

Introduction of melamine milk history essay



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In 2008, Chinese milk was a food safety incident in China involving milk, infant formula, other food materials and components added with melamine.

Melamine is used to manufacture melamine-formaldehyde resin a type of plastic known for its flame retardant properties. They added melamine that has nitrogen-rich and is illegally added to food products to increase their apparent protein content. It has also been used as non-protein nitrogen in soy meal, corn gluten meal and cottonseed meal used in cattle feed.

Melamine is known to cause renal and urinary problems in humans and animals when it reacts with cyanuric acid inside the body sometimes in drinking water and in animal feed. The Kjeldahl and Dumas test the protein levels fail to distinguish between nitrogen in melamine and naturally occurring in amino acids allowing the protein levels to be falsified.

Introduced into milk, it can help conceal its fraudulent dilution with water.

November 2008 China reported 300, 000 victims, six infants dying from kidney stones and other kidney damage. The chemical appeared to have been added to milk in order to cause it to appear to have higher protein content. In a separate incident four years before, watered-down milk had resulted in 13 infant deaths from malnutrition. The scandal broke on 16 July, after sixteen infants in Gansu Province who had been fed on milk powder produced by Shijiazhuang-based Sanlu Group were diagnosed with kidney stones. After the initial focus on Sanlu – market leader in the budget segment – government inspections revealed the problem existed to a lesser degree in products from 21 other companies.

The issue raised concerns about food safety and political corruption in mainland China, and damaged the reputation of China's food exports with at

least 11 countries stopping all imports of mainland Chinese dairy products. A number of arrests occurred as a result of the scandal; the head of Sanlu, seven local government officials, as well as the Director of the Administration of Quality Supervision, Inspection and Quarantine (AQSIQ) were fired or forced to resign in response to the incident.

In late October 2008, similar adulteration with melamine was discovered in eggs and possibly other food, traced to melamine being added to animal feed-despite a ban imposed in June 2007 following the scandal over pet food exported to the United States. As of July 2010, Chinese authorities were still reporting some seizures of melamine-contaminated dairy product in some provinces, though it was unclear whether these new contaminations constituted wholly new adulterations or were the result of illegal reuse of material from the 2008 adulterations

Source of contamination

The World Health Organization (WHO) said that melamine may be found “ in a variety of milk and milk products at varying levels, from low (part per billion) ppb to (part per million) ppm ranges. One academic suggests it may have been part of the food chain in China for a long time, as cyromazine (a melamine derivative) is a very commonly used poison in China. Cyromazine is absorbed into plants as melamine, and may therefore be present in the food chain, which includes poultry, eggs, fish, and dairy products. It is not known where in the supply chain the melamine was added to the milk. The chemical is not water-soluble and must be mixed with formaldehyde or another chemical before it can be dissolved in milk.

Caijing reported that “ spiking fresh milk with additives such as melamine” was no longer a secret to Hebei dairy farmers for the past two years. Caijing reported that the melamine in the tainted milk may have come from scrap melamine costing ¥700 per tone – less than one-tenths of the price of 99% pure industrial grade melamine. The melamine production process produces pure melamine by crystallization; the melamine remaining in the mother liquor is impure (70%) and unusable for plastics, so it is scrapped. It said that Sanlu’s baby formula melamine content was a result of tampering by adding low cost vegetable protein (such as low grade soya powder), and large amounts of scrap melamine as filler. Scrap melamine contains impurities such as cyanuric acid that form more insoluble crystals than melamine alone, aggravating the problem.

Victims

On 17 September 2008, Health Minister Chen Zhu stated that tainted milk formula had sickened more than 6, 200 children, and that more than 1, 300 others, mostly newborns, remain hospitalized with 158 suffering from acute kidney failure. By 23 September, about 54, 000 children were reported to be sick and 4 had died. An additional 10, 000 cases were reported from the provinces by 26 September. A World Health Organization official said 82 percent of the children made ill were 2 years of age or below. The Hong Kong Centre for Food Safety said that 99% of victims were aged less than 3 years. Ten of Hong Kong children were diagnosed with kidney problems at least four cases were detected in Macau and six in Taiwan. Non-human included a lion cub and two baby orangutans which had been fed Sanlu milk powder at Hangzhou Zoo.

The government said on 8 October it would no longer issue updated figures because it is not an infectious disease, so it's not absolutely necessary for us to announce it to the public. Compiled figures reported by local media across the country, and said the toll stood at nearly 94, 000 at the end of September, excluding municipalities. Besides that, 13, 459 children had been affected in Gansu, Reuters quoted Xinhua saying. Henan had reported over 30, 000 cases, and Hebei also had nearly 16, 000 cases.

In late October, the government announced that health officials had surveyed 300, 000 Beijing families with children of less than 3 years of age. It disclosed that approximately 74, 000 families had a child who had been fed melamine-tainted milk, but did not reveal how many of those children had fallen ill as a result. Due to the many months before the scandal was exposed, media suggests that official figures are likely to be understated. Kidney stones in infants started being reported in several parts of China in the past two years. A number of yet to be officially acknowledged cases were reported on by the media. However, those deaths without an official verdict may be denied compensation. On 1 December, Xinhua reported that the Ministry of Health revised the number of victims to more than 290, 000 and 51, 900 hospitalized authorities acknowledged receiving reports of 11 suspected deaths from melamine contaminated milk powder from provinces, but officially confirmed 3 deaths

On treatment of urinary stones in affected infants, the New England Journal of Medicine printed an editorial in March 2009, along with reports on cases from Beijing, Hong Kong and Taipei. Urinary calculi specimens were collected from 15 cases treated in Beijing and were analyzed as unknown objects for <https://assignbuster.com/introduction-of-melamine-milk-history-essay/>

their components at Beijing Institute of Microchemistry using infrared spectroscopy, nuclear magnetic resonance, and high performance liquid chromatography. The result of the analysis showed that the calculus was composed of melamine and uric acid and the molecular ratio of uric acid to melamine was around 2: 1.

In a study published in 2010, researchers from Peking University studying ultrasound images of infants who fell ill in the 2008 contamination found that while most children in a rural Chinese area recovered, 12 per cent still showed kidney abnormalities six months later. “ The potential for long-term complications after exposure to melamine remains a serious concern,” the report said. “ Our results suggest a need for further follow-up of affected children to evaluate the possible long-term impact on health, including renal function.

Sanlu group

The scandal began with revelations of contamination of Sanlu milk products. The New Zealand dairy cooperative Fonterra which owns a 43% stake in Sanlu, said they were alerted to melamine contamination on 2 August (almost a month before the issue became public), and have said to have pushed hard for a full public recall. Although there was an immediate trade recall, Fonterra said that local administrators refused an official recall

Apologize

On 15 September, the company issued a public apology for the contaminated milk powder. Sanlu was ordered to halt production, and to destroy all unsold and recalled products. Authorities reportedly seized 2, 176

tons of milk powder in Sanlu's warehouses. An estimated 9, 000 tons of product had been recalled. Tian Wenhua, Chairwoman and General Manager of Sanlu and Secretary of the Sanlu Communist Party chapter was stripped of her party and functional posts during an extraordinary meeting of the Hebei provincial standing committee of the four Shijiazhuang officials, including vice mayor in charge of food and agriculture, Zhang Fawang, were reportedly removed from office. Shijiazhuang Mayor Ji Chuntang resigned on 17 September. Li Changjiang minister in charge of the AQSIQ was forced to resign on 22 September after the State Council inquest concluded that he was responsible for the " negligence in supervision". Investigators also blamed the Shijiazhuang government. Local Party Secretary Wu Xianguo was fired on the same day.

Arrests

Sanlu GM Tian was charged under Articles 144 and 150 of the criminal code. A spokesman for the Hebei Provincial Public Security Department said police had arrested 12 milk dealers and suppliers who allegedly sold contaminated milk to Sanlu, and six people were charged with selling melamine. 300 kg of suspicious chemicals, including 223 kg of melamine, were confiscated. Among those arrested were two brothers who ran a milk collection centre in Hebei for allegedly supplying three tones of adulterated milk daily to the dairy the owner of another collection centre which resold seven tons of milk a day to Sanlu, was arrested, and his operation was shut down.

Zhang Yujun (alias Zhang Haitao), a former dairy farmer from Hebei, produced more than 600 tons of a " protein powder" mixture of melamine and maltodextrin from September 2007 to August 2008. He and eight other

traders, cattle farm owners and milk purchasers who bought the powder from him were arrested in early October, bringing the total to 36.

During the week of 22 December 2008, 17 people involved in producing, selling, buying and adding melamine in raw milk went on trial. Tian Wenhua, former Sanlu general manager and three other company executives appeared in court in Shijiazhuang, charged with producing and selling milk contaminated with melamine. According to Xinhua, Tian pleaded guilty, and told the court she learned about the tainted milk complaints from consumers in mid-May. She then apparently headed a working team to handle the case, but did not report to the Shijiazhuang city government until 2 August.

The Intermediate People's Court in Shijiazhuang sentenced Zhang Yujun and Geng Jinping to death, Tian Wenhua to life in prison, on 22 January 2009. Zhang was convicted for producing 800 tons of the contaminated powder, Geng for producing and selling toxic food. The China Daily reported Geng had knelt on the courtroom floor and begged the victim's families for forgiveness during the trial. The court also sentenced Sanlu deputy general managers Wang Yuliang and Hang Zhiqi to fifteen years and eight years in jail respectively, former manager Wu Jusheng to five years. Several defendants have appealed. Zhang Yujun and Geng Jinping were executed on 24 November 2009.

Effect on the company

The value of the company plunged as a result of the scandal. On 24 September, Fonterra announced that it had written down the carrying value of its investment by NZ\$139 million (two-thirds), reflecting the costs of

product recall and the impairment of the ‘ Sanlu’ brand because of the criminal contamination of milk. By 27 September, China Daily reported that Sanlu was close to bankruptcy, and might be taken over by the Beijing Sanyuan Foods Company. The company is also facing lawsuits from parents.

The Beijing Review said that Sanlu expects to have to pay compensation claims totaling 700 million, and it became clear that the company would be broken up and sold. On 25 December, Shijiazhuang court accepted a creditor’s bankruptcy petition against Sanlu. Media commentators expected the Sanlu distribution network to be sold.

Trade and industry impact for Chinese industry

The State Council ordered the testing of product of all dairy producers, and to this end, some 5, 000 inspectors were dispatched. The mainland Chinese market has grown at an average annual rate of 23% since 2000. In 2006, milk production reached 30 million tons, ten times the volume of a decade before. It was valued at some ¥122 billion (US\$18 billion) in 2007, and consumers have severely lost confidence in the industry.

The events have exposed the often incestuous relationship between local business and local government. In addition to the tax revenues to local authorities – Sanlu contributed ¥330 million in 2007, many companies invite local officials to become “ silent partners” in their corporations – in return for “ protection” at the political level; former Sanlu chairman Tian Wenhua, was made honorary deputy to the Provincial People’s Congress.

The scandal has also highlighted structural problems of inadequate production volume, inherent quality issues, and poor production methods.

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The Inner Mongolia region produces over one-fourth of China's milk and Mengniu and Yili have invested millions to establish state-of-the-art dairy facilities in its capital, Hohhot the companies still rely on small-scale farmers for over 90% of their production because of the capacity constraint of the modern facilities. Both companies were said by farmers and agents to have habitually purchased milk which failed quality tests, for only two-thirds the normal price. A new policy was put in place on 17 September to stop that practice.

Foreign operations in China

Mengniu-Arla, joint-venture between Danish/Swedish co-operative Arla Foods and Mengniu halted production on 16 September 2008 after three out of 28 tests taken from Mengniu showed traces of melamine; contaminated batches had been recalled. Mengniu, milk supplier to Starbucks was replaced by Vitasoy when the coffee retailer eschewed milk in favor of soya milk in its China operations. KFC also suspended selling Mengniu milk.

Tokyo-headquartered Lotte Group a major snacks maker, recalled its Koala's March cookies in Hong Kong and Macau because of contamination, and promised to "look deeply into all the details of the manufacturing process" in order to preserve customer confidence. The range was also ordered off Dutch and Slovakian shelves. Its Chocolate Pie was seized when samples tested positive in Malta. On 29 September, British confectionery group Cadbury withdrew all of its 11 chocolate products made in its three Beijing factories, on suspicion of melamine contamination. The recall affected the mainland China markets, Taiwan, Hong Kong and Australia. Tests in Hong

Kong found excessive amounts of melamine in China-made Dairy Milk products.

On 30 September, Unilever recalled its Lipton milk tea powder after the company's internal checks found traces of melamine in the Chinese milk powder used as an ingredient Heinz recalled cases of baby cereal in Hong Kong after discovering they contained melamine. Nestlé's factory in Heilongjiang was also implicated: the Taiwanese Department of Health forced the delisting of six Neslac and KLIM products on 2 October for containing minute traces of melamine, although the minister said they did not pose a significant health risk.

Since the milk crisis broke, Nestlé says it has sent 20 specialists from Switzerland to 5 of its Chinese plants to strengthen chemical testing. On 31 October, it announced the opening of a \$10.2 million Beijing research and development centre, to "serve as the base and the reference in food safety for Nestlé in Greater China." Nestlé Chief Technology Officer said that the centre was equipped with highly sophisticated analytical tools for detecting trace amounts of residues and undesirable compounds like melamine or veterinary drugs or natural toxins

http://en.wikipedia.org/wiki/2008_Chinese_milk_scandal

EFFECT ON INTERNATIONAL TRADE

ADVANTAGES:

No problem of dead baby.

No problem of infant breast.

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DISADVANTAGES:

Loss job.

Increase in country's income.

Relationship between local business and local government.

Ruin relationship with other country.

CONCLUSION

The foods that have melamine content bring bad impact not only to the customers who are using the product but to the producer. It also gives impact to the China industry. It also makes consumer loss confident to the industry.

RECOMMENDATION

Government must test the product before market it.

Government must take action to the people who make poison product.

The organization should run their business with honestly and do not take advantages.

Customer should careful before their buy the product.