

mechanism for LH suppression is identified and supported. In addition, the functional endocrinologist will use compounds like *vitex* to enhance the stimulation of LH release.

Note that in this example progesterone was not used, because rather than providing exogenous support for low progesterone, the mechanism of the imbalance was identified and treated appropriately. As a matter of fact, if progesterone were to be used in this example, it would actually further dampen LH and may cause long-term dysregulation of LH-progesterone feedback loop coordination. Although a deficiency of progesterone was identified, it was related to primary pituitary output, not a glandular defect. This patient may end up with long-term dependency on progesterone replacement if her LH output function becomes depressed. The outcome of this may be infertility and inability to have proper healthy and normally sequenced menstrual cycles after the progesterone replacement protocol.

In summary, the functional approach is “physiology-based” and the traditional healthcare model is “condition-based”. The functional approach uses diet, nutrition, and lifestyle as tools to modulate the abnormal physiologic expression of the patient, and is therefore “nutrition and lifestyle based.” The traditional model uses synthetic agents and hormones as tools to manage the patient and is therefore “pharmaceutical based.” Clinical competency in the traditional model of healthcare is based on identifying the appropriate diagnosis and following the standard of care flow chart. Competency in the use of the appropriate drug is strongly emphasized, whereas diet, nutrition, and lifestyle changes are ignored or not emphasized. In the functional model, competency in dissecting and evaluating physiological pathways and recommending nutrition, diet, and lifestyle change is strongly emphasized, whereas drug therapy and hormone replacement are not strongly emphasized. Lastly, it should be made clear that not all conditions are amenable to the functional approach, and the appropriate identification of pathology must always be conducted and managed medically when appropriate.

PATHOLOGICAL MODEL PRINCIPLES

- Focused on establishing diagnosis (ICD.9 code). The primary goal is to label the series of symptoms and signs into an established category. The diagnosis code name will be the indicator for management.
- Treatment and management is specific to the diagnosis and not the patient.
- Dietary and lifestyle management is weakly emphasized.

- Treatment and management is virtually identical for all patients.
- Diagnostic testing is used to establish the disease process and is not unique to the patient’s physiological expression.
- Clinically, competency in the model is based on following standard of care management.

FUNCTIONAL MODEL PRINCIPLES

- Based on understanding the physiological imbalances of the patient and not limited to identifying diagnosis. The diagnosis is established, but not used exclusively to determine management.
- Nutritional support is specific to the patient and not the diagnosis.
- Diet and lifestyle management are strongly emphasized.
- Management is different for virtually all individuals with the same exact diagnosis.
- Diagnostic testing and monitoring is used to establish physiological process.
- Competency in this model is based on reviewing and managing altered physiology versus diagnosis.

Functional Endocrinology Clinical Applications

Three main attributes are necessary for functional endocrinology. They include: (1) A detailed understanding of physiological interactions, feedback loops, and biochemistry; (2) A detailed understanding of laboratory evaluation; and (3) A detailed understanding of the specific influence of natural compounds on physiological systems. Mastery of all three attributes is critical for competence in the functional endocrinology approach. In addition, the functional endocrinologist must be competent in areas outside of endocrinology, such as immunology, gastroenterology, neurology, and detoxification. The endocrine system must not be evaluated in isolation from other physiological systems. An understanding of neuroendocrine-immune interactions is critical for management of chronic metabolic disorders. The intimate connections between these bodily systems must be appreciated and evaluated clinically. Four clinical priorities have been established in the functional endocrinology model when it comes to balancing the endocrine system without hormones, which include: (1) Balancing blood sugar and adrenal abnormalities; (2) Normalizing gastrointestinal function and decreasing antigenic exposure to the gut; (3) Balancing essential fatty acid metabolism; and (4) Enhancing the detoxification capacities of the individual. ♦