

RECOMMENDED RITUAL SLAUGHTER GUIDELINES FOR LIVESTOCK (CATTLE, SHEEP, AND GOATS) AND POULTRY

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INTRODUCTION

Kosher and halal slaughter is performed to satisfy the religious requirements of the Jewish and Muslim communities, respectively. Both of these religions have an extensive set of dietary laws that are part of their religious structure and are an integral part of their religious life-style. Both communities may slaughter without stunning so that attention to animal welfare issues is particularly important. If done properly, both methods of stunning are considered humane by the U.S. Government and the FMI-NCCR Animal Welfare Advisors.

These guidelines are meant to provide food retailers, who wish to purchase meat from a government inspected meat plant, with a set of guidelines that assures modern animal welfare standards are met without violating the religious requirements for kosher and halal production.

Much of the process is identical to that used for non-religious slaughter. Therefore the focus of these guidelines will be on the handling of the animal just prior to slaughter and during the actual slaughter process.

Further Information about Religious Slaughter

Drs. Grandin and Regenstein prepared a fairly comprehensive review of religious slaughter in a 1994 paper for Meat Focus International called "Religious Slaughter and Animal Welfare: A Discussion for Meat Scientists," (March, pages 115-123). It is available on Dr. Grandin's Web site www.grandin.com. Large parts of this paper are relevant to the work of the FMI/NCCR Animal Welfare Advisors. Parts of that document, along with additional material prepared specifically for the FMI/NCCR program, and the guidelines shown below (that suggest themselves from this work) are available on the FMI and NCCR Web sites: www.fmi.org and www.nccr.new.

These guidelines are meant to be used in conjunction with the Animal Care Guidelines developed by the American Meat Institute and available on their Web site at www.meatami.com.

Both the Muslim and Jewish faiths have specific requirements for the slaughter of religiously acceptable animals. The major difference from the general practices in most countries is that the animals are not stunned prior to slaughter.

“...Any Muslim may slaughter an animal while invoking the name of Allah. Again, stunning prior to slaughter is generally not the practice. However, a non-penetrating concussion stunning prior to slaughter has received approval from some Muslim authorities. Work in the 80's in New Zealand led to the development of a very sophisticated electrical stunning apparatus that met a Muslim standard where an animal must be able to regain consciousness in less than a minute and must be able to eat within five minutes. Head-only electric stunning prior to Muslim slaughter is used in almost all sheep slaughter plants in New Zealand and Australia. Electric stunning of cattle is used in many New Zealand Muslim cattle slaughter plants and the practice is spreading to Australia. In recent years, more Muslims have accepted meat that is prepared with some form of stunning. This trend is to be encouraged and the use of an acceptable stunning system should occur whenever possible.

“...In the case of the Jewish dietary laws, a specially trained person of known religiosity carries out the slaughter. This person, the "shochet", is specifically trained for this purpose. He is trained to use a special knife, called the "chalef", to rapidly cut in a single stroke the jugular vein and the carotid artery without burrowing, tearing or ripping the animal. The knife is checked regularly for any imperfections [that] would invalidate the slaughter. This process when done properly leads to a rapid death of the animal. A sharp cut is also known to be less painful.” (Grandin and Regenstein, 1994)

Need for objective evaluation

Given the importance of religious slaughter to people of these two major faiths, it is important that scientists must be absolutely objective when evaluating these practices from an animal welfare standpoint. There are three basic issues. They are stressfulness of restraint methods, pain perception during the incision, and latency of onset of complete insensibility.

GUIDELINES FOR RELIGIOUS SLAUGHTER OF LIVESTOCK

Equipment Requirements

Kosher and halal slaughter will be performed while the animal is in a comfortable upright position. Handling systems that turn the animal upside down or hang the animal are considered unacceptable.

The ASPCA pen and other box type restrainers that hold a single bovid or other animal that weighs over 400 lb (180 kg).

Those plants using an ASPCA pen or other box type restrainer must operate the equipment in such a manner that the animals are calm during the procedure, and slaughter takes place immediately after the headholder is in place. In pens equipped with a belly lift or other lifting device that does not fully support the entire body, the animal must not be lifted off the floor. Lifting devices that support the entire body in a comfortable upright position are acceptable.

The ASPCA pen and all other box type restrainers shall be operated at less than 100 animals per hour. This applies to animals weighing over 400 lb (180 kg).

The rear pusher gate on the ASPCA pen and all other box type restrainers must be equipped with a pressure-limiting device.

Conveyor restrainer systems for all species

The guideline applies to all systems where animals are restrained on one or more moving conveyors. The most common systems are the V type restrainers, where the animals are held between two conveyors that form a V, or the center track (double rail), where the animals straddle a moving conveyor. Systems that use conveyors must be designed so that the animal's body is fully supported in a comfortable upright position.

To reduce balking at the conveyor entrance, installation of a false floor to prevent the incoming animals from seeing the "visual cliff" under an elevated conveyor is strongly recommended.

To prevent incoming animals from seeing people and other distractions through the discharge end of the conveyor, a solid barrier may need to be installed. Plant layout will determine the need for such a barrier.

Conveyor slats or flites must be designed to avoid pinching of the animal between the slats or flites.

Most animals must ride quietly on the conveyor system with a minimum of struggling. Conveyor systems may be operated at speeds greater than 100 animals per hour as long as stunning or post-slaughter stunning is used. Otherwise the line must be slow enough for the animal to become fully insensible before hoisting.

Small animal systems

Small animals such as sheep, goats, and calves weighing under 400 lb (180 kg) can be handled in small versions of the ASPCA pen or other box type restrainers or conveyor restrainers. All guidelines for these systems also apply to small animals.

Small animals such as sheep and goats may be restrained in a standing upright position by one or more persons, often by straddling the animal.

For those plants that ritually slaughter a few animals per week, a simple inexpensive restrainer device can be constructed, e.g., from pipe, to hold the animal in a comfortable upright position. Devices that lift the animal off the floor are permitted only if they support the entire animal's body. One acceptable design is two parallel pipes that the animal straddles. The restrainer must hold most animals with a minimum of struggling.

Requirements for all restraining systems

The device must hold the animal firmly enough to provide the "feeling of restraint" but excessive pressure that causes struggling or vocalization must be avoided. Pressure limiting devices are required. The concept of optimal (*not* maximum) pressure must be used.

For cattle the equipment should be operated in a manner that adheres to the American Meat Institute guidelines of no more than 5 cattle out of 100 vocalizing is adhered to.

Equipment must be designed to prevent jerky motion of all parts of the device that contact the animal. Steady non-jerky motion of restraint devices helps to keep animals calm.

All equipment must be engineered to reduce noise such as air hissing and metal-to-metal clanging and rattling. Some methods of noise reduction that should be used are muffling devices for air hissing and non-metallic guides for moving metal parts. Locating hydraulic pumps and other noisy power units away from the restrainer is strongly recommended.

A solid barrier should be installed around the animal's head to prevent the animal from seeing people and other distractions in its flight zone.

All equipment must be free of sharp edges and pinch points. Surfaces such as the neck opening must be rounded and smooth.

Moving parts of restraint equipment such as rear pusher gates, headholders, or other body restraint devices must be designed so that the operator has control and can incrementally apply pressure. The controls must provide the operator with the capability of easily stopping the moving parts at mid-point positions to accommodate different sized animals.

Restraint equipment must be illuminated to encourage animals to enter and reduce balking.

The entrance into all types of restraint equipment must be designed so that balking is reduced and the equipment will be able to comply with American Meat Institute guidelines on electric prod use.

Flooring both in the restraint equipment and at its entrance must comply with American Meat Institute guidelines on slipping and falling.

Distractions that cause balking must be eliminated.

Headholders

Headholders shall be designed taking into account the materials found in the 1994 Grandin and Regenstein article, "Religious Slaughter and Animal Welfare: A Discussion for Meat Scientists," Meat Focus International – March 1994, Pages 115-123 (www.grandin.com)

To prevent excessive bending of the neck, the bovid's forehead should be parallel to the floor.

All head holders must be equipped with pressure limiting devices, and permit incremental control to obtain optimal pressure.

Slaughter must take place immediately after the headholder is in place. The actual time between restraint of the head and actual slaughter must be less than 10 seconds.

The headholder must hold the incision open during and immediately after the cut, but excessive stretching of the neck that could cause tearing of the incision must be avoided.

The animal should not be responding to the direct application of the headholder.

The headholder must not interfere with the knife.

Knife Requirements

The FMI/NCCR Animal Welfare Advisors recommend that a knife, similar to the kosher chalef be used for halal slaughter. The knife must have a straight blade and be at least twice as long as the width of the neck. It must be kept properly sharpened at all times.

Slaughter

Careful attention to the exact cutting method used is necessary for each animal. Generally for slaughter to be successful, it must be done quickly, with no struggling during the cut, and then the animal will go down quickly after the cut.

Post-Slaughter Requirements

Animals must remain in the restraint device with the headholder and body restraint loosened until they collapse.

Animals must become insensible in less than a minute, i.e., there must not be any eye reflex and if standing, the animal must collapse. If the animal is still sensible after one minute, it must be immediately euthanized using an American Veterinary Medical Association approved method that is legal for a food animal. [It is recognized that such an animal may no longer be acceptable for use as kosher or halal.]

Employees

All employees must be trained in gentle calm cattle handling and use these methods during all stages of animal handling.

GUIDELINES FOR RELIGIOUS SLAUGHTER OF POULTRY

Equipment Requirements

Kosher and live halal slaughter will be performed while the bird is either in a comfortable upright position, generally held by a person, or calmly hanging from a shackle line. Handling systems that turn the bird upside down are considered unacceptable.

All equipment must be engineered to reduce noise such as air hissing and metal-to-metal clanging and rattling. Some methods of noise reduction that should be used are muffling devices for air hissing and non-metallic guides for moving metal parts. Locating hydraulic pumps and other noisy power units away from the slaughter area is strongly recommended.

All equipment must be free of sharp edges and pinch points.

Knife Requirements

The FMI/NCCR Animal Welfare Advisors recommend that a knife, similar to the kosher chalef be used for halal slaughter. The knife must have a straight blade and be at least twice as long as the width of the neck. It must be kept properly sharpened at all times.

Slaughter

Careful attention to the exact cutting method used is necessary for each bird. Generally for slaughter to be successful, it must be done quickly, with no struggling during the cut, and then the bird will go down quickly after the cut.

Post-Slaughter Requirements

Birds on a shackle must remain there until insensible. Birds slaughtered by hand may be immediately placed on a shackle or in a holding cone and no further activity can take place until the bird is insensible.

Birds must become insensible in less than a minute, i.e., there must not be any eye reflex and if standing, the bird must collapse. If the bird is still sensible after one minute, it must be immediately euthanized using an American Veterinary Medical Association approved method that is legal for food birds. [It is recognized that such a bird may no longer be acceptable for use as kosher or halal.]

Employees

All employees must be trained in gentle, calm poultry handling and use these methods during all stages of bird handling.