

## The Slaughter of Livestock

### (part 1 of 4): The Islamic Method of Slaughtering



Although much less complicated and tedious than Jewish *Keshrut*, or Jewish dietary laws, Islam does legislate certain rules and regulations in regards to diet. All legislations which deal with this worldly life in Islam are based upon the precept of maximizing benefits and reducing harm, and if the harm of anything exceeds the benefits that might be gained from it, it is generally prohibited in Islam. God says:

**“They ask you about wine and gambling. Say: In them is much sin, and also some benefit for people. But its sin is greater than its benefit...” (Quran 2:219)**

For this reason, Islam has mandated certain observances in regards to the slaughter of animals to benefit from their meat, and these mandates are legislated due to an intrinsic harm which would result if they were not to be followed, most of which deal with health, as well as alleviating pain inflicted upon the animal.

### The Islamic Method of Slaughtering

One of the main legislations in regards to the permissibility of meat is that it must be slaughtered according to the mandates of the religion. Forbidden is any type of animal if it dies of natural cause, strangulation, due to a violent blow, a headlong fall, by the goring of horns, and that which has been partially eaten by wild animals. Rather, in order for meat to be made permissible to eat, it must be slaughtered by a cut through the neck, reaching through the trachea, esophagus, the jugular veins and carotid arteries, without severing the spinal cord.

This method is indeed the most humane method to slaughter an animal to make use of its meat. This is also the only method endorsed by the congress of the United States of America, as mentioned in section 1901 and 1902 (b), Chapter 48, Title 7, in which is written the following:

The Congress finds that the use of humane methods in the slaughter of livestock prevents needless suffering; results in safer and better working conditions for persons engaged in the slaughtering industry; brings about improvement of products and economies in slaughtering operations; and produces other benefits for producers, processors, and consumers which tend to expedite an orderly flow of livestock and livestock products in interstate and foreign commerce. It is therefore declared to be the policy of the United States that the slaughtering of livestock and the handling of livestock in connection with slaughter shall be carried out only by humane methods.

No method of slaughtering or handling in connection with slaughtering shall be deemed to comply with the public policy of the United States unless it is humane. Either of the following two methods of slaughtering and handling are hereby found to be humane:

- (a) in the case of cattle, calves, horses, mules, sheep, swine, and other livestock, all animals are rendered insensible to pain by a single blow or gunshot or an electrical, chemical or other means that is rapid and effective, before being shackled, hoisted, thrown, cast, or cut; or
- (b) by slaughtering in accordance with the ritual requirements of the Jewish faith or any other religious faith that prescribes a method of slaughter whereby the animal suffers loss of consciousness by anemia of the brain caused by the simultaneous and instantaneous severance of the carotid arteries with a sharp instrument and handling in connection with such slaughtering.<sup>[1]</sup>

As can be seen above, this method of slaughtering ensures the least amount of pain is felt by the animal at the same time rendering the meat safe to eat. The swift cutting of vessels of the neck disconnects the flow of blood to the nerves in the brain responsible for pain, and thus the animal does not feel pain. The movements and withering that happen to the animal after the cut is made are not due to pain, but due to the contraction and relaxation of the muscles deficient in blood. This movement is also essential in forcing the maximum amount of blood from the body, which is extremely important in order to purify the meat, as remaining blood acts as a medium for microorganisms, in addition to meat remaining fresher for a longer period of time. Also crucial to this factor is the severance of the trachea, esophagus, and the jugular veins in conjunction with the carotid arteries, which cause a rapid gush of blood to flow from the system. Severance of the spinal cord, however, may lead to cardiac arrest, causing the stagnation of blood in the blood vessels due to the damage of nerve fibers leading to the heart.

## Does the Animal Feel Pain in This Method?

In a study entitled *Attempts to Objectify Pain and Consciousness in Conventional (captive bolt pistol stunning) and Ritual (halal, knife) Methods of Slaughtering Sheep and Calves*, carried out by Professor Wilhelm Schulze and his colleague Dr. Hazim at the School of Veterinary Medicine, Hanover University, Germany, several electrodes were surgically implanted at various points of the skull of all animals, touching the surface of the brain. After the animals were allowed to recover for several weeks, some animals were slaughtered in the Islamic manner mentioned previously, by the cutting of the trachea, esophagus, the jugular veins and carotid arteries. Other animals were stunned first before slaughtering. During the experiment, an electroencephalograph (EEG) and an electrocardiogram (ECG) recorded the condition of the brain and the heart of all animals during the course of slaughter and stunning. The following results were recorded:

1. The first three seconds from the time of Islamic slaughter as recorded on the EEG did not show any change from the graph before slaughter, thus indicating that the animal did not feel any pain during or immediately after the incision.
2. For the following 3 seconds, the EEG recorded a condition of deep sleep - unconsciousness. This is due to the large quantity of blood gushing out from the body.
3. After the above-mentioned 6 seconds, the EEG recorded zero level, showing no feeling of pain at all.
4. As the brain message (EEG) dropped to zero level, the heart was still pounding and the body convulsing vigorously (a reflex action of the spinal cord) driving a maximum amount of blood from the body thus resulting in hygienic meat for the consumer.

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### Footnotes:

[1] ([http://assembler.law.cornell.edu/uscode/html/uscode07/usc\\_sec\\_07\\_00001901----000-.html](http://assembler.law.cornell.edu/uscode/html/uscode07/usc_sec_07_00001901----000-.html))

## (part 2 of 4): Modern Techniques of Slaughtering

### Modern Stunning Techniques Used Prior to Slaughtering

Critics of Islamic and similar Jewish procedures in slaughtering animals oppose the fact that 1902 (a) is not implemented, which calls, though optionally, that animals be stunned before their throats be cut. This is based on

the claim that stunning renders the animal insensible to pain, although the more favorable opinion is that it renders the animal easier to control in mass factory-like slaughter houses. Some modern means of stunning are the following:

### **Mechanical Methods:**

- **Captive Bolt Pistol (CBP):** This stunning method is widely used for all farmed animals and rabbits. Gun powder (cartridge), compressed air and spring under tension drive bolts through the skull of animals. This type of stunning is widely used for all farmed animals. It is called 'captive' since the bolt is shot out of the barrel but remains attached to the pistol.



- **Concussion stunning.** A mechanically operated instrument delivers a blow to the brain and concusses the brain. Used for cattle, sheep, calves, rabbits.
- **Free bullets.** Used for animals difficult to handle such as wild pigs, bison, deer, horses or in emergencies.

After stunning animals may be pithed, involving inserting a rod into the cavity made by the bolt to destroy the lower portion of the brain and the upper spinal cord. In all these methods, unconsciousness is caused either by penetration of the skull which causes brain damage or by causing a concussive blow to the brain without penetration. After stunning the animal undergoes sticking which cuts off the blood supply to the brain. After animals are stunned and stuck, they are bled, and it is the bleeding that causes death. The industry requires that the heart should remain beating as long as possible after sticking to ensure that as much blood as possible is removed from the flesh and blood vessels. This apparently maintains the quality of the meat and its keeping potential.

### **Electric Stunning**

- **Head-Only Stunning:** Cattle, sheep, goats and ostriches are all stunned using this method. The technique involves the application of a pair of electric tongs on either side of the animal's head. An electric current is then passed through the brain and this supposedly leads to the temporary loss of consciousness.



- **Cardiac arrest stunning:** Used for cattle, sheep, pigs, rabbits and goats. An electric current is either sent through the head and body at the same time to span the brain and heart or is sent through the head first and then across the chest or through the head and body at the same time.



- **Water Bath Stunning:** This is a widely used method of stunning for chickens, turkeys, geese and ducks. In this method, birds are shackled upside-down on a moving conveyor belt that takes them to the electric water bath. The birds' heads are to supposedly be immersed in this water causing their electrocution. In recent years, the strength of the electric current has been raised to ensure the death of the birds by cardiac arrest.

### **Gassing**

Birds may be stunned using CO<sub>2</sub> and Argon gas while they remain in their crates. Pigs are also gassed using CO<sub>2</sub>.

### **Sticking**

In this method a knife is stuck into the animal's throat or neck causing brain death from the rapid loss of blood supply to the brain.

### **Does the Animal Feel Pain in This Method?**

Studies have shown that stunning the animal with the mentioned techniques put the animal through unnecessary pain. Concerning CBP, the study at the German University showed the following result for stunned animals:

1. The animals were apparently unconscious soon after stunning.
2. EEG showed severe pain immediately after stunning.
3. The hearts of the animal stunned by CBP stopped beating earlier as compared to those of the animals slaughtered according to the Halal method resulting in the retention of more blood in the meat. This in turn is unhygienic for the consumer.

Although the animals were rendered unconscious, they felt severe pain from the stunning, a factor not present in the Islamic manner.

## **(part 3 of 4): The Islamic Ruling Concerning Stunning (1)**

Although there is no specific prohibition of stunning prior to slaughtering of animals in Islam, it remains, after certain studies, that refraining from stunning is always best, due to the following reasons.



## Pain

Islam is a religion which encourages its followers to show mercy to all of creation. It prohibits inflicting unnecessary harm to animals. Even during time of slaughtering, the Prophet said:

**“And when you slaughter, then slaughter in the most perfect of manners.”**  
(*Saheeh Muslim*)

He commanded that one sharpen their knives before slaughtering.

**“Sharpen your knives, so that you make it easy for the slaughtering animal.”** (*Saheeh Muslim*)

The epitome of mercy and compassion to animals is that he said that one should never sharpen their knives in their presence, nor slaughter one animal in the presence of another.

**“He commanded that we sharpen our knives and [slaughter] out of the sight of other animals.”** (*Ahmad*)

In another narration:

**“The Prophet, may the mercy and blessings of God be upon him, passed by a man who was sharpening his knife while had his foot on one side of the face of a sheep (holding it to the ground), and it was looking up at him. The Prophet said: ‘Couldn’t you have done this beforehand? You wish to kill it many times.’”**<sup>[1]</sup> (*al-Mundhiri*)

In order to be effective, CBP stunning must be performed by highly trained personnel, and specific cartridge strengths must be used. If this is not the case, or if the pistol is not positioned correctly, the animal will have to endure the pain of being shot incorrectly, and then will have to face the pain of being shot again, or the claimed pain (although not true) of being knifed while conscious. If the animal were to have been slaughtered without CBP, there would have been none or minimal pain felt by the animal. In a 1996 report, the Scientific Committee of the European Commission said that, “In 5 to 10% of cattle, captive bolt stunning is not applied correctly,” which according to VIVA (Vegetarian International Voice for Animals), translates to 230,000 cattle in the UK alone. FAWC (Farm Animal Welfare association) reported “In the course of our slaughterhouse visits, we have frequently examined carcass heads to check the site of bolt penetration. In our view, there were far too many cases where penetration had not been at or near the recommended position and also evidence of a considerable number of double shots (i.e. indicating that the first shot had missed its proper target).”

The same may be said for electric head-only stunning. The Royal Society for the Prevention of Cruelty to Animals (RSPCA) says “There is increasing scientific evidence that some animals that are stunned electrically using tongs regain consciousness before they die from loss of blood.” The reasons behind this are either an inefficient electric current being passed through the animals’

brain during stunning or the animals begin to regain consciousness if the time interval between stunning and sticking exceeds a period of 20 seconds.

VIVA explains this saying that the stun caused by the electric head-only technique lasts between 20 and 40 seconds whereas the interval between stunning and knifing is as high as 70 seconds for sheep. This means that there are around 5 million sheep that regain consciousness after being electrically stunned before they die of blood loss.

Research done at Bristol University has also shown that after an electric stun, sheep may not be able to feel pain; they do, however, experience periods of full awareness. Furthermore, there is no evidence that the loss of consciousness is immediate, and some people, like neurophysiologist Dr. Harold Hilman, believe that stunning is extremely painful, pointing out that the electrocution of prisoners is used as a torture method in some countries. The animals cannot express this pain by crying out or by moving since the massive electric current paralyzes them.

Inadequate stunning also occurs in water bath stunning, especially with ducks and geese, as they tend to raise their heads when entering the water bath and their heads are therefore not fully immersed in the water. Another problem with this method is that, although the aim of this method is to induce cardiac arrest, “many birds are improperly stunned and recover consciousness before slaughter,” according to the RSPCA. This is also the case for sticking, as animals may regain consciousness prior to death.

The pain felt by any living being through suffocation, as in the case of gassing, is clear to any person and need not be detailed.

What can be observed is that although these methods are supposedly meant to reduce pain, the result is that the animal actually undergoes more pain, both from the initial stunning and from the following actions if stunning is performed inadequately. Again, causing unnecessary pain to animals is prohibited in Islam.

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#### Footnotes:

[1] Meaning that sharpening the knife in the presence of the animal was equal to killing it.

## Health

### Removal of Blood:

It is clear that the removal of the maximum amount of blood before death of the animal is crucial to the purity of the meat. In the various methods of stunning, animals may undergo cardiac arrest after stunning, either unintentionally, such as electric head-only stunning, or intentionally, such as electric water bath stunning, in which enough electricity is used to ensure cardiac arrest of poultry. From the results of the experiment of the German University was that the hearts of animals stunned by CBP stopped beating earlier as compared to those of the animals slaughtered according to the Islamic method resulting in the retention of more blood in the meat. Stunning also causes 'salt and pepper' hemorrhage where the small blood vessels rupture, and blood leaks into the meat tissue. All these techniques cause the blood to remain in the vessels, encouraging the spawning of microorganisms.

### Contamination of Meat

There is a rising concern that stunning may be a factor in the spread of mad cow's disease from cattle to humans, as it was discovered in recent research carried out at Texas A&M University and by Canada's Food Inspection Agency, that a method called pneumatic stunning (which is the firing of a metal bolt into the cow's brain followed by a pulverizing burst of 150 pounds of air pressure) delivered a force so explosive that it scattered brain tissue throughout the animal. This news is disturbing since the brain tissue and spinal cord are the most infectious parts of an animal with mad cow disease, which causes fatal Swiss cheese like holes in the brain of the infected animal. It is more disturbing to find out that around 30 to 40 percent of American cattle are stunned by pneumatic guns.

It was found by an experiment conducted by Gregory and Whittington in 1992 and published in *Research in Veterinary Science* under the title of *Inhalation of Water During Electrical Stunning in Chickens* that "chickens can and do inhale water during electric stunning in a water bath. No remedy for this is available at the moment." It was also noticed that birds may defecate while being stunned and so live birds may inhale water fouled by feces at stunning, thus making their meat unhygienic as the fluids may leak out of the lungs and cause contamination.

## Fear of Death

In many of these stunning techniques, animals die before they are slaughtered, either unintentionally, such as CBP and electric head-only stunning, or intentionally, such as gassing. This, according to Islam, renders the meat unlawful for human consumption, as it enters the category of carrion meat.



## Conclusion

The legislations of the religion come from a Divine source, the Creator of all that exist, One Whose knowledge of His creation is infinite. This fact necessitates that all things mandated by God in the religion are done so from this Divine Knowledge, and therefore must be ultimate in all ways. Analyzing the legislations mandated and recommended in the religion of Islam will definitely come to show that indeed they are the best and most suitable to any given circumstance, and that they have a common denominator, the maximization of benefits and reduction of harm. As some people classify the Islamic method of slaughter to be cruelty to animals, the reality shows facts quite the opposite. Accusations of animal cruelty should very rightly be focused on those who do not use the Islamic way of slaughtering, but prefer to use those methods which cause pain and agony to the animal and could also very well cause harm to those consuming the meat

### Sources:

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