

# Incorporation of $^{14}\text{C}$ -glucose into glycogen by whole homogenate of liver

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It has been reported that in liver slices glucose is a better precursor of glycogen than glucose 6-phosphate and glucose 1-phosphate<sup>1,2</sup>. To explain these results and others in the literature, a new pathway from glucose to glycogen was postulated that circumvented the hexokinase-phosphoglucomutase-phosphorylase sequence<sup>1-3</sup>. Since the discovery of glycogen synthetase<sup>4</sup>, it has been accepted that synthesis of glycogen occurs through glucose 1-phosphate and uridine diphosphate glucose. However, this new pathway does not explain satisfactorily all the results obtained with slices. As some of these results might be the consequence of the permeability of liver cells, glycogen synthesis by liver homogenate was investigated. © 1962 Nature Publishing Group.