

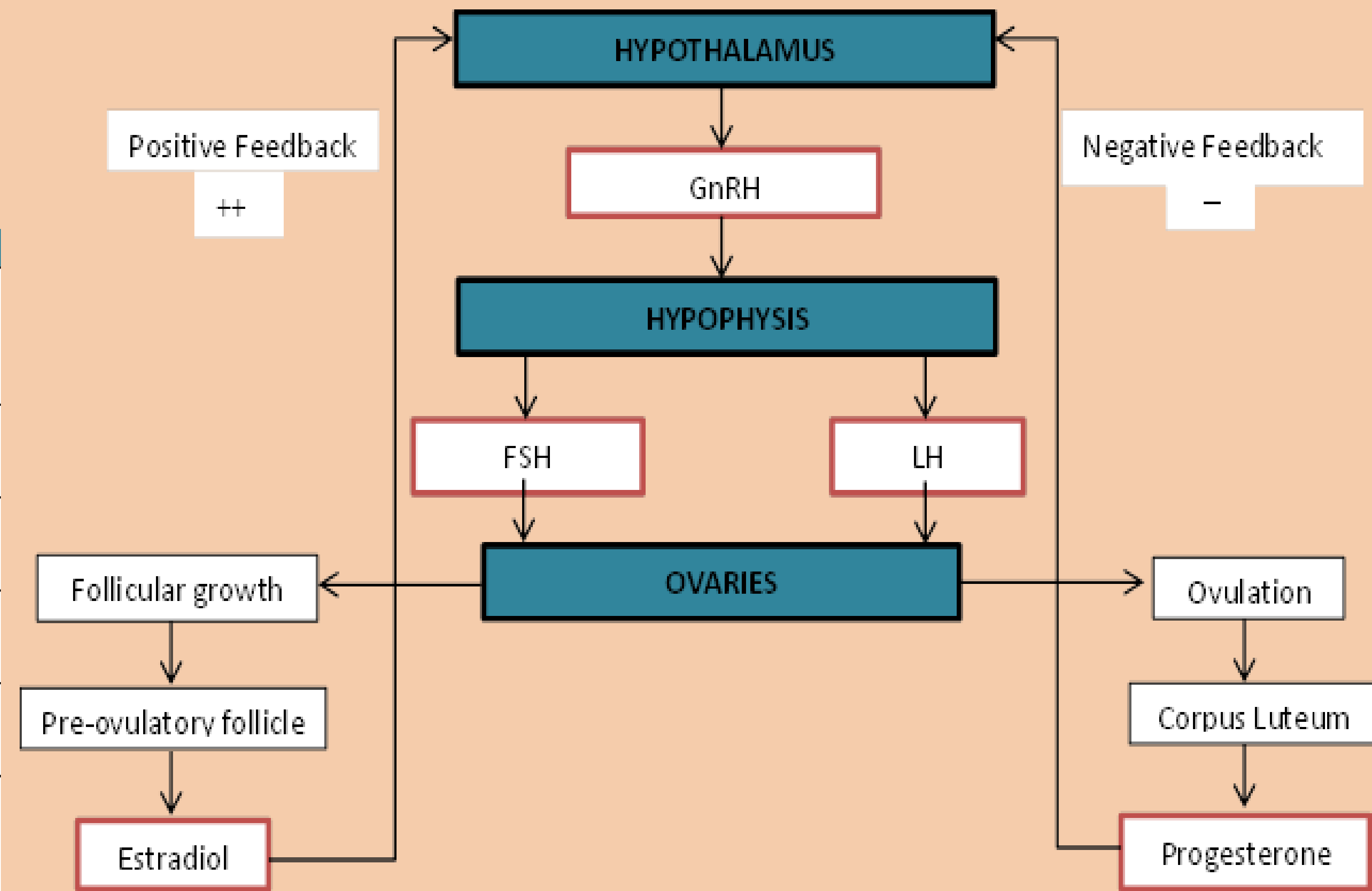


INTRODUCTION

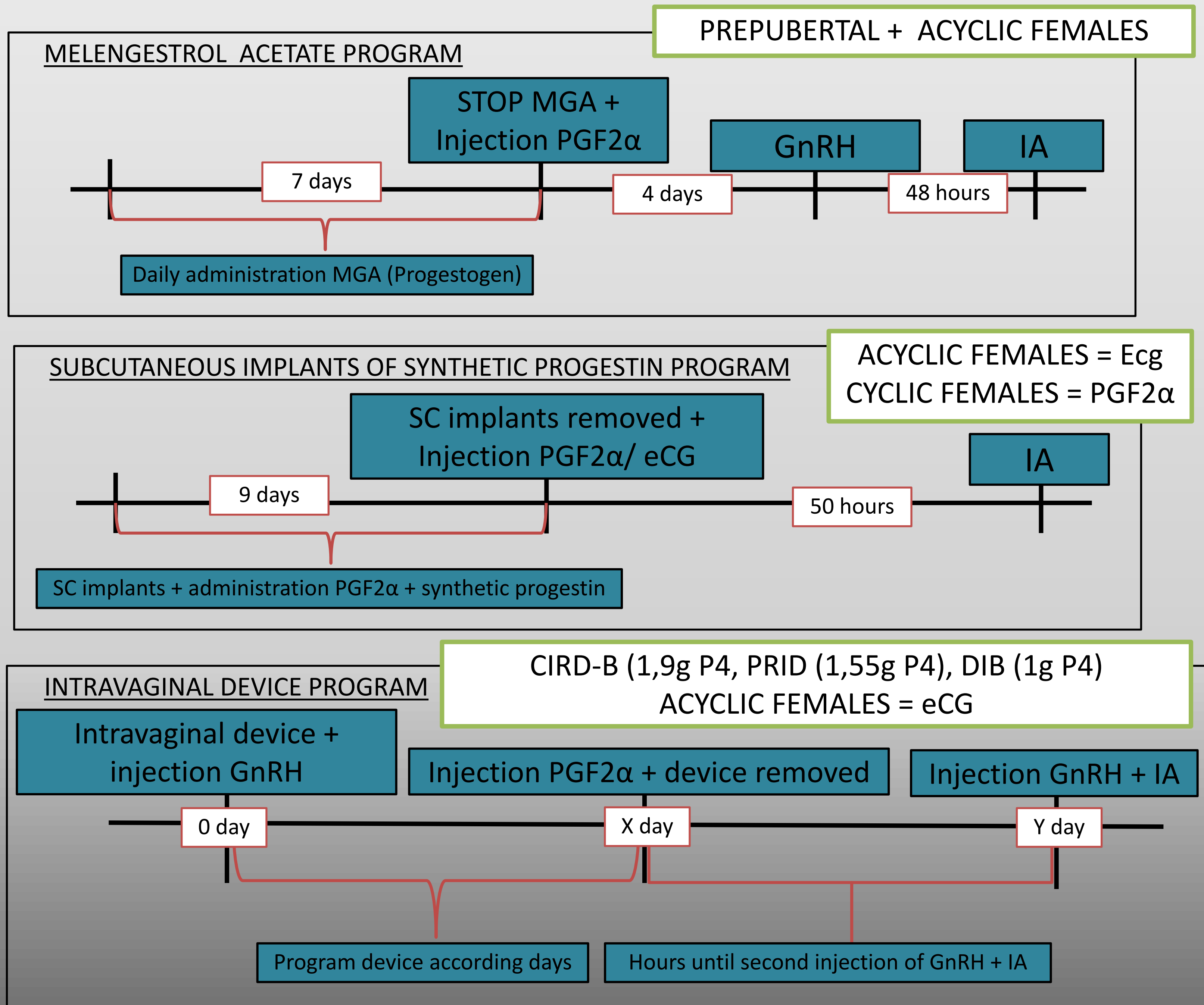
Reproductive efficiency is considered to be one of the main management factors to improve dairy profitability. Pregnancy rate and its distribution over the time are two variables that affect the production and economy of dairy farms. To be more competitive, appropriate synchronization protocols have to be used to get a high pregnancy rate after only one artificial insemination. In this way, the recent literature describes different synchronization protocols that are able to control the estrous cycle using different strategies.

FOLLICULAR DYNAMIC

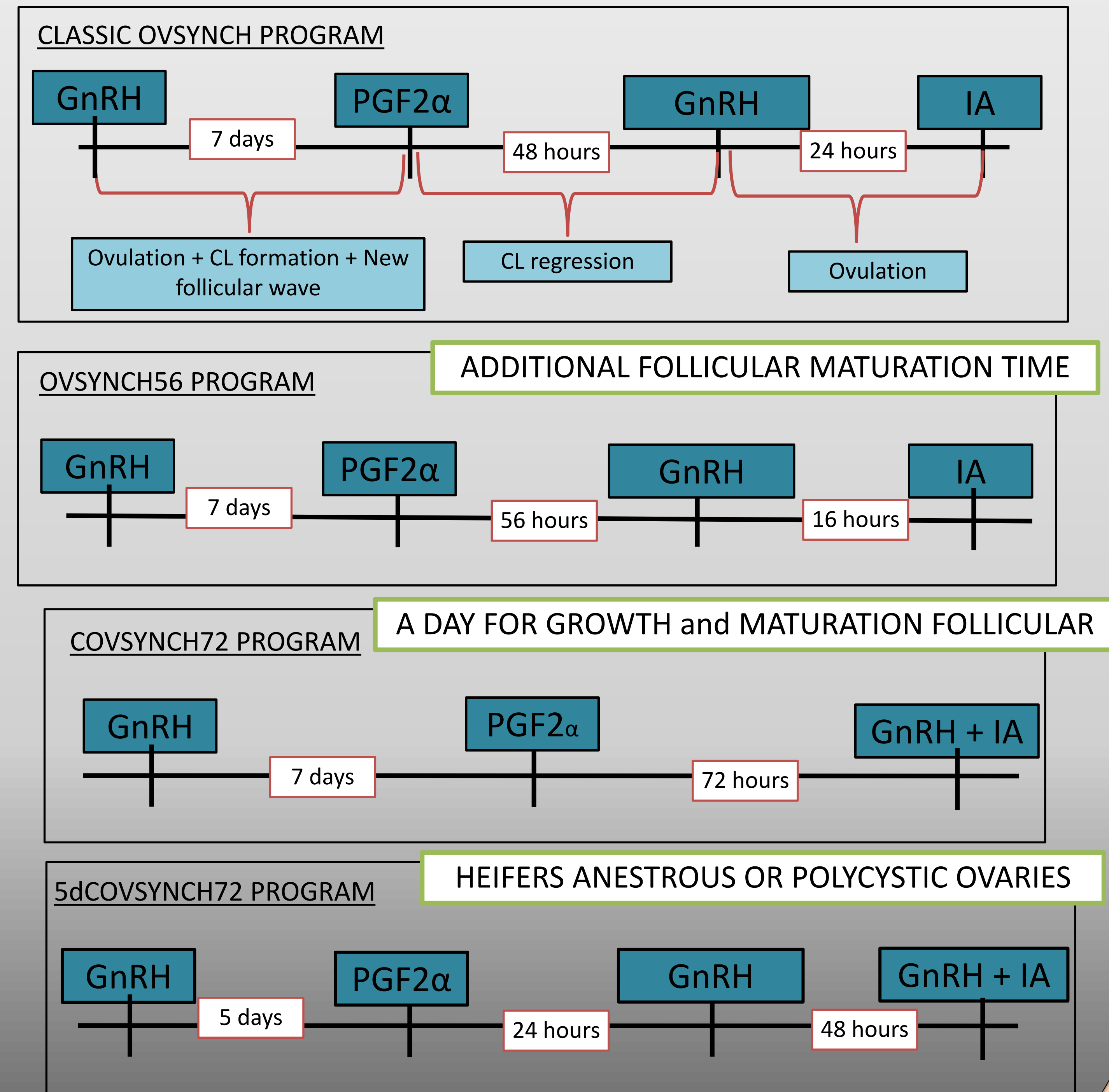
Process of growth and regression follicles modulated by the neuroendocrine system



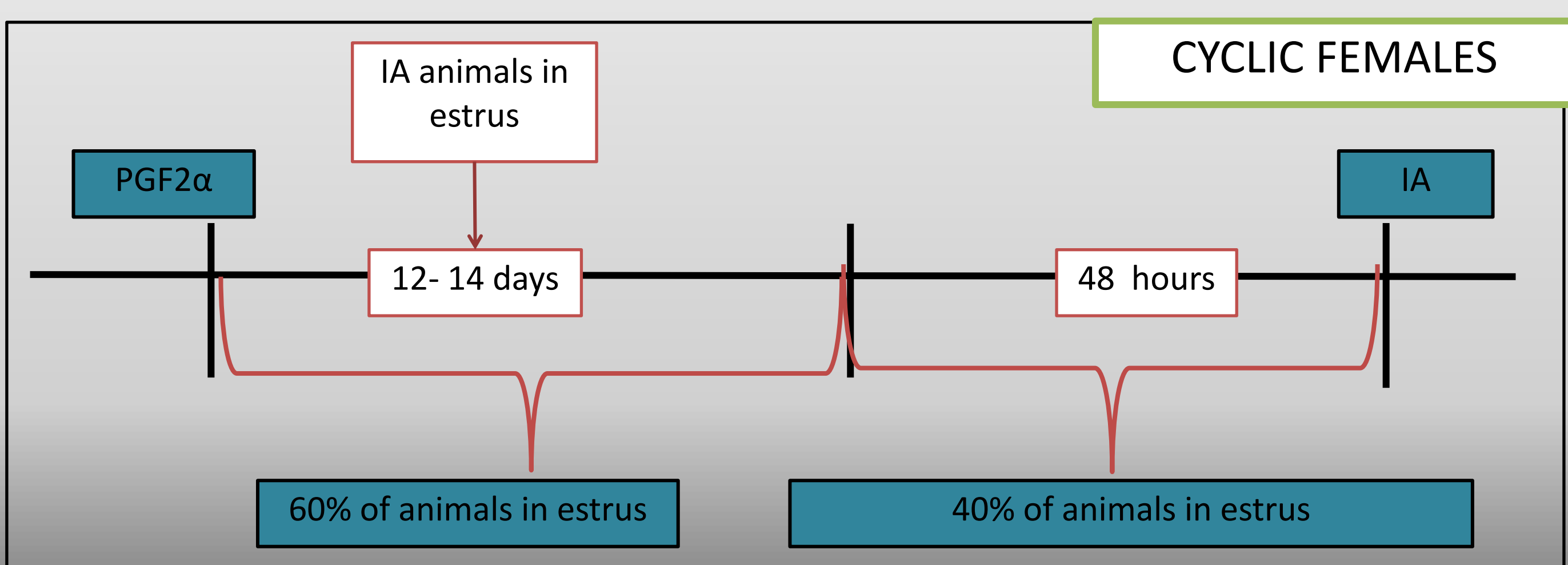
1. PROGESTAGEN PROGRAMS



2. GnRH – PGF2α- GnRH PROGRAMS



3. PROSTAGLANDIN PROGRAM



CONCLUSIONS

- It is necessary to understand the reproduction physiology to develop new estrus synchronization programs.
- Synchronization efficiency and fertility rate depend on the synchronization program used.
- The synchronization program may require the use of one or more hormones.
- Management, nutrition, environmental or pathologic factors that prevent cows from cycling or cause low conception rate must be corrected before starting a synchronization program.