Dog Meat Consumption: an Emerging Human and Animal Health Risk?



EFSA Stakeholder Discussion Group on Emerging Risk Parma 26-27 November 2018

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Federation of Veterinarians of Europe Dog meat consumption in the Asian countries



- it is well recognised that various countries use dog meat as a food source for human consumption
- the Humane Society International estimates nearly 30 million dogs are killed just across Asia every year for human consumption
- the more intensive production occurs in China, South Korea, Vietnam, Indonesia, Philippines
- In China, more than a third of the population eats dog meat multiple times a year.

Dog meat consumption in the Africa



- dog meat is eaten in over 20 countries across Africa
- northern parts of Namibia dogs are bred and slaughtered for human consumption, by dog farmers.
- much of African dog meat is eaten in Nigeria

Dog meat consumption in Europe?



Switzerland

- dogs are regularly eaten by farmers in some rural areas, despite the commercial slaughter and sale of dog meat being illegal (no government regulation prohibit consumption).
- dog lard is sometimes used for medicinal purposes
- Slovakia: among roman people
- Poland: dog fat has been known to be used for lard.
- Greece: during economic crisis dog meat consumption among immigrants.
- Italy occasional consumption

And in the rest of the world?



- In the US it is still legal to eat dog meat in 44 states although few cases of dog meat consumption have been reported
- Consumption occur in Canada and dog meat not explicitly illegal
 - the dog meat has to be inspected
 - license to slaughter dogs for food
 - raised explicitly for food

How can dog meat enter the EU?

Look at the illegal import of bush meat

- the international bushmeat trade into Europe has been identified as a source of zoonotic disease transmission, including the emergence of novel human pathogens
- On 2014 EFSA evaluated the risk of transmission of Ebola virus (EBOV) via the food chain in EU, mainly via illegal import bush meat
- the main risk of human exposure to dog meat in the EU would be via illegal importation possibly under the guise of bush meat

Potential illegal import of dog meat?





Trade of dog meat in Cina and elsewhere in the world

Harbin Qunfu Dogfield Corp. Ltd

Home	Products v	Company Profile	e v	Selling Leads Contact	
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Frozen Dog	gmeat				
-		Company Name		Harbin Qunfu Dogfield Corp. Ltd	
		Membership	-	Free Member	
10	Cel	Registration Date	2	2005. 12.15	
Ca.	1	Country/Region		China 🔤	
a Care		City		Heilongjiang	
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Potential animal and human health risk of dog meat consumption

- The use of dogs as a human food source, is associated to important zoonotic risk to humans
 - rabies, trichinella
 - other potential zoonoses (theoretical)
 - Cholerae
 - Ebola
 - Tuberculosis
 - Cysticercosis cellulosae
 - E. coli, Salmonella, Campylobacter
 - Brucellosis, Leptospirosis, Toxoplasma gondii, Neospora caninum, Echinococcus multilocularis, Dirofilaria immitans and Spirocerca lupi
 - further study is needed to provide good

Potential risk of human rabies associated to dog meat consumption

- In Asia human rabies death have been directly linked to involvement in the slaughtering butchery handling and consumption of meat from infected dogs.
- The WHO and the Global Alliance for Rabies Control have both acknowledged that the link between the spread or rabies and the dog meat trade.
- The CDC of the United States stated that there are reports that dog-meat markets have a higher rate of rabies than the general dog population, as people often sell dogs to the markets when they act sick, some of these sick dogs have rabies.

Other potential animal and human health risk?





RESEARCH ARTICLE

Emergence and Evolution of Novel Reassortant Influenza A Viruses in Canines in Southern China

Ying Chen,^{a,b,c} Nídia S. Trovão,^{b,c,d} Guojun Wang,^{b,c} Welfeng Zhao,^a Ping He,^a Huabo Zhou,^{a,e} Yanning Mo,^a Zuzhang Wel,^a Kang Ouyang,^a Weljian Huang,^a Adolfo García-Sastre,^{b,c,r} Martha I. Nelson^d

 by sequencing the complete genomes of 16 IAVs obtained from canines in southern China in 2013 to 2015, it was demonstrated that the evolution of canine influenza viruses (CIVs) in Asian dogs is increasingly complex, presenting a potential threat to humans.

Human *Trichinella* risk and dog meat consumption

- Trichinellosis is constantly present in the sylvatic cycle in Slovakia, with several sporadic human outbreaks registered since the 1960s.
- the high percentage of seropositive dogs in endemic regions of eastern Slovakia, via the consumption of dog meat might represent a potential risk for human infections.
- The largest outbreak of trichinellosis occurred in 1998 and was related to the consumption of dog meat that had been added to smoked pork sausages.

Illegal import of dog meat

Control measures

- Information campaigns aimed at passengers stating clearly that the carriage of meat imports (including bushmeat potentially containing dog meat) from non-EU countries is forbidden and that health risks could arise from such imports.
- Monitoring at EU Border control posts

Illegal import of bush meat?

Control measures

- Strenghtening monitoring at EU Border control posts. How?
 - the databases for meat imports at the airports should be standardized and include information on species and methods used to process the animal products.
 - tools of genetic analysis would be helpful for rapid identification of species
 - DNA analysis of samples collected at the airports will result in a better understanding of species at risk and potential diseases of concern.

Look at the drivers

- the extent of illegal introduction of bushmeat into Europe to feed immigrant communities
- increasing EU immigration flow from Asia countries
- custom and culinary tradition of immigrant communities in the EU countries.

Look at the drivers



- the extent of illegal introduction of bushmeat into Europe to feed immigrant communities
 - look at recent studies carried out at airport in France and UK
 - It is expected that a similar flow of bushmeat passes through other major EU airports such as Amsterdam, Frankfurt and Lisbon.

Look at the drivers

Increasing immigration flow into Europe:

Breakdown by major area of origin of the 72.4 million migrants residing in Europe (out of a population of 742 million) **at mid-2013**,

Area of origin 🔶	Number of immigrants to Europe (millions)	Percentage of total number of immigrants \$ to Europe
Africa	8.9	12
Asia	18.6	27
Europe	37.8	52
Latin America and the Caribbean	4.5	6
Northern America	0.9	1
Oceania	0.3	0.4
Various	1.3	2
TOTAL	72.4	100

Look at the drivers

- custom and culinary tradition of immigrant communities in the EU countries.
 - occasional consumption among immigrants in South of Italy



by THOMAS D. WILLIAMS, PH.D. 16 Feb 2018 3,369

Animal rights activists are up in arms over attempts to barbecue a dog at an immigrant welcome center in southern Italy, with migrants insisting the practice is normal where they come from.

Members of the Carabinieri, an Italian military police force, intervened immediately after receiving a call from an employee of the center who had witnessed the scene of a 29-year-old Nigerian man intent on roasting a dog at the center in Vibo Valentia, in the Italian

Legal and public health aspects?

- Although it is illegal to commercially slaughter and sell dog meat in many countries around the world (law enforcement is weak and it continues being a popular dish even where it is prohibited)
- ...there are no international laws prohibiting the consumption of dog meat.
- Role of OIE/WHO: need to review international legislation that would explicitly outlaw the slaughter of dogs and cats for food for the public health purpose?

Ethical issue

- Ethical issues to take into consideration
 - More than 80 animal charities from across Asia and the rest of the world have signed an open letter to global governments to take action to end the dog meat trade as a way to tackle the deadly disease (rabies).
 - UK House of Common
 - USA Congress bill amending animal welfare

Ethical and public health issue



VETERINARY PUBLIC HEALTH ASSOCIATION (Division of British Veterinary Association)

VPHA's position on use of dogs for meat



 VPHA does not agree with the practice of commercial farming, slaughter or consumption of dog meat and would discourage such practice anywhere in the world. In countries where dog meat is used as a food source, the VPHA believes that greater awareness and education should be promoted about the risk to public health and the poor welfare

- UK: Veterinary Public Health Association' position on use of dogs for meat
 - discourage such practice anywhere in the world
 - awareness and education should be promoted about the risk to public health and the poor welfare standards for the dogs.
 - from a cultural and public health perspective, any killing of dogs for meat or the consumption of dog meat in the UK should be banned and the meat condemned.

Ethical and public health issue



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• UK: VPHA's position on use of dogs for meat

- in countries where this practice is still going on it is important the assure high welfare standards of the animal production
- the source animals should be of known origin and practices to control exposure to infection and parasites are critical to reduce both animal disease risk and public health risk.
- the practice of pre-slaughter stressing should be prohibited.

Thank you

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