

a general effect upon the vascular system, possibly through the adrenal glands, causing secondary effects in various organs, including the ovaries. The need for a stimulation of the glandular system and the growth of vascular tissues like the placenta during pregnancy might account for the existence of a general reaction of this type.

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**Is Levulose Converted to Dextrose in the Process of Absorption
from the Small Intestine?**

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A number of experiments were carried out by injecting levulose into closed loops of small intestine in normal unanesthetized dogs. After one hour the remaining loop fluid was aspirated and its total reducible sugar determined. A polariscope reading was made on a cleared specimen and a levulose determination made by the colorimetric method of Corley.¹ No dextrose was indicated in the aspirated fluid by these methods. However, this did not exclude the possibility of conversion in the mucosa with none demonstrable in the loop fluid. It became necessary for us to know whether or not levulose was present in the mesenteric vein from the loop during absorption. Forty-five minutes after giving levulose by loop the animal was anesthetized, abdomen aseptically opened, mesenteric vein from the loop exposed, and 10 cc. of blood withdrawn. A similar amount of blood was taken from the heart immediately following. Blood sugar was determined in each specimen and both were tested for levulose. In 5 experiments levulose was found in the mesenteric blood with the systemic blood negative. The mesenteric blood sugar was greater than that of the systemic blood by the amount of levulose found in mesenteric blood. Since the amount of levulose given (1.5 to 2 gm.) was shown not to cause a rise in systemic blood sugar in separate experiments, these findings indicate that no levulose is converted to dextrose in the process of absorption from the small intestine.

¹ Corley, R. C., *J. Biol. Chem.*, 1929, **81**, 81.