



# **Toward Humane Slaughter and Safe Food: Ritual Guidance versus Secular Astray**

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***International Halal and Tayyip Products Fiqh,  
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***Istanbul Congress Center, Istanbul***



# نحو احسان في الذبح وغذاء آمن: التوجيه الديني مقابل التيه العلماني

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This is a scientific approach  
to prove that  
divine religious commands  
are linked to preserve human  
health and  
insure animal welfare



I am addressing this presentation since some European parliaments have voted on the ban of 'traditional religious' slaughter\* of animals.

This act is considered as a move that will make the Islamic Halal and Jewish Kosher methods of slaughter illegal.



**\* Slaughter without stunning for religious requirements**

There are four main themes that one must address with slaughtering of animals and birds for food:

- 1) Religious requirements
- 2) Human's safety & health
- 3) Animal welfare, and
- 4) The raw material is alive, has a central nervous system, can express emotion states, and has biological components like humans.



# Religious requirements

Religious requirements on food are well expressed by prominent divine religions:

These religions put great emphases:



Islam

Christianity

Judaism

<sup>1</sup>to follow specific way when slaughter of sacrificial animals,

<sup>2</sup>to follow humane methods in obtaining food from animals and birds

<sup>3</sup>not to eat pork, or dead meat



<sup>4</sup>not to eat blood, and



<sup>5</sup>to some extent, in some of these divine religions, to avoid drinking alcohol

The law in Europe requires that all animals and birds must undergo pre-slaughtering methods (i.e. stunned) to render them, **as they claimed**, unconscious or dead before they bleed\*.

Lately, there is a call from **HSA** for an effective stunning, i.e. complete death of birds before slaughter, i.e. stun-to-kill.



\*V. Sante, G. Le Pottier, T. Astruc, M. Mouchonière, and X. Fernandez (2000). Effect of Stunning Current Frequency on Carcass Downgrading and Meat Quality of Turkey. Poultry Science 79:1208–1214.

**HAS = Human Slaughter Association ([has.org.uk](http://has.org.uk))**



## Examples of pre-slaughtering methods (or stunning methods)

- Captive-bolt shot into the brain
- Mushroom gun shot into the head\*
- Electric stunning using a water-bath
- Electric shock
- Controlled atmosphere Killing (CAK)  
using gas mixtures.



## \*Percussion stunning



All of these methods substantially causes external & internal injuries to the animal/birds while they are alive (i.e. causes pain to the live animal/birds) and they may (under certain circumstances) lead to their death.

# Religious requirements of slaughtering



**VS.**

**Non-religious**

**OR**

**Secular slaughtering Methods**



In order **for an animal** to be religiously slaughtered it must be:

Healthy (free from diseases) **with**

Stable life **and**

Not-deadly injured



That is: The animal live depending on itself at the time of slaughter



These conditions are often not guaranteed with pre-slaughtering methods.



It must be clear that **in** Halal / Kosher methods the death of an animal or bird should only be caused by the **actual one swift cut of a sharp knife** and not by or in conjunction with other methods.



Pre-slaughtering methods may participate in the killing of the animal/bird before slaughter.

There is a need for Islamic scholars to define the point of death as death is a process and does not occur instantaneously\*.

There could be an argument by slaughterhouses that an animal may be slaughtered whilst it is **DYING** but not yet dead.

We need to say that: the point of death becomes the point at which death is initiated and it should not be intervene with any killing methods (in most cases: stunning, if used).

Thus as a precautionary basis: **Further interventions** to slaughter the animal before its death is disallowed because of the risk that the time delay or a second stunning may result in death before slaughter.

\* Rizwan Khalid



# Pre-slaughtering methods for animals in a Non-Halal Slaughter



With cattle, deer and sometimes sheep, pre-slaughtering methods are done by shooting their heads with a traditional bullet or a steel bolt (shot-to-the-head method).

The bullet or bolt penetrates the skull and injures the brain permanently and ultimately causes death to animals.

\*Here the animal is already dead and allowing dropping of his blood out will not make it Halal or Kosher.



# Pre-slaughtering methods for animals in a Halal Slaughter



Most Halal Slaughter of animals in the west uses electrical stunning.

Cattle, and sheep are gripped by their head with large electrical calipers passing a voltage through it and giving it an electric shock, their throat then cut, to bleed out.

In some countries like New Zealand, and after throat are cut, cow's esophagus are stabbed with a thorax rod.



# Pre-slaughtering methods for poultry in a Halal Slaughter

Most Halal Slaughter of poultry in the west uses electrical stunning.

Birds are first shackled upside down and then **receive an electric shock** by **immersing their heads** in a water-trough through which is passed a voltage, their throat then cut, to bleed out.



**Sometimes animal/birds are gassed using**  
**a carbon dioxide/argon mix**

**to make them dead/unconscious (during transportation).**



The word unconscious has a magical impact to readers.

Does the meat industry really want to render the animal/bird unconscious before slaughter?

Or do they want to speed up the flow of processing lines.

The meat industry takes the animal welfare issue as an excuse for their malpractices to make more profits.

All pre-slaughtering methods are forbidden in strict

Halal or Kosher slaughter. Why?



Because some of them render the animal/bird critically irreversibly injured at the time of slaughter with often unstable life (if not dead) that makes them Non-Halal / Non-Kosher and forbidden as a source of food to Muslims and Jews.

So, what is stunning?



And what's wrong with it?

Many used it and ascertained that it is in favor of animal welfare and if used will not cause or lead to death!!

OK, let us examine our religious commands against their secular claims.

Stunning is a pre-slaughtering method that make the animal or bird at the time of slaughter motionless.

In certain types of stunning such as electrical stunning of chickens, stunning will make them at the time of slaughter without breathing as well.



What is the effect of stunning on animal/bird before slaughter?

If **percussive captive bolt stunner** is used and the stunned animals left without slaughtering they will not go back to life (i.e., Mawqoozah ).



With electrical stunning, many variables decide their quality in term of death and living, and the most important ones are:



The combination of  
Current (mA) and Frequency (Hz)

But

Low frequency is by far the biggest factor in causing death

but we cannot rule out the effect of high current\*.



Accordingly, chicken carcasses, which comes to all GCC and Middle East countries from Europe, America and Brazil, that are accompanied with a Halal certificate and are stunned\*, \*\* with a frequency of 50 Hz the percentage rate of killed ranged from 61%-99%.

with 50 Hz frequency

At 60 mA the rate kill is 22%

At 75 mA the rate kill is 61%

At 90 mA the rate kill is 80%

At 120 mA the rate kill is 95%

At 148 mA the rate kill is 99%

At 70-100 Hz, at 100 mA the rate kill is 80%\*\*\*

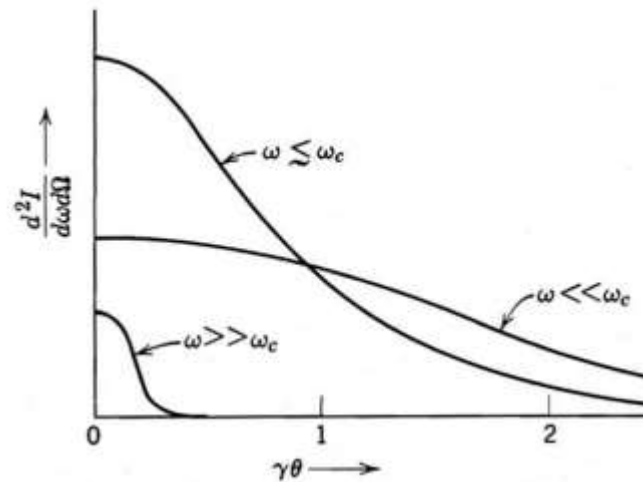
At 200 Hz, at 120-150 mA the rate kill is 80%\*\*\*

\*Gregory N.G. & Wotton S.B. (1990). Effect of stunning on spontaneous physical activity and evoked activity in the brain. British Poultry Science. 31: 215-220.

\*\*Gregory, N. G., and S. B. Wotton (1987). Effect of electrical stunning on the electroencephalogram in chickens. Br. Vet. J.: 143, 175-183.

\*\*\*S. Prinz, G. Van Oijen, F. Ehinger, A. Coenen and W. Bessei (2010). Electroencephalograms and physical reflexes of broilers after electrical waterbath stunning using an alternating current. Poult Sci. 89:1265-1274.

The criteria for stunning with electrical shock is very critical and must be accurate in terms of its numerical values.



It is also difficult to ensure a 100% Halal control of birds with electrical stunning because:



Any changes in the trend **or** the frequency **or** distance **or** weight **or** resistance, **or** the amount of feathers on the body as seen from published works will result in a mortality rates could reach a value **that can not be tolerated from the standpoint of their religious legitimacy.**

In France as well as in many European countries (and if not observed well by Muslims) birds are stunned-to-kill at low frequencies (50Hz)\*.



Also, the electrical stunning requirements of the new European Slaughter Legislation 1099/2009 is stun-to-kill! So we may not even be allowed to use different currents/frequencies\*\*.

\*V. Sante, G. Le Pottier, T. Astruc, M. Mouchonière, and X. Fernandez) 2000(. Effect of Stunning Current Frequency on Carcass Downgrading and Meat Quality of Turkey. Poultry Science 79:1208–1214.

\*\*Rizwan Khalid

At low frequencies (50Hz) a ventricular fibrillation appears, which is one of the signs of a heart attack (i.e. death).

This phenomenon is scientifically well established and is clearly seen with electrical stunning of animal or birds at very low-frequency (such as 50Hz).

The ventricular fibrillation (i.e. death) is confirmed by **Dr. Neville George Gregory** of the University of Bristol\* a famous research university on the impact of electric shocks on birds and animals before slaughter: the proportion of deaths among chickens with electric current of 148 mA **at frequency of 50 Hz prior to slaughter is 99%.**

At 50 Hz with electric current of 148 mA the rate kill is 99 %

\*Gregory, N. G., and S. B. Wotton (1987). Effect of electrical stunning on the electroencephalogram in chickens. Br. Vet. J.: 143, 175-183.

Moshonner M.\* and his colleagues published the results of their research, conducted on Turkey weigh on an average between 5-7 kg to identify the impact of electrical stunning at high frequency, with fix electrical current of 150 mA for 4 seconds and different frequencies. The results of their published research were as follows:

with 150 mA

At 50 Hz the rate kill is 100%

At 300 Hz the rate kill is 60%

At 480 Hz the rate kill is 30%

At 550 Hz the rate kill is 30%

At 600 Hz the rate kill is 0 %

\*M. Mouchoniere` RE, G. Le Pottier, and X. Fernandez (1999). The Effect of Current Frequency During Waterbath Stunning on the Physical Recovery and Rate and Extent of Bleed Out in Turkeys. Poultry Science 77:485–489.



But the European regulations\*\* does not allow the use of electrical stunning on Turkey higher than 400 Hz at **400 mA**.

**Table — Electrical requirements for water bath stunning equipment (average values per animal) \*\***

Frequency (Hz)	Chickens	Turkeys	Ducks and geese	Quails
< 200 Hz	100 mA	250 mA	130 mA	45 mA
<b>From 200 to 400 Hz</b>	<b>150 mA</b>	<b>400 mA</b>	Not permitted	Not permitted
<b>From 400 to 1 500 Hz</b>	<b>200 mA</b>	<b>400 mA</b>	Not permitted	Not permitted

**\*\*Regulations:** Council regulations (EC) No 1099/2009 of 24 September 2009 on the protection of animals at the time of killing. Official Journal of the European Union. <http://eur-lex.europa.eu/JOHtml.do?uri=OJ:L:2011:040:SOM:EN:HTML>

i.e. the rate of mortality in Turkeys would be expected to be greater than 50% using 400 Hz with 400 mA rather than the 150 mA current used by Moshonner M. and his colleagues, so with:

**150 mA, at 300 Hz the rate kill is 60%**

**400 mA, at 400 Hz the rate kill is greater than 50%**

**150 mA, at 480 Hz the rate kill is 30%**

At higher stunning frequencies (1500Hz) chickens will recover back to clear signs of life that is breathing and moving **after** 16 seconds and 57 seconds respectively after stunning\*.

\*Gregory, N. G., L. J. Wilkins, and S. B. Wotton, (1991). Effect of electrical stunning frequency on ventricular fibrillation, downgrading and broken bones in broilers, hens and quails. Br. Vet. J. 147:71–77.

But with stunning at high frequency, the slaughtering process is much faster (11-14 seconds) than the time chickens recover back to clear signs of life (16-57 seconds).

**So, what is the religious verdict?**



We find the religious verdict in the Muwatta الموطأ, of Imam Malik for the religious slaughter, he said: if the animal/bird at the time of slaughter has No ongoing breathing and it is not in a disturbance state, then its meat after slaughtering is not allowed to be eaten.\*

He رحمه الله also said: With Mawqoozah and in similar cases, if the animal/bird **can not live with**, it is not permissible to eat its meat even if it was slaughtered before death\*.

In Islam, the general rule of meat is unlawful until proven to be without any doubts **it is Halal**.

Stunning definitely put meats in doubts, and thus **EATING STUNNED MEAT** will become unlawful if doubts are associated with its slaughter until proven to be without any doubts.

# Sheikh Prof. Nasser bin Abdullah Al Maiman\*

On the basis of what have been said on the use of stunning

**It is better not to resort to any method of loss of consciousness; we should close the door of its discussion once and for all; as if we opened it both lawful and unlawful things will be entered.**



\* Professor of Higher Islamic Studies, Umm Al-Qura University, Makkah, and a member of the Shura Council, Saudi Arabia





Stunning methods definitely jeopardize the religious requirements of slaughter.



The Law in some European countries recognizes that “conventional” stunning methods are not permitted for Halal / Kosher food.

These countries legislate for Halal / Kosher to be exempted from such stunning provided the animal is prepared “Halal / Kosher” by a duly licensed Halal / Kosher.



Theoretically, stunning should cause less amount of bleeding.

However, few published works showed just the opposite.



## Pattern of bleeding:



The hadith of prophet Mohammed peace be upon him focuses on the **pattern of bleeding** rather than the amount of blood that comes out at the time of actual cut of the arteries.

We believe that the pattern of bleeding at the time of slaughter could be used as a an indirect sign of the religious legitimacy of the slaughter (Healthy slaughter).

The pattern of bleeding may have an impact on the purification and drainage of impure blood from internal tissues such as muscles (arteries, breast, thigh, and wings).

عن رافع بن خديج رضي الله عنه: عن النبي ﷺ قال: « ما أنهر الدم وذكر اسم الله عليه فكل، ليس السن والظفر، أما السن فعظم، وأما الظفر فمدى الحبش » \*متفق عليه.

Prophet Mohammed peace be upon him said (translation): «What causes it to bleed like a gushing river and the name of God was uttered upon it then eat, -----»\* Agreed.

Bleeding like a gushing rivers is a pattern of bleeding that usually occurs when we do not use stunning prior to slaughter this pattern will not exist with a delayed slaughter after stunning.



The pattern of bleeding with **a delayed slaughter after stunning** is like dropping bloods (liquid being poured from its reservoir) and not like a gushing river.



The color of blood, as reported by some observers, of the non stunned animal is **light red** and not **dark red** as in the case of stunned animal with delayed slaughter.



What follows is that the use of pre-stunning  
methods does not comply with Halal standards  
because it does not meet the criteria of bleeding  
pattern as prescribed in the previous hadith



# Human's safety & health

**Blood** is a good environment for the growth of bacteria and microbes.



In general, meat carcasses nearly sterile before slaughtering process.

However, if the animal is exposed to stress (compression, tension, or fatigue) prior to slaughter, meat of such animals can be severely contaminated after slaughtering.

In this case the total number of bacteria may be increased to thousands per gram of meat.

Certain fatigue such as stunning may cause small capillaries in the muscles to be ruptured, these capillaries are the **bloodstream**.

- The **free blood** that is forbidden in religious law and not **trapped blood** inside the meat after religious slaughter.
- It is here that one realizes the wisdom and the legitimate purpose of Religious Slaughtering that God swt commanded before eating the meat of sacrificial animals, so that harmful malignant in **blood** is properly expelled out.



There are other health risks with stunned meat is eating of dead meat, i.e. slaughtering will be of no use with dead animal.

What is the adverse health effect of eating dead meat?



When sacrificial animal die, bacteria will transmit across the gut very quickly, so there is a need to slaughter the animal when they are fully alive and eviscerate quickly to prevent pollution.

The adverse health effect from eating **Pork** and its by products are well documented in literatures.

Professor Hans in his biological therapy has based his observations on the Germans before and after the consumption of pork products, and this what he found:



Eating pork may causes tension, stress, fatigue and toxicity

# Animal welfare

So far we have discussed the hygienic principle that should be involve in a ritual slaughter.

Let us now determine to what extent pre-slaughter methods can be painful (or cruel).

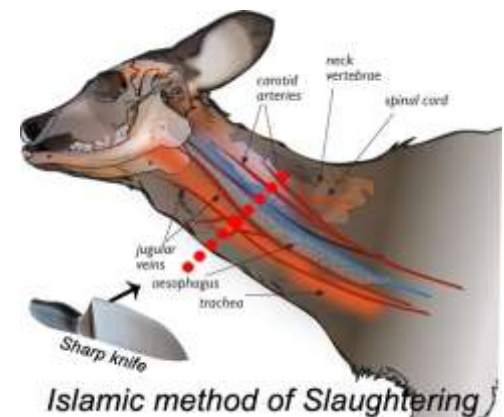


When the Halal / Kosher incision is made on the animal's neck, it severs the major organs:

Arteries and veins

Thereby causing a massive and immediate drop in blood-pressure in the brain.

The incision takes a second to perform, and the animal is rendered unconscious within seconds.



How much painful is the pre-slaughter methods?

Only Allah swt (God) the Creator of the animal and the animal which undergoes stunning while being disposed knows.





But we (humans) can ascertain pain from ritual slaughter by considering how much painful similar process would be if inflicted on us, in the light of anatomical and physiological bases of perception of pain.



It is generally known that we do not perceive when we accidentally cut ourselves during shaving with a sharp new blade until after it has happened and when the bleeding draws our attention to it.



We also know too well the difference between the smooth shave with a new blade and one with a blunt blade.

Hence it is essential that the knife used in slaughtering of animals should be sharp.



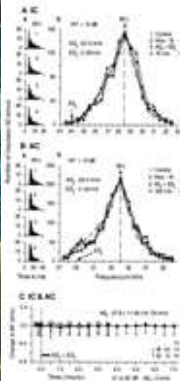
www.shutterstock.com · 62074537



The cut by the blade during shaving **bleeds very little** as only tiny capillaries are cut and we feel the pain only after the perception of our brain.



With animals, the cut severs four major blood vessels in the neck, through them so much blood is lost so quickly that the animal faints and the sensation of pain in the sensory center of the animal's brain is abolished.



We can see by now that:

*Method of slaughtering*

is of great importance to animal welfare, meat

safety & hygiene and

has significant impact on human health

Seculars claim that:

Human health & Animal Welfare are not linked  
with religious prohibitions.

Many religious prohibitions were  
found to be linked to human health  
and animal welfare.



# Please Mercy Me



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- <sup>2</sup>Rizwan Khalid of Bristol University.
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- <sup>6</sup>Kettlewell, P.J. and Hallworth R.N. (1990). Review paper, Electrical stunning of chickens. J. agric. Engng Res. 47, 139-151.
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- <sup>8</sup> Regulations: Council regulations (EC) No 1099/2009 of 24 September 2009 on the protection of animals at the time of killing. Official Journal of the European Union. <http://eur-lex.europa.eu/JOHtml.do?uri=OJ:L:2011:040:SOM:EN:HTML>
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- <sup>12</sup> البخاري : الشركة (2488) , ومسلم : الأضاحي (1968), والترمذي: الأحكام والفوائد (1491), والنسائي: الضحايا (4410), وأبو داود: (3/463) الضحايا (2821), وأحمد (2821).
- <sup>13</sup>ZabH Halal VS. Stunning Method, By: Dr Jawad Hidmi (PhD)

سبحنک اللهم وحمدک أشهد أن لا إله إلا أنت، أستغفرک وأتوب إليك



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