

## **SYNTHETIC VS BIOIDENTICAL HORMONES**

Bio Identical Hormones are the exact copy of those that are naturally occurring in the human body.

Synthetic hormones are not found in the human body, and are not identical in structure or function to the hormones they are intended to replace. Bio identical hormones are derived from a plant molecule found in soy beans and wild yam. Bio identical hormones are said to be natural Bio Identical Hormones, not because of their source but their chemical structure is the same as that of the hormones our bodies produce. The plant molecule, (diosgenin) is taken to a laboratory to be converted into progesterone. Progesterone can then be converted into the three oestrogen hormones, oestrone, oestradiol and oestriol and then also converted into testosterone, cortisol, dhea and pregnenolone.

Supplementing the body with hormone molecules that are identical to those we produce, allows our body to **benefit identically**, the same way as it would when the body produces them. The bio identical hormones are recognised by the body & bind quickly to receptors causing the appropriate affect and then are broken down quickly & metabolised so they may be excreted from the body. Bioidentical hormone replacement therapy (BHRT) can therefore, be used effectively and safely.

### **Can just anyone take hormones?**

No, not every patient can take all hormones (synthetic or bioidentical...), for example estrogen.

### **Relative contraindications to oestrogen therapy include:**

- Family history of breast cancer (outside immediate family)
- Benign breast disease
- Past history of recurrent thromboembolisms (blood clots)
- Moderate or severe endometriosis
- Enlarging fibroids or fibroids that produce heavy bleeding

### **Absolute contraindications to oestrogen therapy include:**

- Presence of non-eradicated endometrial cancer
- History of breast cancer
- Cancer history in first-degree relatives
- Active thrombosis (blood clot)
- Acute liver disease or chronic liver failure
- Unexplained vaginal bleeding
- Pregnancy
- Contraindications to progesterone therapy include:
- Allergy to progesterone, progesterone-like drugs, or inactive ingredients
- Past or present blood clots
- Liver disease
- Known or suspected cancer of the breast or reproductive organs
- Unusual bleeding from the vagina, not evaluated by a physician
- Miscarriage with suspected tissue remaining in the uterus

- Breastfeeding

### **If already on synthetic HRT, how difficult is it to switch to biologically identical hormones?**

In most cases, the transition is a smooth one.