threat, are emaciated, or are not able to walk and considerations for selection the method and mechanism of euthanasia, determination of unconsciousness, and conformation of death. Related Hotspots 2. Animal Housing - Farm Stage 4. Culling Procedures - Farm Stage	References • Fetrow, Nordlund, & Norman, 2006





MANUFACTURING AND ASSEMBLY

9. Implement stockperson training programs for broiler chicken health and welfare at the slaughter stage

Seek collaboration with supply chain partners to implement stockperson training for animal health and welfare for broiler chicken slaughterer. Document that those who are in contact with broiler chickens are competent and trained in proper handling procedures. The training should include understanding of the physical and environmental requirements of the animal, humane animal handling, animal behavior, pre-slaughter stress factors, and effective stunning techniques.

Related Hotspots

7. Animal Handling - Slaughter Stage

Coleman & Hemsworth, 2014

References

Hemsworth, 2007

Boivin & Ruis, 2011

DISTRIBUTION

10. Implement stockperson training programs for broiler chicken health and welfare at the transportation stage

Seek collaboration with supply chain partners to implement stockperson training for animal health and welfare for broiler chicken transporters. Document that those who are in contact with broiler chickens are competent and trained in proper handling procedures. The training should include facility requirements, humane animal handling, animal behavior, and injury and disease detection. Examples of implementation of these criteria by all stockpersons are understanding the physical and environmental requirements for a broiler chicken, understanding the relation between litter condition and welfare outcomes such as hock burn or footpad dermatitis, and recognizing normal flock activity and broiler behavior. Additional training may need to be required for catching crews, transport crews, or euthanasia crews and outside workers such as vaccination crews.

References

- Boivin & Ruis, 2011
- Schwartzkopf-Genswein, Haley, Church, Woods, & O'Byrne, 2008

Related Hotspots

8. Animal Handling - Transportation Stage

MOROVEMENT OPPORTUNITIES FOR MULTIPLE LIFE CYCLE STAGES

11. Implement an animal welfare policy

Implement a policy that sets goals for supply chain partners to commit to farm animal welfare issues. The policy should include a clear statement for why animal welfare is important to the company, a commitment to comply with relevant legislation, a statement on expected farm animal welfare standards, a commitment to continuous improvement and public disclosure on animal welfare performance, and a description of the processes to ensure an effective implementation of a policy (e.g., senior management oversight, performance monitoring, or corrective actions).

Related Hotspots

1. Supply Chain Transparency

References

- D'Silva, 2006
- Gregory, 2008
- The Business Benchmark on Farm Animal Welfare, 2016





12.	 Implement animal welfare best practices at broiler chicken farms, during transport, and at slaughter Seek collaboration with supply chain partners to implement best practices on farms, during transport, and prior to slaughter of animals that maximize animal welfare. Considerations at the farm level include best practices associated with housing circumstances, painful procedures, euthanasia, and handling. Considerations during transport include loading density, temperature and moisture control, ventilation, and transportation time. Considerations prior to slaughter include effective stunning, handling of animals, slaughter equipment, alternative procedures, and timing of activities. Related Hotspots Supply Chain Transparency 	 References de Jong, van Harn, Gunnink, Hindle, & Lourens, 2012 D'Silva, 2006 Gentle, 2011 Gregory, 2008 Manning, Chadd & Baines, 2007
13.	 Implement a data sharing system across the supply chain Use a system for data assembly and sharing that enables monitoring, benchmarking, and evaluating sustainability performance in the supply chain. Addressing the issue of animal welfare within a food supply chain requires cooperation among companies at different stages of the supply chain. Companies should engage in initiatives that improve transparency, communication, data collection, and data sharing. A certification system enables communication between different supply chain stages, while a farm management data system is well suited to handle quantitative data and to calculate animal welfare indicators. Related Hotspots 1. Supply Chain Transparency 2. Animal Housing - Farm Stage 3. Animal Handling - Farm Stage 5. Health & Injuries - Farm Stage 7. Animal Handling - Slaughter Stage 8. Animal Handling - Transportation Stage 	References Bryan, Barry & Marvanek, 2009 Maloni & Brown, 2006





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Animal Welfare - Broiler Chickens Category Sustainability Profile References









Release Notes

*** 01.02.10, May 2021 ***

- In-text references and broken resource links (URLs) included in the KPI guidance were updated to the most recent available versions. Where no alternative resource was available, the item was substituted with a comparable resource or was removed. *01.02.10, May 2020*

- In-text references and broken resource links (URLs) included in the KPI guidance were updated to the most recent available versions.

01.02.10, June 2019

- Broken links referenced in the KPI guidance were corrected.

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01.02.10, June 2018

- Broken links referenced in the KPI guidance were corrected.

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01.01.10, June 2017

- No change from version 01.01.10, January 2017

TSC's Multi-stakeholder Process

The Sustainability Consortium (TSC) is a multi-stakeholder organization comprised of leading companies, non-profit organizations, and other members that represent broad perspectives on sustainability. To build a KPI set that can be deployed widely, TSC acknowledges that members have diverse points of view. As such, the attributes, activities, KPIs, and scoring used in this KPI set represent a composite perspective of the current market and are not necessarily the views, policies, or program of any single member of TSC.

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