

IV. Conclusion

Although it is suggested that endocrine disruptors may have health effects on humans, there is yet no scientific consensus on the presence or absence of such effects. Also, many have the opinion that such chemicals can exert few health effects on adults whose endocrine systems are completely developed. On the other hand because it is suggested that endocrine disruptors may have similar effects on humans as those observed in animal experiments and in wildlife, research is immediately conducted.

This report summarizes a comprehensive strategy for solving problems concerning endocrine disruptors. The most appropriate approach would be to effectively promote research and studies according to this strategy, which will assure us and our children of a healthier life.

The three additional matters discussed below should be kept in mind in putting the strategy into practice.

- 1) There are various additional questions to be considered about endocrine disruptors.

Many reports on endocrine disruptors indicate that there is little reproducibility in studies on such chemicals. Also, there are many reported cases in which results from *in-vitro* studies contradict those from animal experiments. It is necessary to carry out scientifically reliable studies in order to efficiently resolve these discrepancies.

- 2) The endocrine disruptor issue is a global issue.

The endocrine disruptor issue is a globally common issue because chemicals are distributed all over the world, and substances released into the environment disperse beyond political boundaries. It is necessary to approach the problems comprehensively under a globally common framework to solve them smoothly.

- 3) The endocrine disruptor issue could become a multi-generational issue.

Some endocrine disruptors are known to be less-degradable or cumulative. Less degradable chemicals remain in the environment and are passed on to the next

generation. Also, cumulative chemicals (i.e., chemicals that accumulate in the body) are passed on from mother to child. The experts and other people concerned in Japan must do their utmost to clarify the problems, lest they negatively affect the next generation.

Because the number of chemicals is so large and such problems are very complicated, extensive cooperation of people from various fields is required to solve the problems of endocrine disruptors. The Ministry of Health and Welfare is asking the people concerned to approach the problems by tapping into the knowledge and energies of the academic, industrial, and administrative sectors.