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An update on beef traceability regulations in Japan

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ABSTRACT

An updated beef traceability system has been in operation in Japan since December 2004. This system enables consumers to check the origin of beef products, not only for table meat, but also for restaurant cuisine. The system is dependent on producers, abattoirs, meat wholesalers and meat retailers recording and managing information on each cattle beast using a ten-digit individual identification number. It would not be an exaggeration to say that the essence of the Japanese beef traceability system would not be possible without this individual identification number. Fukaya Wagyu adopted an extended traceability system by presenting detailed information which is missing in the national system. This detailed information enables a ‘face to face’ relationship to be established between the farmer and consumer. This relationship is an effort to promote the supermarket’s own brand to the customer.

Keywords: traceability system; beef; Japan.

INTRODUCTION

The Law for Special Measures Concerning the Management and Relay of Information for individual Identification of Cattle (The Beef Traceability Law) was promulgated in June 2003. This law was implemented for both beef suppliers and slaughterhouses from December 2003. After a one year preparation period, this law was implemented in beef retail shops and restaurants from December 2004. This change obliged beef retail shops and restaurants not only to indicate the individual animal identification number to customers, but also to record and keep the information of every single beef product for five years. Furthermore, some prefectures voluntarily developed advanced traceability systems to introduce their ‘branded beef’ to consumers, thereby adding onto the national traceability system. Ozawa et al. (2003) described an early stage of the traceability system and showed what would be necessary for New Zealand to follow up on this matter in Japan. This review covers an outline of beef traceability systems in Japan, especially focusing on the counter measures of beef retail shops and restaurants.

What is beef traceability?

Figures 1 and 2 illustrate the details of the traceability system in Japan. This system follows a number of steps. The first step is to attach a ten-digit individual identification numbered ear-tag to all cattle born in Japan and also into any imported live cattle after passing quarantine. Secondly, producers (dairy or meat farmers), abattoirs and meat wholesalers have to report the details of each cattle beast using the individual identification number. The information required includes breed, date of birth, place raised, sex, name of the cattle, identification number of parents and date of slaughter. However, only the date of import and the name of export port are reported as initial information in the case of live cattle. These data enable the compilation of a database that can be managed in an integrated fashion. These first two steps were implemented in December 2003.

The third step is to display individual identification numbers to the public. Also the list of suppliers is recorded by meat wholesalers or by retailers of individual meat sales after slaughtering the relevant cattle. The process follows the carcass after it has been processed into cuts and until it becomes table meat. This step was implemented in December 2004.

The above 3 steps guarantee complete control of the production and distribution of cattle for domestic beef. It is possible not only to track cattle from birth to table meat, but also to trace back from table meat to the cattle beast itself. These interacting processes are what constitute traceability. By using this system, consumers can check the origin and circulation of table meat by using the individual identification number through the Internet. The information provided contains details of the animal from birth of the cattle beast to slaughter. Overall, this traceability system provides a sense of food security for domestic beef.

What does the retailer have to do?

The retailer is obliged to perform two tasks. Firstly, they must relay the individual identification number and associated information to their customers. This is achieved by indicating individual identification numbers (or ‘lot numbers of beef products’ if identification numbers are replaced) on the container or package of the beef, on the invoice, or in an easily visible location in the retail stores. However, beef products that are manufactured or processed, as well as certain fresh products such as ‘minced meat’ or ‘small cuts of meat’, are excluded from this measure.

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Figure 1:

Outline of the System of Beef Traceability

- **Producer**
  - Reports on births, transfers, etc.

- **Individual Cattle Identification Register (NLBC)**
  - Individual Identification Nos.
  - Disclosed via Internet, except names and addresses

- **National Livestock Breeding Center**

- **Abattoirs / Meat wholesalers**
  - Attachment of ear tags
  - Notification of transfer

- **Meat retailers**
  - Indication of Individual Identification Number or lot (consignment) number

- **Consumers, etc.**

- **Collection of reference samples from all carcasses**

- **DNA testing**

- **Collection of samples for testing**

- **Public disclosure via Internet**

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**Notes:**

1. NLBC records and manages information on all cattle
2. Collection of reference DNA samples from all slaughtered carcasses
3. Collection of test samples from retail outlets during on-site inspections by Ministry of Agriculture, Forestry and Fisheries (Director-General of Regional Agricultural Administration Office)

**Source:** Ministry of Agriculture, Forestry and Fishery
Figure 2:

Illustration of Indication and Relay of Individual Identification Numbers, etc.

Live animal (farm)

Dressed carcass (abattoir)

Cut meat (wholesaler)

Dressed meat (retailer)

Source: Ministry of Agriculture, Forestry and Fishery

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The reasons for this include that specifying all contributing cattle would be extremely costly and time consuming even if the contributing cattle were specified, their number could be very high resulting in confusing information for the buyer. The second task for the retailer is to record and store the information of each cattle beast for five years.

**What do restaurants have to do?**

The foods which are defined as having beef as their ‘principal ingredient’ are ‘yakiniku’ (Korean-style barbequed beef), ‘sukiyaki’, ‘shabu-shabu’ (traditional Japanese beef cuisine) and ‘steak’. Suppliers of these foods have to follow the same measures as retailers. They have to show the information for cattle used in their cuisine on the menu or in their advertising display.

**Extended traceability system in the Saitama prefecture**

The Saitama Prefecture, an inland prefecture located in the Kanto Plain, lies next to the Tokyo metropolitan area. The population of the Saitama Prefecture is estimated to have exceeded 7 million in August 2002, thereby becoming the 5th largest prefecture in terms of population. Saitama is one of the dormitory suburbs of Tokyo and it produces a wide variety of agricultural produce, being the 6th largest in the country, which in particular includes spinach and broccoli. Saitama’s wheat production is also 4th largest in the country. Other major agricultural production includes rice and cattle. Production of Saitama’s specialty produce such as gardening plants, flowers and tea is also very economically important for the region. The Saitama Prefecture is promoting the ‘Buy Locally Grown’ movement, whereby consumers know that the produce was generated by trustworthy local producers and that safe, fresh, produce is supplied (Saitama Prefecture, 2005).

An extended beef traceability system operating in Saitama is aimed at promoting ‘Fukaya Wagyu’ to consumers. Fukaya is one of the suburban cities in Saitama and four Japanese Black Cattle fattening farmers run their business producing Fukaya Wagyu. Hyogo and Shimane breeds are used to produce carcasses with large marbled loin dimensions, which is one of the defining characteristics of Fukaya Wagyu. Also they are fed using home-formulated concentrated feed.

The Fukaya Wagyu council was established in 1994 by four Wagyu fattening farmers to promote their own brand through a ‘face to face’ relationship with consumers by adopting an extended traceability system. Eight hundred Fukaya Wagyu were sold into the market in 2003 and their number continues to increase (Fukaya City, 2005). The traceability system has been supported financially by the Saitama Prefecture and the Saitama livestock council from 2003. As well as the mandatory information from the national system, the extended information supplied to consumers by this system is as follows:

- a picture of the fattening farmer and the beef animals
- the detailed address of the farmer
- the animal’s pedigree (name of father, grandfather and great grandfather)
- features of the fattening system
- results of the hygiene test by the meat inspection centre
- result of the bovine spongiform encephalopathy (BSE) test
- ingredients of animal feed (concentrated feed, single feed and additives)
- a message from the farmer

The information can easily be obtained via the Internet using the individual identification number of each Fukaya Wagyu animal (http://saitama.lin.go.jp/tores202.htm).

**CONCLUSIONS**

The updated beef traceability system introduced in December 2004 was certainly a defining moment for the Japanese beef industry. The system offers useful information to consumers allowing them to grasp the origin of their table meat or restaurant meal. This information conveys a sense of food safety to consumers. However it can not be said that the traceability system using a ten digit number is ‘user friendly’. This is because consumers have to either connect to the Internet to trace their meat or ask their waiter/waitress in the restaurant or store staff at the butcher to provide this information. An improvement in accessing information is needed for the system to become more consumer friendly. An extended traceability system in the Saitama Prefecture plugs the information holes in the national traceability system. Establishing a ‘face to face’ relationship with consumers provides a great advantage when promoting their own brand. This joint effort of the public and private sector is a good example that should be considered by New Zealand meat shippers wishing to promote their products in Japan.

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