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DISCUSS THE FACTORS FACILITATING THE MOVEMENT OF THE SPERM IN THE FEMALE REPRODUCTIVE TRACT.

1) **SEMEN**

i) Alkaline secretions from prostate gland into the semen help to create an alkaline environment in the acidic vagina to protect sperm in the vagina.

ii) prostaglandins present in the semen and female reproductive tract cause myometrial contractions to help in movement of sperm towards the oviduct.

2) **FEMALE REPRODUCTIVE TRACT**

i) Oestrogen and oxytocin secreted in the female help to assist myometrial contractions on order to facilitate the upward motility of sperm towards the oviduct.

ii) Oestrogen facilitate the production of a watery mucus in the cervix during the timing of ovulation to allow easy passage of sperm.

3) **CAPACITATION OF SPERM**

(i) In the female reproductive tract, sperm undergoes capacitation. This occurs after the sperm membrane becomes more fluid via the removal of cholesterol and glycoproteins from the membrane in order to expose the zona pellucida bindng tight.

(ii) There is a change in the sperm membrane potential that permits calcium to enter the sperm to facilitate vesicle release for the acrosome reaction.

(iii) Phosphorylation of numerous protein needed in fertilization.