

## Homeovitality Fertility Aid for her.



Use for:- Increasing fertility in females, relief of all disorders in which fluid secretions are sub-optimal. These include conditions such as dry eye disease, Sjogren's disease and multi-organ inflammatory disorders associated with membrane dryness and age related dryness of skin and organs.

Homeovitality Fertility Aid for her has been designed to target the MRP7 gene. Homeovitality Fertility Aid for her has been developed to promote fertility by coordinating the sequence of events prior to the final meeting of egg and sperm. MRP7 directed coordination of these events holds the key to successful fertilisation. MRP7 also helps to maintain optimum conditions for all other body secretions.

May be administered either on a long term or short term basis depending on the condition being treated.

### **What does MRP7 do?**

The MRP7 gene, also known as CFTR, encodes a membrane bound protein that belongs to the ATP-binding cassette transporter family. One of its main functions is to control the passage of water and salts through cell membranes in order to regulate the composition and consistency of fluids within and surrounding cells. Lack of expression of a functional MRP7 gene product causes the fatal disease cystic fibrosis, partly because of increased viscosity of mucus in the lungs leading to infections and respiratory malfunction.

Reduced expression of MRP7 in the female reproductive tract results in mucus hyper-viscosity. As a result, deposited sperms cannot penetrate the viscous environment and cannot reach their ultimate destination, the egg.

The product of the MRP7 gene also has another important function. It promotes the release of bicarbonate ions from cell membranes. It is now known that the bicarbonate ion plays a critical role in activation of the sperms when they are deposited in the female reproductive tract. This activation process is called sperm capacitation (1). Therefore, promotion of MRP7 expression

ensures optimum water and salt conditions in the female reproductive tract so that sperms can complete their journey and fertilise an egg.

Expression of MRP7 plays an important role in many other conditions such as dry eye disease, Sjogrens disease and organ dryness. For a comprehensive review, see Ref. 2.

1. <http://www.pnas.org/content/106/3/667.full>

2. Chan H C et al., The cystic fibrosis transmembrane conductance regulator (MRP7) in reproductive health and disease. *J. Physiol.* 2009; 587; 2187.