

### Views and Recommendations of the Probabilistic Modelling Sub-group members on the FSA paper.

The FSA paper on probable and possible dose was circulated to the Probabilistic Modelling sub-group members and was discussed in detail when the group met on 13 March 2003. The views and recommendations of the sub-group members on this paper are summarised below.

1. The sub-group members found the terminology of 'probable' and 'possible' dose confusing. It was argued that the upper end of the distribution (i.e. 100<sup>th</sup> percentile) could also be considered as a possible dose. Also, it is not clear which of the calculated doses should be taken as the critical group dose. It was suggested that a probabilistic calculation could be carried out to determine the standard deviation around the central value to avoid the use of probable and possible dose.
2. With regard to adopting cautious assumptions in FSA method, members explained that the ICRP concept of critical group already includes cautious assumptions in the calculation of critical group dose. It was felt that some clarification is needed for the meaning of the 'single critical group' and this ties in with the ICRP concept of critical group. Members also found the variation in consumption rates only addresses part of the issue of variability in habits. Variability in the location of the production of local food, for example, is another aspect that needs to be considered.
3. The use of data from habit surveys in FSA dose assessment method was also discussed. It was explained that the habit surveys target individuals most likely to be particularly highly exposed and hence the data in the surveys are not random. The data are therefore not appropriate to be presented as a statistical distribution applicable to the whole of the local population. The probable/possible dose will depend on the number of habit data observations available around a given site. Members felt that it would be useful to have some information on how the combined survey data were compiled.
4. The sub-group members recommended the replacement of the term 'Probable dose' with 'Reference dose' and to use this as a base from which to develop various other exposure scenarios instead of using a single 'Possible dose'. It was also recommended that the realism of any exposure scenario should be considered and discussed together with a clear statement of the assumptions made in the assessment.

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