

limits of error with a slight preference for galactose in accordance with Cori's experiments on ingestion of individual sugars. The reversion of this relation for glucose-galactose mixtures was not observed under our experimental conditions.

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Endogenous Stimulation of Albino Rat Fetuses.

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Studies upon the progressive development of muscular activity of albino rat fetuses, from 15 days to almost 21 days after insemination, have been made.

During this study it has been found that fetuses of about 18 days after insemination do not respond to tactile stimulation of the hands. But, on ligation of the umbilical cord they give a very characteristic waving of the hand shortly after the time of ligation. This waving of the hand has a short duration and is followed by strong body movements typical of fetuses of that stage of development.

Fetuses of about 19 days after insemination begin to respond to tactile stimulation of the hands, and about 19½ days after insemination one can obtain discrete reflexes from this member. Thus stimulation of the dorsal side of the hand causes an extension of the hand with spreading of the fingers, while stimulation of the volar side of the hand causes flexion of the hand with closure of the fingers.

At this stage (19½ days) one cannot arouse the fetuses by stimulation of the hind legs. But on ligation of the umbilical cord the first observable movement is flexion of the hind legs which is then followed by waving of the hands and finally the characteristic body movements of this age.

These observations seem to indicate that the motor nerve reaches these parts sooner than the sensory nerve, also that it is possible to stimulate directly by means of metabolites (CO₂) the centers that control these movements.