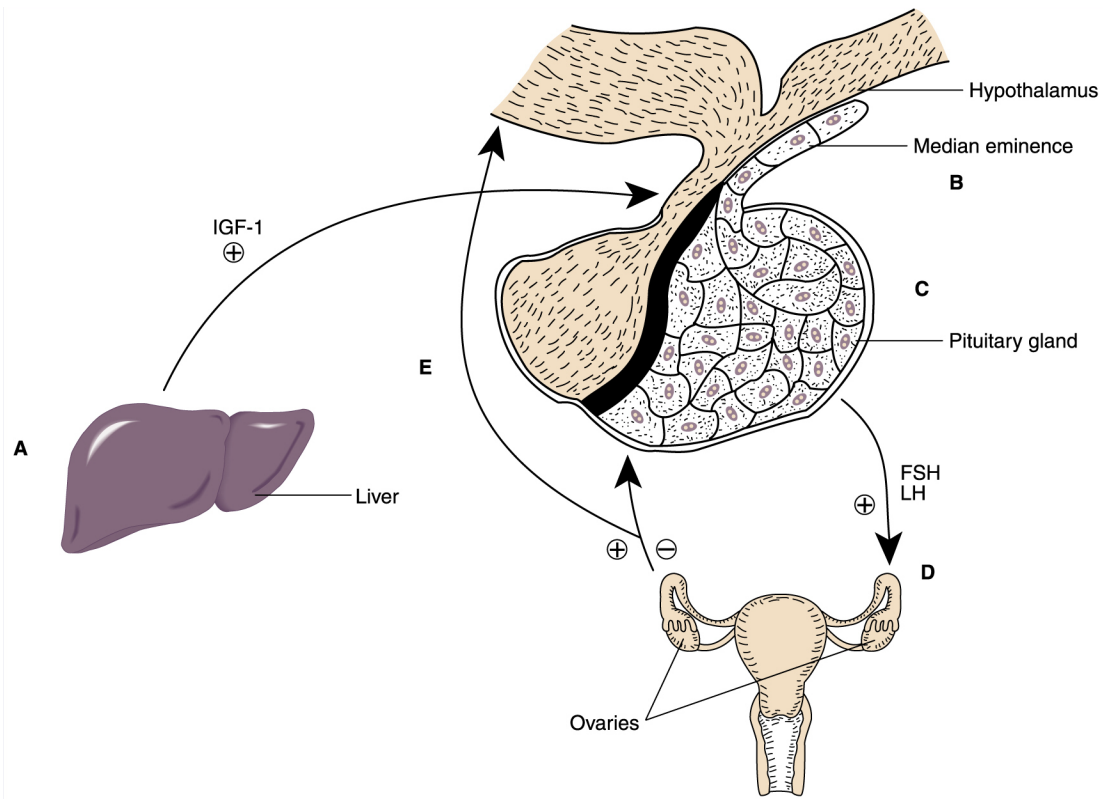


## Proposed action of IGF-1 in females as puberty approaches



(A) As puberty approaches, growth hormone stimulates the synthesis of IGF-1 by the liver. The liver releases IGF-1 into the bloodstream. (B) IGF-1 induces the release of LHRH from the median eminence of the hypothalamus. (C) LHRH induces the pituitary gland to secrete FSH and LH into the bloodstream. (D) On reaching the ovaries, FSH and LH help regulate the synthesis of steroid reproductive hormones. (E) In addition to its direct effects on the reproductive cycle, the ovarian steroid hormone estradiol contributes to the regulation of LHRH and LH levels.

Source: Dees, W.L., et al. Alcohol's effects on female puberty: The role of insulin-like growth factor 1. *Alcohol Health & Research World* 22(3):165–169, 1998.

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