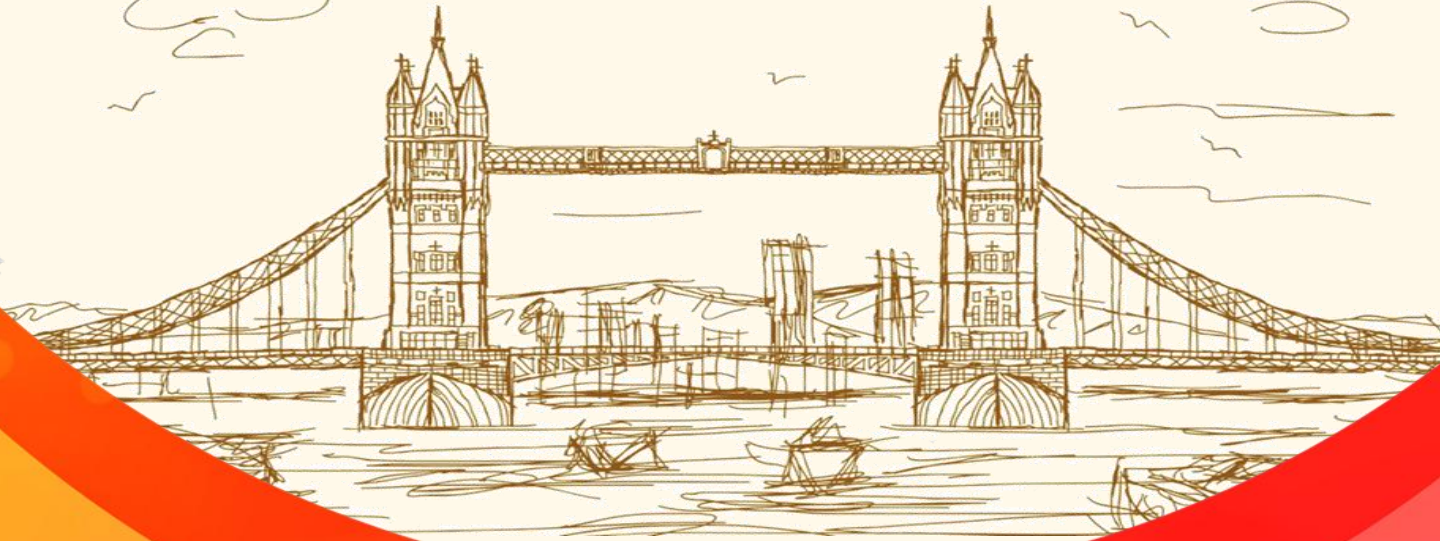


HALAL

Stunning and slaughter

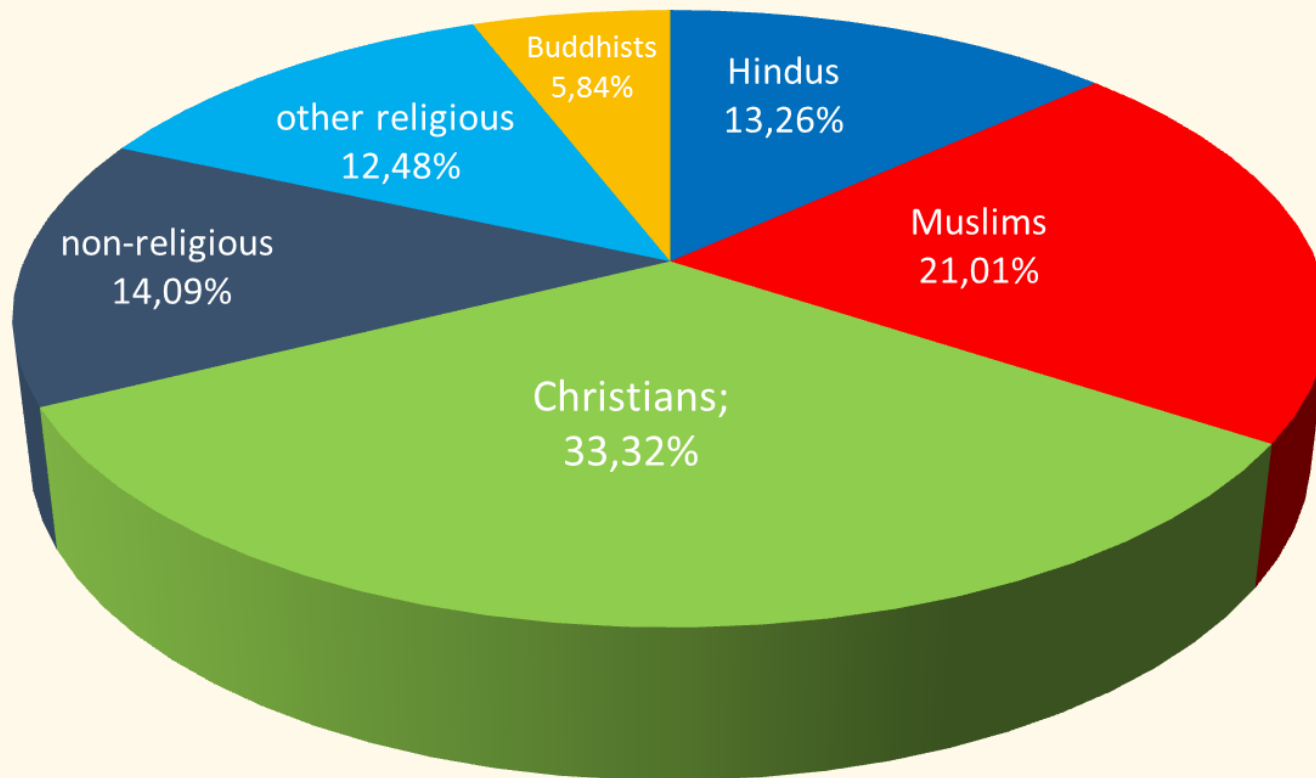
Dr Haluk Anil



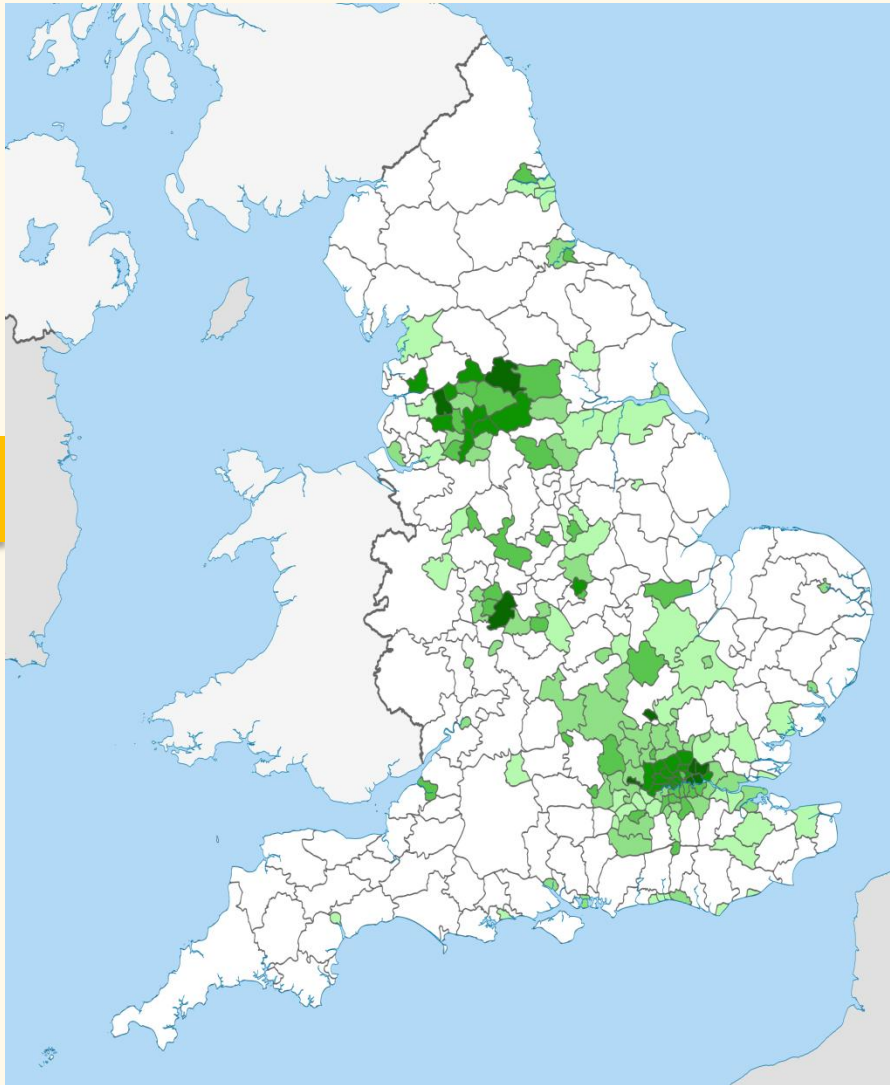
ISLAM IS THE SECOND BIGGEST AND FASTEST GROWING RELIGION

It is the 2nd largest religious group in the world

WORLD RELIGIONS BY PERCENTAGE



UK MUSLIM POPULATION



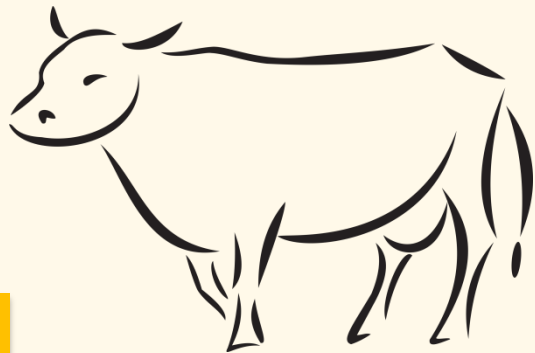
UK Muslim numbers:
2.7 million

5% of the population

Mostly in London, the Midlands
and the north of England

Halal or haram? Considerations

1. Source



2. Ingredients



3. Slaughter method



Halal or haram?

Many are clear to define. However, some not so, known as mashbooh, doubtful or questionable

Food ingredients e.g. gelatin, enzymes, emulsifiers, and flavors are questionable due to unidentified origins



Non-Halal or haram Foods:

- Pig meat and products
- Dead or incorrectly slaughtered animals e.g. dead before blood is out
- Alcoholic drinks and intoxicants
- Carnivorous animals, birds of prey and some other animals e.g. crocodiles, frogs
- Blood and its derivatives



Products that contain any of the above items Najis

CONSULTATION FINDINGS

- Alive animal
- Flow of blood
- Tasmiyyah
- Eating of any meat in necessity and from people of the books
- More flexibility in rules than thought
- Kible not necessary
- Recommendation for latest techniques
- Stunning acceptable if conditions met
- Misunderstandings of techniques and effects

Problem/contentious areas Halal Meat

- Halal Certifiers- Authenticity
- Illegal slaughter and unfit meat sale
- Lack of auditing standards
- Mechanical killing of animals
- Animal welfare compromises
- Labelling– stun/non-stun
- Islamic rules-interpretation
- Lack of training for Muslim slaughter men
- Hygiene

Questions and concerns:

- 1) **Is preslaughter handling stressful ?**
- 2) **Is exsanguination cut painful during severance and /or afterwards?**
- 3) **How long does it take before brain function is lost ?**

Cattle slaughtered by muslim method



Cattle Tr1.wmv

Sheep slaughter no stunning



M2U00322.wmv

RECOVERY FROM A STUN



Wondershare PDFElement
Trial Version

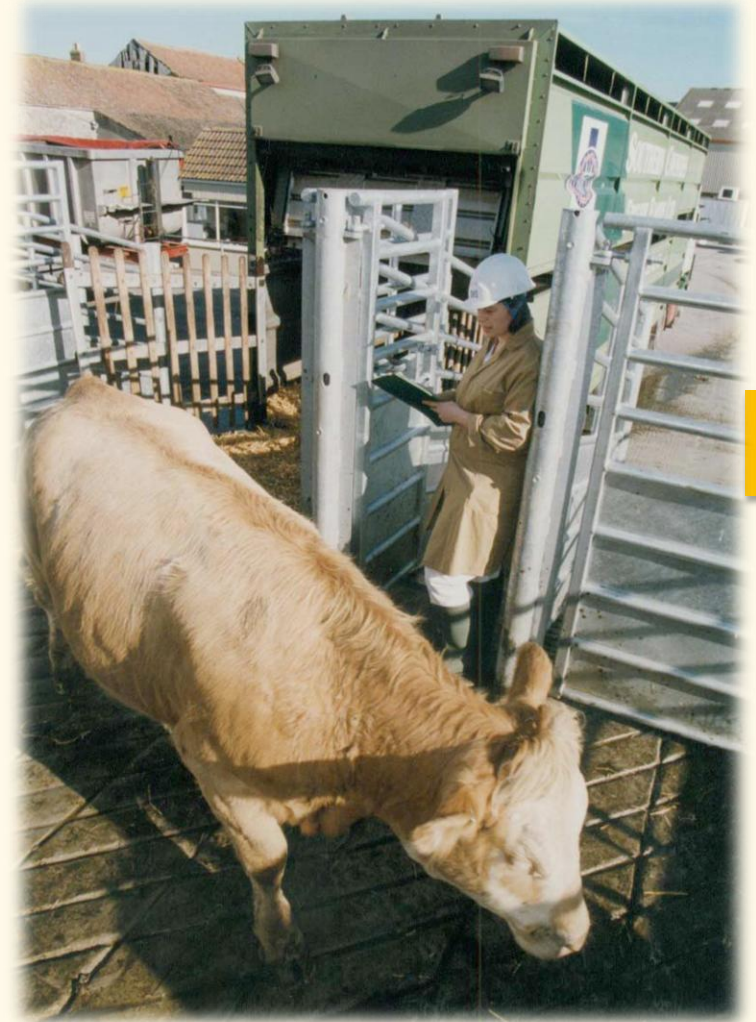


STUNNING AND WAITING
TO GAIN CONSCIOUSNESS

TO GAIN CONSCIOUSNESS
STUNNING AND WAITING



UNLOADING



www.grandin.com/



MENDIX LTD Dr Haluk Anil

UNITED KINGDOM

Preslaughter handling before religious slaughter



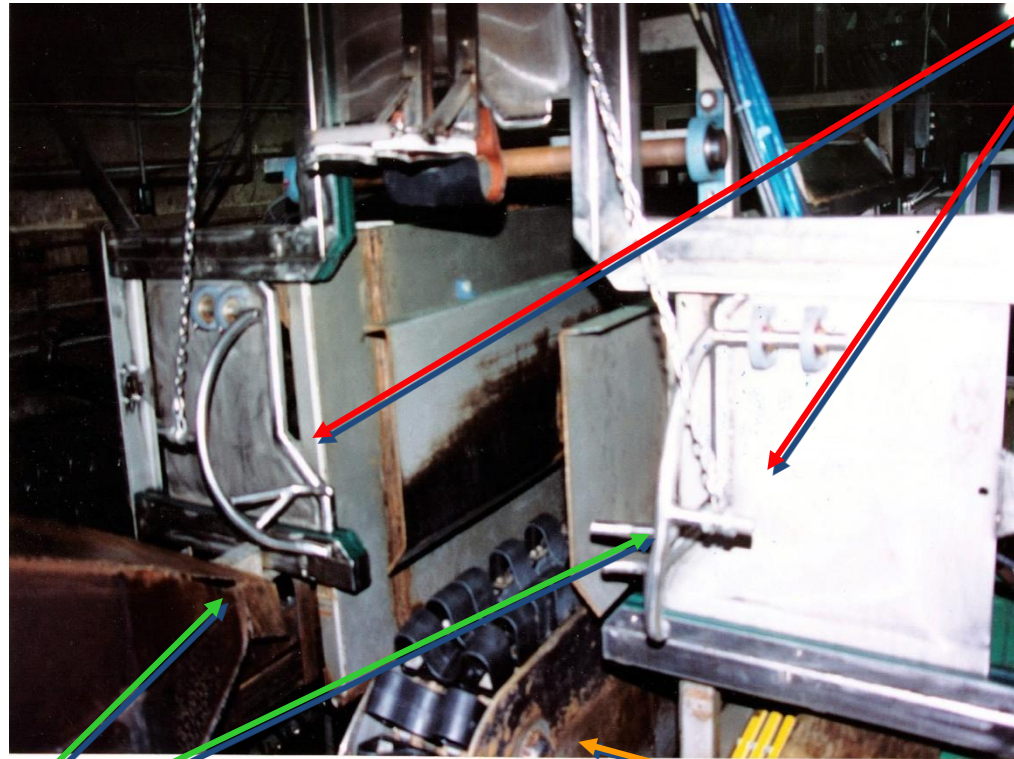
Cattle slaughtered by Muslim method



Animal just after exsanguination

Restraining conveyor for cattle

View from front



Neck restraint

Chin lift

Monorail

Facomia restraining pen for cattle

View from
front



Chin lift

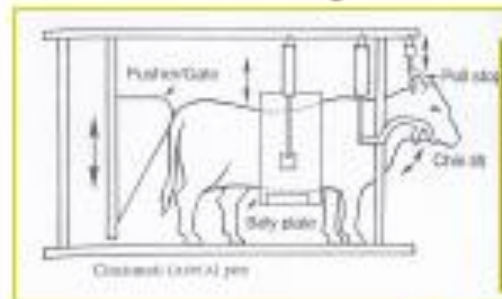
Belly lift

Rotating pen

Restraining methods: Example cattle

see www.grandin.com

- upright restraint,



- inverted 180° (on the back)



- inverted 45°/90° (on the side)

Photo only to be taken as an example for self constructed equipment; Rotary pens can be also used for turning to 45°/90°



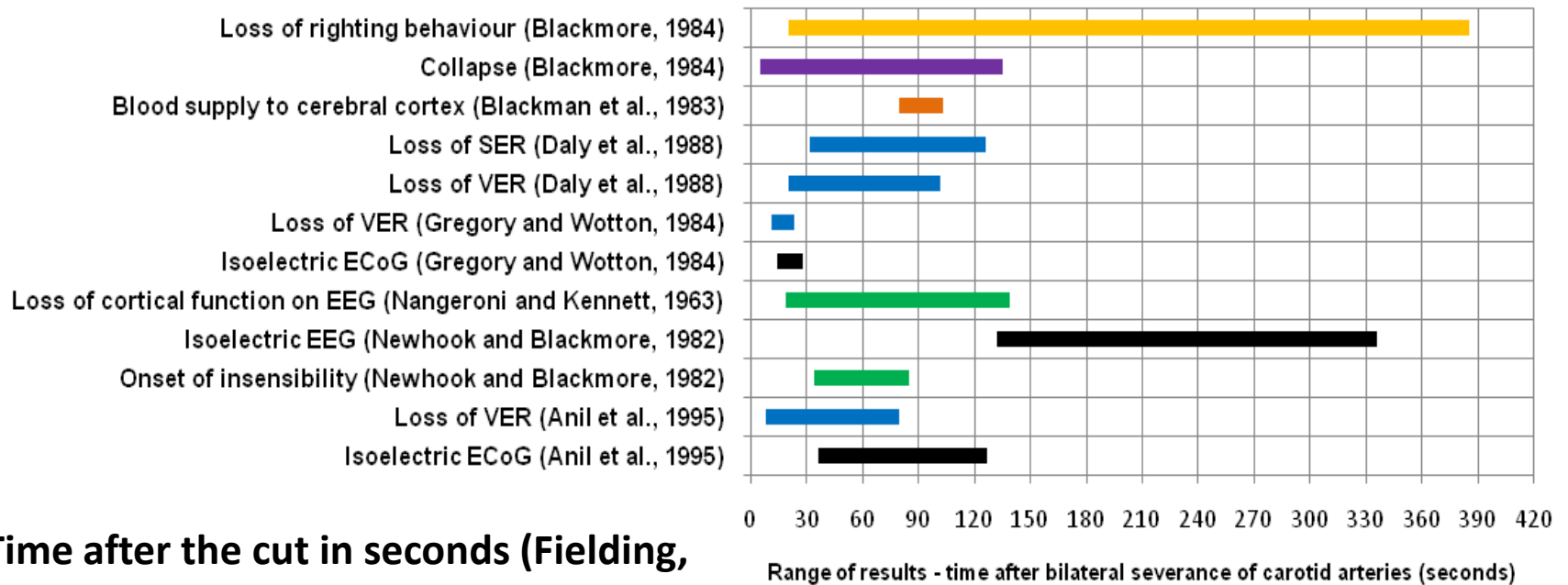
* dialrel

Slaughter without stunning – the cut

A) How to measure loss of brain activity

Slaughter without stunning – post cut

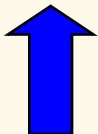
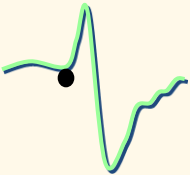
Figure 1: minimum and maximum values obtained in studies on loss of cortical function in slaughter without stunning



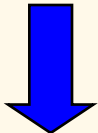
Time after the cut in seconds (Fielding, 2009)

-Visual evoked responses in cattle-

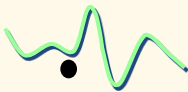
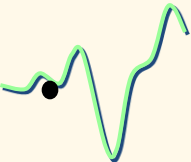
Shechita



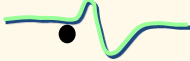
TREATMENT



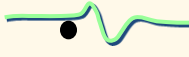
Captive bolt



0 - 20



20 - 41



41 - 61



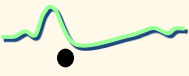
61 - 82

Time following treatment (sec)

50 μ V



50ms



0 - 16



16 - 32



32 - 48



48 - 64

Time following treatment (sec)

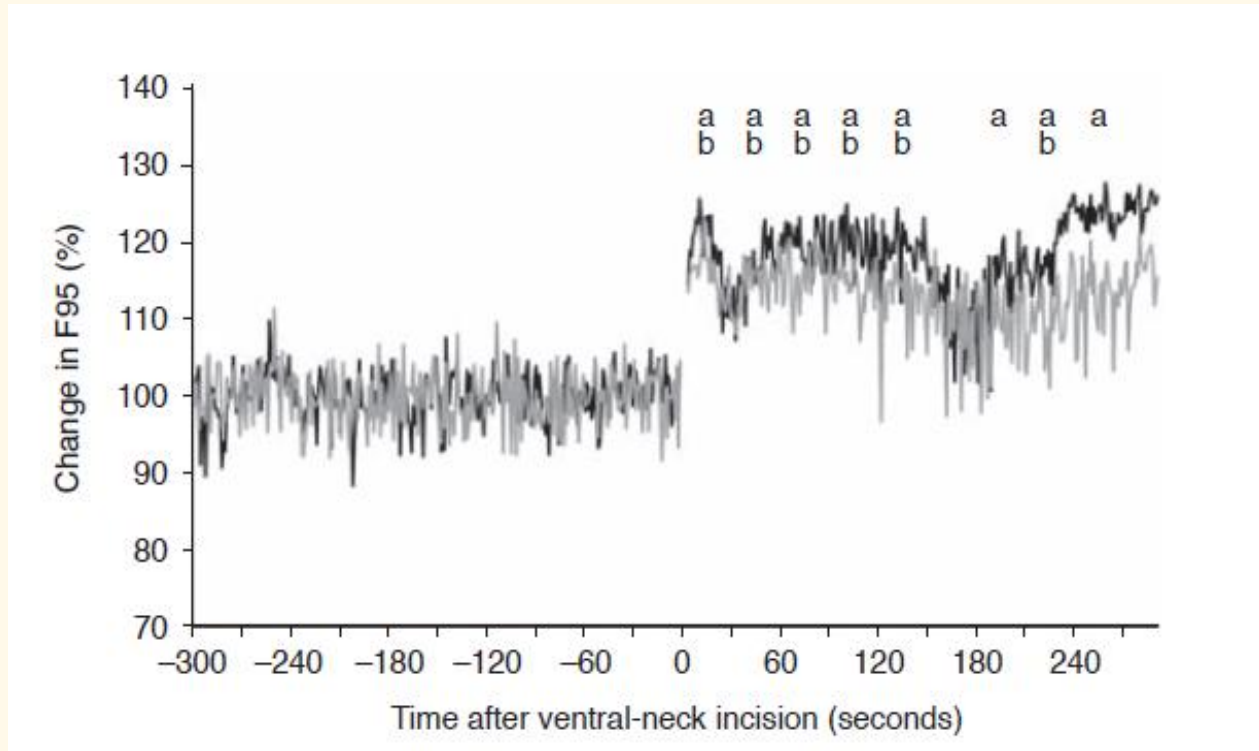
Daly *et al* (1988)

Slaughter without stunning – the cut

B) How to measure pain – brain electrical activity

Slaughter without stunning – the cut

Recent work by Gibson et al. 2007/2009
(EEG spectral analysis):



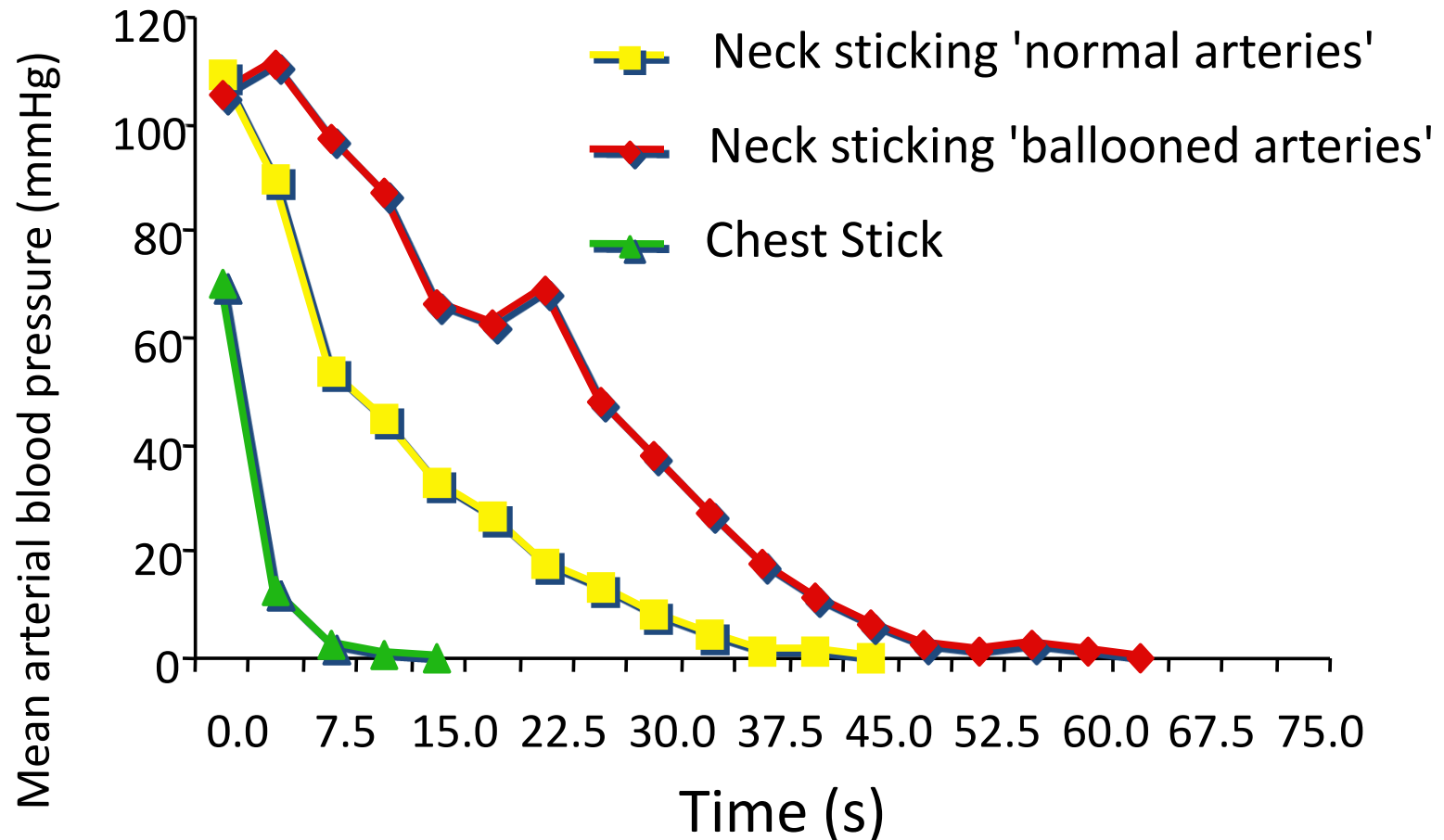
Spectral edge frequency

Carotid ballooning in cattle

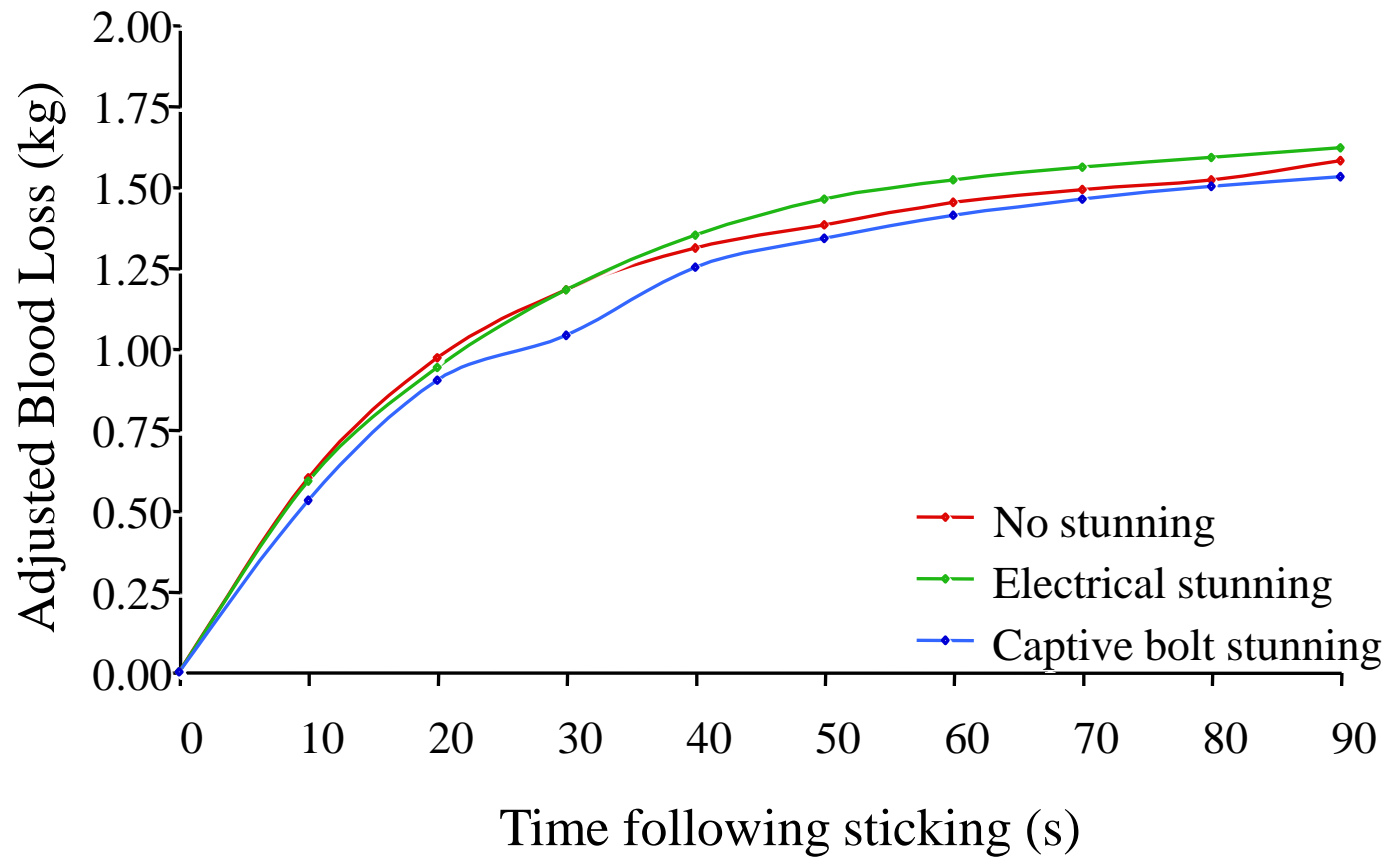


Anil et al

Delayed loss of consciousness: Blood pressure in calves



Comparison of slaughter methods - blood loss in sheep



SHECHITA

Shechita:

The means by which an animal (mammals and fowl; not fish or grasshoppers) must be killed so that its meat is permitted for consumption according to Jewish law.

Historically carried out on a local level and tightly regulated by communal rabbinic court with a view to total picture of Jewish law that encompasses a concern for all living beings.

Shechita

The object:

- Only ruminants with fully split hooves.
- This includes cow, sheep, deer, and giraffe; excludes pig, camel, and rabbit
- Only non-predatory fowl for which there is a tradition. Includes chicken, turkey, pigeon; excludes ostrich.

Shechita

The practitioner:

- In theory, any adult Jew may shecht
- In reality, for well over 1000 years only those who receive a “license” from the community.
- Years of training; respected

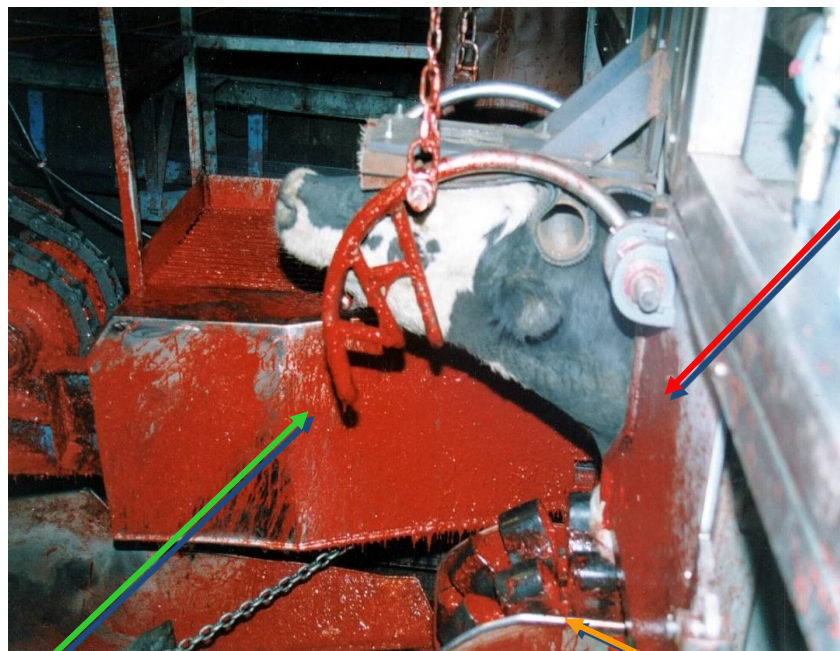
Slaughter cut:

Preslaughter stunning has not been acceptable

CHALAF



View from front



Neck restraint

Chin lift

Monorail

Removal of parts and Porging

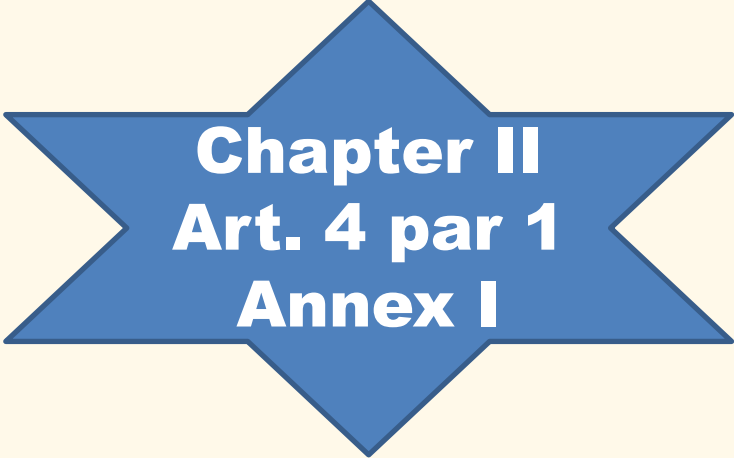
There are portions of the animal that are not kosher and must be removed. The three items are: blood, certain fats known as chailev, and the sciatic nerve known as the gid hanasheh. The consumption of blood is an abhorrence, the admonition of which is repeated several times in the Bible.

Concerns about Shechita:

- Preslaughter handling in pens
- Delays before neck cut
- Washing neck
- Late loss of sensibility
- Palpation of neck after cut

1099/2009 regulation and religious slaughter

For animals subject to slaughter prescribed by religious rites, the requirements of paragraph 1 shall not apply provided that the slaughter takes place in a slaughterhouse



**Chapter II
Art. 4 par 1
Annex I**

Handling and restraint

Art. 15(2)

- **Animals that are killed in accordance with Article 4(4) without prior stunning are individually restrained**
- **Art. 15(2) ruminants shall be mechanically restrained**

Certificate of competence:

- **Handling and care of animals before restraint**
- **Restraint for stunning or killing**
- **Stunning of animals**
- **Assessment of effective stunning**
- **Shackling or hoisting**
- **Bleeding of live animals**
- **Slaughtering in accordance with Art. 4(4)Art. 7**

- **Slaughter for domestic consumption outside slaughterhouses:**

- **1009/2009 Regs**

- **Shall not apply to:**

- b) to poultry, rabbits and hares slaughtered outside of a slaughterhouse by their owner for his/her private domestic consumption.

- **OTHER ANIMALS?**

- **Art 3.1 Avoid pain, distress**

- **4.1 Use stunning**

- **7.1 Competency**

Restraining for cattle











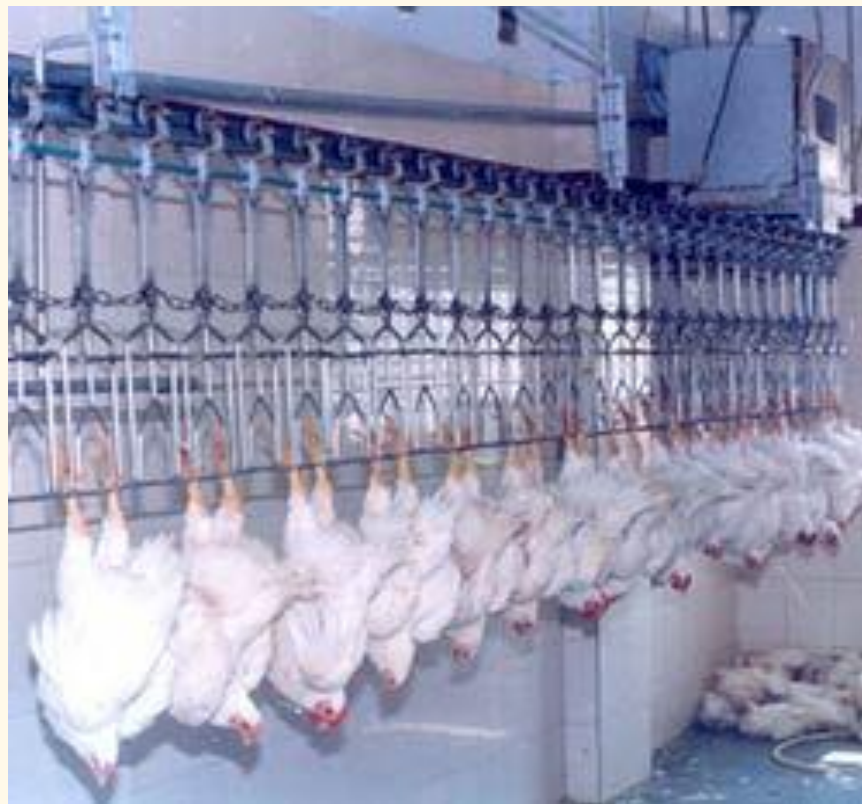
Wool pull damage in sheep

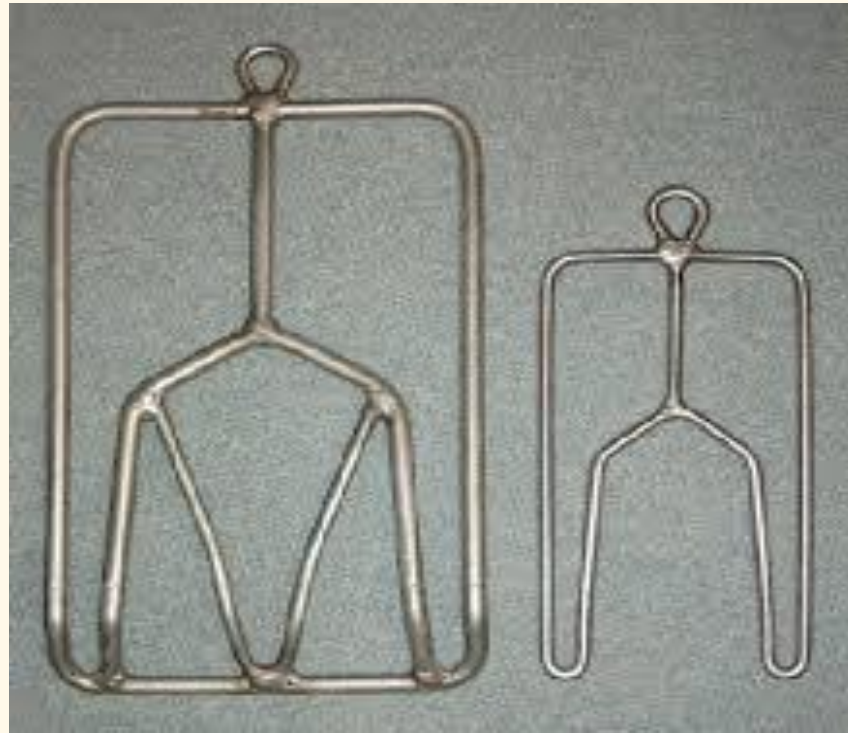


Animal Welfare at Slaughter

Glycogen depletion results in less lactic acid production. In this case the meat will be very dry and dark in color. This condition is known as **Dark Firm Dry (DFD)** meat.











THANK YOU

Dr Haluk Anil

