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The Glycogen Content of Muscles in Tetanus Contracture.

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Local tetanus was produced in one hind limb of experimental animals (rats, guinea pigs and rabbits), and the glycogen content of flaccid and contracted gastrocnemii compared. Time intervals of 2 to 58 days were allowed to elapse from time of injection of tetanus toxin to sacrificing the animal.

In general, less glycogen was found in the shortened muscle than in the flaccid gastrocnemius from the opposite (uninjected) side. Two rabbits were allowed to survive for over six weeks and when sacrificed the tetanus gastrocnemii although still in contracture contained more glycogen than their functioning companions. Guinea pigs which survived for seven weeks still showed reduced glycogen in tetanus muscles unless they had regained function. In the latter case (one animal) the glycogen content was the same on both sides. Rats showed very little change in glycogen from the normal.

In view of the variability of results it was concluded that the changes in glycogen were indirectly associated with the phenomenon of contracture. This view was strengthened when it was found that contractures produced in the hind limbs of cats by section of the dorsal roots of spinal nerves were not associated with changes in glycogen content of the shortened muscles.

Our observations on the glycogen changes in tetanus muscles are in agreement with those made by Wertheimer[1] on guinea pigs.

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Reaction of Gall-Bladder to Faradic Stimulation of Stomach.

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In a previous publication attention was called to a case of spontaneous emptying of the human gall bladder during fasting, in which the patient reported the occurrence of hunger pangs during the in-

[1] Wertheimer, E., *Arch. ges. Physiol.*, 1928, ccxxi, 139.