amino acids and a 100cm column for the separation of neutral and acidic amino acids (Moore & Stein, 1951). Three distinct peaks appeared when the 15cm column was used. The first peak corresponds to all the neutral and acidic amino acids, the second to ammonia and the last to arginine. With the 100cm column nine distinct peaks were obtained, which can be accounted for as urea, aspartic acid, glutamic acid, glycine, α -aminobutyric acid, valine, isoleucine and leucine. The final identification of these amino acids as their 2,4-dinitrophenyl derivatives is in progress. A possible mechanism to account these transformations will be presented.

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The Pattern of Response of Rat Hepatic Lobes to Atromid-S (Ethyl α -p-Chlorophenoxyisobutyrate) Administration

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Dietary administration of the antihypercholesterolaemic drug Atromid-S (ethyl α -p-chlorophenoxyisobutyrate) to the rat is known to increase the weight as well as the mitochondrial content of the liver. This response is not uniformly observed in all the lobes of the liver. The median and the left lateral lobes, which together constitute 60–65% of the total liver weight, account for most of this increase. The caudate lobes, which account for less than 10% of the liver weight, do not show any appreciable increase in weight.

The content of subcellular components is not different in the lobes of normal liver. On administration of the drug the caudate lobes do not show appreciable increase in the content of mitochondria, whereas the major lobes show an increase of 50% or more. No significant differences in the respiratory and phosphorylative activity of mitochondria are observed in the different lobes either before or after administration of the drug. When the drug is withdrawn from the diet, the weight as well as the mitochondrial content of all the lobes revert to the normal values, indicating the reversible nature of both these effects.

Observations on the Mode of Action of the Polyene Antibiotic A-435

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The isolation and some characteristics of the new antifungal tetraene antibiotic A-435 from *Streptomyces rimosus* strain AC₂435 has been described (Pal & Nandi, 1970). The present communication summarizes preliminary results on the mode of action of the antibiotic.

The growth of *Saccharomyces cerevisiae* N.C.Y.C. 401 is inhibited by 50 μ g of antibiotic A-435/ml when the antibiotic is added to a lag-phase culture, but 200 μ g/ml is required to inhibit a similar concentration of cells in the exponential phase. As with other polyene antibiotics, the inhibitory effect of antibiotic A-435 was diminished in the presence of cholesterol (see Gottlieb *et al.*, 1958). Respiratory and fermentative activity in *S. cerevisiae* was inhibited by antibiotic A-435; aerobic production of CO₂ was inhibited more strongly than was anaerobic (fermentative) CO₂ production.

A significant loss of dry weight and leakage of both ninhydrin-positive and nuclear materials was observed on incubation of washed cells of *Saccharomyces cerevisiae* with antibiotic A-435. The leakage of Na⁺, K⁺ or PO₄³⁻ was not detected. Experiments undertaken with isolated cell-wall and cell-membrane preparations have shown conclusively that antibiotic A-435 is a surface-active agent that is bound to the cell membrane.

The results obtained show that antibiotic A-435 has a mode of action similar to that of other polyene antibiotics (Lampen & Arnow, 1959; Kinsky, 1961; Gottlieb *et al.*, 1961).

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