

OBJECTIVES

The main objective of this bibliographic review work is to determine if SC* melatonin implants are effective suppressing oestrus in domestic cat, males and females, evaluate how long is the suppression and in what areas could it be implemented.

*SC: subcutaneous

Non-surgical contraceptive methods

Progestogens
& progestins

GnRH
Agonist/
Antagonist

Immunocontra
ception

Oral
melatonin

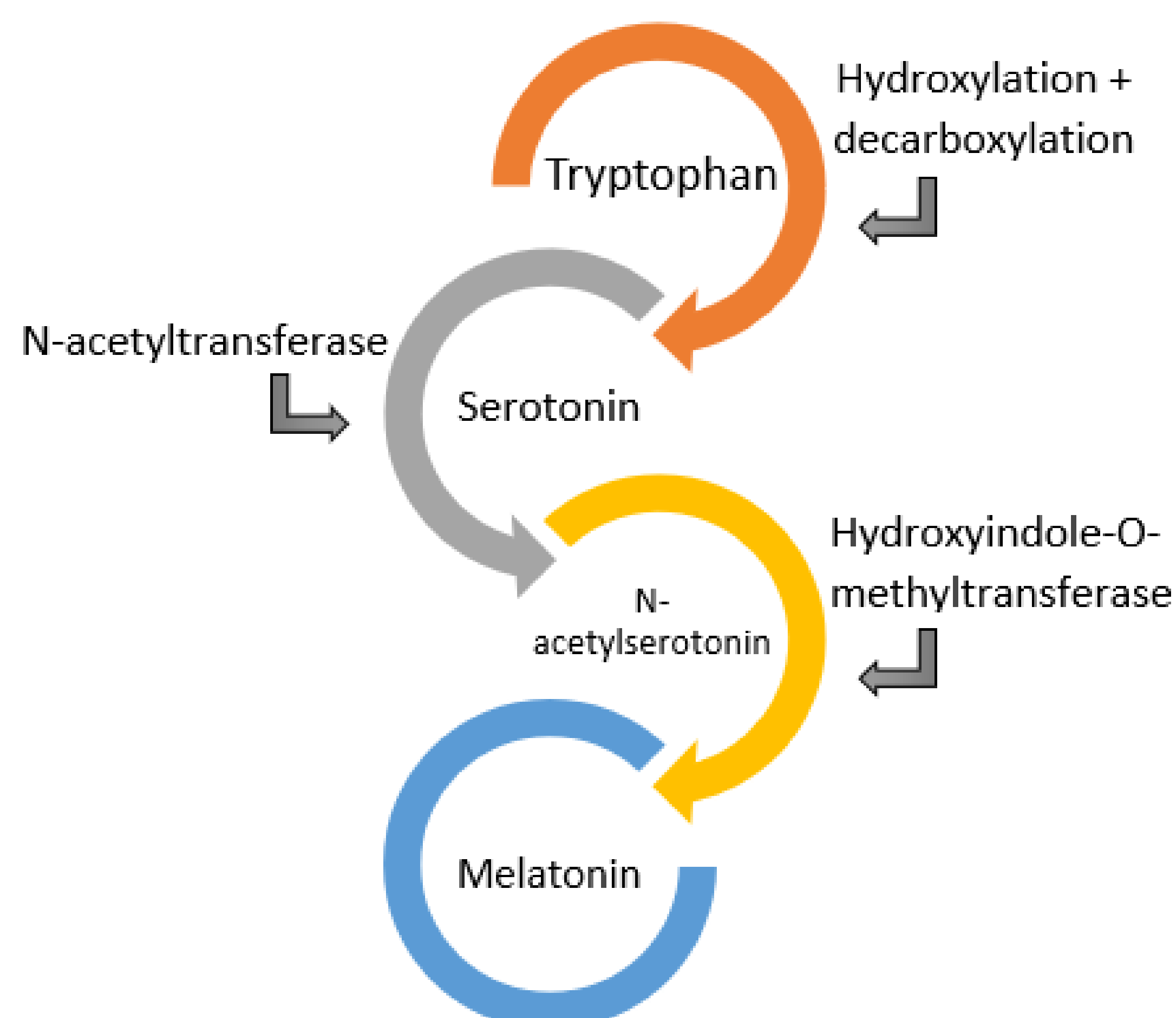


Figure 1: Melatonin synthesis. Modified from Poza et al. (2018)

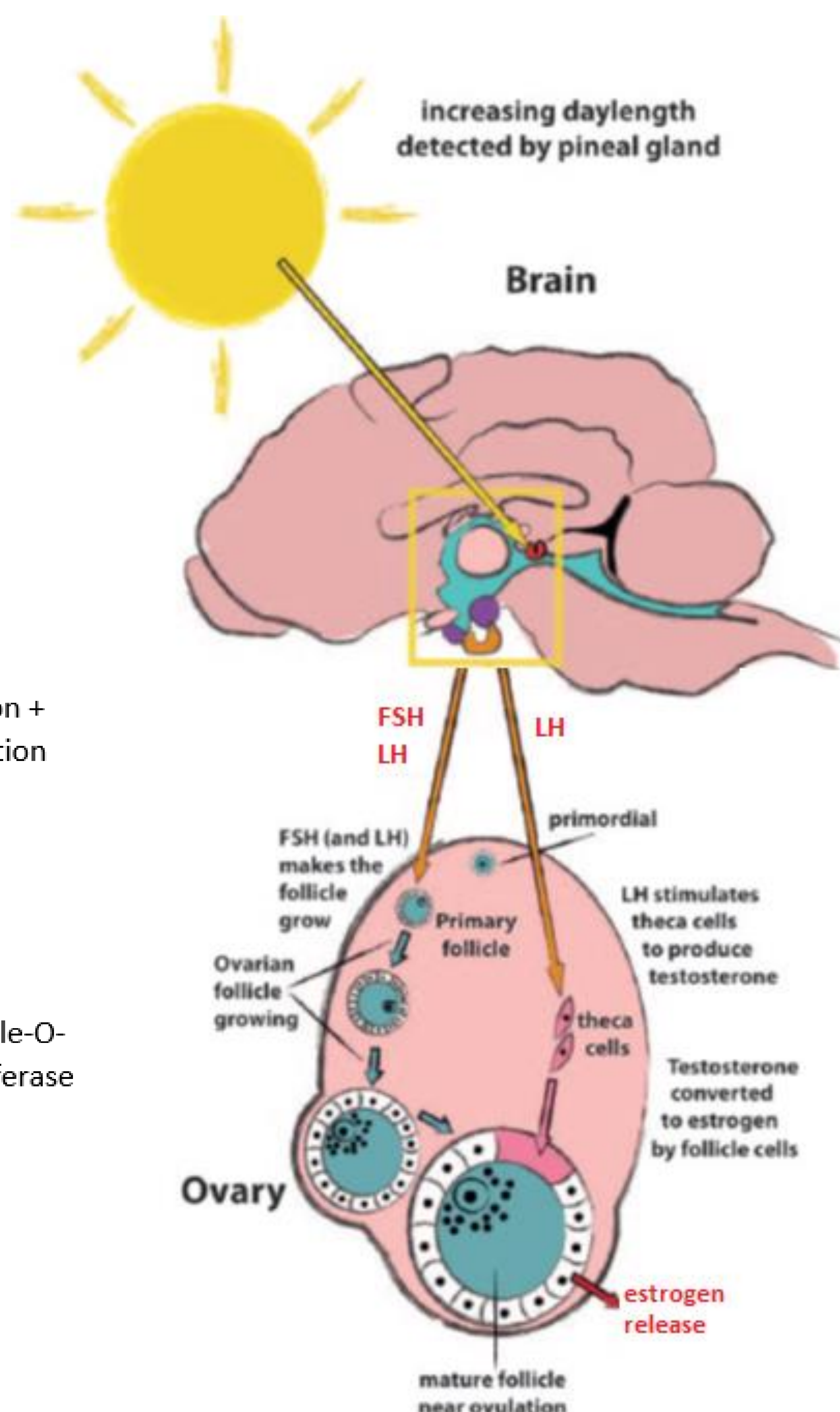


Figure 2: Effect of increasing photoperiod on the hypothalamic-pituitary-ovary axis. Modified from Schäfer-Somi (2016)

CONCLUSION

SC melatonin implants are effective suppressing oestrus in domestic cat, in both sexes.

Advantages

Secure and rapid suppression, easy administration, prolonged release and no side effects.

Disadvantages

High individual variability in duration of suppression, and needs good monitorization of the oestrus before administration.

Study	Concentration of melatonin	Nº of individuals	Duration of deletion
Griffin et al. (2001)	12mg	12 queens	75 (53-94) days
Faya et al. (2011)	18mg	17 queens	63.8 days
Gimenez et al. (2009)	18mg	9 queens	61.1 days
Núñez Favre et al. (2014)	18mg	4 tomcats	120 ± 15 days
Schäfer-Somi (2016)	18mg	27 queens	103.9 days

Table 1: Results of the main experiments reviewed.