ADVISORY COMMITTEE ON THE MICROBIOLOGICAL SAFETY OF FOOD

UPDATE ON ADVICE ON EGG CONSUMPTION AND USE

1. At the ACMSF meeting in December the Committee discussed amending the advice on the cooking and eating of eggs. During their discussion of the issues the Committee asked for further information on the contamination rates in non-UK eggs as well as information on the level of non-UK eggs on retail sale in the UK. It was felt that this information would be important for the review of the FSA egg advice by demonstrating whether non-UK eggs are a significant source of *Salmonella* infection or not.

FSA survey of non-UK eggs

- 2. Since the December meeting the FSA has commissioned a 14-month long survey of non-UK eggs on retail sale in the UK. This work is being carried out by the Health Protection Agency and began in March 2005. Sampling is being carried out in the north West of England and the areas in and around London by local authorities sampling officers (EHOs). The sampling is co-ordinated by the relevant Food Liaison Groups (FLGs).
- 3. The final report for the retail survey of non-UK eggs is to be published in late summer 2006. This is the first of three proposed non-UK egg surveys to be carried out by the Agency aiming to measure the level of prevalence in eggs coming into the UK and the eggs used in the catering industry.
- 4. The Agency has just received its first set of results from the survey. In the first month of sampling 23 samples of 6 eggs have been taken. All were tested negative for *Salmonella*. This initial dataset should be seen as 'bedding in' results whilst the various protocols were tested. The survey of catering eggs, which will sample both UK and non-UK eggs, is being developed and the protocol has been sent to the ACMSF sub-group on surveillance for comment. The third survey is of wholesale eggs and will mean the whole chain should have been covered.

Previous non-UK egg surveys

5. Data on *Salmonella* contamination of shell eggs in catering premises is limited. In 1991, a Department of Health funded survey of imported eggs at the port of entry was carried out by the Public Health Laboratory Service¹. The *Salmonella* prevalence was 1.6% from 8,630 samples of six eggs. In 1996/97, DH carried out a further survey, comprising 1,433 samples of 6 non-UK shell eggs taken from importers¹. The study found the prevalence of *Salmonella* in non-UK eggs to be 1 in 49 boxes of 6 eggs, a per box prevalence of 2.0%. The results from these surveys suggested that there had been little improvement in *Salmonella*

contamination of non-UK eggs coming into the country. In 2003, the HPA/LACORS network carried out a survey of eggs (including duck and other species) used in catering premises. The survey collected both UK (88%) and non-UK eggs (12%)². The overall prevalence of *Salmonella* in catering eggs was 0.3% of samples of 6 eggs. Because of the relatively small number of non-UK egg samples tested, it is not possible to provide a statistically valid comparison between UK and non-UK eggs.

6. Despite the dataset generated by these surveys, there is still a gap in information relating to the current prevalence of *Salmonella* in non-UK eggs consumed in the UK, particularly in relation to the variation in the patterns of trade. The current and forthcoming FSA surveys will aim to capture data on the prevalence of *Salmonella* in non-UK eggs used within the catering sector and sold at high street retailers, wholesalers and importers. The results of these surveys and the previous survey of UK eggs on retail sale will be used to assess whether the advice on the use and consumption of eggs should be changed.

Current position on Spanish eggs

7. The National Outbreak Control Team (OCT) dossier was presented to the Commission in December. The point was reiterated to the Commission that the UK's dossier is firmly based on scientific investigations and, although each line of evidence on its own may be considered insufficient to make a case, it is the accumulated weight of evidence that convinced our experts that there was a strong association between Spanish eggs and the increase in cases of non-PT4 *Salmonella* Enteritidis. To date, there have been no outbreaks associated with Spanish eggs in 2005. The Agency has now received a report on implementation of the Spanish plan for controlling *Salmonella* in eggs, which is in the process of being translated.

Conclusions- amendments to advice

8. The survey of non-UK eggs at retail sale is currently in the first few months of sampling. At present there is an insufficient number of samples to ascertain incidence of contamination or to make statistical comparisons regarding the prevalence of *Salmonella* in non-UK eggs. However initial information on the number of non-UK eggs found on retail sale indicates that they have an important share of the retail market and that it would be premature to review the ACMSF advice to the Agency before these surveys are completed.

References

^{1.} de Louvois J. (1993) *Salmonella* contamination of eggs; a potential source of human salmonellosis. PHLS Microbiology Digest ,11: 4; 203-205

^{2.} Elson R., Little C.L., Mitchell R.T. (2005) Salmonella and raw shell eggs: results of a cross-sectional study of contamination rates and egg safety practices in the United Kingdom catering sector in 2003. Journal of Food Protection, 68(2):256-64.