<u>Disclaimer: I am not a qualified health practitioner. You should always consult a qualified health practitioner if you are sick. Opinions expressed on this website are my own or come from my own experience or research</u>

The Gut and Hormones

Apart from the essential functions that hormones have in the body in signalling myriad processes, they are also needed for a healthy intestinal lining and function. For the body to have sufficient hormones, you need sufficient nutrients so the appropriate organs can produce them. Further, gut hormones also influence other processes both in the gut and in the body.

- Gastro intestinal hormones regulate motility(how digested food moves through the gut) and the digestion and absorption of nutrients.
- Oestrogen modulates permeability and the tight junctions of the gut lining
- Lack of testosterone delays intestinal healing
- Progesterone helps protect the gut lining
- Gut health plays a big role in oestrogen regulation. For example, oestrogen has to be conjugated (bound to another substance) in order to be excreted. An imbalance of bad bacteria can de-activate this conjugation and the oestrogen gets re-absorbed into the body. This can lead to oestrogen dominance and possibly oestrogen dominant cancers such as breast cancer and prostate cancer. The form of oestrogen that is re-absorbed is estriol which may not be picked up by GP tests.
- Sex hormones influence the brain-gut connection and play a role with the HPA (hypothalamus-pituitary-adrenal) axis.
- The mucosal gut lining secretes a number of hormones that play regulatory roles in key metabolic processes such as insulin sensitivity, glucose tolerance, fat storage and appetite.

Knowledge is still limited on the connections and influences of hormones in the gut and their interaction with the body. Ongoing research will reveal more about these connections in the future.

If you have poor gut health and digestive issues, this can cause raised cortisol levels which results in low grade inflammation in the gut and the body. Not only does this cause digestion to slow but the body closes down the hormone receptors so they either can't work or work slowly.

Further, raised cortisol levels result in the body 'stealing' the hormone pregnenolone in order to make cortisol instead of being used to make hormones like progesterone, oestrogen, testosterone etc.

The adrenal glands, that make cortisol, work together with the thyroid gland. So raised cortisol will affect thyroid function. You need minerals, vitamins and essential fatty

acids for hormone production so if you have poor gut health, you will not be getting the nutrients you need to make sufficient hormones.	