Economic Commission for Europe

Inland Transport Committee

Working Party on the Transport of Perishable Foodstuffs

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Item 5 (b) of the provisional agenda
Proposals for amendments to the ATP: New issues

Comments on ECE/TRANS/WP.11/2010/2

Transmitted by the Government of Denmark

- 1. Denmark could take a positive stand on the proposal concerning the inclusion of ripened cheese and butter in annex 3. However, for several reasons of principle Denmark will have to oppose the suggested changes to annex 3 made in the document submitted by Finland.
- 2. Our primary concern when applying the treaty is food safety. We must ensure that perishable foodstuffs arrive at their destination in a state fit for consumption and safe to consumers. Some perishable foodstuffs pose no risk to food safety, as their physical appearance may show them to be clearly in a state of decomposition even at a time when they are microbiologically still safe to eat.
- 3. We worry about the microbiological quality, but if it is just a matter of quality in general, we agree with your assessment that this is a problem for the transport companies and for the insurance companies. We also believe that that is exactly where that problem should remain. Making sure that your contract gives a clear picture of realities as well as promises and expectations, and making sure that you have insured your business in case costs which you are not prepared to lift yourself are incurred, is part of your professional responsibility as a transport company. If we include quality issues unrelated to food safety in the measures we make it compulsory for control authorities in Member States to police the relations between parties who should have dealt with uncertainties in their contracts. In other words we make tax payers in 45 countries pay for what the contracting parties should have settled legally themselves.
- 4. If monitoring temperatures during transportation is beneficial when it comes to convincing your insurance company that you have a claim, you should feel free to install the equipment. We should not pass legislation to make sure that all your competitors have the same cost if this is still just a question about contracts and competition but not about food safety. Lack of a compulsory monitoring system does not pose any problem whatsoever for the Danish control authorities. In our opinion the ATP agreement should not be seen as a way to police fair competition in all aspects of food transportation at no cost to the actual operators. Our concern is food safety, and for other aspects of the food transportation they must take precautions when entering into contracts just like everybody else in business. We are concerned about fair competition as such, but not to an extent that we will place the state paid food control system at the service of operators carrying any type of perishable foodstuff.
- 5. A long time has passed since the treaty was worded, and we will see it in 2010 lights.



6. When this is said, consultations in Denmark has revealed, that ripened cheese should not be considered a perishable foodstuff, see the attached note. For this reason too, we will not be able to support the Finnish proposal.

Comments to proposal to add ripened cheese and butter to Annex 3 of the ATP Agreement

As outlined below, it is not justified to add ripened cheese or butter to the table, as they are not perishable foods, even though refrigeration may be desirable in some cases, and consequently, they are outside the scope of the ATP Agreement.

Cheeses in general are not microbiologically perishable. Ripened cheese matures from the day of manufacture until it is consumed or heat processed. The rate of maturing is influenced by storage temperature. The durability of such cheeses is not determined to any significant extent by safety or suitability objectives but by the desired degree of maturation as well as the physical stability of the cheese (e.g. oiling off, colour) – and therefore perishability is not an issue. For the exact same type of cheese, the desired degree of maturation may vary from a few weeks up to several years. The moment the whole cheese is cut, sliced or grated, there is no desire for further maturation and the durability can be quantified to meet further suitability objectives.

Butter is not perishable. Butter is a microbiologically stable product, and durability is established on the basis of physical and chemical changes of milk fat (oiling off, oxidation).

Temperature control during storage is not important for ensuring food safety of ripened firm, hard and extra hard cheeses (e.g. Havarti, Gouda, Emmental, Cheddar), as contents of pathogenic organisms (if present) decline with age. This has been shown in number of scientific papers as follows:

Bachmann & Spahr (1995): The fate of potentially pathogenic bacteria in Swiss hard and semihard cheeses made from raw milk. Journal of Dairy Science 78:476-483

Buazzi et al (1992): Survival of Listeria monocytogenes During the Manufacture and Ripening of Swiss Cheese. Journal of Dairy Science 75:380-386

Benech et al (2002): Inhibition of Listeria innocua in Cheddar Cheese by Addition of Nisin Z in Liposomes or by In Situ Production in Mixed Culture. Applied Environmental Microbiology 68(8): 3683–3690

Desmarchelier & Vanderlinde (2002): Safety assessment of raw milk very hard cooked-curd cheeses. Final assessment report, proposal P263, Food Standards Australia New Zealand, 20 November 2002.

Genigeorgis et al (1991): Growth and survival of Listeria monocytogenes in market cheeses stored at 4-30 °C. Journal of Food Protection 54:662-668

Glass et al (1999): Growth and survival of Eschericia coli O157:H7 and non pathogenic E. coli in Cheddar Cheese curds. Annual Report 1999, Food Research Institute, University of Wisconsin, USA

Maher et al (2001): Growth and survival of E. coli O157:H7 during the manufacture and ripening of a smear-ripened cheese produced from raw milk. Journal of Applied Microbiology 90:201-207

Pinto et al (2009): Survival of Listeria innocua in Minas Traditional Serro cheese during ripening, Food Control 20:1167–1170

Reitsma et al (1996): Survival of EHEC O157-H7 during the manufacture and curing of cheddar cheese. Journal of Food Protection 59(5):460-464

Ross et al (2000): Assessment and control of food borne pathogens in Ireland. End of project report 2000 DPRC No. 37, Dairy Products Research Centre, Moorepark, Cork, Ireland

Ryser & Marth (1989): Behaviour of Listeria monocytogenes during manufacture and ripening of Brick cheese. Journal of Dairy Science 72:838-853

Schällibaum et al (2002): Quality and Safety of Swiss Raw Milk Cheese - FAM-Info 446

Schlesser et al (2006): Survival of a five-strain cocktail of Escherichia coli O157:H7 during the 60-Day aging period of Cheddar cheese made from unpasteurized milk. J. Food Prot, 69(5):990-998

Solano-Lopez et al (2000): Behaviour of Listeria monocytogenes during the manufacture and ripening of Manchego and Chihuahua Mexican cheese. International Journal of Food Microbiology 62:149-153

Yousef et al (1999): Fate of Listeria monocytogenes during the manufacture and ripening of Parmesan cheese. Journal of Dairy Science 73: 3351-3356

Ripened cheese may be subject to controlled ripening during transport. It is customary to utilize transport time (in particular sea transport) to finalize the ripening of certain cheeses. This can be carried out at various temperature conditions.

Temperature control of some unripened (fresh) cheese types is justified but not to the level justifying inclusion in the ATP treatment. Fresh cheese, such as cottage cheese, soft mozzarella etc., which do have limited durability, requires refrigeration to ensure food safety and suitability. However, the need for refrigeration does not automatically make such cheese perishable, primarily due to low pH and antagonistic effects of organic acids and starter cultures. Some unripened cheese types (e.g. firm mozzarella) and mould ripened cheeses (e.g. blue and brie) are less vulnerable to temperature variation and will not require temperature control to the level required by the ATP Agreement.

Setting a reference temperature at 6 °C for storing ripened cheese is not justified. For the reasons above, there is no justification for indicating that ripened cheese need be subject to cold storage.