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The Influence of Yeast on Nitrogen Retention in Normal and Depancreatized Dogs.

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One normal dog and 4 completely depancreatized dogs were fed a basal diet with additions of baker's and starch-free yeast in 4 to 6 day periods. The control dog showed a greater nitrogen retention in the yeast periods than in the control periods, amounting, in the first weeks of the experiment, to 150% of the extra nitrogen ingested in the yeast; at the end of 3 months this had decreased to 30%. Following a control period of 3 months the nitrogen retention on a subsequent yeast regime was 190% of the nitrogen contained in the yeast. The high retention was again noted after a month during which the dog had been on stock diet. The loss of nitrogen in the depancreatized dogs was less in the yeast periods than in the control periods, with no significant alteration in the D:N. There was no apparent correlation between the distribution of waste nitrogen to urine and feces and the addition of yeast to the diet.

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Can the Isolated, Perfused Liver of the Dog Form Carbohydrate at the Expense of Fat?

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Eighteen perfusions, 4 using cats and 14 using dogs, have yielded essentially negative results. These animals were fed on XXXX cream for periods extending up to 30 days. The livers were placed on a weighing scale in an incubator kept at 37.5° C. Thirteen perfusions were single, that is, blood was perfused through the portal vein only. Five were double, that is, blood was perfused both through the portal vein and the hepatic artery.

The exclusive fat diet did not remove all the glycogen from such livers, many of which showed a normal glycogen content. The percentages of glycogen and free sugar of the various lobes in each liver showed marked differences.