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An investigation into the availability of horsemeat in Belgium, France and the Netherlands

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Introduction

Each year, several hundred thousand tonnes of horsemeat are imported to the European Union, primarily from Canada, Mexico, Brazil, Argentina and Uruguay. This is in addition to the tens of thousands of horses that are slaughtered for human consumption within the EU itself.

To gain greater insight into the European horsemeat market, Humane Society International (HSI) conducted a retail investigation in three EU Member States where horsemeat is commonly eaten, namely Belgium, France and the Netherlands. The fieldwork was conducted in June 2012.

The aim of this study was to determine the availability and range of horsemeat and products containing horsemeat sold in these countries. It also sought to ascertain whether and what proportion of horsemeat products are labelled with information concerning the meat's country of origin. Data concerning the price, weight and composition of the horsemeat products were also collected.

Horsemeat production and trade in Belgium, France and the Netherlands

The retail and consumption of horsemeat in Belgium, France and the Netherlands must be situated in the broader context of these three EU Member States' involvement in the global horsemeat trade, both in terms of their role as major importers of horsemeat as well as the producers thereof.

Each year, several thousand horses are slaughtered domestically in Belgium, France and the Netherlands. Not all of these animals have been necessarily raised in the country where they meet their end. Live horses are also transported across the borders from the Netherlands and France for slaughter in Belgium. This may partly be due to – in some instances - the closer proximity of slaughterhouses licensed for horse slaughter across the border. However, horses are also known to be exported for slaughter from Germany and Denmark too. Likewise, in France, live horses not just exported for slaughter from Belgium, but also from its southern neighbour, Spain as well as from Poland, which is much further afield. The following table provides an overview of the total number of horses slaughtered in the respective countries in 2007, 2010 and 2011.

Table 1: Total number of horses slaughtered in Belgium, France and the Netherlands¹

Country	2007	2010	2011
Belgium	10,149	8,926	9,613
France	17,744	15,581	16,970
Netherlands	2,656	2,500	3,400

Table 2 reveals the extent of chilled and frozen horsemeat imports from other countries to Belgium, France and the Netherlands in 2011. It should be noted that under the Harmonised

¹ Data for 2007 from Eurostat Database, data on equidae (i.e. horses, asses, mules or hinnies) extracted from category of 'Slaughtered animals for meat production [food_in_pagr2]'. Accessed 15th August 2012. Data for 2010 and 2011 derives respectively from Statistics Belgium, Statischek van de geslachte Dieren; Accessed 15th August 2012; France AgriMer (2012) Les filières animaux terrestres et aquatiques: Perspectives 2012; p. 61; Statline database, Central Bureau voor de Statistiek. Vleesproductie; aantal slachtingen en geslacht per diersoort. Accessed 16th August 2012.

Table 2: Value and volume of meat of horses, asses, mules or hinnies, chilled or frozen (020500) exported to Belgium, France and the Netherlands in 2011

Belgium	€	100 kg
Canada	11,637,433	45,784
Mexico	11,947,982	41,256
USA	5,116,644	20,377
Argentina	15,347,912	39,409
Brazil	3,258,933	13,240
Uruguay	2,875,589	7,251
Australia	77,479	290
New Zealand	216,363	638
Germany	860,390	3,158
France	9,123,728	27,468
United Kingdom	32,156	142
Ireland	1,313,166	5,241
Italy	392,278	7,481
Luxembourg	9,610	13
Netherlands	8,264,973	23,030
Romania	4,992,513	13,788
Slovenia	859	1
Total horsemeat exported to Belgium	74,685,008	215,924
France	€	100 kg
Canada	6,566,685	18,362
Mexico	5,062,025	12,045
Argentina	5,255,347	11,322
Uruguay	618,600	1,472
Australia	622,628	913
Belgium	27,077,482	65,020
Germany	883,298	2,184
Denmark	3,661	27
Spain	151,820	678
United Kingdom	4,407,694	21,578
Ireland	2,233,731	8,293
Italy	17,909	29
Luxembourg	6,348,164	16,866
Netherlands	7,175,827	19,030
Romania	120,125	622
Total horsemeat exported to France	65,795,944	102,796
Netherlands	€	100 kg
Argentina	2,613,246	7,622
Brazil	130,469	744
Uruguay	6,017,046	15,400
Belgium	21,684,906	79,474
Denmark	1,199	7
Spain	2,692	18
France	156,317	482
United Kingdom	23,960	149
Italy	801,974	3,940
Romania	1,305,993	6,189
Total horsemeat exported to Netherlands	32,716,238	95,233

Data extracted from Eurostat database , EU27 Trade Since 1995 By HS6. Accessed 7th September 2012.

Commodity Description and Coding System (HS) used globally to record international trade, the meat of all equidae is listed under all single code. Although imports may include meat from other equines, such as asses and mules, the majority of imports concern meat derived from horses. In addition, these figures do not include the trade in processed horsemeat products.

As these figures illustrate, the horsemeat trade is a global one and is a multimillion business. Belgium lies very much at the heart of this, not only being the recipient of the largest volumes of horsemeat imports from North America, South America and Australasia, but also re-exporting significant quantities of chilled and frozen horsemeat to other EU Member States. As Table 2 illustrates, Belgium exports substantial amounts of horsemeat to its neighbours, France and the Netherlands.

One of the reasons for the prominence of Belgium in the horsemeat trade is because Belgian companies are known to have an important stake in horse slaughter operations in both North and Latin America (as well as in Australia and New Zealand) either co-owning abattoirs or engaging in joint ventures with local partners. A Belgian concern also operates a horse slaughter plant in Romania.

Acceptability of eating horsemeat in Belgium, France and the Netherlands

Although - as the present study will illustrate - horsemeat products are readily available in Belgium, France and the Netherlands, this does not necessarily translate into a broad social acceptance of eating horses, nor does it mean that the majority of the population where horsemeat is sold enthusiastically engage in this culinary practice.

Indeed, a survey commissioned by Humane Society International and conducted by Ipsos MORI in July 2012 found that only 50% of respondents in France and 51% in Belgium believed that it was acceptable to eat horses. There were a significant gender differences recorded with 60% of the male respondents, as opposed to 42% of the female ones in Belgium stating that it was acceptable to eat horses. Likewise, 61% of men and 39% of women interviewed in France found it acceptable to eat horses.²

These results echo a previous survey conducted in the Netherlands by Utrecht University in 2002, which noted that 49.1% of Dutch people found the slaughter of horses for the purposes of meat production acceptable. As in the Ipsos MORI survey, significantly fewer women (36.8%) than men (59.2%) accepted the killing of horses for food. This research study also highlighted the ambivalence that many people have towards the practice with 26.9% of respondents claiming to neither agree or disagree with the statement that it was acceptable to slaughter horses for meat production.³

The Ipsos MORI survey also investigated the frequency with which respondents in Belgium and France actually consumed horsemeat. Respondents were given a number of statements about eating horsemeat and asked which of them was closest to their experience. The table below reveals that while 67% of respondents in both Belgium and France had - at some point in their lives - consumed horsemeat, yet a mere 4% and 6% in each country actually claim to eat it frequently.⁴

² Ipsos MORI survey on attitudes towards horsemeat consumption conducted in July 2012. Belgium: 23rd -31 July 2012, 1,000 respondents aged 18+ France: 20th-24th July 2012, 1,012 respondents aged 18+, Italy: 24-27th July 2012, 1,000 respondents aged 18+The Netherlands was not included in this research. However, the survey was also conducted in Italy.

³ L.J.E. Rutgers, J.M. Swabe & E.N. Noordhuizen-Stassen (2003) Het doden van dieren: ja mits... of nee, tenzij? Utrecht University/Nederlandse Organisatie voor Wetenschappelijk Onderzoek. pp.32-33.

⁴ Ipsos MORI survey on attitudes towards horsemeat consumption conducted in July 2012.

Table 3: Frequency of horsemeat consumption in Belgium and France (Ipsos MORI 2012)

Please tell me which, if any, of the following statements is closest to your experience?	France %	Belgium %
I have never and would never eat horsemeat	28	28
I have never eaten horsemeat but would consider doing so in the future	5	5
I have eaten horsemeat once	13	22
I have eaten horsemeat a few times	34	19
I sometimes eat horsemeat	16	20
I often eat horsemeat	4	6
Have eaten horsemeat - total	67	67

These survey results would indicate that a relatively low percentage of the Belgian and French populations are eating horsemeat on a regular or occasional basis. However, the findings of the HSI retail investigation presented below suggest that consumers may not necessarily even be aware that they are consuming horsemeat; actual consumption of horsemeat products could, therefore, be higher.

As the trade data presented above clearly demonstrates, the majority of horsemeat consumed in both Belgium and France is either sourced from outside the EU or - to a lesser extent - from other EU Member States. To ascertain whether consumers were aware of the origins of this meat, the Ipsos MORI survey also asked respondents where they thought the horsemeat sold in their country came from.

Table 4: Opinions on origins of horsemeat sold in Belgium and France (Ipsos MORI 2012)

Where do you think most of the horsemeat sold in your own country originates from?	France %	Belgium %
In own country	25	23
Elsewhere in the European Union	32	14
Another European country outside the EU	5	5
North America	1	4
South America	8	9
Elsewhere (Africa, Australasia & Asia)	3	2
Don't know	25	43

It is notable that the majority of those who expressed an opinion on where most of the horsemeat sold in their country came from thought that it originated either in their own country, or derived from elsewhere in Europe. Only 4% of Belgians and 1% of French people interviewed thought that the horsemeat sold in their country originated in North America, despite Canada and Mexico being responsible for a large proportion of imports.

A higher, though still low, percentage of respondents (8% France and 9% Belgium) realised that many horsemeat products sold in their countries originated from South America. As the results of the retail investigation presented below will suggest, this may partly be due to chilled horsemeat products from this region being explicitly labelled as such.

The retail investigation

Humane Society International's retail investigation into the availability of horsemeat products in Belgium, France and the Netherlands took place between 21st and 23rd June 2012.

The investigation focused exclusively on products sold directly to consumers in supermarket chains, independent grocery stores and hypermarkets in Belgium, northern France and the south of the Netherlands. It did not, therefore, investigate any bulk retailers that supply the restaurant, catering or fast-food trade.

It should be noted that this retail study was never intended to be exhaustive. The objective was to provide a snapshot of the variety of horsemeat products that are routinely available to consumers in countries that both slaughter horses and import significant quantities of horsemeat for human consumption.

Methodology

Belgium, France and the Netherlands were selected for this investigation due to their geographic proximity, in addition to cultural culinary and linguistic similarities. A second retail study of the horsemeat market in Italy is also required, given that this country is the biggest consumer of horsemeat in the European Union.

Our researcher visited a total of 21 retailers in different 15 locations in Belgium (both Flanders and Wallonia), France (Nord and Moselle departments) and the Netherlands (Limburg). The following supermarket retailers were visited: Delhaize, Colruyt, Lidl, Okay, Spar and Carrefour in Belgium; Aldi, Carrefour, Henri Boucher, Intermarché, E. Leclerc, Leader Price in France; Albert Heijn, C1000 and Jumbo in the Netherlands.

These stores selected were all part of major national or regional supermarket chains, and were situated in both urban and rural areas. Three of the stores visited were categorised as hypermarkets, 12 as large supermarkets, 5 as small supermarkets and one as a national butcher's chain.

In each store, we looked for the following categories of products:

- Fresh horsemeat
- Frozen horsemeat
- Chilled and vacuum-packed cuts of horsemeat (i.e. steaks, stewing meat, etc.)
- Sliced processed horsemeat products (i.e. luncheon meats)
- Processed horsemeat products (i.e. sausages)
- Other processed meat products and convenience foods that may contain horsemeat

Information concerning the brand and manufacturer, country of origin and/or manufacture, price and weight were recorded for all horsemeat products found. A photographic record of each unique product sold was also taken. No horsemeat products were, however, purchased as part of this investigation.

The results

Horsemeat or products containing horsemeat were found in 14 of the 21 stores visited. The majority of these retail outlets had between one and four different kinds of horsemeat product on sale. However, three stores (2 in Belgium and 1 in France) were found to sell seven different horsemeat products and two vendors (in Belgium and the Netherlands) had a total of eight on their shelves. No horsemeat was found in two stores in Belgium, four in France and one in the Netherlands.

Chilled and fresh horsemeat

The most obvious horsemeat product found on sale was chilled, fresh horsemeat. This tends to be sold vacuum-packed in chilled cabinets alongside other fresh meat products, such as beef and pork. It is also sold behind the counter in some stores with a butcher's department.



1. Fresh horse rump steak from Romania. Okay, Lontzen, Belgium. 23rd June 2012



2. Fresh sirloin horse steak from Argentina. Cut and packaged in Belgium. Delhaize, St. Antonius, Belgium. 21st June 2012

As the photographs above illustrate, fresh horsemeat is fairly distinctive since it tends to be darker in colour than most other kinds of meat. The cuts of fresh meat available were fillet steak, tenderloin, sirloin and rump steak. Fresh, smoked horsemeat was also sold behind the counter in three stores.

The majority of vacuum-packed horsemeat was clearly labelled with the country of origin as well as the country where the meat was cut and packaged. However, no country of origin was listed for the non pre-packaged meat, which could be purchased in three supermarkets behind meat counters. The issue of country of origin labelling will be discussed further below.

Prices for chilled, vacuum-packed horsemeat products ranged from € 8.40 to € 31.11 per kilo. The average price per kilo for all products recorded was € 18.05 per kilo. Notably, the most expensive horsemeat products found were labelled as deriving from horses raised and slaughtered in Belgium. The very cheapest product found came from Canada. The cut and quality of the meat is also a determinant of the price per kilo.

Processed horsemeat products

Processed horsemeat products seem to fall into two main categories: sliced, smoked fresh horsemeat and sausages or salami. A total of 24 (of which 13 were unique) fresh, sliced horsemeat products were found in stores in Belgium and the Netherlands. No products of this description were found in France.



1. Thinly sliced, smoked horsemeat. Delhaize, St. Antonius, Belgium. 21st June 2012



2. Smoked horsemeat, Albert Heijn, Maastricht, the Netherlands, 23rd June 2012.

Sliced, smoked horsemeat products also tend to contain a variety of the following additional ingredients: salt, cane sugar, dextrose, aromas, preservatives (sodium nitrite E250, potassium nitrate E252), citric acid, guanylic acid (E626); and antioxidants (sodium L-ascorbate E301), potassium nitrate.

The average price of chilled smoked horsemeat products as €18 per kilo. The price of individual products ranged between € 1.45 and € 3.05. In all but three instances, there was no country identification mark on these products. Three products were labelled as a product of Belgium.

The second main processed horsemeat product found concerned sausages or salami. These products were located in stores in all three countries. Sausages were primarily found vacuum-packed in plastic, but were also available fresh and unpackaged at one supermarket fresh meat counter. These products did not just contain horsemeat, but also a variety of other ingredients including pork fat and – in the case of ring cervelat sausage – also pork meat.



1. Boulogne salami, Delhaize, St. Job in 't Goor, Belgium. 21st June 2012



2. Ring cervelat sausage, Jumbo, Maastricht, The Netherlands. 23rd June 2012

The proportion of horsemeat in such processed horsemeat products was not always clear. Some contained around 38% horsemeat; others as much as 62%. From the name of some products, it was not immediately obvious that they contained horsemeat at all, unless one read the ingredient label properly.



3. Horse cervelat sausage, Carrefour Market, Avesnes-sur-Helpe, France. 22nd June 2012.



4. Smoked horse sausage, Aldi, Louvroil, France. 22nd June 2012.



5. Fresh horse sausages, Carrefour Market, Avesnes-sur-Helpe, France. 22nd June 2012.



6. Horse cervelat sausage, E. Leclerc, Hauconcourt - Maizières Les Metz, France. 22nd June 2012

Horsemeat as a 'hidden ingredient' in convenience foods

While consumers in Belgium, France and the Netherlands may expect to find horsemeat sold in the form of steak, sausages and salami, they may not necessarily realise that meat from horses may also be used as an ingredient in cheap, convenience foods.



1. Party snacks, Delhaize, St. Antonius, Belgium. 21st June 2012



2. Party mix mini-snacks, Jumbo, Maastricht, The Netherlands, 23rd June 2012

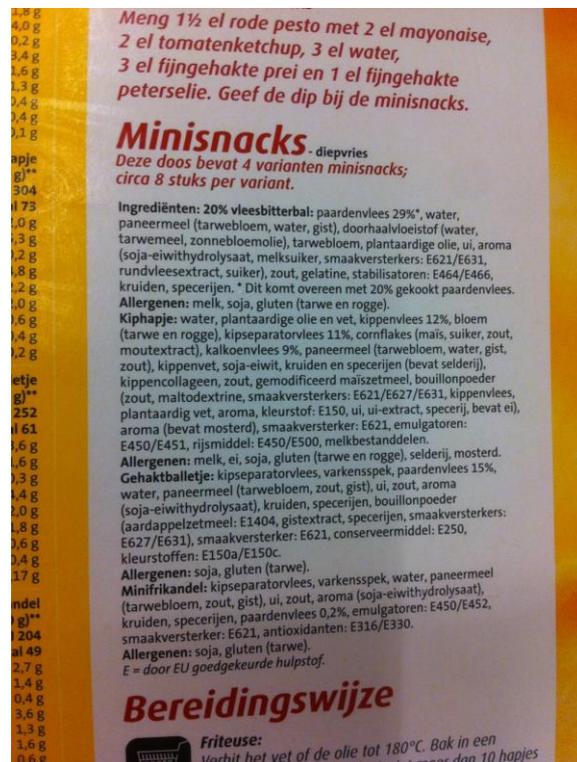
The two deep-freeze products above provide a good illustration of horsemeat being used as a 'hidden ingredient' in cheap, convenience foods. During the present retail investigation, such products were only found in Belgium and the Netherlands. The kind of bite-sized meat products found are commonly served in both countries at social occasions, such as parties and receptions, and are also widely available as snacks in bars, cafés and hotels.

Figure 1 shows a pack of 'party snacks' sold by the Belgian supermarket chain Delhaize. The product contains four different kinds of meat snack, two of which include horsemeat as their main ingredient. The 'bitterbal', which is a kind of croquette ball often served as an appetiser, contains 12% horsemeat, while the 'minced meat' product (gehakthapje) is 11% horsemeat. The product retails for €1.69.

Similarly, one of the six varieties found in the 'party mix' product depicted in Figure 2, which is sold by the Dutch supermarket chain Jumbo, also contains 10% horsemeat. This is also a 'bitterbal'. The box contains circa 96 snacks and is retailed at €8.50 (i.e. each snack costs approximately € 0.09).



3. Beckers Bitterbalmix, Albert Heijn, Maastricht, The Netherlands. 23rd June 2012



4. Deep-freeze mini-snacks (reverse side of package). Jumbo, Maastricht, The Netherlands. 23rd June 2012.

Figure 3 shows a packet of Beckers' 'bitterbalmix'. One of these snacks, the Goulash bitterbal, is listed as containing 15% horsemeat. This product contains 18 snacks and is sold at €2.99. Likewise, the 20% meat bitterbal, which is included in the Jumbo own-brand deep-freeze mini snacks (Figure 4), is made up of 29% horsemeat. Horsemeat is also listed as an ingredient in both the minced meat ball (15%) and mini minced meat hotdog (minifrikandel) (0,2%). There are 32 snacks in the box and the product was being sold for € 2.79.

In addition to these party snacks, there were other fast-food snack products found in Dutch supermarkets, which contained horsemeat. Figure 5 shows a spicy deep-fried snack that is labelled as containing 35% meat (horsemeat, pork & beef). The actual percentage of horsemeat is not listed. This product retails at € 3,79.

The product 'smulrol' depicted in Figure 6 is advertised as a 'crispy pancake filled with a delicious mix of meat and finely cut vegetables'. On the back of the product, the only meat listed is 26% horsemeat. At the time of the research, this product was on sale for €3.99.



5. Meat snack 'Mexicano's'. Jumbo, Maastricht, The Netherlands. 23rd June 2012



6. Meat snack Smulrol. Jumbo, Maastricht, The Netherlands. 23rd June 2012

These fast food products are particularly interesting, because they exemplify how horsemeat is being marketed to consumers in a way that they may not immediately recognise. This could mean that unless people read the labels properly, they may unwittingly be purchasing and consuming horsemeat when they may otherwise prefer not to do so. Certainly when a tray of such meat snacks is passed round at a social gathering, those who partake of them are unlikely to be aware of their composition.

Finally, the existence of such horsemeat products appears to belie the assumption that horsemeat is only consumed by as a delicacy in Europe. It is, however, likely that the horsemeat that finds its way into these cheap, convenience meat products are off-cuts that are produced when horse carcasses are butchered and cut into steaks.

Country of origin labelling

As noted above, this retail investigation found the majority of fresh, chilled horsemeat to be explicitly labelled with information concerning the country that the animal was born, raised, slaughter and where the meat was further processed and packaged. The photograph below provides a good example of how fresh horsemeat products are labelled.

Most of the vacuum-packed fresh horsemeat found in Belgium and France originated from Argentina; the remainder came from Canada, Uruguay and Romania. The labelling strongly also suggests that this horsemeat is exported in the form of whole or quartered carcasses, and is then cut and packaged for retail in Europe.



1. Labelling of chilled horse filet steak from Argentina. Delhaize, St. Antonius, Belgium. 21st June 2012

While most of the fresh, chilled horsemeat products found during this retail investigation were clearly labelled with respect to country of origin, the same cannot be said for processed ones.

Most of the processed fresh meat products documented carried the standard, official oval-shaped EC food identification mark; this mark is clearly depicted in the image above. This code comprises the country code, the code of the establishment (i.e. slaughterhouse, cutting plant, processor, etc.) that has handled the product and the code EC (or translated equivalent), which represents the European Commission. This is to ensure the traceability of products in the context of EU food safety regulations and is supposed to give a guarantee that the meat has been produced according to legal requirements.

The EC food identification mark, however, refers explicitly to the country in which the food was produced. In other words, its last point of processing or packaging. This identification mark does not, therefore, refer to the country of origin of the animal from whence the meat came.

This effectively means that processed meat products can be legitimately be represented as coming from a specific EU Member State or even region, while the meat may indeed originally come from elsewhere around the globe. The labelling is thus referring to the processing and manufacture of the product, not necessarily its true origins.

In the course of this retail investigation, HSI found smoked horsemeat products in Belgium, which carried a special regional hallmark for traditional Flemish products (see below). These products have been prepared according to a time-honoured process whereby the meat is first pickled and then left to ripen. It is then smoked using beech wood to give the horsemeat a distinctive taste, colour and smell. This production process is what makes it a regional product.

Nonetheless, as the annual statistics on horse slaughter in Belgium suggest, it is highly unlikely that the manufacturers of such a product would be able to source sufficient quantities of horsemeat nationally to be able to facilitate a high level of production. A proportion of this meat must, therefore, necessarily be sourced from elsewhere in either the EU or third countries.



2. Smoked horse knuckle carrying special logo indicating it is a regional product. Delhaize, St. Antonius, Belgium. 21st July 2012



3. Smoked horse sausage labelled as product of France; Carrefour Market, Avesnes-sur-Helpe, France. 22nd June 2012

Finally, there was also no information directly available to consumers concerning the country of origin of meat used in processed convenience food products.

Conclusions

The present retail study highlights that fresh, chilled horsemeat and processed horsemeat products are readily available in Belgium, France and the Netherlands. With respect to the latter country, it is evident that horsemeat there is generally sold in the form of smoked meat slices or incorporated as an ingredient in cheap convenience meat products, rather being sold as fresh steaks.

Yet even in Belgium and France where fresh horsemeat is easily obtainable, the relatively low number of unique products found in supermarkets – coupled with the low levels of frequent and occasional consumption reported in the Ipsos MORI survey - would seem to suggest that fresh horsemeat is more of a speciality item in those countries too.

The high level of horsemeat imports from third countries is not reflected in the labelling of horsemeat products with reliable country of origin information only really being provided for fresh cuts of horsemeat.

Despite high levels of exports to Belgium and France from both Brazil and Mexico, no fresh products from these countries were found in stores during this investigation. With regard to Belgium, there is a good explanation for this. Following the Belgian organisation GAIA's exposé of animal welfare abuses at Brazilian and Mexican horse slaughter plants in 2010, the main

Belgian supermarket chains decided to remove horsemeat from these countries from their shelves.⁵

While the fresh horsemeat from Brazil and Mexico may well have been removed from chilled cabinets of most Belgian supermarkets, it is more than likely that meat deriving from horses slaughtered in these countries is still ending up being sold there in a processed form. For the consumer, it is simply impossible to ascertain where the meat used in processed products originally comes from.

Lastly, our finding that horsemeat is being used as a 'hidden ingredient' in cheap convenience meat snack products, particularly the kind of products that are routinely served up at social gatherings, highlights the need for greater consumer awareness about the nature and content of the food they are eating. This finding suggests that the consumption of horsemeat products may indeed be higher than our survey results have indicated, purely because consumers may be completely oblivious to the fact that they may be eating them.

Appendix

Glossary of Dutch and French language terms used on horsemeat packaging

Dutch	English translation
Paard	Horse
Paardenvlees	Horsemeat
Filet	Tenderloin or fillet
Filetstuk	Piece of tenderloin
Tournedos	±Fillet steak
Dunne lende	Sirloin
Paardenrumsteak	Horse rump steak
Paardenboon	Horse knuckle
Bitterbal	A meat croquette ball
Frikandel	Minced meat hotdog
French	English translation
Cheval	Horse
Viande de cheval frais	Fresh horsemeat
Viande de cheval fumeé	Smoked horsemeat
Filet de cheval	Horsemeat fillet
Noix de cheval	Horse knuckle
Steak tranche de cheval	Sliced horse steak
Saucisson de cheval fumeé	Smoked horsemeat sausage
Cervelas de cheval	Horsemeat sausage

⁵ GAIA (2010) Van Paard tot Steak: Brazilië en Mexico <http://www.gaia.be/nl/gaia-bibliotheek/rapport/van-paard-tot-steak-brazili-en-mexico>