

or long-lasting injury, such as blister agents and those causing eye injury, would not qualify as incapacitating weapons. The basic purpose of an incapacitating agent was to reduce military effectiveness without endangering life.

It is at this point that the importance of bioregulators or agents of biological origin take central importance. Bioregulators could give capabilities that classical chemical or toxin agents cannot give. The prime effect would be physical incapacitation that would not lead to death. Lethality is a reliably measured endpoint; however, there are a myriad of other biological effects, some of which may be militarily significant.

4.4 Extrapolation of Current Technological Trends

This section extrapolates current scientific and technical trends over the short and medium term. In the short term, improved biological production of active compounds can be expected. Chemical synthesis will remain an integral part of large-scale production of peptides. The future of biologically based methods of peptide production will see an increased emphasis on the use of transgenic plants and animals.

In the long term, development of highly specific analogues of naturally occurring bioregulators or toxins can be expected. The development of militarily effective physical incapacitation that