

# Cholesterol transport and steroidogenesis by the corpus luteum

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The synthesis of progesterone by the corpus luteum is essential for the establishment and maintenance of early pregnancy. Regulation of luteal steroidogenesis can be broken down into three major events; luteinization (i.e., conversion of an ovulatory follicle), luteal regression, and pregnancy induced luteal maintenance/rescue. While the factors that control these events and dictate the final steroid end products are widely varied among different species, the composition of the corpus luteum (luteinized thecal and granulosa cells) and the enzymes and proteins involved in the steroidogenic pathway are relatively similar among all species. The key factors involved in luteal steroidogenesis and several new exciting observations regarding regulation of luteal steroidogenic function are discussed in this review. © 2003 Christenson and Devoto; licensee BioMed Central Ltd.