

The Quality and Safety of Meat and Meat Foods in Kazakhstan Market

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Abstract: The article covers development and cattle breeding in recent period. Dynamic of production and meat foods businesses in Kazakhstan. Analysis of meat and meat foods market in Great Britain, Germany, Slovakia, Serbia. Genetically modified products (GMP). Quality and safety of meat and meat foods. Results of sanitary and hygienic research of meat foods. Forecast of beef production in Kazakhstan. Deployment of HACCP standards. Priorities of Kazakhstan joining WTO.

Key words: Meat and meat foods market • Meat-production businesses • Quality • Safety • Halal • genetically modified products (GMP) • Forecast • HACCP • WTO

INTRODUCTION

N.A. Nazarbaev in his keynote on Republic Forum of Agroindustrial Complex Workers said that “Foods are the most stable currency in present and future world. Quality foods produced on natural raw materials will never replace genetically modified products. It will always remain expensive. Our quality must conform European standards.” [1].

In changed internal and external conditions due to Kazakhstan entering in CU and WTO and the necessity to apply new instruments of state regulation and modernization of the industry it has been developed new industrial program of development of Kazakhstan agro-industrial complex [2].

In 2012 meat production (in deadweight) was 934.1 thousand tons comparing with 838.7 thousand tons (in deadweight) in 2007 that means 16-percent growth [3]. In general in 2014 the increase is forecasted in all types of farms. Meat production in deadweight will reach 1140 thousand tons and its share in all agricultural businesses will be 30.3% [4].

Methodic: Meat production in Kazakhstan is represented mainly by businesses of cooked meat and semi-prepared food production and to the lower extent by canned meat and final meat goods.

According to the Agency in 2011 meat-production businesses revenue reached B87.6 tenge that is 3.8 times higher than in 2010. In 2011 meat and semi-prepared food production was 160.1 thousand tons that is 2% higher comparing with 2010 (157.2 thousand tons), cooked meat – 37.9 thousand tons (7.9% up), canned meat – 7.6 thousand tons (5.1%). Despite the presence of livestock in live weight, Kazakhstan is the main importer of Russian meat products. Import share in 2011 was 45%, meat and canned meat – 41%. In meat products import structure Russia has the main share (99.8%) [5].

Main Body: In Great Britain consumers think that there is a direct relation between the price and the quality of canned meat and sometimes wrongly consider that paying higher price for high quality products they get better taste [6].

German producers of meat products try to consider new quality criteria consumers pay attention making their choice. Following these demand trends in European market German concern Westfleisch initiated the program “Animal well-being”. The main idea is to provide maximum comfort living conditions for animals. Byers and producers are united in thinking that high quality meat may be produced of “happy” cows and rams [7].

According to analysis of quality research consumers consider beef as expensive thing. At the same time in consumers thinking price of beef,

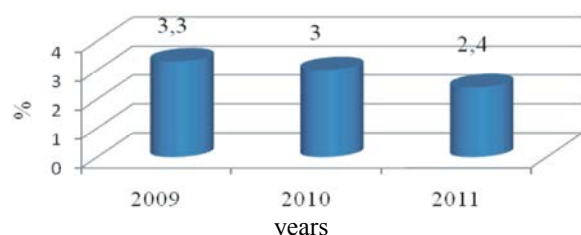


Fig. 1: Volume of meat products non-conforming to sanitary and chemical requirements in 2009-2011.

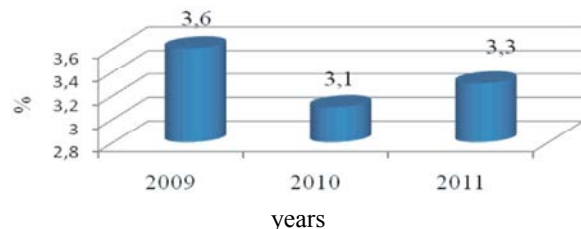


Fig. 2: Volume of meat products non-conforming to microbiological requirements in 2009-2011.

its application properties and lack of interest from children are the main reason of demand decrease [8].

Decrease of demand for higher beef and veal are replaced by pork while demand for fowl and fowl production plays additional function. In considered period meat consumption decreased. Structure of meat consumption was also unfavorable and consumption level in Slovakia was much low that in EC. Taking into the account foods prices growth and population's incomes one should not expect improvement of situation [9].

Stability of meat products quality has economic importance for meat products businesses. If a buyer feels changes in taste, appearance or some defects in the same cooked meat he/she used to buy he/she will prefer the other product. If media becomes aware of information about the low quality of a product sales will dramatically reduce. Sometimes differences are so serious that the products are to be disposed. So producers try to discover problems as earlier as possible [10].

Results of conformance of meat products to sanitary and chemical requirements in 2009-2011 research carried out by Scientific and Practical Center of Sanitary and Epidemiological and Monitoring are presented in Fig. 1.

According to Fig. 1 in 2009 the volume of meat products non-conforming to requirements was 3.3%, in 2010 it slightly reduced on 0.3% to 3.0%. In 2011 this parameter was 2.4% that means that the volume of meat products non-conforming to sanitary and chemical requirements reduced on 1.25% comparing with 2010. That

means that the quality of meat products in Kazakhstan is improving from year to year. Turning to microbiological parameters one may see the following (Fig. 2).

According to Fig. 2 in 2009 the volume of meat products non-conforming to microbiological requirements was 3.6%, in 2010 – 3.1%, in 2011 – 3.3%. Comparing with 2009 results reduction is 1.09% but comparing with 2010 this parameter demonstrates growth on 0.93%. In total the quantity of meat products non-conforming to microbiological requirements is reducing that means that the quality of meat products improves [11].

Meat and meat products are traditional foods of the people of Kazakhstan. With the shift to market economy live-stock farming underwent dramatic changes. In Kazakhstan there are all necessary conditions to provide population with meat and meat products. In 1990 meat production was 92 kg per capita and consumption was 73 kg. According to academician Ya. Uzakov meat production facilities distribution was non-uniform but they were underused. Live stock is prepared by meat production businesses where it is easier to negotiate lower price [12].

In Kazakhstan meat consumption norm per man is 170 g or 62 kg a year. If a man needs 170 g of meat each day he/she have to buy 5.1 kg meat a month that equals 7650 tenge for average price of 1 kg of beef equals 1500 tenge. With minimal salary equals 15999 tenge a family consisting of 2 persons is unable to have various menu that has negative impact of people's health [13].

According to the Committee of Technical Regulation and Metrology of Kazakhstan the number of meat production and meat processing businesses deployed ISO-based food products safety management systems (ISO 22000:2005/CT PK ICO 22000-2006) is 82 while there are more that 4000 businesses in this industry. Major element of this system is HACCP. Kazakhstan falls significantly behind its partners in Custom Union both in absolute and percentage of certified businesses. More than 50% of businesses in Belarus are certified and more that 2 thousand of 43 thousand businesses in Russia are certified. Absence of HACCP certification system makes technical barriers for native exporters in the markets of USA, European Union, Japan, Australia, Canada and the New Zealand where this system is mandatory [14].

According to this research system HACCP was applied to increase safety of Serbian meat and regulation is very important stimulus for meat products safety system. The main cost of HACCP deployment was related

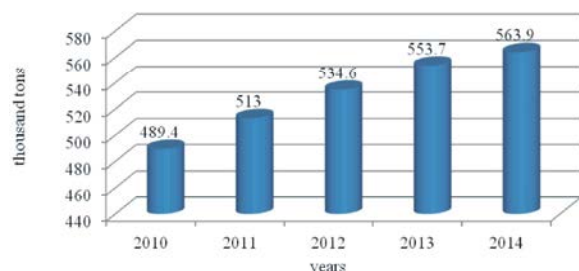


Fig. 3: Beef production forecast in Kazakhstan in 2010-2014.

to investments to new equipment while the main problems with HACCP realization were related to covering the expenses [15].

Belgium Muslims trust “halal” markings because they are sure that this market is being regulated. According to research market consumers were separated into for segments: indifferent (29.2%), interested (9.7%), sure (33.1%) and Islamic idealists (26.7%). The greatest segment is “sure” because they more that others trust Islamic institutions about the quality of “halal” meat [16].

The growth of Muslim population of Europe gives the perspectives of development of all-European standards of |halal” type of products. The founders of “halal” standard certification are Indonesia and Malaysia. The revenue of European market of such products is \$ B66 and according to experts its growth rate will be 20-25%.

The growth of demand on these products is 15% a year. France, Great Britain and Germany are leading in production of “halal” foods in Europe. The main importers of these products are Russia, Israel and Germany [17].

Safety of food products is the aggregate of characteristics of all components that has no negative impact on man's health. The advantage of each product is defined by the complex of indicators with quality and safety being the most important. Our county import products denied by the other countries because most consumers in Europe prefer natural foods. Slovenia, Hungary, Austria, Greece, France, Luxembourg, Great Britain declared themselves free from GMP. Great Britain leads the movement against genetically modified products [18].

According to S. Kurmangaliev the forecast of beef production in Kazakhstan in 2010-2014 is the following (Fig. 3):

According to Fig. 3, beef production in Kazakhstan grows. Comparing with 2010 in 2013 it was produced 1.13 times more beef and according to the forecast on 2014 it will be 563.9 thousand tons [19].

Totally the potential of our country allows completely provide stability in internal market. With joining CU the foreign trade program of Kazakhstan is developing, approval of the programs “Agrobusiness 2020” and “Development of export potential of cattle meat of Kazakhstan” proves that developing export and providing internal market with native products our country will more probably join the WTO.

CONCLUSION

In general Kazakhstan meat and meat product market is developing. It is worth noting the growth of consumer demand in beef because its consumer properties satisfy the customers. Results of research show that high beef price increases the demand on fowl and pork from consumers with low income. Consumers are concerned with the quality and safety of meat and meat products because they agree to pay for quality and safety. The quality of meat originates from happy animals, consumers are satisfied if buying the meat of happy cows. “Halal” products are highly demanded with consumers throughout the world because major part of them trust “halal” marking.

In general analyzing the above materials one can make the following **conclusions**:

- Meat and meat products market requires constant state support;
- Buying meat of happy animals will increase demand;
- Consumers are ready to buy quality products for relatively high price;
- Safety of meat product is important for consumers because all the people are concerned about their health;
- High price on beef force consumers in EU eat it on high days and holidays or shift to fowl and pork due to lower price;
- Demand on “halal” products is growing in the world because for many people the word “halal” means quality;
- Kazakhstan plans growth beef production because all the conditions are in place;
- Kazakhstan has high chances to join WTO because meat processing businesses are actively deploying international standards and HACCP.

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REFERENCES

1. Daugalieva, S.T., 2012. Quality and composition of meat products. *Quality of Meat Products*, 8: 1.
2. Development Program of the Republic of Kazakhstan "The program of development of Kazakhstan agro-industrial complex in 2013-2020 (Agrobusiness - 2020)" of 2012.
3. Kaliuaskarova, A.A., 2013. Meat and meat products market development in Kazakhstan. *International Conference "Summer Scientific Readings"*, Kiev, pp: 12-16.
4. Kaliyaskarova E.A., 2012. The development tendency of the market of meat products market in KAZAKHSTAN. *Socio-economic modernization of Kazakhstan under conditions of global financial instability*. Almaty: Economics, pp: 2152.
5. To the current state of food industry. 2012. *Food and food processing industry of Kazakhstan*, 2: 24-25.
6. Sheard P.R., E. Hope, S.I. Hughes, A. Baker and G.R. Nute, 2010. Eating quality of UK-style sausages varying in price, meat content, fat level and salt content. *Meat Science*, 85: 40-46
7. Meat quality. 2012. *Meat Industry*.
8. Sajdakowska, M., K. Gutkowska, S. Zakowska-Biemans, M. Kosicka-Gebska and J. Wierzbicki, 2012. Factors influencing the decision-making process of beef consumers. *Oeconomia*, 11(1): 69-78.
9. Kubicova, L., Z. Kadekova and P. Rovny, 2012. Marketing analysis of the revenue impact on the Slovak households demand for meat and meat products. *Oeconomia*, 11(4): 23-34.
10. Yorchak, Z.A., 2012. The quality of meat products and defects discovering. *Meat Industry*.
11. Apsemetova, M.A., Z.A. Gabdilashimova, Zh. M. Bekshin, Sh.U. Zhandosov, A.V. Vorobiova, S.D. Zhetibaev, M.O. Seitalieva, S.F. Sharipova, S.V. Zhernosenko and G.N. Alibekova. 2012. Hygienic aspects of food products safety. *Viola-S*, pp: 280.
12. Uzakov, Ya. and Zh. Beligbaeva, 2011. Modern state and development perspectives of meat and meat products market in Kazakhstan. *Food and food processing industry of Kazakhstan*, 1: 25-27.
13. Abdikerimova, G.I. and D.A. Kulanova, 2012. The problems of meat processing industry of Kazakhstan. *Science and Education in South Kazakhstan*, 2: 3-6.
14. Bulashev, B., 2013. HACCP - what is it necessary for? *Agrodom*, 18(79): 5.
15. Tomasevic, I., N. Smigi, I. Peki, V. Zari, N. Tomic and A. Rajkovi, 2013. Serbian meat industry: A survey on food safety management systems implementation. *Food Control*, 32: 25-30.
16. Bonne, K. and W. Verbeke, 2008. Muslim consumer trust in halal meat status and control in Belgium. *Meat Science*, 79: 113-123.
17. Bazarnova, Yu. G. and E.M. Chernikov, 2013. Meat products of "halal" category in Russia. *Meat Industry*, 24-28.
18. Dontsova, N.T., A.M. Sivacheva, T.P. Nitsenko and N.N. Mashkova, 2009. Quality and safety products is the foundation of healthy eating. *Meat Industry*, pp: 20-24.
19. Kurmangaliev, S., 2011. To the state of meat industry in Kazakhstan and in the world. *Food and food processing industry in Kazakhstan*, 3-4: 31-35.