

Yoga & Women's Life Cycles

Glands, Hormones, and Yoga

The glands of the endocrine system secrete hormones that carry messages to specific organs in the body. Below are the glands of major importance to us as women.

The **Hypothalamus** and **Pituitary** glands are the producer and director of the whole endocrine system. The hypothalamus controls all hormonal release to regulate our reproductive cycles as well as our body temperature. It secretes hormones that signal the pituitary (the "master gland") to do its work. The pituitary in turn, controls each individual gland of the endocrine system. After being triggered by the hypothalamus, the pituitary secretes the hormones that control the functioning of the ovaries and feed the involuntary muscles of the uterus.

Thyroid and Parathyroid Glands: The thyroid gland is involved in growth and development, proper nervous activity, and metabolism. The parathyroid maintains proper calcium levels in the blood/tissues, which affect muscle activity and blood clotting among other things.

The **Adrenal Glands** stimulate metabolic rate and give us more available energy. They elicit the fight or flight reaction in response to life-threatening situations. At menopause they take on major responsibility for estrogen production.

The **Ovaries** are responsible for development of the ovum and the secretion of the hormones estrogen and progesterone as well as male hormones. Estrogen develops and maintains our reproductive organs, and along with progesterone is responsible for endometrial growth and secretions during our menstrual cycles. We are born with nearly a half million ova (eggs) in our ovaries. As these eggs are released each month, no new cells replace them, so by our late thirties or early forties we have fewer eggs and may occasionally skip ovulation. Around age fifty, no eggs remain, or only a relative few, that are no longer sensitive to the hormonal messages. Ovulation ceases, menstruation stops, and the cycle of fertility has completed itself.

The yoga postures that follow each section are found to be helpful in stimulating and regulating the function of the particular area or gland listed. At the end I have included diagrams of some of the postures mentioned in each section to help you become familiar with them. These yoga postures can be practiced on your own, but like anything else, if you're new to yoga, it is best to have a qualified teacher to help you with posture alignment, and if warranted, any modifications to suit your specific needs or body's current ability.

Hypothalamus & Pituitary

- Downward Dog
- Headstand
- Shoulderstand

Thyroid & Parathyroid

- Bridge
- Camel
- Fish
- Shoulderstand

Adrenals

- Boat
- Dancer
- Pigeon
- Bow
- Half Circle
- Seated Angle
- Bridge
- Half Moon
- Spinal Twist
- Camel
- Head to Knee
- Triangle
- Cobra
- Knee-Down Twist

Ovaries

- Boat or Bow
- Downward Dog
- Headstand
- Bridge
- Frog
- Knee-Down Twist
- Camel
- Half Shoulderstand
- Seated Angle
- Cobra
- Head to Knee
- Spinal Twist

Stages

Puberty

Reproductive system starts functioning (estrogen increases).

Asana & Pranayama

- Nurture confidence, skeletal growth and body shape
- Balance hormonal secretions and regulate the rhythm of menstrual cycles
- Tone and nourish pelvic organs and endocrine system

Menstruation

Menstruation is a purification process. The natural flow is down and out. Toxins needing to leave the body are released with the menstrual blood. Toxic thoughts and emotions are also liable to come to the surface to be released. This is a time to be more sensitive with yourself. There is an open wound in the uterus . . . you are more vulnerable both physically and mentally.

Asana & Pranayama

- Create hormonal balance, insure proper menstrual flow
- Induce relaxation and reduce psychological tensions

Avoid

- Inverted poses
- Abdominal strengtheners
- Extended or strenuous holding (especially standing postures)
- Energizing breaths

Pregnancy

If possible begin practicing Yoga before conception.

Asana & Pranayama

- Strengthen pelvic muscles and whole reproductive system
- Expand the pelvic cavity
- Normalize thyroid functioning (thyroid deficiency can cause miscarriage)
- Normalize blood pressure
- Guard against excessive weight gain
- Help relieve discomfort in the spine
- Stimulate pituitary to secrete prolactin (controls lactation)
- Increase hemoglobin count, enriches breast milk
- Calm nerves and increases confidence
- Conquer fatigue

Avoid

- Straining and abdominal jarring during first trimester

- Constricting the belly and unsupported balancing poses during 2nd and 3rd trimesters
- Inverted postures in advanced stages (constricts breathing)
- Over stretching joints can release hormonal reactions.

Menopause

The Menopause process takes place in three stages over a matter of years and embraces the entire changeover from our reproductive to the non-reproductive years.

- **Pre-menopause:** the period of gradual transition to menopause
- **Menopause:** occurs at final menstruation
- **Post-menopause:** the body's time of adjustment to the hormonal changes.

As the ovaries begin to run out of ova, the rare few that remain can no longer respond to the hormonal messages from the hypothalamus and pituitary. As the ovaries stop releasing mature eggs, they also greatly reduce their production of estrogen and progesterone. This is a time of readjustment as the system begins bringing itself into a new state of equilibrium. As ovarian hormones decrease, pituitary hormones increase, trying to stimulate the unresponsive ovaries. These hormonal levels remain high for two-three years after menopause.

New Sources of Estrogen

1. The adrenals now take on major responsibility for estrogen production. Healthy adrenals and ovaries insure relatively stable estrogen production after menopause.
2. Ovaries continue to secrete small amounts of estrogen and also testosterone. Male hormones are converted into estrogen in the fat cells and make up nearly half of our total estrogen supply. So it is important to maintain at least 15% (but not more than 25%) total body fat.

Hot Flashes

During menopause, the hypothalamus adjusts the body's thermostat downward in response to hormonal changes that are occurring, thus temperatures that before felt comfortable now feel too warm.

During Hot Flashes

- Avoid energizing breaths and strenuous holdings
- Use cooling breaths, such as Ujjayi, Complete breath, Anoloma Viloma and the Moon breath
- Do forward bending (cooling) postures

Hara Warm Ups, Asana & Pranayama

- Calm nervous system

- Improve physical and mental stability
- Tone and nourish the endocrine system
- Increase estrogen production
- Increase hormonal levels circulating in bloodstream
- Keep tissues healthy and better able to receive and utilize estrogen and other hormones
- Reduce tendency toward water retention
- Release energy blocks, breaking up stress patterns
- Create greater tolerance for heat stress
- Increase ability to sweat and cool the body more efficiently

Hysterectomy

Even if your uterus and/or ovaries have been removed or are no longer functioning, it's still important to be aware of the womb as an energy center. You may even notice cyclic energy shifts, just as you did when you were still menstruating. Remember, yoga affects us on an energy level as well as on physical and mental levels.

After Surgery

- Begin very gentle stretching and nurturing postures after 2 weeks to one month
- Resume regular practice when physical healing is complete

Hara Warm-ups, Asana & Pranayama

- Same as Menopause if ovaries have been removed

Resources

- *Yoga, A Gem for Women* by Gita Iyengar
- *Women Coming of Age* by Jane Fonda
- *Light on Yoga* by B.K.S. Iyengar
- *Kripalu Yoga Posture Book*

This information came from the references listed and Tony Riposo 2001