including their virion structure and chemical composition. These large rod-like DNA containing viruses have been known for a long time to control the development of insects population in nature and to cause epizootics. Thus Baculoviruses show considerable promise as living insecticides for the control of harmful pests and it is now of importance to produce preparations of Baculoviruses by the use of live insects or cultures of insect cells. In this study we obtained nuclear polyhedrosis virus from infected larvae of the Fall webworm, *Hyphantria cunea* (Drury). Complete polyhedral inclusion bodies of nuclear polyhedrosis viruses are produced in cell of *Trichoplusia ni* (TN-368). Nuclear polyhedrosis viruses of *H. cunea* were transmitted serially in culture by transferring media from infected cultures to new cultures. Polyhedral inclusion bodies and their viruses were isolated on the linear sucrose gradient centrifugation TN-368 cells produced 11, 46 polyhedra per infected cell at 36, 58 hr post infection.

**A-1 : Controlled Delivery of Indomethacin with Poly (DL-Glu-CO-DL-Leu) as Biodegradable Carrier**

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Indomethacin, a potent antiinflammatory agent, was immobilized on the copolymer of glutamic acid and leucine and the problem of this biodegradable delivery system were studied. The rate of release of indomethacin from the polymer found to be closely related to the monomer composition of the copolymer and to the pH of releasing medium. The duration of the drug delivery system and the lifespan of the copolymer were also considered in relation to the hydrophobicity of the copolymer. Considering all the requirements as a carrier of a drug in a polymeric drug delivery system, the copolymer having the monomer composition of Glu/Leu=50 was selected as the most promising carrier of all. The intrinsic viscosity of this polymer was 4.350 dl/g and a 250mg sample of the drug delivery system of this polymer released indomethacin at nominal rate of 4.665 µg/day after the initial burst effect.

**A-7 : Studies on the Production of Interferon: Effects of Heparin on Induction of Interferon Synthesis**

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The effect of incubation with polyanion materials after stimulation of interferon production and of superinduction on poly I: poly C-induced FS-4 cell cultures was studied. Under the optimal conditions, superinduction which was used poly I: Poly C-DEAE-dextran as a interferon inducer produced about 9,000 units/ml from fully monolayered FS-4 cells (about $1 \times 10^6$ cells). By incubation with polyanion material, heparin, after sequential treatment with cycloheximide and actinomycin D in superinduction method, interferon yield was increased about 3 times more than that of normal superinduction. The effect of conformation of poly I: Poly C and of priming in interferon induction was also observed. Priming and native poly I: Poly C complexed with DEAE-dextran had improved capacity to induce interferon.

A-8 : 자동산화 Methyl Linoleate의 지질대사에 미치는 영향

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자동차화유의 특성을 규명하기 위하여 자동산화 Methyl Linoleate 을 mouse 에 20일간 경구 투여하여 혈액 및 간장에서의 지질 구성의 변동을 검토한 결과는 다음과 같다. 자동산화 Methyl Linoleate 를 경구 투여한 실험군의 혈청에서는 TBA, POV 및 COV값이 증가함에 따라 TG, PL 및 TCh의 양이 Methyl Linoleate 를 경구 투여한 대조군에 비하여 현저히 증가하였다. 그러나 실험군의 간장에서는 PL의 양은 대조군에 비하여 약간 증가하였으나 반면에 TG, TCh의 양은 대조군에 비하여 감소하였다. 한편, 혈청 Lipoprotein의 Electrophoresis pattern에 있어서는 실험군에 있어서의 거의 모든 Lipoprotein 분포에서 변화가 인정되었다. 이러한 결과로부터 자동산화 Methyl Linoleate는 mouse의 지질대사에 크게 영향을 주고 있음을 알 수 있었다.

A-9 : Effect of L-Carnosine on the Proliferation of Cultured Fibroblast

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In the presence of $10^{-2}\%$ L-carnosine, the proliferation of cultured fetal rat skin fibroblast was accelerated 25% more than that of the control group and it was confirmed that the consumption of oxygen by the cultured fibroblast was also elevated.