**Statement by Professor Alan Reilly, Chief Executive,**

**Food Safety Authority of Ireland**

**to the**

**Joint Committee on Communications, Natural Resources and Agriculture**

**on the**

## Sale of Raw Milk for direct Human Consumption

**13th October 2011**

**Opening Remarks**

Chairman, Committee Members

I thank you Chairman for inviting my colleagues and I here today to update the Committee on the food safety issues associated with the sale of raw milk for direct human consumption.

In making this presentation and addressing your queries, I am joined by my colleagues, Dr Mary Flynn, Chief Specialist in Public Health Nutrition and Mr Tim Camon, Agricultural Officer.

With the agreement of your Committee, I propose to briefly review the regulation of the sale of raw milk for direct human consumption in Ireland and address the public health basis for the advice given by the Food Safety Authority of Ireland to the Minister for Health and the Minister for Agriculture, Food and the Marine.

We trust that our discussion will lead the Committee to recognise that there are health risks associated with drinking unpasteurised milk, the continuing value of pasteurisation in eliminating such risks and that the renewal of the prohibition of the sale of unpasteurised milk from all farm animals intended for direct human consumption is at this time an appropriate, measured and proportionate response to protect consumer health, especially vulnerable groups like young children and the elderly.

**Regulation of the sale of Unpasteurised Milk**

Regulating the sale of milk in Ireland dates back to the early 1920s. Prohibiting the sale of raw milk for direct human consumption is not new.Up until about 1990, a County Council could request the Minister for Health to prohibit the sale of unpasteurised milk within its district. Following such a request, the Minister would make an order under the Milk and Dairies Acts 1935-1956.

In 1996 the then Department of Agriculture, Fisheries and Food introduced S.I. No 9 of 1996 to give effect to European Council Directive No. 92/46/EEC on milk and milk products. The 92/46 Directive allowed Member States to establish or re-introduce national rules to prohibit or restrict the placing on the market of raw milk intended for direct human consumption. From 1997, the sale of raw cows’ milk for direct human consumption was thus prohibited on a national rather than council level.

In 2006 with the introduction new European regulations on food hygiene, both Directive 92/46/EEC and S.I. No 9 of 1996 became redundant. As a result the statutory basis for prohibiting the sale of raw milk ceased. Current European hygiene regulations (Regulation 853/2004/EC) allow Member States to establish or re-introduce national rules to prohibit or restrict the placing on the market of raw milk intended for direct human consumption. What is currently proposed by the Minister for Agriculture, Food and the Marine is in reality a return of the status quo.

**Advice from the Food Safety Authority of Ireland**

Setting any public policy of course brings many issues and principles into focus. In this case, apart from it being a public health consideration, banning the sale of raw milk raises matters such as civil liberty, proportionality, an adult’s rights to eat as they wish or the potential damaging economic effects of a food safety related milk incident or scare on Ireland’s important dairy industry.

From FSAI’s viewpoint, we consider this issue purely from our remit’s perspective - is simply the protection of public health. Our role is clear - to provide independent scientific advice to Government so that Ministers are better informed when making policy or legislation. Scientific advice is developed using our in-house scientific expertise, supported by our Scientific Committee which is composed of external, national independent experts.

In 2008 the Scientific Committee published a report entitled “Zoonotic Tuberculosis and Food Safety” in which it reviewed all available data on bovine tuberculosis and transmission to humans. It concluded that the transmission of zoonotic tuberculosis through milk derived from infected herds has, in the past, been a major public health problem that was largely solved by the introduction of milk pasteurisation and the programme for the eradication of tuberculosis in cattle. The Scientific Committee recommended that “*the sale of unpasteurised milk intended for human consumption, originating from all farm animals, should be prohibited*”.

Later in 2010 the Scientific Committee reviewed food safety issues associated with the prevention of verocytotoxigenic *Escherichia coli* (VTEC) infections. Highly virulent strains of *Escherichia coli* such as *E coli* O157:H7 were only recognised as foodborne pathogens in the past 30 years. These can be present as part of the normal gut flora of healthy cattle and can inadvertently contaminate milk during the milking process. Surveillance studies carried out in Ireland in recent years shows that these pathogens are present in low numbers in raw milk from some farms. In its report entitled the Scientific Committee again concluded that consuming raw milk poses an unacceptable risk to health and recommended that “*the public sale of raw milk intended for human consumption in the raw state, originating from cattle, sheep or goats, should be prohibited”.*

The prevalence of TB in cattle herds in Ireland puts us in a different position to most other Member States in the EU where the disease has been eradicated. While the risk of acquiring TB from drinking raw milk is very low, it still exists and the consequences can be devastating. The risk will remain until TB is eradicated from the national herd. Pasteurisation was introduced as the standard commercial practice and was responsible for breaking the link between drinking milk and tuberculosis. Pasteurisation kills any *Mycobacterium bovis* present in raw milk. It is equally effective against other serious pathogens that may be present in raw milk such as Salmonella, Listeria and Campylobacter.

While the Authority recognises that the standards of dairy hygiene and animal health have improved greatly in recent years, it is virtually impossible to produce raw milk under commercial production conditions that can be guaranteed pathogen free.

The risks to human health from drinking raw milk remain real, serious and potentially fatal even if rare. These risks can be controlled effectively through pasteurisation, which makes the milk safe to drink.

Various advocates of raw milk consumption claim that there are resulting nutritional and health benefits such as curing asthma and similar afflictions. It is of particular concern that attainment of these unconfirmed health benefits involves giving raw milk to infants and young children. There is no scientific justification for promoting the consumption of raw milk as a method of improving our immune systems. Some preliminary studies suggest that the consumption of raw milk may be associated with some health benefits. The scientific data however to support such claims is insufficient. In our view the unconfirmed benefits are far outweighed by the potential risks to heath. In contrast the adverse health effects associated with the consumption of unpasteurised milk especially by people whose immune systems are immature (infants and children) or compromised due to illness or old age are well documented. The mechanisms, if any, responsible for the perceived beneficial or protective effects are neither identified nor understood.

FSAI does not recommend that people drink raw milk. This has been our consistent opinion for many years. It is a view which is in accord with many other international organisations. We have even advised dairy farmers who drink milk on farms to buy home pasteurisation kits.

The key food safety issue regarding raw milk is that it may contain low numbers of pathogenic bacteria. Milk is very nutritious and these bacteria can increase in numbers to harmful levels over a short period of time. We know that healthy animals can naturally carry such bacteria as *E coli* O157:H7 or salmonella in their gut and even under the best standards of hygiene and sanitation these bacteria can contaminate milk at the time of milking.

**What is pasteurisation?**

Pasteurisation is a process that kills harmful bacteria by heating milk to a specified temperature for a specified time e.g. 72°C for 20 seconds. First developed by Louis Pasteur in 1864, pasteurisation kills harmful organisms responsible for such diseases as listeriosis, salmonellosis, scarlet fever, typhoid fever, tuberculosis, diphtheria, campylobacteriosis, and brucellosis. Looking back over recent history, pasteurisation of milk was one of the greatest public health achievements of the 20th century. Since it was introduced as the norm for marketing milk it saved thousands of lives in Ireland and prevented enormous levels of human suffering. In addition it saved the State millions of Euro in health care costs and protected the reputation of Irish Dairy Industry as producers of safe and quality products.

As almost all liquid milk consumed in Ireland is pasteurised, illness associated its consumption is thankfully very rare. Unpasteurised milk is consumed by some farm families and sporadic cases of illness result. Data from other countries shows that outbreaks increase when the numbers consuming raw milk increases and vice versa. A prohibition keeps the level of exposure of the population low; whereas even limited sales increases exposure of an urban, less immune, population to an extent that is hard to estimate. Using recorded cases of illness as a measure of risk is inherently flawed due to the existing low level of exposure, under-reporting of illness to GPs and the nature of our national systems of disease surveillance which generally depend on clinical diagnosis by isolation of pathogenic bacteria from clinical samples in order for cases to be recorded.

**What happens in other countries?**

The FSAI is not the only consumer protection agency that has advised against drinking raw milk on public health grounds. Similar advice is routine from public health agencies and expert groups from around the world.

For instance, the Advisory Committee on Microbiological Safety of Foods (ACMSF) is a group of experts that advises the UK Food Standards Agency on the biological safety of the food chain. This Committee has considered the microbiological status of raw drinking milk several times over the past 15 years and has regularly stressed the importance of pasteurisation in the protection of human health.

Between 1992 and 2002 the consumption of raw milk and cream was associated with 8 outbreaks of *E coli* O157, 6 outbreaks of salmonellosis and 5 outbreaks of campylobacteriosis in England and Wales. In Scotland the sale of raw milk intended for direct human consumption is banned. While legal in Northern Ireland, there are no outlets selling raw milk for direct human consumption.

While raw milk for human consumption is allowed in Austria and Italy, their regulations state that it must be labelled as “raw milk, boil before consumption”. In Denmark and Spain the sale of raw milk is banned.

In the United States the sale of raw milk is banned in about 50% of the States. Advice from expert bodies such as the US Food and Drug Administration and the Centres for Disease Control and Prevention (CDC) of the Health Department recommend that all drinking milk is pasteurised before consumption. Many of the State Health Departments offer similar advice.

The safety of raw milk products is under review in Australia and New Zealand. In August 2011 their standards setting body - Food Safety Australia New Zealand (FSANZ) - reported that for raw drinking milk “the level of risk cannot be reduced sufficiently and such products present a high level of public health and safety risk”.

**Conclusion**

The FSAI has advised Ministers that the most effective way to protect the population is to prohibit the sale of unpasteurised milk for direct human consumption from all farm animals. European Regulation 853/2004/EC allows Member States to establish national rules to prohibit or restrict the placing on the market of raw milk.

The sale of unpasteurised milk for direct human consumption is prohibited in many other countries, although we accept that this is not universally the case.

Pasteurisation is the most reliable and acceptable method of ensuring that milk is safe to drink. To protect people’s health, especially vulnerable groups like young children, the FSAI advises that all milk offered for human consumption in Ireland should be pasteurised.

May I thank you Chairman for the opportunity to address you. My colleagues and I are at your disposal and will endeavour to answer any questions you and the Committee have.