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HORMONAL YOGA

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ELPORTÁL

Created in collaboration with Service Center for E-Learning at MU,

Faculty of Informatics, Masaryk University, Brno, Brno 2017–2018

Tiskový výstup publikace vydané na Elportále MU (http://elportal.cz/)

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Introduction

Hormonal yoga is a style of exercising whose aim is to harmonize and balance the hormonal levels in a human body. It includes exercising in selected conventional yoga asanas, specific breathing, concentration, relaxing and meditation techniques. As with other types of exercising, it can improve the state of health, the elasticity and flexibility of the human body and the mobility of joints. Moreover, it can detoxify the organism, accelerate our metabolism, improve the posture and the shape of the complexion, while supporting immunity. This yoga type mainly focuses on the activation and correct functioning of all hormones influencing the production of sexual hormones in the sex glands. It gears to human beeings suffering from hormonal dysbalances, mainly to women who are more willing to perform it. It can be good for women in the menopause to decrease its undesirable symptoms such as insomnia, hot flushes, irritability, nervousness, depression, emotional instability, memory loss, loss of vitality, urogenital dryness, incontinence, low libido and migraines. It may also help young girls suffering from premenstrual syndrome, painful menstruation, the loss of menstruation after they stop taking contraception pills, suffering from polycystic ovarian production, and from some causes of infertility (caused by hormonal imbalance or poor blood circulation in the pelvic area). It may help in thr case of the hair loss, brittle nails, dry skin and acne. As mentioned above, it is not suitable for women only. It may harmonize hormonal levels in men too, although for them this is not a very popular type of exercise.

Hormonal Yoga is suitable for women without health restrictions, too. The asanas of this project educational material, recommended and selected by the authors, are grounded on their own practice and lecturing experience, and on the theoretical knowledge of yoga. Still, authors cannot assume responsibility for wrong practising, if it takes place without an experienced guidance and supervision of the lecturer. In case of health problems, the authors recommend its practising after consulting the doctor. If any health problems occur during exercise, even if you follow the basic rules and recommendations of the asanas, consult them with your instructor or doctor.

About the Project

As part of the project *MUNI/FR/0979/2016 Innovation of Selected Courses at FSpS MU by Integrating the Topic of Hormonal Yoga*, the team of teachers and students of FSpS MU have created educational material. This will be used as an educational aid in selected classes at FSpS MU, namely in sbp/sbk 2257 Specialization III Fitness for the study field of Fitness Trainer, and np2414 Motion and Regeneration Techniques for the study field of Applied Kinesiology. Hormonal yoga will be included in some practical PE courses at the USC FSpS MU (p939 Wellness Fit Programme, p902 Fitness Yoga and p913 Wellness Fit Programme) as an enriching type of exercise.

This form of yoga is mainly focused on women, although it is also appropriate for men. We have decided to innovate the classes mainly because we want to support the intention of the Faculty to introduce and offer current movement activities and trends based on the latest knowledge and the principles of healthy exercise for university students during their studies. This intention corresponds with one of the university's long-term aims to support a healthy lifestyle and the awareness of how important active exercise is in our students. The topic of hormonal yoga is due to be introduced into classes in the spring semester 2018. The material was first written in Czech, and then it was translated into English. Czech students and students from abroad, whether coming to university exchange programmes or studying full-time in English, can participate in the instruction.

The project material was aided by our theoretical knowledge and practical experience in different kinds of Body-and-Mind exercise, and styles of modern postural yoga. Another incentive was the growing interest of the wide public in this form of exercise.

The material is divided into two main parts, theoretical and practical. The first chapter of the theoretical part briefly introduces the topic of yoga. The other two chapters introduce the organ systems, which hormonal yoga aims to improve. They describe the endocrine and reproductive systems. The final chapter focuses on selected disorders which hormonal yoga could influence. The practical part includes chapters describing breathing, relaxing and meditation techniques, and asanas, whose practice could affect selected organs of the endocrine and reproductive systems, and thus support the harmonization of selected hormonal levels in human bodies. The explanatory texts, photos or videos accompany the introduced poses (asanas) and techniques.

Hormonal yoga is an exercise trend where traditional asanas are performed using breathing, relaxing and concentration techniques aimed to harmonize the functions and production of selected endocrine and reproductive glands. This type of yoga is geared for women suffering from dysbalances in hormonal levels and for women in the menopause to reduce its unpleasant and undesirable manifestations and symptoms. Yet, we should be aware that hormonal yoga is not the only and unique type of exercise solving every hormonal problem. To practise it regularly, it is advisable to do it under an expert and knowledgeable instructor, and after consulting with a doctor.

Theoretical part

The theoretical part of the project material introduces the history of yoga, describes selected trends of yoga in brief. Furthermore, it introduces the endocrine and reproductive systems, the selected dysfunctions of these systems and their manifestations and symptoms which hormonal yoga aims to improve.

Yoga

The Sanscrit term of „jho“ (yoga) has a lot of different meanings, such as connection, uniting, or bonding. We can also understand or translate this word as a way or method to verify a theory by practice. Yogis were people who thought about existing organizations, dogmas and systems, and wanted to reach and find the truth. Originally, yoga, whose roots date back to the ancient history of mankind, included the philosophical contemplations of people in the Indian subcontinent. Only later, different yoga schools and trends appeared, aiming to work with the physical body. The development of the current “modern” yoga derives from Hatha yoga, and dates back to the turn of 19th and 20th century. The interest in modern yoga first appeared among the wider American public and since the 1960s yoga has become a well-known idea worldwide. Today, the term yoga includes a wide range of human activities and thinking.

Traditional Types of Yoga

Literary references mention four main classical styles of yoga. These aim to improve our self-knowledge and self-recognition and to understand processes running both inside the human body and in the surrounding world. In the past, they did not focus primarily on the physical body.

Karma yoga is one of them. Karma means a deed or activity. This type assumes that human beings behave in a way where they do not expect any rewards. Its basis is an unselfish, impartial and unbiased course without clinging to the results of our activities.

Bhakti yoga is another traditional style of yoga. It is a spiritual way of love, compassion, devotion to God, and of humility. It aims to teach us to love the whole universe, to love all human beings and animals and to love ourselves. We can practise Bhakti yoga in many different ways. We can read holy texts, repeat mantras, sing god names, or worship saints.

Jnana yoga is a philosophical style of traditional yoga where we can reach self-knowledge and self-recognition through studying and practical experience. It is a way that uses common sense and wisdom, and it is considered the most difficult. It involves self-questioning, eavesdropping, musing, contemplation and meditation.

Radha yoga is the last type of traditional yoga. Radha yoga is understood to be a royal journey – a journey where people win against themselves. It defines eight steps to master and reach the freedom of our mind and soul: yama (social code how to behave), niyama (personal code), asana (correct body postures), pranayama (breathing), pratyahara (supression of the senses), dharana (concentration), dhyana (meditation), samadhi (insight and immersion). Hatha yoga, derived from Radha yoga, is a much younger branch of yoga, and works mainly with the first four steps. Hatha yoga, focusing on the work with a human body mostly at its physical level, could be consider an umbrella type of yoga for all modern styles.

Modern Types of Yoga

There are many modern styles of yoga, which predominate in today´s world. We could call them overall a modern posture yoga. Their main goal is the practice of asanas. Posture yoga focuses on the balance, stability and mobility of our physical bodies and the locomotive system. It optimises posture and

teaches correct breathing mechanisms. Some of these modern styles attempt to focus on the spiritual, emotional, psychological and mental balance and health, with a higher or lesser effect. Some of them try to include traditional breathing, releasing, relaxing, concentration and meditation techniques. This subheading briefly introduces some selected types only; the ones which are most frequently exercised, or highly specific.

Power yoga is a very popular style, commonly offered in many gyms and fitness centres. It is a dynamic style of modern yoga without any strictly given order of practising the asanas. The style arranges and orders asanas to stretch and strengthen the whole body effectively. Breathing, relaxing and concentration techniques are an important part of the system. The spiritual part, meditations, mantras and other traditional techniques are not included.

Bikram yoga is a highly specific style, sometimes called Hot Yoga. This style means working out in a room heated up to 42°C. The heat has a specific effect on a body; toxins leave the body better, and muscles relax more easily. As for the range of motion, exercising people can get over their natural boundaries more easily. However, this could cause their muscles to be strained or pulled. More minerals may be released than is desirable. Heat and humidity can cause dizziness or fainting.

Jin yoga is another type of posture yoga, most distinctive for its lengthy holding of asanas. People stay in asanas for 3–5 minute or longer. Jin yoga focuses on stretching and relaxing some connective tissues, ligaments, tendons, fascia and cartilage. It can be included to complement other yoga classes to increase the elasticity and plasticity of soft tissues, and the flexibility of joints.

Acro yoga is a specific kind of couple yoga. It combines asanas, techniques of touch and communication, and work with "*the other"* body. Two people exercise, one of them often lies on their back to provide a stable base for the other person. Partner asanas, circle ceremonies, acrobatic flights and Thai massages are included in acro yoga.

Hormonal Yoga Therapy (HYT) is a modern yoga style focused on the harmonization of hormonal balance in a body. It is considered effective for many dysbalances and dysfunctions of the endocrine and reproductive systems. HYT is a certified system which includes a firmly set-up asana practice involving breathing and relaxing techniques derived from Hatha and traditional yoga. Tibetan energy techniques are also involved. A specific massage of selected inner organs performed by specific breathing techniques, yoga nidra and relaxation aims to bring a desirable effect. Its author is Dinah Rodriguez (*1927), and the system is protected by copyright.

Endocrine glands

A great number of control mechanisms govern the interaction of the entire human organism. They closely collaborate and interconnect in complex systems. The nervous, hormonal and immune systems are involved in the process of sending signals to different parts of the body to answer and react. The transmission of the signals is either electrical or humoral.

Hormones, “chemical messengers”, provide humoral mediation and control. The hormones are produced in specific endocrine glands (hypothalamus, hypophysis, epiphysis, thyroid, parathyroids, suprarenal glands and the pancreas), or in endocrine specific tissues and cells located in different organs (such as the central nervous system, ovaries, testicles, heart atriums, kidneys, liver or digestive tracts). Their transmission mediates by blood mostly. The hormons have a slow onset and prolonged effect. The target cells are equipped with receptors to which appropriated hormones are bound.

The control of the hormonal production in the endocrine glands uses feedback mechanisms where the substances produced affect the production systems. The feedback is negative or positive, simple or complex. Most frequently, the negative feedback is used. In simple negative feedback, the increase in the hormone concentration of blood causes a decrease in its hormonal production. In complex negative feedback, the production of a superordinate hormone influences the production of a peripheral hormone. Positive feedback, less frequently applied mechanisms, is based on similar principles. In simple positive feedback, the hormonal production stimulates its further production. In complex positive feedback, a superordinate hormone stimulates the production of a peripheral hormone.

Hypothalamus

Hypothalamus and hypophysis form one functional unit, which is superior to the other endocrine glands. Hypothalamus, superior to hypophysis, influences the production of hormones in adenohypophysis. Hypothalamus collects the information coming from the inner environment, sorts it, and responds to it. Hypothalamus produces vasopressin (maintaining water homeostasis in the organism) and oxytocin (increasing the frequency of contractions in the uterus, releasing the connective tissue in the pelvis during a confinement, controlling breast milk production during breast-feeding). Hypothalamus further produces substances controlling activities in adenohypophysis and other glands, such as thyeroliberin (controlling the production of thyreotropin), luliberin (releasing a hormone of the *follicle-stimulating hormone) and somatoliberin (*releasing a hormone of the growth hormone). Hypothalamus also produces statins, factors inhibiting the production of hormones, such as somatostatin (inhibiting a hormone of the growth hormone, thyreotropin, glucagon and insulin). Hypothalamus also produces dopamine (a neurotransmitter sending signals to other nerve cells, and a chemical inhibiting prolactin to stop the release of breast milk). Hypothalamus is interconnected with other parts of the central nervous system, and its functioning influences many different factors, such as bio-rhythms (sleeping–wakefulness), or psycho-emotional factors.

Hypophysis

Hypophysis is divided into two parts, adenohypophysis and neurohypophysis. Adenohypophysis produces a growth hormone (supporting the *protein synthesis and the release of glycogen in livers),*

*prolactin (stimulating the growth of mammary glands and supporting the production of breast milk), thyrotropin (*stimulating the release of the T3 and T4 hormones in the thyroid*).* Adenohypophysis produces gonadotrophic hormones, follicle-stimulating hormones (stimulating the *growth* of ovarian follicles), luteinizing hormones (stimulating the production of *gestagens*, supporting ovulation and the creation of the corpus luteum). Adenohypophysis also produces corticotropin (supporting the function of suprarenal glands) and melanotropin (stimulating the darkening of the skin). Neurohypophysis does not have the structure of a gland, and does not produce any hormones, it just stores the hormones produced in the hypothalamus, the oxytocin and vasopressin.

Epiphysis

Epiphysis is a small gland in the diencephalon producing a specific hormone, melatonin, with far-reaching effects on the whole organism, Melatonin coordinates daily rhythms, sleep, blood circulation, blood pressure, body temperature, metabolisms of sugar, fat and proteins, as well as the production of sexual hormones. This hormone influences sexual behaviour and psychological reactions. Its production increases after dark and reaches its peak in the middle of the night.

Thyroid

The thyroid is a bi-lobed gland richly supplied with blood, and is located along the sides of the thyroid cartilage of the larynx. It produces the hormones thyroxine and triiodothyronine that influence the metabolism of sugar, fat and proteins, oxygen consumption, the growth and development of the whole organism, and the development of the brain during the intrauterine development and just after a birth. Their production requires iodine. Its lack during the intrauterine and early postnatal development has a fatal effect on the development of the psyche and intellect, on growth and on reproductive abilities. The thyroid produces calcitonin (decreasing the concentration of calcium in the blood and transporting it to the bones).

Parathyroids

This gland forms four formations on the back of the thyroid gland. They produce parathormone that supports the release of calcium from the bones, and increases its amount in the blood. This hormone restricts the excretion of calcium in kidneys and helps support its absorption in the small intestine. A high level of it causes a decalcification of bones.

Pancreas

The pancreas is a lobate gland located in the abdominal cavity. Most of its tissue produces pancreatic juice with enzymes lysing sugar, fat and proteins. The pancreas produces insulin (decreasing the level of glucose in blood) and glucagon (increasing the level of glucose in the blood). The production of insulin starts if the level of glucose in blood is over 5.5 mmol/l. A lack of insulin, its wrong structure or a lack of the receptors in the target tissues cause diabetes. If the level of glucose in the blood becomes lower than 3.5 mmol/l, the production of glucagon is induced.

Suprarenal glands

This geminate encocrinne gland consists of the core and medulla. The core of the suprarenal glands is a vital gland. It produces aldosterone (controlling the management of minerals and water in human

body). It influences kidneys, sweat and salivary glands. The core supports the absorption of Na^+ and water in the intestine, thus it supports the release of K^+ in the kidneys. The core also produces glucocorticoids; cortisol (controlling the metabolism of nutrients) is most important one. Cortisol is also a very important stress hormone. Androgen hormones produced in the testicles, and in the core of the suprarenal glands too, control the development of secondary sexual characteristics. The medulla of the suprarenal glands, which forms about 10% of their volume, produces catecholamines: adrenaline (the basic hormone of the stress response "attack or escape", preparing the body for a performance), noradrenaline (allowing increased activities in the short run).

Female reproductive system

A reproduction system is a set of organs aimed at sexual reproduction. Its basic function is the production of sexual cells and the transfer of genetic information to offspring. Unlike other organ systems, the organs of the reproductive system are sexually different. The primary genitals are the gonads producing sexual cells, ovaries in women and testicles in males. These glands also produce sexual hormones, with testosterone forming in the testes, and estrogen and progesterone in the ovaries. The reproductive system consists of other glands and organs involved in the reproduction.

Although men can practice hormonal yoga, they are very sporadic in classes. Hormonal yoga is mainly popularised among women and practised by them. Therefore, this chapter deals with the female reproductive system.

Menstrual cycle

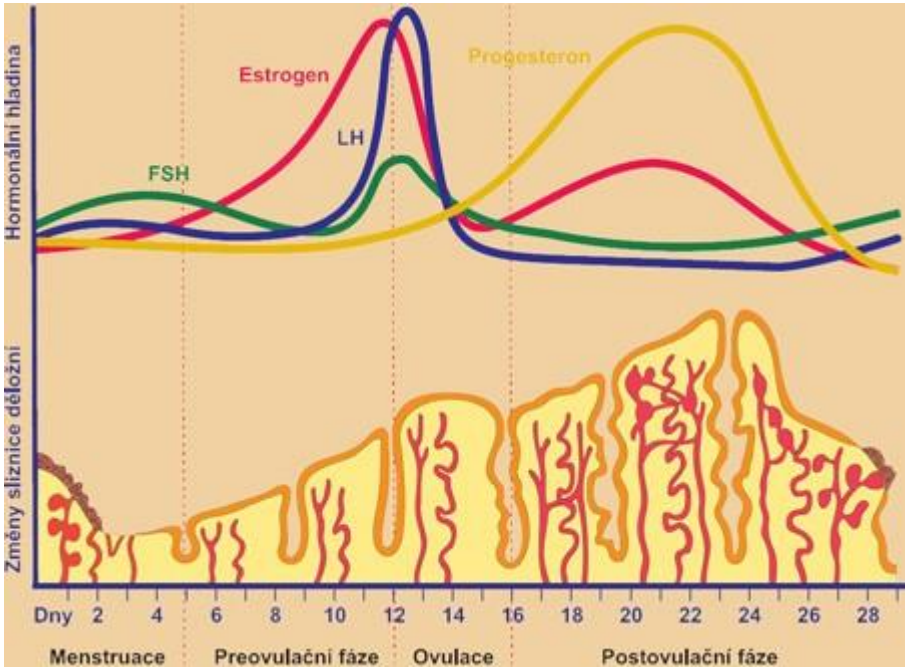
The menstrual cycle is a basic and very important process in terms of reproduction. It is a programmed, cyclically repetitive process controlled by the hormones of the hypothalamic-pituitary system and the ovaries. The environment, nutrition and the state of the organism can also influence its course and regularity. The first menstrual bleeding occurs in girls between the age of 12-16. After women reach 40, the cycle becomes irregular, with the transition period lasting up to 10 years. At the age of 48-52, the last bleeding and menopause usually occur. The menstrual cycle usually lasts 28 (21-35) days. If the cycle is irregular with deviations greater than 2-3 days, the ovulation does not have to occur, which is about 20% of all cycles in a healthy woman.

The mestrual cycle is divided into several phases:

1. Phase 1 – menstrual bleeding occurs in the menstrual phase, which lasts for 2 to 7 days. The average blood loss is 35-45 (20-80) ml. In the uterus, the blood vessels constrict for several hours, and unnecessary cells of the endometrium die. After releasing the constriction, new blood flows into the endometrium sweeping away these dead cells. The body gets rid of all unnecessary components, unimpregnated eggs, old and dead cells of the endometrium together with blood and mucus.
2. Phase 2 – in the follicular (proliferation) phase, which lasts for about 6 days, one egg cell matures in a follicle, new soft cells of the endometrium grow, the cervix begins to produce more mucus, then it opens and shortens.
3. Phase 3 – in the ovulation phase, within the first 2-3 days the matured egg cell is released into the fallopian tube. The watery and elastic cervical mucus maintains an alkaline environment in the vagina and helps a sperm reach an egg. If the egg is not impregnated within about 12 hours after it is released, the egg disintegrates. After the egg is released, the low basal temperature increases.
4. Phase 4 – in the secretory (luteal) phase, the empty follicle is transformed into a corpus luteum, and the endometrium grows. The amount of cervical mucus is reduced and becomes more dense and acidic. If the egg was not impregnated, the yellow body turns into a corpus albicans. The blood vessels of the endometrium start to constrict and its cells begin to die gradually.

Hormones of the menstrual cycle

The hormones involved in controlling the menstrual cycle include **gonadorelin (gonadoliberin** (GnRH)), two gonadotrophins: follicle-stimulating hormone (follitropin (FSH)) and the luteinizing hormone (lutropin (LH)), as well as oestrogens (E) a progesterone (P) – see picture 1.



Picture 1 Hormons of menstrual cycle (Institute Galenus, 2017)

Gonadorelin (luliberin) is a hormone responsible for the production of the luteinizing hormone and the follicle-stimulating hormone in the pituitary gland. **Gonadorelin** is synthesized and released inside the hypothalamus.

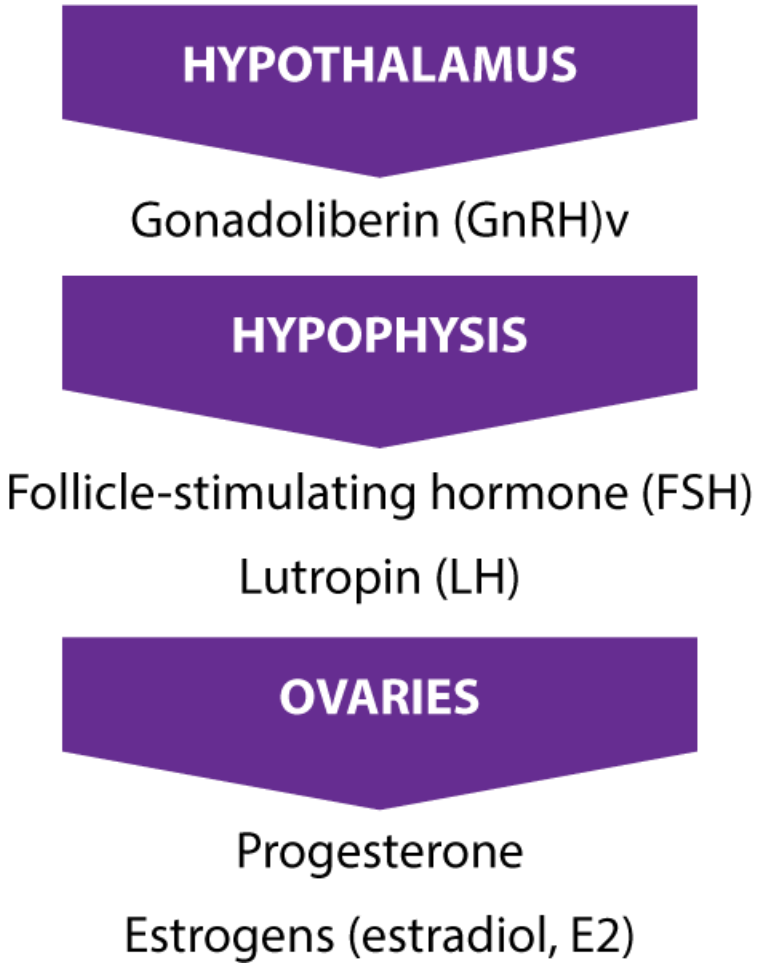
Gonadotropins (follitropin and lutropin) are two hormones of the anterior lobe of the pituitary gland. They control the activity of the sex glands, and regulate the production of the sex hormones, estrogen and progestin, and the maturation of sex cells.

Estrogens are produced in the ovaries, in the corpus luteum and placenta. The liver, suprarenal glands and breasts also produce a small amount of estrogen, which is important for postmenopausal women. The level of estrogen is at its highest at the end of the follicular phase, the peak directly preceding ovulation. The most important and most effective of the group of estrogens is estradiol (E2) produced in the corpus luteum in the ovaries. Other estrogens include estrone (E1) produced by the ovaries, adrenals and fatty tissue and estriol (E3) produced by the placenta. Estron and estriol have a significantly weaker efficacy than estradiol. Estrogens induce the proliferation phase of the menstrual cycle and stimulate the secretion of the sparse mucus in the uterine cervix. They are responsible for the development of female sexual characteristics and for the optimization of the effects of progesterone. They support the follicular maturation and have a negative feedback on the secretion of the luteinizing and follicle-stimulating hormones at physiological levels. At very high levels, however, they impart a positive feedback on these hormones.

Progesterone is made of cholesterol in the corpus luteum of the ovaries and in the suprarenal glands. Progesterone is the best-known hormone of progestins whose levels rise just before the ovulation with the peak reached 5-7 days before it. The task of progesterone is to prepare and maintain the endometrium for and during pregnancy. It introduces the secretory phase of the menstrual cycle, supports the growth of the endometrium after ovulation. It is responsible for muscle reconstruction, for the supply of vessels in the uterus, for maintaining the secretory phase in it to be prepared for nursing the egg. Progesterone inhibits the release of the luteinizing hormone in the luteal phase. Its administration in the follicular phase suppresses the ovulation, which, along with other factors, is the basis of the contraceptive pills.

Hormonal regulation of the menstrual cycle

Because the objective of hormonal yoga is the harmonization of hormonal levels in a human body, it is advisable to understand all these processes. This subchapter therefore details the hormonal processes during the menstrual cycle.



Hormonal regulation of the menstrual cycle – Schematic depiction

At the end of the luteal phase and at the beginning of the follicular phase, the level of the luteinizing hormone (LH) is relatively low and there is a gradual increase in the secretion of the follicle-stimulating hormone (FSH). Due to the follicle-stimulating hormone, the follicles mature in the ovaries, and one of them starts to produce estrogen (E). This secretion is the highest and most important during the first

week of the follicular phase of the menstrual cycle. At the end of the follicular phase, the level of follicle-stimulating and luteinizing hormones increases. The high level of the follicle-stimulating hormone induces the first egg cell division and the secretion of estrogens and progesterone in the ovaries by activating the enzyme aromatase and p450 enzymes. It also influences the secretion of gonadoliberin (GnRH) by negative feedback.

The rapid increase in estrogens in the follicle results in an increased secretion of the luteinizing hormone from the anterior lobe of the pituitary gland, producing more androgens and more estrogens. The luteinizing hormone is vital for the growth of pre-ovulation follicles as well as for the ovulation of the dominant follicle and subsequent luteinization, i.e. the conversion of a matured follicle in the ovary into the corpus luteum after the ovulation. About 10 hours later, the level of the luteinizing hormone reaches its peak, the dominant follicle bursts, the egg is released, and the ovulation starts. Unless this sudden rise in the luteinizing hormone occurs, the ovulation does not occur and pregnancy is not possible.

At the beginning of the luteal phase, the luteinizing hormone, follicle-stimulating hormone and estrogens cause the conversion of the follicle into the corpus luteum producing the progesterone and a small amount of estrogen. The estrogen and progesterone suppress the secretion of the follicle-stimulating and luteinizing hormones (partly indirectly by the inhibition of gonadoliberin), whose concentration in the plasma decreases. Through this negative feedback, when the levels of estrogen and progesterone decrease, menstrual bleeding occurs. At the same time, there is a gradual increase in the follicle-stimulating hormone. The menstrual cycle starts with menstruation at the beginning of the follicular phase. The follicular phase ends with ovulation, which goes into the luteal phase.

The increased level of the follicle-stimulating hormone stimulates the follicular secretion of estradiol. On the granulosa cells (i.e. supporting cells which create the cover of immature egg cells), the expression of the aromatase receptors increases the convertion of androgens into estrogens. The follicle-stimulating hormone simultaneously induces the expression of follicle-stimulating hormone receptors on the follicles. This enhances the effect of the follicle-stimulating hormone and the follicles produce more extradiol. The estradiol level peak occurs on the 10^{th}-13^{th} day of the menstrual cycle before ovulation.

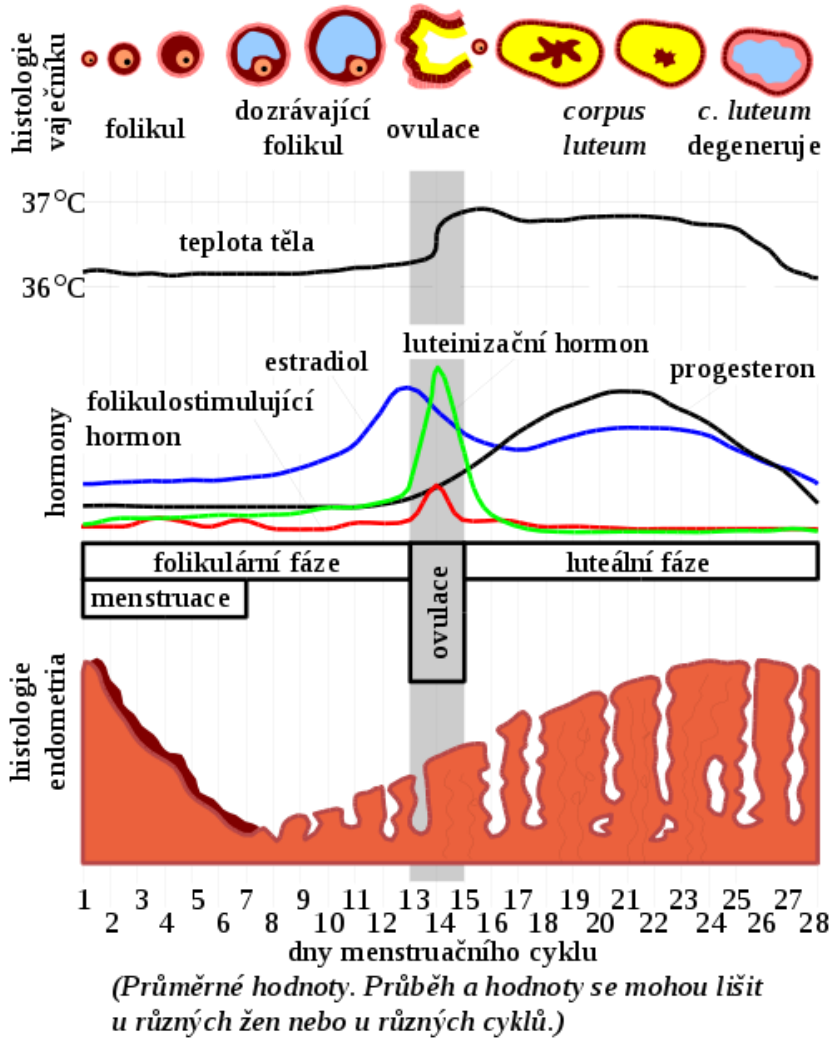
An increased level of estradiol initially causes negative feedback on the anterior lobe of the pituitary, thus diminishing the secretion of the follicle-stimulating and luteinizing hormone. Their level decreases between the 11^{th} and 13^{th} day of the menstrual cycle. The level of estradiol peaks and the feedback changes to positive, resulting in the pre-ovulatory release of the luteinizing and, to a lesser extent, folliculostimulatory hormone.

The release of the luteinizing hormone iniciates the process of ovulation (egg release) and luteinization, or, to put it differently, the transformation of the follicle (the remaining granulosa cells, the cover of the follicle, and the remaining connective tissue) to the corpus luteum. After luteinization, the granulosa cells begin to produce progesterone instead of androgens, the expression of the the luteinizing hormone receptor increases in these cells, and the affinity for the estrogen and follicle-stimulating hormone decreases. The progesterone secretion peaks between the 5^{th} and 7^{th} day after the ovulation.

Progesterone and estrogens are produced by the corpus luteum and their secretion increases until the yellow?? corpus luteum begins to degenerate during the luteal phase. The production of progesterone is significantly higher than the production of estrogen and reaches its peak. The level of estrogen decreases, the corpus luteum degenerates into the corpus albicans. The production of progestone and estrogens decreases and hormone levels decline.

The decrease in the hormone levels of progesterone and estrogen no longer induces negative feedback at the pituitary level. The secretion of the follicle-stimulating hormone stops being inhibited and starts rising again, which results in menstruation.

If the egg is not impregnanted and its nesting does not occur, the secretion of gonadoliberin is inhibited by progesterone and estrogens on the 22nd day. The corpus luteum is transformed and ceases to produce hormones. This rapid decline results in the constriction of the blood vessels in the uterus, the cells of the endometrium begin to decouple, and menstrual bleeding occurs. If the egg is not fertilized, it perishes and the rests of the Graaf's follicle changes from the corpus luteum into corpus albicans.



Picture 2 Hormonal activity in the course of the menstrual cycle (Wikipedia, 2017)

Sexual maturity

Sexual maturity is the state when women can reproduce. Then, a secretion of gonadorelin begins in the hypothalamus, stimulating the production of the follicle-stimulating and luteinizing hormone in the hypophysis. The secretion of gonadorelin occurs in pulses, which is one of the preconditions for a normal menstrual cycle. The average frequency of this secretion is once in a 90-minute period during the early follicular phase, increasing up to once a 60-70-minute interval later in the follicular phase. During the luteal phase, the frequency decreases to once a 4-5-hour interval, but the amount of produced hormone increases. This induces a pulsatile release of the follicle-stimulating and luteinizing hormone from the adenohypophysis. Any disorders of this rhythm, an acceleration or continuous distribution, decrease the secretion of the follicle-stimulating and luteinizing hormone and result in a possible subsequent infertility. The follicle-stimulating and luteinizing hormones subsequently regulate the production of estrogen and progesterone. Many psychological factors and stress can influence the secretion of both these hormones. All these factors reduce both their production and the production of sexual hormones in the ovaries. The ovarian hormones then indirectly affect the production of gonadorelin.

Menopause

The menopause is a period of time when women stop menstruating. It is a natural period when the activity of the ovarian falls and the production of estrogen and progesterone decreases. The menstrual cycle disappears, and the period of natural infertility starts. Menopause begins in women aged 45 to 55, but there may be deviations in the age. From the medical point of view, the menopause means the absence of menstruation for longer than one year. Perimenopause usualy precedes the menopause, characterized by irregular menstrual bleeding. Perimenopause usualy affects women for four years before the menstrual bleeding completely disappears. Various inconveniences, difficulties and troubles may accompany the menopause. However, not every woman has to undergo these unpleasantnesses. Positive attitudes to life, positive thinking, and care about physical and mental health may decrease these symptoms in acitve women.

Selected disorders and dysfunctions of the endocrine and reproductive systems

Madanmohan (2008) states that the impact of yoga on physical and mental health has been proven in research many times. Hormonal yoga, however, is a relatively young concept and is based on the foundations of Dinah Rodriduez's Hormonal Yoga Therapy. Rodriguez systematically damascenes?? her system and extends the possibilities of its possible impact. In her books (2014, 2015) she introduces some selected cases when her concept helped. Unfortunately, these case studies do not have a seriously scientifically-backed background. Nevertheless, this chapter is based on Rodriguez´s knowledge as the only available resource. It provides a brief description of selected difficulties and disorders of the endocrine and reproductive system that hormonal yoga may influence according to Dinah. It would be very beneficial in the future, if the research focused on the impact of yoga on the human health targeted in this topic in order to confirm or refute the claimed impact and effects.

Thyriod diseases

Thyroid diseases are some of the most common endocrine diseases. A number of endocrine organs may be the target of an autoimmune attack. The thyroid gland is one of the most common targets of autoimmune damage that can be manifested by a development in the neck, struma (thyroid enlargement), as well as by irritation or soreness in the neck. It can develop into the increased (hyperthyroidism) or decreased (hypothyroidism) function of the thyroid gland.

Hyperthyroidism is a disease characterized by the increased working of the thyroid. A large amount of thyroid hormones are produced, and simultaneously there is an increased response in the peripheral tissues to these hormones. The excess of the hormones may be accompanied by certain typical symptoms. A common symptom is the struma, which is lacking in approximately 10% of the affected women. Another consequence of the increased amount of hormones is the acceleration of the metabolism, which influences many other organs. The skin can get sweaty and warm, the hair thins, the nails become brittle or grooved. Excessive fatigue may be common and frequent, a loss in muscle mass or in total weight may occur, sometimes accompanied by an increased appetite and diarrhea. Nervous and mental symptoms, such as gentle tremors, insomnia, nervousness, irritability, restlessness and anxiety can also be present. Higher levels of tyroxine can cause the inability to maintain pregnancy.

The causes of hypothyroidism, a disease characterized by the decreased working of the thyroid, may be thyroid inflammation, postoperative states after the thyroid gland underwent an operation, radioiodine treatment, prolonged iodine deficiency, or the irradiation of the throat. Fatigue, decreased efficiency, sleepiness, cold-sensitivness, forgetfulness and the inclination to depressions are amongst the most common manifestations and difficulties. Other symptoms involve pain in the muscles and joints, dry and peeling skin, the swelling of lower limbs, the face and around the eyes. There is a tendency to become overweight caused by swelling and a lower metabolism, or severe constipation. In women, hypothyroidism can lead to sterility, reproductive and menstrual disorders, such as

menstrual cycle irregularities, irregular ovulation, oligomenorrhea, and ovarian dysfunctions. Hypothyroidism may increase the risk of atherosclerosis or the level of cholesterol in the blood.

Here, we consider that it is very important to mention that Monika Schostak in her book called Hormonal Yoga, which mainly explains the ideas of Dinah Rodriguez's concept, states that the practice of hormonal yoga should be appropriately adapted in case of hyperthyroidism. She recommends the reduction of breathing techniques, especially bhastrika.

Inconveniences of the menopause

The natural manifestations of the menopause are irregular and the loss of menstruation. In some women, the menopause may occur earlier than at the age of 40. The causes can be genetic, but stress or other stimuli can also trigger this process. Various difficulties that women experience as unpleasant and annoying may accompany the menopause. These may include hot flushes and excessive sweating, insomnia, mental and emotional instability, an increase in weight, nausea and constipation. Headaches, pain in the back and joints, worsening of the blood circulation in the lower extremities, swelling and formication can appear, as well as hair loss and a worsening of hair quality, drying of vaginal mucus and a decrease in libido. There is a higher risk of heart disease and osteoporosis. These manifestations are highly individual and relate to complex changes occurring not only in the reproductive and endocrine system, but also in other organ systems. These manifestations may also depend on the mental and psychological state of a woman and many other factors. It is often very difficult to find and determine their cause.

Irregularities and menstrual disorders

Irregular menstruations occur as a natural sign of the menopause when a physiological reduction in sex hormone secretion begins. If irregular or the total loss of menstruation occur earlier than at the age of 40, it is not a natural process. This is secondary amenorrhoea. Menstrual irregularities in the frequency and length of the period can appear due to the lack of estrogen. The lack of progesterone can cause extensive menstrual bleeding. The deficiency of both of these hormones or their irregular secretion can result in no ovulation. Menstrual irregularities may arise due to the pathological functioning of the ovaries or their superior glands, the glands of the hypothalamic-pituitary system. Other reasons may include anorexia or excessive physical load.

Primary dysmenorrhea is another disorder. It is a painful menstruation that often affects young women aged 15-19. The dysmenorrhea may be accompanied by headaches, nausea, fatigue, or backaches. Oligomenorea is irregular menstrual intervals, longer than 35 days, and the bleeding occurs only 4 to 9 times a year. The causes of oligomenorea are various, including thyroid hyperfunction, hormonal changes associated with the onset of the menopause, the polycystic ovary syndrome or eating disorders such as anorexia or bulimia. Menorrhagia is a severe excesive bleeding that can be caused by anovulation, the menopause or cancer.

Premenstrual syndrome manifested by a number of physical, mental and emotional symptoms occuring 3 to 14 days before the menstrual bleeding can be included in menstrual disorders too. The symptoms of premenstrual syndrome can involve breast stiffness and soreness, fatigue, anxiety, mood changes, depression, nausea, headaches, decrease in libido or weight gain, insomnia. The cause of the

syndrome is unknown, but it can appear due to changes in hormone levels before the menstrual period.

Polycystic ovary syndrom

Polycystic ovary syndrome is caused by an increased level of testosterone, estrogen and luteinizing hormone, and by the decreased secretion of the follicle-stimulating hormone. Follicles maturing inside the ovaries rise to the surface of the ovary in healthy women, where they burst and release an egg. If the follicles are not released, they grow under the surface of the ovary. This process can repeat itself many times. Thus, a cyst, or even more cysts, can develop, and the ovaries can be distended. The ovary shell also grows, the ovulation is stopped, causing the absence of menstruation and infertility. The main cause of the syndrome is unknown.

Infertility

Infertility is the inability to conceive a child after regular unprotected sexual intercourse for more than 1 year. Factors that could play a role in female infertility include non-ovulation, problems with the production of mucus in the genital tract, fallopian tube problems, or uterine abnormalities. In addition to pathophysiological factors, lifestyle, stress, and other phenomena may play a major role. The treatment of infertility is complicated because its cause can be anywhere in the body.

Practical part

From today's perspective, the term hormonal yoga includes yoga techniques, asanas or compositions that aim to harmonize hormonal levels in human bodies. Both classical and modern postural yoga styles include a variety of asanas and techniques targeting the endocrine and sexual glands or organs, and the aim of the practical part of this material is to offer a set of asanas, exercises, breathing, relaxing and meditation yoga techniques. Unlike certified Hormone Yoga Therapy, the set does not offer an unchanging, strictly formed set, but yoga poses, exercises and techniques possible to practise in lessons of various yoga styles. The set can also be used to create individual classes of hormonal yoga. With a good and deep knowledge and experience in the field, the exercises of this set can be modified. The profound knowledge of health problems, the anatomy and physiology of the human body and organ systems which hormonal yoga targets is important both for the exercising itself and for the creation of classes and the modification of particular exercises. Instruction requires an individual approach and the knowledge of a client´s history to avoid the worsening of difficulties or causing other health problems.

Since the hormonal control of the organism is a holistical and interconnected system, it is necessary to keep in mind when choosing asanas, exercises and techniques that it is desirable to harmonize the endocrine system as a whole, not to target the exercise on a single gland. Therefore, it is advisable to select asanas so that asanas from all parts of this set are evenly practised during a class. Selected breathing and concentration techniques and "body locks" (bandhas) should also be a part of hormonal yoga practice. Classes should include relaxation that can be performed both during and at the end of lessons.

In terms of methodology, hormonal yoga follows general basic rules governing many other exercise programmes. One of the basic principles is the coordination of movement and breathing. Breathing is superior to movement, since we move as fast as we breathe. Slow and deep breathing allows the ideal performance. The more advanced you are, the faster you can practice. The effectiveness of exercising depends on both the correct performance and the ability to concentrate, endurance and the regularity of exercising. A whole lesson of hormonal yoga should take a maximum of 60 minutes, including the initial warm-up and final relaxation stages. Either selected asanas or a comprehensive, carefully-designed programme of hormonal yoga can be practised daily, with the basic principles of yoga taken into consideration. However, we should always remember that the bigger a health problem or imbalance in the body is, the slower and finer the used technique should be. In addition to active movement, lifestyle changes and alcohol and smoking restrictions, a healthy diet and positive thinking are important general recommendations.

Breathing Techniques

Breathing is a basic principle vital to follow when practicing hormonal yoga. There are many different breathing techniques in yoga, some of them called krije (cleaning), some other pranayama (guiding and controlling). In the traditional concept of yoga, breathing techniques are practised in sitting and lying positions only. Some breathing techniques can be performed independently as relaxation techniques, or can be practised in selected positions to increase their effect. To perform breathing techniques in a dynamic motion is only suitable for advanced and experienced clients who have already mastered both the breathing technique itself and the proper performance of the selected asana or exercise. Modern yoga styles do not practise pranayama techniques very often. If they are used, they are modified several times, and their performence does not correspond to their originals.

Pranayama is the art of breath control, which involves breathing through one or both nostrils. It consists of breathing in, breathing out and breath holds after inhales and exhales. Breath holds are an integral part of pranayama techniques. Yet, it must be remembered they are contraindicated in people with cardiac, vascular and psychiatric illnesses. Pranayama breathing techniques can be divided into three groups, activating, calming and harmonizing. Rhythmic, deep and slow breathing calms and stabilizes the mind, while creating the correct breathing stereotypes and appropriate breathing patterns.

Full Yogic Breath

Starting position

Lie with both arms stretched along the sides, and palms facing upward.

Action

Relax the whole body whilst lying on the back. First, we divide the breathing cycle into 3 parts (abdominal, upper chest and lower thoracic breaths). For abdominal breathing, we put our palms on the lower abdomen and feel the movements in this area. For the lower chest breathing, we put the palms on the sides of the rib cage, the fingers following the direction of the ribs, the thumbs pointing in the opposite direction. We feel the expansion and shrinkage movements in this area. For upper chest breathing, we place the crossed arms on the chest, the thumbs touching the inner ends of the collarbones, the forefinger following the collarbones toward the shoulders. We feel the expansion and shrinkage movements. Then we perform full yoga breathing, combining all three of the above-mentioned breathing techniques together. We put our arms along the body, palms facing upward. We breathe smoothly and feel the breathing movements gradually in all three areas. Finally, we breathe breath naturally.

Precision points

In yoga practice, full yoga breathing is the most used breathing technique. Natural breathing differs from full yoga breathing, with some phases missing or neglected. We consciously do not interfere or control natural breathing cycles.

Purposes

This technique has profound soothing effects. It reinforces the healthy and correct breathing stereotype. It stimulates, deepens and softens bodily self-awareness, while increasing the maximum lung capacity.

Bhastrika Pranayama (smith's blowers)

Starting position

Sit with legs crossed, palms resting on the knees.

Action

Sit with your legs crossed and keep the feeling of long spine. Both phases of breathing (inhaling and exhaling) are equally deep, with the focus on the abdominal breathing. Put the palm of one hand on the lower abdomen, with the other hand resting freely on the knee and relax the abdominal muscles. After breathing out in a relaxed manner, breath in and out actively. The rhythm and depth of the breaths are individual. There may be spontaneous short breaks in breathing between the phases. We always repeat the breathing cycle for a maximum of 10 times. Then a pause is required.

The practice of inhaling actively means that each breath is sent to the palms placed on the belly, so that the abdominal wall is fully active. After inhaling actively, we breathe out relaxingly.

The practice of exhaling actively: with a strong contraction of the abdominal wall, the bell actively pulls inwards towards the spine. After exhaling actively, we breathe in relaxingly.

Precision points

Inhaling and exhaling actively may initially cause nausea and dizziness. These feelings can be regulated by the speed and depth of breathing. We try to perform contractions of the abdominal wall as deeply as possible and in the lowest parts of the abdomen. It is an advanced breathing technique, whose practice is advisable to perform under the supervision of an experienced yoga instructor.

Purposes

Bhastrika is an activating breathing technique. It increases the heart rate and blood pressure. It stimulates metabolism and thermoregulation, massages the abdominal organs (glands in the abdominal cavity) and regulates the digestive system activity. It is not advised for people with the high blood pressure, heart diseases, hernia, gastric ulcers, epilepsy, progressive myopia or retinal detachment, glaucoma, asthma, chronic bronchitis, stroke and pregnancy.

Ujjayi Pranayama (winning breath)

Starting position

Sit with legs crossed, palms resting on the knees.

Action

Sit with your legs crossed and keep the feeling of an extended spine. Both phases of breath (inhale and exhale) are equally deep, focusing on the area of the neck. Perform a gentle "throat contraction" (contraction of the vocal cavity), which will produce a snoring sound in both the inhalation and exhalation. This reduces the flow of air, breathing becomes more difficult, and the breathing muscles

are actively involved. The palms can be placed on the sides of the chest, with the fingers following the ribs, the thumbs pointed in the opposite direction. We can feel the expansion and contraction.

Precision points

The increased airflow through the throat can cause dryness and a compulsive necessity to drink. Drinking is undesirable, as this technique heats up the throat and the water will cool it. With the neck constricted, there can be a lack of air and the feeling of panic from suffocation. Such stress is undesirable, so we never perform this technique when feeling any breathing discomfort. We try to make the contraction of the throat as strong as possible. Be careful not to affect the vocal cords. It can be performed instead of natural breathing in selected asanas, and thus we increase the effect of the pose.

Purposes

Ujjayi pranayama is a breathing technique that activates and heats up the throat (thyroid), and it also has a calming effect. It helps people with insomnia, relaxes mental tension and slows the heartbeat.

Nadi Shodhana Pranayama (alternate breath)

Starting position

Sit with legs crossed, palms resting on the knees.

Action

Sit with your legs crossed and keep the feeling of the extended spine. We breathe naturally, alternately with one nostril only. The right hand forms Nasagra Mudra, the left hand Dzhana Mudra. We breathe alternately with one nostril (right/left). After exhaling through both nostrils, we close the right nostril with the thumb of right hand and only breathe through the left one. We feel the permeability of the nostril and the breathing movements. Then we close the left nostril with the middle finger of the right hand. With alternating breathing (Nadi shodhana), we close the right nostril with the thumb and inhale through the left. After that, we close the left nostril, and exhale and inhale through the right one. Then close it and exhale through the left nostril. Once the unilateral and alternate breathing is complete, we remain in the starting position and breathe through both nostrils naturally.

Precision points

Breathing through the right nostril is also called Surya Bhedana Pranayama. It stimulates the sympathetic nervous system that activates and mobilizes the organism. We call the breathing through the left nostril Chandra Bhedana pranayama. It stimulates the parasympathetic nervous system, which controls the calming of the organism.

Purposes

This breathing technique balances the clarity of both nostrils and releases the airways. It harmonizes the sympathetic and parasympathetic nervous systems.

Warm-up Sets

Khatu Pranam (Khatu Salutation)

Starting position
Kneeling, sit with the feeling of an extended spine, with hands resting on thighs.

Action
(1) Raise the arms, with the palms connected, and look upwards. (2) Turn the palms forward and bend forward, placing the forehead on the mat. The movement comes from the hips. (3) Press the palms into the ground and move forward, with the toes supported on the mat. The knees, upper chest and chin or forehead should be on the mat, with the pelvis positioned slightly above it. (4) Put the pelvis on the mat, lock the knees and point the feet. Push the palms away, and lean backwards. (5) Move to the standing press-up, with the knees active, the head relaxed between the arms. (6) Step forward with the right leg and place the foot between the palms, place the left knee on the mat; look forward. (7) Raise the arms, looking upwards, and push the pelvis forward. (8) Rest the palms on the mat, relax the head. (9) Bring the left leg next to the right one, the torso is in a deep bow. (10) Roll the torso up, raise the arm, looking upwards. The set continues in the opposite order, with the left foot remaining in front only in positions 8, 7 and 6.

Precision points
We go through an even number of rounds (2, 4 or 6) in which we change the starting leg. The set can be practiced twice a day (morning and evening). We breathe naturally all the time: 1 – inhale, 2 – exhale, 3 and 4 – inhale, 5 – exhale, 6 and 7 – inhale, 8 and 9 – exhale, 10 – inhale. Back: 10 – inhale, 9 – exhale, 8 and 7 – inhale, 6 and 5 – exhale, 4 – inhale, 3 and 2 – exhale, 1 – inhale, the starting position – exhale. Advanced breathing option: in positions 4, 7 and 9 we hold our breath when moving to the standing position. When returning, we hold our breath in positions 7, 5 and 2.

Purposes
Khatu Pranam warms up, stretches and releases the muscles, tendons and joints of the entire body. Bending positions support the blood circulation of the head, and are said to improve the sight, hypothalamus and pituitary. Overall, the set improves the mobility of the spine, regulates and harmonises the nervous and endocrine systems.

Surja Namaskara (Sun Salutation))

Starting position
Standing with the feet parallel to each other, palms connected, the crown of the head extended.

Action
(1) Raise the arms, look upward and turn the palms forward. (2) Bend forward, and place your palms or fingers on the mat. (3) Step back with the left leg, put the left knee on the mat, bend the right leg and moved into the squat and look upward. (4) Move to the standing press-up position, lock the knees, and look towards the belly, the feet on the mat. (5) Lie down, with the chin, chest, knees and the tips of the toes on the mat, the pelvis above the ground ("narrow yoga push-up"). (6) Push the palm away from the mat, lift the head, and with the feeling of an extended spine lift the upper part of the trunk

up into the push-up slightly bent. (7) Move to the standing press-up position. (8) Step forward with the left leg and continue by doing the set in the opposite sequence of 3, 2 and 1.

Precision points

We go through an even number of rounds (2 to 12), in which we change the starting leg. We breathe naturally all the time, in harmony with the movement: 1 – inhale, 2 – exhale, 3 – inhale, 4 a 5 – exhale (or 5 – hold the breath), 6 – inhale, 7 – exhale, 3 – inhale, 2 – exhale, 1 – inhale, the starting position – exhale. We can hold the breath in the advanced breathing option.

Purposes

Surja Namaskara stimulates blood circulation, increases the physical fitness and the vital capacity of the lungs. It develops coordination skills and harmonises the nervous and endocrine systems.

Yoga Poses – Asanas

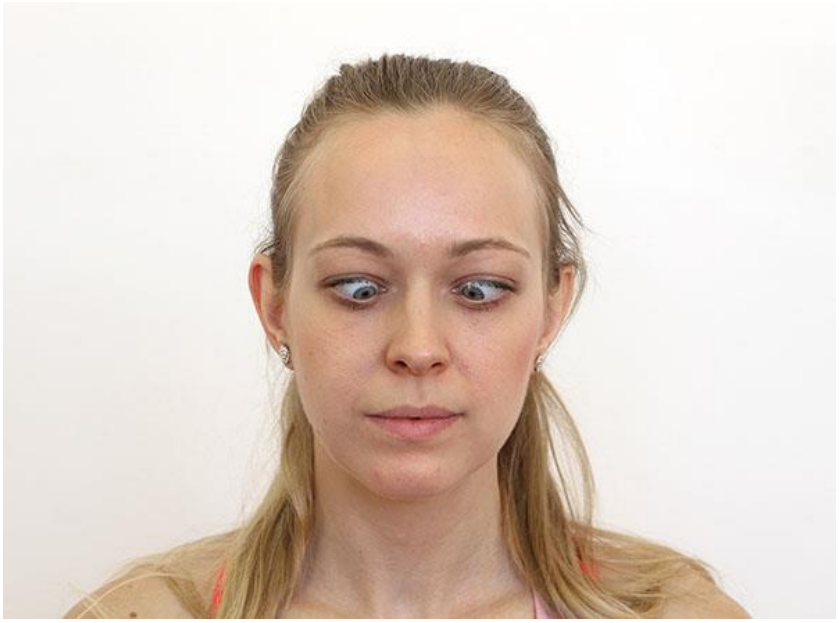
Each yoga pose (asana) should be stable and comfortable. The dynamic performance of transitions between asanas should be technically correct according to the principles of healthy and safe movement. We never go beyond the pain threshhold. We try to perform asanas technically correctly, but we are aware of each individual's range of motion. Deep concentration, attention and breathing are important parts of the exercise. We always exercise in accord with breathing. In some asanas, we can use special techniques, mudras and bandhas. When creating our own sets, we follow the logical ordering of asanas. Since each set ends with relaxation, it is advisable to start in the standing position, then sit and end up in the lying position. Exercises of the practical part aim to selected organs and glands, namely ovaries, adrenals, thyroid and pituitary glands. For easy orientation, the exercises are divided by the starting positions. The whole set includes static and dynamic positions, asanas bending forward and backwards, and rotational poses.

Mudras and bandhas are introduced in the following subchapters before the set of asanas, as these techniques are closely related to asanas and can be performed using them.

Mudras

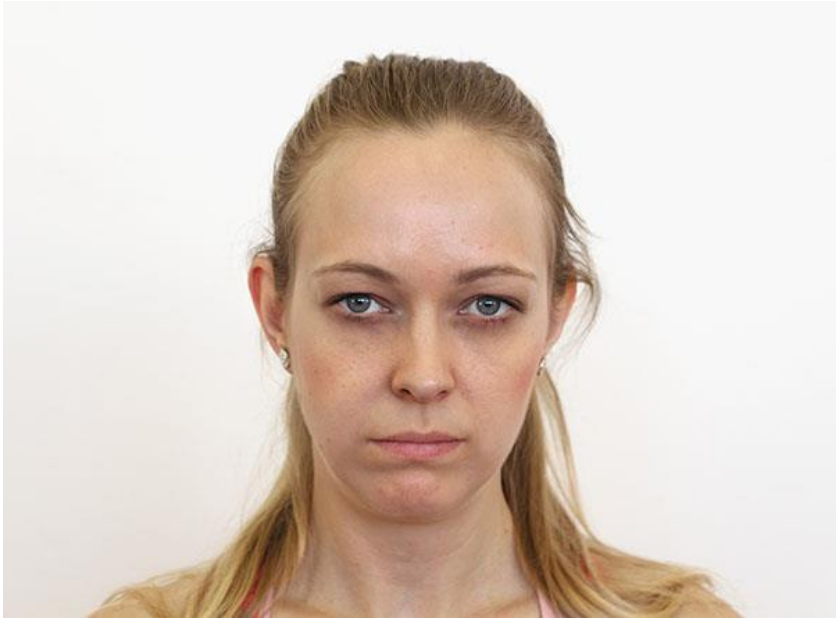
A mudra is a gesture that transcends into the emotional and spiritual level. Mudras are the positions of either the whole body or just the hands used to direct the flow of vital energy (prana) through the energy channels (nadis) in the human body. These are advanced yoga techniques. The starting position for their training is to sit with crossed legs or in the kneeling position with the legs folded, sitting on the heels.

1. Nasikagra drishti mudra is formed by looking at the tip of the nose. It improves the ability to concentrate.



Nasikagra drishti mudra

2. Khechari mudra is formed by bending the tongue backwards and resting it on the furthest part of the palate with the feeling that we want the tongue to reach the nasal cavities. It stimulates and massages the pressure points on the soft palate and the glands in the mouth. Khechari mudra stimulates the function of the endocrine gland, especially the pituitary and hypothalamus.



Khechari mudra

3. Akashi mudra is formed by tilting the head back, and looking upwards while inhaling deeply. This is followed by holding one's breath for as long as feels comfortable. While exhaling, we bring our head to its natural position. The HJT system performs it in the opposite rhythm (holding one's breath followed by exhaling while leaning back). This mudra activates the thyroid gland.

Akashi mudra

4. Nasagra mudra (also Pranayama mudra) is the position of the right hand where the index and middle fingers are rested between the eyebrows. This point symbolically belongs to the pituitary and hypothalamus. The thumb lies on the right nostril and the ring finger on the left nostril. The little finger is relaxed next to the ring finger. The fingers thus help to perform alternate breathing by closing the nostrils alternately.

Nasagra mudra

5. Jnana mudra is formed by joining the forefinger and thumb, with the forefinger resting against the root of the thumb. The remaining three fingers gently stretched out, with the backs of the hands resting on the knees. This mudra is often used in meditation, it has calming effects and helps focus one's attention.

Džňána mudra

6. Adi mudra is the position of the hand when the thumb is placed into the palm with the other fingers curled over it in a finely clenched fist. This mudra helps to breathe more intensely into the upper lung lobes and has a calming effect.

Adhi mudra

Bandhas

A bandha means a lock, it is a certain muscle contraction whose purpose is to close and channel the flow of life energy (prana) into a certain area.

1. Jalandhara bandha (throat lock) is performed by tilting the head forward, with the chin pressed against the chest holding one's breath after inhaling. This bandha stimulates the thyroid gland. At the same time, the coronary arteries are constricted which prevents the loss of consciousness during the breath hold.

Džalandhara bandha (hrdelní zámek)

2. Mula bandha (root lock) is performed by the contraction of the pelvic floor muscles and their "pulling" upwards. Mula bandha stimulates the nerve network of the pelvic floor, while toning the muscles of the urogenital tract and the rectum. According to Swami Satyananda Saraswati, it should not be practiced at the time of menstruation.

Mula bandha (kontrakce perinea)

3. Uddiyana bandha (abdominal lock) is performed after exhaling deeply, followed by a false intake of breath, which means pulling the abdomen towards the spine and upward, while spreading the chest in all directions. Uddiyana bandha stimulates the function of the pancreas and the adrenal glands.

Udjána bandha (břišní zámek)

4. Maha bandha (great lock) is a combination of all the above locks. After exhaling, they are performed in the following order: jalandhara bandha, uddiyana bandha and maha bandha. Maha Bandha stimulates the entire endocrine system, especially the epiphysis.

Maha bandha (velký zámek)

Ásany ze stoje

Bandha hasta utthanasana

Starting position

Stand in the basic standing position with feet together and arms beside the body (Picture 1).

Action

Cross the wrists in front of the body (Picture 2), inhale and raise the arms above the head, keeping the wrists crossed (Picture 3), exhale and bring the arms to the sides, the palms facing upward (Picture 4), inhale and cross the arms above the head vice versa (Picture 5). Exhale and bring the arms back in front of the body (Picture 6). Repeat 10x.

Precision points

The crown of the head is drawn upward, which leads to the feeling of an extended spine. We breathe regularly and do not lift the shoulders. The speed of the movement is adapted to the rhythm of natural breathing.

Purposes

Asana relieves the tension in the shoulders and in the upper part of the trapezium muscle. It stimulates blood circulation in the head and the pituitary gland. To increase its efficiency, we can breathe using ujjayi pranayama.

Picture 1 – Stand in the basic standing position with feet together and arms beside the body

Picture 2 – Cross the wrists in front of the body

Picture 3 – Inhale and raise the arms above the head, keeping the wrists crossed

Picture 4 – Exhale and bring the arms to the sides, the palms facing upward

Picture 5 – Inhale and cross the arms above the head vice versa

Picture 6 – Exhale and bring the arms back in front of the body

Tiryaka tadasana

Starting position

Stand in the basic standing position with legs apart and arms beside the body, fingers interlocked and palms facing down (Picture 1).

Action

Inhale and raise the hands upwards over the head (Picture 2), exhale and bend sideways to the right (Picture 3), inhale and come back to the center with the arms over the head, exhale and bring the arms down. Repeat the movement to the other side. Repeat 10x at the rhythm of the natural breath.

Precision points

The crown of the head is stretched upward, which leads to the feeling of the extended spine. While bending, unroll the spine fluently throughout its whole length. The pelvis remains stable. We do not lift our shoulders, and keep are the arms locked at the elbows. The speed of the movement is adapted to the rhythm of natural breathing.

Purposes

This asana massages the waist area and balances the imbalances between the right and left sides of the postural muscles. It stimulates the ovaries and adrenals. To increase efficiency, bhastrika pranayama can be breathed while bending. We repeat this move rhythmically 5 times to one side, then we repeat it to the other side.

Picture 1 – Stand in the basic standing position with legs apart and arms beside the body, fingers interlocked and palms facing down

Picture 2 – Inhale and raise the hands upwards over the head

Picture 3 – Exhale and bend sideways to the right

Kati chakrasana

Starting position

Stand in the basic standing position with legs apart and arms beside the body (Picture 1).

Action

Inhale and bring the arms to the sides (Picture 2), exhale and rotate the trunk and head to the left, with eyes following the direction of the rotation (Picture 3). The left arm goes behind the back reached as far as possible, the left hand placed on the right hip. The right hand should be placed on the left shoulder, pushing it slightly (Picture 4). Stay in the pose for 5 breathing cycles, or until you feel fine. Repeat to the other side.

Precision points

The crown of the head is drawn upward, which leads to the feeling of the extended spine. While rotating, make sure to twist gradually from the lower back upward. The pelvis remains stable.

Purposes

This asana relaxes the postural muscles and the muscles of the neck area. It calms the mind, reduces mental tension and stimulates the thyroid gland. To increase efficiency, ujjayi pranayama can be breathed when exercising.

Picture 1 – Stand in the basic standing position with legs apart and arms beside the body

Picture 2 – Inhale and bring the arms to the sides

Picture 3 – Exhale and rotate the trunk and head to the left, with eyes following the direction of the rotation

Picture 4 – The left arm goes behind the back reached as far as possible, the left hand placed on the right hip. The right hand should be placed on the left shoulder, pushing it slightly

Trikonasana

Starting position

Stand in the basic standing position with legs apart and arms stretched out to the sides (Picture 1).

Action

Turn your right foot to the right (Picture 2). Inhale and move your trunk to the right (Picture 3), exhale and bend your right side. Place your right palm on your lower leg and raise your left arm (Picture 4). Stay in the pose for 5 breathing cycles, or until you feel fine. Repeat to the other side.

Precision points

The crown of the head is stretched upward, which leads to the feeling of an extended spine. Keep the pelvis stable. The bend should be without any rotation.

Purposes

This asana stretches the muscles on the sides of the torso and the muscles on the back of the turned leg. It improves digestion and stimulates the organs in the pelvis and the ovaries. To increase efficiency, bhastrika pranayama can be breathed when exercising.

Picture 1 – Stand in the basic standing position with legs apart and arms stretched out to the sides

Picture 2 – Turn your right foot to the right

Picture 3 – Inhale and move your trunk to the right

Picture 4 – Exhale and bend your right side. Place your right palm on your lower leg and raise your left arm

Utthita lolasana

Starting position

Stand in the basic standing position with legs apart and arms beside the body (Picture 1).

Action

Inhale and raise your arms, with your palms facing downward, wrists relaxed and hands dropped forwards (Picture 2). Exhale and bend the upper body forward (Picture 3), keeping your head and arms relaxed. Move your arms as far as possible down between the legs (Picture 4). Inhale and bring the trunk up.

Precision points

The crown of the head is stretched upward, which gives the feeling of an extended spine. Exhale fully, emptying the lungs, breathe through the mouth while making the “haa” sound.

Purposes

This asana stretches the muscles on the back of the thighs. It improves the blood circulation in the abdominal cavity and head, stimulates the workings of the adrenal and pituitary glands. To increase efficiency, bhastrika pranayama can be breathed when exercising, but only through the nose.

Picture 1 – Stand in the basic standing position with legs apart and arms beside the body

Picture 2 – Inhale and raise your arms, with your palms facing downward, wrists relaxed and hands dropped forwards

Picture 3 – Exhale and bend the upper body forward…

Picture 4 – … keeping your head and arms relaxed. Move your arms as far as possible down between the legs

Dolasana

Starting position

Stand in the basic standing position with legs apart and arms beside the body (Picture 1).

Action

Put your hands at the back of your head, with your elbows pointing sideways (Picture 2). Inhale and turn the trunk to the left (Picture 3). Exhale and bend forward, with your forehead approaching or touching your knee (Picture 4). Hold your breath and swing your head and upper torso from one knee to the other one alternately (Picture 5). Finish the exercise on the starting side. Inhale and come up to the starting position. Repeat on the other side, performing once on each side.

Precision points

The crown of the head is stretched upward, which leads to the feeling of an extended spine. High blood pressure and dizziness are contraindications. The time for holding the breath (delay) can vary in length, so the number of swings in that phase is different.

Purposes

This asana stretches the muscles on the back of the thighs. It massages the organs in the abdominal cavity and improves the blood circulation of the head and face. It stimulates the workings of the ovarian and pituitary glands. To increase efficiency, uddiyana bandha can be performed when bending forward.

Picture 1 – Stand in the basic standing position with legs apart and arms beside the body

Picture 2 – Put your hands at the back of your head, with your elbows pointing sideways

Picture 3 – Inhale and turn the trunk to the left

Picture 4 – Exhale and bend forward, with your forehead approaching or touching your knee

Picture 5 – Hold your breath and swing your head and upper torso from one knee to the other one alternately

Vayu nishkasana

Starting position

Stand in the basic standing position with legs apart and arms beside the body (Picture 1).

Action

Move into a deep squat with your feet fully on the mat. Place your palms under/on your feet, with your thumbs over the insteps (Picture 2). Look upward and hold your breath (akashi mudra) for 3 seconds. Then exhale and stretch your knees out. Move into a deep bend (Picture 3), holding your breath for 3 seconds. Inhale and move back into a squat. Repeat 5 times or until it is pleasant.

Precision points

The crown of the head is stretched upward, which leads to the feeling of an extended spine. The breath should be held without over-exerting and should only be used as a breath delay.

Purposes

This asana relaxes the thigh muscles, the knee and shoulder joint areas and the muscles of the neck. It supports the blood circulation in the entire pelvic region, and stimulates the ovaries. In the breath-hold after the inhale, we can include khechari mudra and nasikagra mudra. In the breath-hold after the exhale, we can perform jalandhara bandha. When combined with the mudras and bandhas, the asana supports the workings of the thyroid gland.

Picture 1 – Stand in the basic standing position with legs apart and arms beside the body

Picture 2 – Move into a deep squat with your feet fully on the mat. Place your palms under/on your feet, with your thumbs over the insteps. Look upward and hold your breath (akashi mudra) for 3 seconds

Picture 3 – Then exhale and stretch your knees out. Move into a deep bend

Namaskarasana

Starting position

Stand in the basic standing position with legs apart and arms beside the body (Picture 1).

Action

Move into a deep squat with your feet fully on the mat. Hold your palms in the praying position, with your elbows pushing against the knees (Picture 2). Look upward and hold the breath (akashi mudra) for 3 seconds. Exhale and stretch out your arms, while tilting your head forward. Hold the trunk between the knees (Picture 3), and hold your breath for 3 seconds. Inhale and return to a squat. Repeat 5 times or until it is pleasant.

Precision points

The crown of the head is stretched upward, which leads to the feeling of an extended spine. The breath should be held without over-exerting and should only be used as a breath delay.

Purposes

This asana relaxes the thigh muscles, and improves flexibility in the knees and hips. It supports the blood circulaion in the entire pelvic region, and stimulates the ovaries. It releases any excess gases in the body and helps against the constipation. In the breath-hold after the inhale, we can include khechari mudra and nasikagra mudra. In the breath-hold after the exhale, we can perform jalandhar bandha. When combined with the mudras and bandhas, the asana supports the workings of the thyroid gland.

Picture 1 – Stand in the basic standing position with legs apart and arms beside the body

Picture 2 – Move into a deep squat with your feet fully on the mat. Hold your palms in the praying position, with your elbows pushing against the knees. Look upward and hold the breath (akashi mudra) for 3 seconds

Picture 3 – Exhale and stretch out your arms, while tilting your head forward. Hold the trunk between the knees.

Kashtha takshanasana

Starting position

Stand in the basic standing position with legs apart and arms beside the body (Picture 1).

Action

Move into a deep squat with your weight spread on the whole feet. Inhale, raise your arms and join yours hands together, fingers pointing upwards (Picture 2). Exhale deeply and rapidly, move your arms down until they are just above the ground (Picture 3).

Precision points

The crown of the head is stretched upward, which leads to the feeling of an extended spine. Exhale deeply until the lungs are almost empty. You can exhale through your mouth while making the "haa" sound.

Purposes

This asana releases the thigh muscles, improves mobility in the knee joints and flexibility in the hips. It strengthens the inter-muscular muscles, supports the blood circulation in the pelvic area, and stimulates the ovaries. It helps to release any excess gases, and helps with constipation. To increase efficiency, bhastrica pranayama can be breathed in the pose, but we only breathe through the nose. In this way the asana supports the function of the thyroid gland.

Picture 1 – Stand in the basic standing position with legs apart and arms beside the body

Picture 2 – Move into a deep squat with your weight spread on the whole feet. Inhale, raise your arms and join yours hands together, fingers pointing upwards

Picture 3 – Exhale deeply and rapidly, move your arms down until they are just above the ground

Ashwa sanchalanasana

Starting position

Stand in the basic standing position with feet together and arms beside the body (Picture 1).

Action

Bend forward deeply, and put your palms on the mat next to the feet. Inhale and knee down on your right knee with the toes tackled and look forward (Picture 2). Hold your breath and stay in the pose. Exhale and bring your right leg back to its starting position. From the deep forward bend, perform the asana to the other side. Repeat 10 times.

Precision points

The crown of the head is stretched upward, which leads to the feeling of an extended. The backward step should be sufficiently long. Keep the palms on the mat.

Purposes

This asana releases the tension in the area of the lower back and relaxes the hip joints. It can also be performed by staying in it and breathing naturally or using bhastrika pranayama. In the asana, bhastrika pranayama stimulates the blood circulation in the pelvic area and the workings of the ovaries.

Picture 1 – Stand in the basic standing position with feet together and arms beside the body

Picture 2 – Bend forward deeply, and put your palms on the mat next to the feet. Inhale and knee down on your right knee with the toes tackled and look forward

Ardha Chandrasana

Starting position

Stand in the basic standing position with feet together and arms beside the body (Picture 1).

Action

Bend forward deeply, and put your palms on the mat next to your feet. Inhale and kneel down on your right knee, hold your toes and exhale (Picture 2). Inhale and lift up trunk. Raise your arms, join your palms together with your fingers pointing up. Bend backward slightly (Picture 3), hold your breath and stay in the pose. Exhale and put your palms back beside the front foot. Then perform the asana on the other side. Repeat 10 times on each side.

Precision points

The crown of the head is stretched upward, which leads to the feeling of an extended spine. The backward step should be long and the bend backward is fluent throughout the whole spine.

Purposes

This asana stretches the muscles along the spine, relieves the tension in the hips and shoulders, and improves stability. It can also be performed by kneeling and breathing naturally or using ujjayi pranayama. The Ujjayi type of breathing increases the impact on the pituitary gland.

Picture 1 – Stand in the basic standing position with feet together and arms beside the body

Picture 2 – Bend forward deeply, and put your palms on the mat next to your feet. Inhale and kneel down on your right knee, hold your toes and exhale

Picture 3 – Inhale and lift up trunk. Raise your arms, join your palms together with your fingers pointing up. Bend backward slightly

Asanas from the Sitting Position

Veerasana

Starting position

Sit on heels, with hands relaxed on thighs (Picture 1).

Action

While sitting on your right heel, bend your left leg. Then place your left elbow on your left knee and support your head with your left hand (Picture 2). Hold your breath for 10 breathing cycles or until it is pleasant. Repeat for the right side of the body.

Precision points

We breathe naturally. To achieve deeper serenity, ujjayi pranayama can be performed.

Purposes

This asana is relaxing and calms the mind. It improves the concentration and stimulates the adrenal glands and ovaries. To increase the effect on gland secretion, bhastrika pranayama can be used.

Picture 1 – Sit on heels, with hands relaxed on thighs

Picture 2 – While sitting on your right heel, bend your left leg. Then place your left elbow on your left knee and support your head with your left hand

Shashankasana

Starting position

Sit on heels, with hands relaxed on thighs (Picture 1).

Action

Inhale and bend forward. Place your forehead on the mat, with your arms relaxed beside your head (Picture 2). Hold your breath for 3 seconds. Inhale and stretch your trunk and arms. Exhale and move back to the starting position. Repeat 5 times.

Precision points

The head touches the mat at the same time as the forearms. After exhaling, when the bending forward, uddiyana bandha can be performed while holding breath. We can hold breath for several seconds.

Purposes

This asana releases any spinal tension, and stimulates the workings of the adrenals and ovarians. It is suitable for relieving constipation problems.

Picture 1 – Sit on heels, with hands relaxed on thighs

Picture 2 – Inhale and bend forward. Place your forehead on the mat, with your arms relaxed beside your head

Shashank bhujangasana

Starting position

Sit on heels, with hands relaxed on thighs (Picture 1).

Action

Inhale and raise your arms. Exhale and bend forward deeply, place your forehead on the mat (Picture 2). Inhale and tilt the head backward (Picture 3). Exhale amd move the torso just above the ground (Picture 4) forward to the lying position, keep the elbows close to your body (Picture 5). The hand position remains the same at all times. Inhale and tilt the torso backward (Picture 6). Exhale and return to the starting position. Repeat 7 times.

Precision points

We engage the back muscles actively when performing the backward bend. The arms work symmetrically, the feet are in contact with the mat all the time.

Purposes

This asana releases spinal tension, and stimulates the function of the adrenals and ovarians. It is suitable for relieving problems associated with menstrual irregularities.

Picture 1 – Sit on heels, with hands relaxed on thighs

Picture 2 – Inhale and raise your arms. Exhale and bend forward deeply, place your forehead on the mat

Picture 3 – Inhale and tilt the head backward

Picture 4 – Exhale amd move the torso just above the ground …

Picture 5 – … forward to the lying position, keep the elbows close to your body

Picture 6 – The hand position remains the same at all times. Inhale and tilt the torso backward

Supta Vajrasana

Starting position

Sit on heels, with hands relaxed on thighs (Picture 1).

Action

Bend backward in a deep curve and place your forearms on the mat. Tilt your head back, place the crown of your head on the mat and the palms on your thighs (Picture 2). Stay in the pose for 10 breaths or until it is pleasant.

Precision points

Breathe naturally.

Purposes

This asana improves spine flexibility, stretches the abdominal muscles and improves digestion. It deepens the breathing and stimulates the thyroid gland. Ujjayi pranayama increases the effect of the pose on the thyroid gland, if performed in the asana.

Picture 1 – Sit on heels, with hands relaxed on thighs

Picture 2 – Bend backward in a deep curve and place your forearms on the mat. Tilt your head back, place the crown of your head on the mat and the palms on your thighs

Eka padottanasana

Starting position

Sit on heels, with hands relaxed on thighs (Picture 1).

Action

Sit down beside your left foot and stretch your right leg. Interlock the fingers behind your right foot. Keep your torso upright and your right leg stretched out (Picture 2). Stay in the pose for 10 breaths or until it is pleasant. Then repeat on the other side.

Precision points

Keep the trunk upright, the knee and instep of your bent leg on the mat, and breathe naturally.

Purposes

This asana stretches the muscles on the back of the thighs and improves the flexibility of the hip joints. When using bhastrika pranayama, the adrenal glands and ovarians are stimulated.

Picture 1 – Sit on heels, with hands relaxed on thighs

Picture 2 – Sit down beside your left foot and stretch your right leg. Interlock the fingers behind your right foot. Keep your torso upright and your right leg stretched out

Paschimottasanasa

Starting position

In the basic sitting position, with hands on the mat (Picture 1).

Action

Bend forward deeply, gripping the toes of your feet with your forefingers and middle fingers. Place your head on your knees (Picture 2). Stay in the pose for 10 breaths, or until it is pleasant.

Precision points

The knees are locked or slightly bent. Breathe naturally.

Purposes

This asana stretches the muscles on the back of the thighs and improves the flexibility of the hip joints. When using bhastrika pranayama, the pancreas, adrenal glands and ovarians are stimulated.

Picture 1 – In the basic sitting position, with hands on the mat

Picture 2 – Bend forward deeply, gripping the toes of your feet with your forefingers and middle fingers. Place your head on your knees

Chakki chalanasana

Starting position

In the basic sitting position, with hands on the mat (Picture 1).

Action

Put your legs apart and stretch your arms forward, with your palms connected and fingers interlocked. Rotate your torso to the right and lean forward so that your arms move horizontally (Picture 2). Exhale and and move your torso to the left (Picture 3). Sit upright and lean back still turned to the left (Picture 4). Start turning to the right. Exhale and start leaning forward. Repeat 5 times on each side.

Precision points

The pose resembles a turning mill wheel. The arms remain locked at the elbows when horizontal, as do the knees. The arms make as large a circle as possible. Breathe naturally.

Purposes

This asana stretches the muscles on the back of the thighs and stimulates the ovaries.

Picture 1 – In the basic sitting position, with hands on the mat

Picture 2 – Put your legs apart and stretch your arms forward, with your palms connected and fingers interlocked. Rotate your torso to the right and lean forward so that your arms move horizontally

Picture 3 – Exhale and and move your torso to the left

Picture 4 – Sit upright and lean back still turned to the left start turning to the right

Nauka sanchalanasana

Starting position

In the basic sitting position, with hands on the mat (Picture 1).

Action

Exhale and bend forward deeply, put your hands in adhi mudra and touch your toes with your finger joints (Picture 2). Inhale and lean backward. Fold your arms at the elbows and place your fists on your chest (Picture 3). While moving forward and backward, move your fists in an ellipse. Repeat 10 times.

Precision points

The pose resembles rowing. Breathe naturally and keep the knees locked.

Purposes

This asana stretches the muscles on the back of the thighs and improves the flexibility of the hip joints. It relieves constipation and stimulates the ovaries.

Picture 1 – In the basic sitting position, with hands on the mat

Picture 2 – Exhale and bend forward deeply, put your hands in adhi mudra and touch your toes with your finger joints

Picture 3 – Inhale and lean backward. Fold your arms at the elbows and place your fists on your chest

Gatyatmak paschi

Starting position

In the basic sitting position, with hands on the mat (Picture 1).

Action

Place your hands at the back of the head. Inhale and tilt your head back (Picture 2). Exhale and lean forward. Put your interlocked fingers on your feet (Picture 3). Stay in the pose and hold your breath for 3 seconds. Inhale and bring your torso back to the basic sitting position (Picture 4). Exhale and lie down, with your hands still at the back of your head (Picture 5). Stay in the pose and hold your breath for 3 seconds. Repeat 5-10 times.

Precision points

Keep the spine upright and breathe naturally, keeping the knees locked.

Purposes

This asana activates the metabolism, stretches the muscles on the back of the thighs and improves the flexibility of the hip joints. It stimulates the pancreas, adrenal glands and ovaries.

Picture 1 – In the basic sitting position, with hands on the mat

Picture 2 – Place your hands at the back of the head. Inhale and tilt your head back

Picture 3 – Exhale and lean forward. Put your interlocked fingers on your feet

Picture 4 – Inhale and bring your torso back to the basic sitting position

Picture 5 – Exhale and lie down, with your hands still at the back of your head

Ardha matsyendrasana

Starting position

In the basic sitting position, with hands on the mat (Picture 1).

Action

Bend your left leg and then bend your right leg over your left (Picture 2). Hug your right leg with your left arm and rest your right hand on the mat, turning your torso to the right and looking back (Picture 3). Stay in the pose for 10 breaths, or until it is pleasant. Then repeat on other side.

Precision points

Keep the spine upright and breathe naturally.

Purposes

This asana activates the metabolism, stretches the muscles on the back of the thighs and improves the flexibility of the hip joints. It stimulates the pancreas, adrenal glands and ovaries.

Picture 1 – In the basic sitting position, with hands on the mat

Picture 2 – Bend your left leg and then bend your right leg over your left

Picture 3 – Hug your right leg with your left arm and rest your right hand on the mat, turning your torso to the right and looking back

Marjariasana

Starting position

Sit on heels, with hands relaxed on thighs (Picture 1).

Action

Inhale and raise your arms. Exhale and bend forward, place your forehead on the mat (Picture 2). Inhale and move onto all fours (Picture 3). Exhale and bend the back upward (Picture 4). Inhale and bend your back down (Picture 5). Repeat 5 times. Then change the breathing around. Inhale and bend the back upward, exhale and bend the back down. Repeat 5 times.

Precision points

While kneeling, the hips are above the knees, the shoulders above the wrists. In the pose, we actively push away from the mat. The spine unfolds gradually, always from the coccyx to the neck. Breathe naturally.

Purposes

This asana releases the tension of the spine and stimulates the adrenal glands and ovaries. It is suitable for relieving painful menstruations. To increase the effect, it is possible to perform udjána bandha while bending the spine upward and exhaling. While bending the spine downward and inhaling, khechati or nasikagra mudra can be performed.

Picture 1 – Sit on heels, with hands relaxed on thighs

Picture 2 – Inhale and raise your arms. Exhale and bend forward, place your forehead on the mat

Picture 3 – Inhale and move onto all fours

Picture 4 – Exhale and bend the back upward

Picture 5 – Inhale and bend your back down

Vyaghrasana

Starting position

Sit on heels, with hands relaxed on thighs (Picture 1).

Action

Inhale and raise your arms. Exhale and bend forward, place your forehead on the mat (Picture 2). Inhale and move onto all fours (Picture 3). Exhale and bend your back upward, cross your right leg under your body (Picture 4). Inhale and bend your back down, lift the right leg up (Picture 5). Repeat 5 times on both sides.

Precision points

While kneeling, the hips are above the knees, the shoulders above the wrists. In the pose, we actively push away from the mat. The spine unfolds gradually, always from the coccyx to the neck. We breathe naturally.

Purposes

This asana releases the tension of the spine and stimulates the adrenal glands and ovaries. It is suitable for relieving painful menstruations. It helps the digestion and improves the blood circulation. To increase the effect, khechati or nasikagra mudras can be performed in the backward bend after inhaling and the breath can be held for 3 seconds.

Picture 1 – Sit on heels, with hands relaxed on thighs

Picture 2 – Inhale and raise your arms. Exhale and bend forward, place your forehead on the mat

Picture 3 – Inhale and move onto all fours

Picture 4 – Exhale and bend your back upward, cross your right leg under your body

Picture 5 – Inhale and bend your back down, lift the right leg up

Ushtrasana

Starting position

Sit on heels, with hands relaxed on thighs (Picture 1).

Action

Lift your torso upright (Picture 2). Lean backwards and put your hands on your heels, pushing your pelvis forward (Picture 3). Stay in the pose for 10 breaths, or until it is pleasant.

Precision points

In the pose, the spine is evenly bent backward, the pelvis pushed forward, and the buttocks relaxed. Breathe naturally.

Purposes

Thia asana improves digestion, and relieves constipation and menstrual problems. While using ujjayi pranayama, it stimulates the working of the thyroid gland.

Picture 1 – Sit on heels, with hands relaxed on thighs

Picture 2 – Lift your torso upright

Picture 3 – Lean backwards and put your hands on your heels, pushing your pelvis forward

Sirshasana

Starting position

Sit on heels, with hands relaxed on thighs (Picture 1).

Action

Bend forward and place the forearms on the mat with the fingers intertwined (Picture 2). Place the top of the head on the intertwined fingers (Picture 3). Move forward and lift your buttocks up (Picture 4). Walk towards the head and move the center of gravity above the head and elbows. Lift the legs, they are in front of the trunk still slightly bent (Picture 5). Move the legs from the front of the body to the back (Picture 6). In the last phase, stretch the legs out in the last phase, the whole body is vertical (Picture 7). Stay in the pose for 30 breaths or until it is pleasant.

Precision points

The spine is upright, and the head must be tilted neither forward nor backward. The weight is spread between the head and both forearms evenly. Once the position mastered, the weight can be moved to the head more. Breathe naturally. The correct execution of this asana is demanding. In order to perform it correctly and effectively from a health point of view, its practice requires a careful preparation and long-term training under the expert guidance.

Purposes

This asana improves the mood, and helps relieve the anxiety and other psychological disorders associated with a hormonal imbalance. It accelerates the regeneration, adjusts diaphragm breathing in the exhalation phase. It stimulates the nervous and endocrine system generally.

Picture 1 – Sit on heels, with hands relaxed on thighs

Picture 2 – Bend forward and place the forearms on the mat with the fingers intertwined

Picture 3 – Place the top of the head on the intertwined fingers

Picture 4 – Move forward and lift your buttocks up

Picture 5 – Walk towards the head and move the center of gravity above the head and elbows. Lift the legs, they are in front of the trunk still slightly bent

Picture 6 – Move the legs from the front of the body to the back

Picture 7 – In the last phase, stretch the legs out in the last phase, the whole body is vertical

Asanas from the lying position

Supta pawanmuktasana

Starting position

Lying position (Picture 1).

Action

Exhale and cross the right leg. Hold the knee with the intertwined fingers, the head leaned forward (Picture 2). Breathe 5 times and repeat on the other side. Then inhale and move back to the starting position. Exhale and cross both legs, pull them towards the chest, the head tilted forward (Picture 3). Breathe 10 times.

Precision points

It is important to start with the right leg as we compress the ascending part of the large intestine. The left leg then compresses its descending part. The stretched leg is in contact with the mat all the time. If possible, the forehead touches the knee. We breathe naturally.

Purposes

This asana stretches the area of the lower back and improves the digestion. It relieves of the constipation and menstrual problems, and stimulates the ovaries.

Picture 1 – Lying position

Picture 2 – Exhale and cross the right leg. Hold the knee with the intertwined fingers, the head leaned forward

Picture 3 – Breathe 5 times and repeat on the other side. Then inhale and move back to the starting position. Exhale and cross both legs, pull them towards the chest, the head tilted forward

Jhulana lurhakanasana

Starting position

Lying position (Picture 1).

Action

Exhale and cross both legs, the intertwined fingers hold the knees, the head tilted forward (Picture 2). Inhale and turn to the right while exhaling (Picture 3). Inhale and return back. Exhale and turn to the left (Picture 4). Repeat 5 times to each side. Inhale again and swing backwards to the cradle (Picture 5). Then swing forward (Picture 6). Repeat 10 times.

Precision points

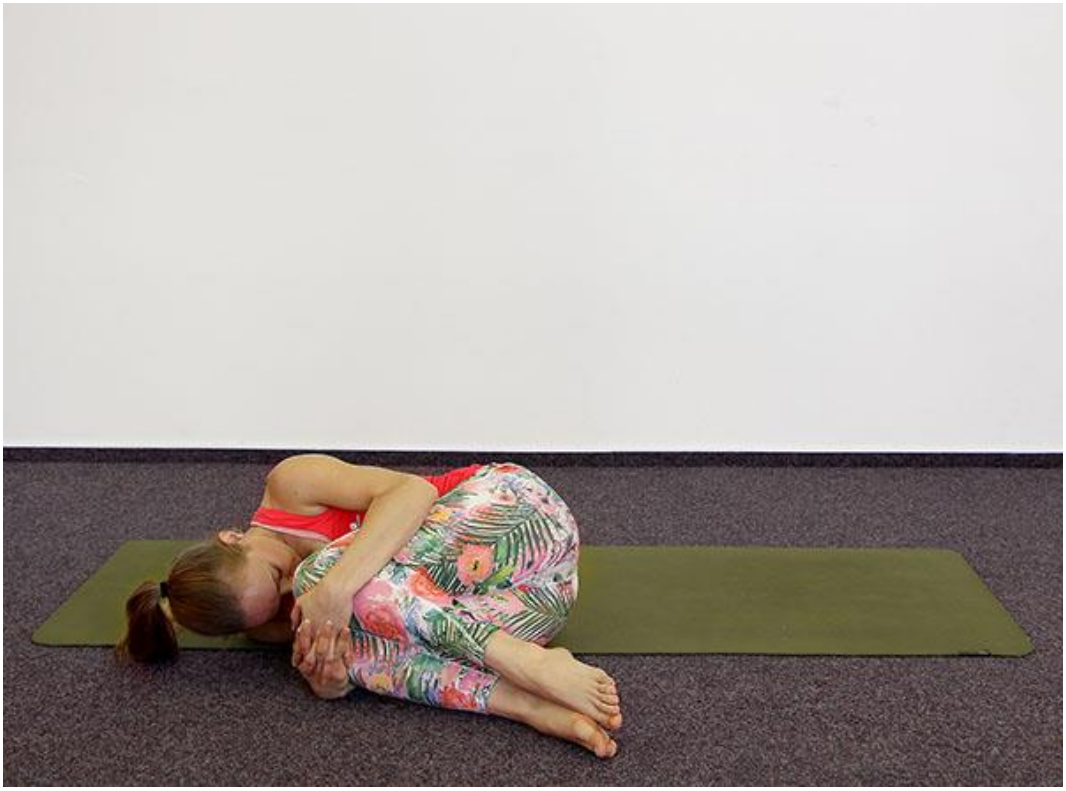
When rocking back, keep the head above the ground. It is advisable to use a softer mat to avoid bruising on the spine. We breathe naturally.

Purposes

This asana stretches the area of the lower back and improves the digestion. It relieves of the constipation and menstrual problems, and stimulates the ovaries.

Picture 1 – Lying position

Picture 2 – Exhale and cross both legs, the intertwined fingers hold the knees, the head tilted forward



Picture 3 – Inhale and turn to the right while exhaling

Picture 4 – Inhale and return back. Exhale and turn to the left. Repeat 5 times to each side

Picture 5 – Inhale again and swing backwards to the cradle

Picture 6 – Then swing forward

Supta udarakarshanasana

Starting position

Lying position (Picture 1).

Action

Put the hands at the back of the head. Bend the legs at the knees and lift them up (Picture 2). Exhale and turn the legs to the right and the head to the left (Picture 3). Stay in the position and breathe for 3s or until it is fine. Inhale and return to the lying position. Then perform to the other side.

Precision points

The spinal rotation is performed throughout its whole length, the blades and elbows remain in contact with the ground all the time. The knees are connected. We breathe naturally.

Purposes

This asana releases the muscles along the spine. It relieves of the constipation and menstrual problems and stimulates the adrenal glands and the pancreas.

Picture 1 – Lying position

Picture 2 – Put the hands at the back of the head. Bend the legs at the knees and lift them up

Picture 3 – Exhale and turn the legs to the right and the head to the left

Naukasana

Starting position

Lying position (Picture 1).

Action

Lift your stretched arms above your body, join your palms together and point your fingers towards your feet. Inhale and bend forward slightly, lift your leg just above the mat (Picture 2). Hold your breath and stay in the position for 3 seconds. Exhale and move back to the starting position.

Precision points

The fingers point to the toes, the shoulders and heels do not rise more than 20 cm above the mat. It is advisable to perform the asana before relaxing. The lower back should be placed on the mat.

Purposes

This asana releases a mental tension. It stimulates the whole nervous and endocrine systems. To increase the effect, jalandhara bandha can be performed in the pose.

Picture 1 – Lying position

Picture 2 – Lift your stretched arms above your body, join your palms together and point your fingers towards your feet. Inhale and bend forward slightly, lift your leg just above the mat

Bhujangasana

Starting position

Lying position on the belly (Picture 1).

Action

Put your palms and chin on the mat beside the shoulders (Picture 2). Lean backwards while actively engaging the back muscles (Picture 3). Stay in the position and breathe 5 times. Then exhale and relax your body back on the mat.

Precision points

The coccyx remains in contact with the mat at all times. The feet are in contact with each other all the time.

Purposes

This asana releases spinal tension and stimulates the working of the thyroid gland, adrenal glands and ovaries. It hepls to keep the correct position of the uterus. It is suitable for relieving problems associated with menstrual irregularities and painful menstruation. To increase the effect, we can use ujjayi pranayama.

Picture 1 – Lying position on the belly

Picture 2 – Put your palms and chin on the mat beside the shoulders

Picture 3 – Lean backwards while actively engaging the back muscles

Sarpasana

Starting position

Lying position on the belly (Picture 1).

Action

Interlock your fingers behind your back and put your chin on the mat. Lean backward, while looking forwards. Stretch your arms (Picture 2). Stay in the position and breathe 5 times. Then exhale and relax the body back on the mat.

Precision points

Pull the shoulders down and the blades towards each other, the head remains in the extension of the spine.

Purposes

This asana releases spinal tension and stimulates the workings of the thyroid gland, adrenal glands and ovaries. It helps to keep the correct position of the uterus. It is suitable for relieving problems associated with menstrual irregularities and painful menstruation. To increase the effect, we can use ujjayi pranayama.

Picture 1 – Lying position on the belly

Picture 2 – Interlock your fingers behind your back and put your chin on the mat. Lean backward, while looking forwards. Stretch your arms

Ardha shalabhasana

Starting position

Lying position on the belly (Picture 1).

Action

Place your hands, with your palms faced down, under the torso. Lock your arms at the elbows and rest your chin on the mat (Picture 2). Stretch your left leg to your back and tilt your head backwards, while looking forwards (Picture 3). V zádrži dechu setrváme v pozici 3 s. Stay in the pose and hold your breath for 3 seconds. Exhale and bring your leg and head back. Repeat on the other side. Repeat 5 times.

Precision points

To support the peristalsis, stretch the left leg to the back first.

Purposes

This asana releases the tension in the pelvic area. It improves the digestion and excreting. It strengthens the back muscles and gluteuses, stimulates the function of the thyroid gland, adrenal glands and pancreas. To increase the effect, we can use ujjayi pranayama.

Picture 1 – Lying position on the belly

Picture 2 – Place your hands, with your palms faced down, under the torso. Lock your arms at the elbows and rest your chin on the mat

Picture 3 – Stretch your left leg to your back and tilt your head backwards, while looking forwards

Dhanurasama

Starting position

Lying position on the belly (Picture 1).

Action

Bend your legs back and hold your insteps (Picture 2). Inhale and push the insteps into your hands. Hold your breath and bend your torso backwards (Picture 3). Stay in the position for 5 breaths. Then exhale, and bring the body back on the mat. Repeat 3 times.

Precision points

The arms are locked at the elbows and the body is relaxed. Only the leg muscles work.

Purposes

This asana releases the tension in the pelvic area. It improves digestion and excreting. It strengthens the back muscles and gluteuses, while stimulating the workings of the thyroid gland, adrenal glands and pancreas. To increase the effect, we can use ujjayi pranayama.

Picture 1 – Lying position on the belly

Picture 2 – Bend your legs back and hold your insteps

Picture 3 – Inhale and push the insteps into your hands. Hold your breath and bend your torso backwards

Hasta padangushthasana

Starting position

Lying position on the belly (Picture 1).

Action

Lie on the left side, with your arms strechted out and your palms connected (Picture 2). Inhale and lift up your right arm and leg, place the right hand on the knee (Picture 3). Exhale and bring the leg and arm down. This is a balance position. Repeat 10 times on each side.

Precision points

The body is firm, the limbs are locked at all joints. Make sure not to bend forward or backward.

Purposes

This asana improves the hip flexibility. It strengthens the back and core muscles. It helps to keep the correct position of the uterus and stimulates the workings of the ovaries.

Picture 1 – Lying position on the belly

Picture 2 – Lie on the left side, with your arms strechted out and your palms connected

Picture 3 – Inhale and lift up your right arm and leg, place the right hand on the knee

Kandharasana

Starting position

Lying position (Picture 1).

Action

Bend your legs and grab your ankles (Picture 2). Inhale and push your feet into the mat, lift your pelvis and torso as high as possible (Picture 3). Exhale and bring the torso back onto the mat. Repeat 5 times.

Precision points

The hands hold the ankles firmly. Lift the spine gradually.

Purposes

This asana releases the entire spine and stretches the area of the chest muscles and the shoulders. It improves the digestion and the breathing stereotype. It is suitable for relieving problems associated with menstrual irregularities and painful menstruation. It stimulates the workings of the ovarian and thyroid glands. To increase the effect, jalandhara bandha can be performed in the pose.

Picture 1 – Lying position

Picture 2 – Bend your legs and grab your ankles

Picture 3 – Inhale and push your feet into the mat, lift your pelvis and torso as high as possible

Sarvangasana

Starting position

Lying position (Picture 1).

Action

Inhale, use your abdominal muscles and raise your legs, allow them to sweep over your head until your toes touch the floor. Put your stretched arms on the mat, with your fingers intertwined (Picture 2). Bend your arms and place your hands on your back. Inhale again and raise your legs holding your waist with your palms. Then lower your legs vertically to the ground (Picture 3). Breathe 15 times.

Precision points

The hands support the back. Do not transport the weight on the head and neck only. When mastering the asana, we can stay there for up to 5 minutes.

Purposes

This asana improves the blood circulation in the legs and relieves difficulties in varicose veins. It regulates the digestion and mobilizes the immune system. It stimulates the entire endocrine system, especially the pituitary gland, the thyroid gland and parathyroid glands.

Picture 1 – Lying position

Picture 2 – Inhale, use your abdominal muscles and raise your legs, allow them to sweep over your head until your toes touch the floor. Put your stretched arms on the mat, with your fingers intertwined

Picture 3 – Bend your arms and place your hands on your back. Inhale again and raise your legs holding your waist with your palms. Then lower your legs vertically to the ground

Halasana

Starting position

Lying position (Picture 1).

Action

Inhale, use your abdominal muscles and raise your legs, allow them to sweep over your head until your toes touch the floor. Place your stretched arms on the mat, with your fingers intertwined (Picture 2). Breathe 15 times.

Precision points

The hands support the back. Do not transfer the weight onto the head or neck only. When mastering the asana, we can stay there for up to 5 minutes. After performing halasana, it is advisable to perform ushtrasana or supta vajrasana as compensatory asanas. To increase the effect, it is possible to use ujjayi pranayama.

Purposes

This asana improves the digestion and mobilizes the immune system. It stimulates the adrenal glands, pancreas, thyroid, and parathyroid glands.

Picture 1 – Lying position

Picture 2 – Inhale, use your abdominal muscles and raise your legs, allow them to sweep over your head until your toes touch the floor. Place your stretched arms on the mat, with your fingers intertwined

Druta halasana

Starting position

Lying position (Picture 1).

Action

Inhale, use your abdominal muscles and raise your legs, allow them to sweep over your head until your toes touch the floor, grabbing your toes with your hands (Picture 2). Return back to the starting lying position, and then continue to bend forward (Picture 3). Inhale and go back to the lying position. Repeat 10 times.

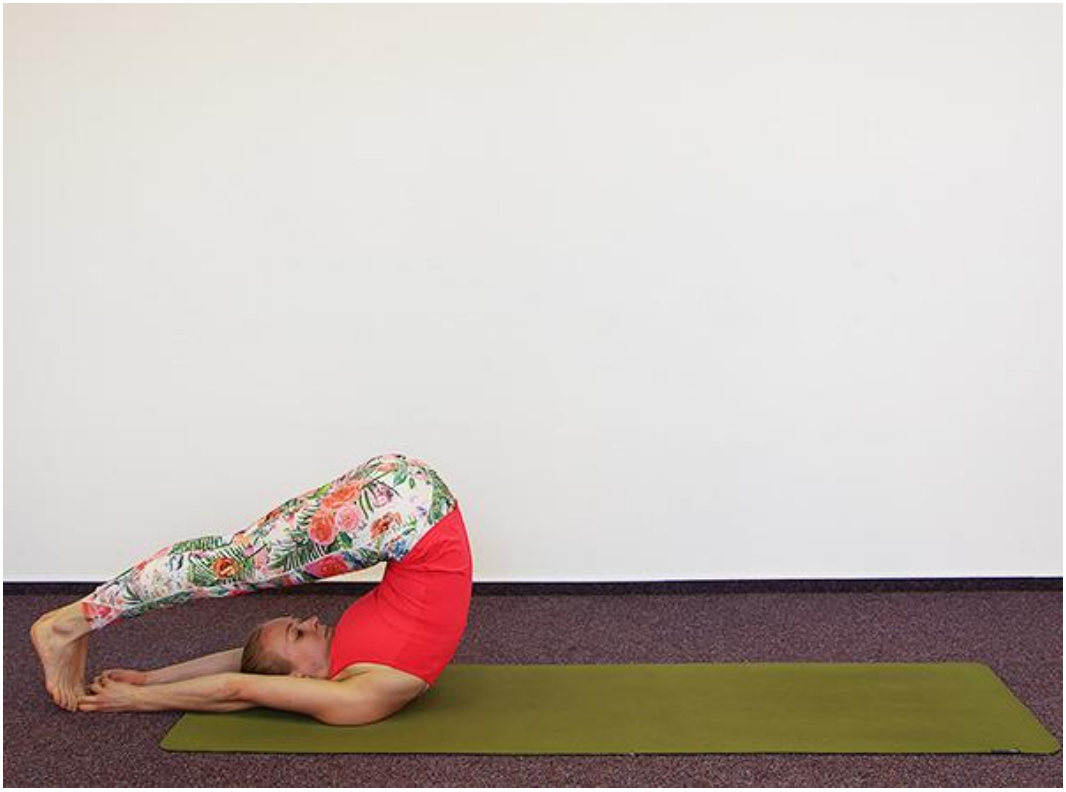
Precision points

Breathe naturally. Do not transfer the weight onto the head or neck only. After performing druta halasana, it is advisable to perform ushtrasana or supta vajrasana as compensatory asanas. Breathe naturally. To increase the effect, it is possible to use ujjayi pranayama.

Purposes

This asana improves the digestion and peristalsis. It relieves constipation and stimulates the adrenal glands, pancreas, thyroid, and parathyroid glands.

Picture 1 – Lying position



Picture 2 – Inhale, use your abdominal muscles and raise your legs, allow them to sweep over your head until your toes touch the floor, grabbing your toes with your hands

Picture 3 – Return back to the starting lying position, and then continue to bend forward

Relaxing Techniques

The relaxation state is the same as the state of release. The ability to relax on a physical and mental level is one of the highest peaks in yoga. In yoga, relaxation is understood as a feeling of being inside the body and being detached from the outside world. It is a springboard for meditation. Through relaxation, the body and the mind can get rid of fatigue and exhaustion. Accompanying symptoms of relaxation include the decreased muscle tension, blood flow and body temperature (by to 2°C), slowing of the pulse, respiratory rate and metabolism. The frequency of brain waves decreases to the alpha level (7-14 Hz), in deep relaxation states to the level of theta (4-7 Hz). Unlike deep sleep with the delta level (1-4 Hz), relaxation is a waking state.

Relaxation can be practiced separately or within a class – at its beginning or end, but also during a class. It is important to choose a convenient and comfortable pose. The place where we relax should be warm, quiet and safe. The relaxation time depends on how advanced clients are. More advanced yogis can practise it longer. The body should be restful and still. The basic relaxation asanas include the corpse pose (Shavasana) and flapping fish pose (Matsya kridasana).

Types of Relaxation

Relaxation with the awareness of individual parts of the body

Attention gradually focuses on specific places of the body, using the idea of tension and relaxation. To induce the tension, we can use gentle motions. We recommend starting in the lower limbs and continuing through the trunk to the head.

Relaxation with the awareness of the heaviness/inner lightness of the body

Attention gradually focuses on the individual parts of the body. In these parts, we create a feeling of heaviness, then lightness. The idea of heaviness can be induced with the attention focused on the contact of the individual body parts with the mat.

Relaxation concentrating on breathing

Attention focuses on breathing, which we do not influence intentionally. We notice where the breath comes from and where it flows. It is advisable to start to follow breathing through the nose, where it is easier to feel. We can concentrate on the breathing temperature, moisture, or sounds accompanying inhales and exhales. The breath can be gradually observed down to the lower extremities.

Relaxation concentrating on breathing movements

Attention focuses on the movements rhythmically accompanying breathing. We can lay palms on the body parts in which we observe the breathing movements (the belly, chest, back, etc.). We follow the expanding and shrinking movements in the selected parts. In this way, the breathing movements can also be felt in the lower extremities.

Relaxation concentrating on mantras

Attention first focuses on the rhythm of breathing. Then we begin the inner or silent recitation of a mantra. Short mantras are recommended to be used. The ones lasting one breath cycle are ideal, such as "So Ham" or "Om". Recitation of mantras is one of the most effective relaxation techniques.

Relaxation with visualization

Visualizing or recalling images or ideas in the mind is a very frequent type of relaxation. We can work with the idea of the sea, a beach and many other places. We can enjoy the pleasant feelings we experienced when we first saw the sea, felt a salty wind, climbed a hill, experienced a sunrise or sunset, etc. It is advisable to choose neutral and safe images to avoid any unpleasant or traumatic experiences (if they saw a person drowning in the sea in their childhood, they may feel anxiety).

Meditation Techniques

Meditation is an advanced technique built on the mastered ability to concentrate and relax deeply. The basics of meditation is the awareness of the present moment resembling the state of sleep, but with the mind awake. We do not remember or plan anything.

In the meditative state, the mind does not need any phenomena or objects, and it stays in general observation. The mind is the one who observes, but it is also the object of the observation. This state is called dhyana in yoga, the observer blends with the object of observation and with observation itself.

When meditating, ideas or thoughts may enter the mind. If we do not pay attention to them, they slowly fade away. There may also be feelings of levitation, head turning, body swinging or leaving the body. These phenomena accompany the changed state of consciousness.

From the physiological angle, many changes take place in the body during relaxation, such as a reduction in muscle tension and blood flow, a fall in body temperature, a slowing of the pulse, the respiratory rate and the metabolism. The frequency of brain waves drop to alpha level (7-14 Hz).

At the psychological level, meditation can have beneficial effects on releasing anxiety and reducing stress. It improves our sleep, relieves insomnia, and helps to gain emotional stability.

Asanas for Meditation

Sukhasana

Starting position

In the basic sitting position, with palms on the mat (Picture 1).

Action

Cross your left leg, placing it under your right thigh. Then cross your right leg, placing it under your left thigh. Put your hands on your knees (Picture 2).

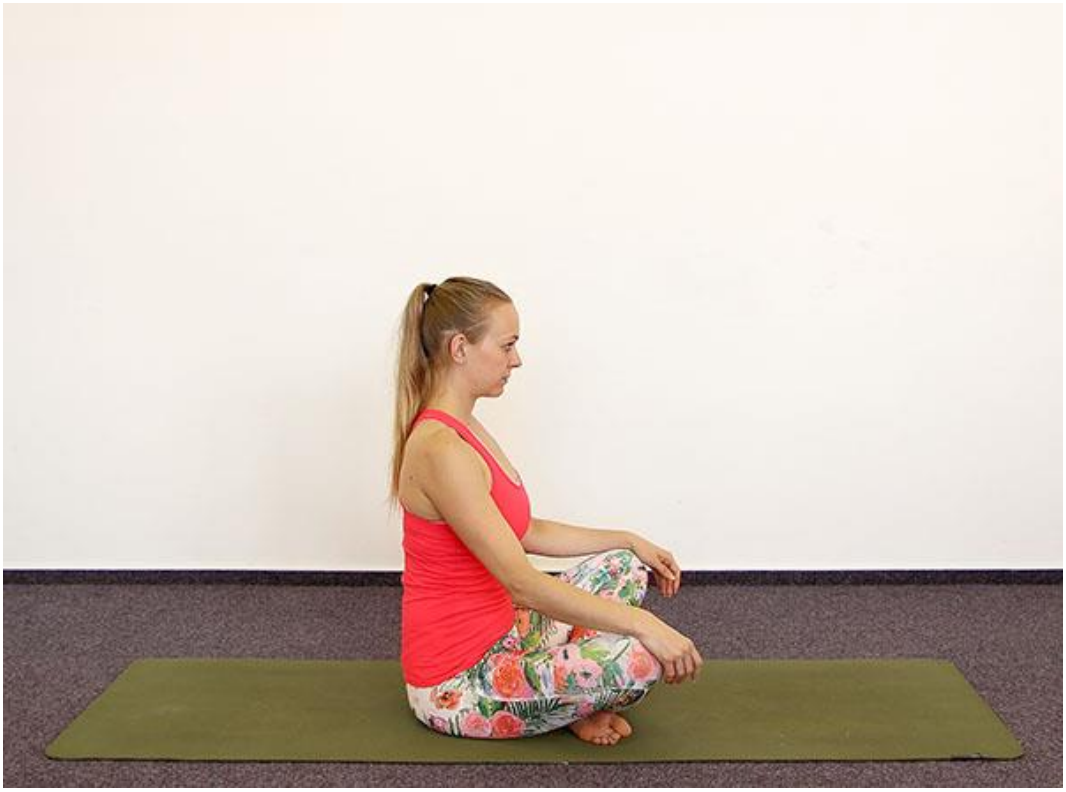
Precision points

Pay attention to the upright spine. The asana prepares for more advanced meditation poses. Since only a small part of the sitting area touches the mat, it is exhausting for long-lasting meditations.

Purposes

This asana relieves the hip, knee and ankle joints, while accelerating the blood circulation in the pelvis and calming the mind.

Picture 1 – In the basic sitting position, with palms on the mat



Picture 2 – Cross your left leg, placing it under your right thigh. Then cross your right leg, placing it under your left thigh. Put your hands on your knees

Vajrasana

Starting position
Sitting on heels, with hands resting on thighs.

Action
Sit on your heels, and put your hands on your thighs (Picture 1).

Precision points
We pay attention to the upright spine. The asana prepares for more advanced meditation poses.

Purposes
This asana relaxes the spine, improves the digestion and stimulates the sexual organs.

Picture 1 – Sit on your heels, and put your hands on your thighs.

Padmasana

Starting position
In the basic sitting position, with palms on the mat (Picture 1).

Action
Cross the right leg, using your hands to place the outer side of the right foot on the thigh of the left leg. The instep is on the groin and the foot turned upward. Then place your left foot on your right thigh in a similar way. Keep the knees on the ground. Place your hands on your knees and form the gjan mudra. Tilt the head forward slightly (Picture 2).

Precision points

Be careful to keep the spine upright. Do not force your feet onto your tighs agressively. Only practise in the asana if you are able to place your feet there without using hands.

Purposes

This asana has a healing impact on the whole organism. It calms the mind and deepens the meditive state.

Picture 1 – In the basic sitting position, with palms on the mat

Picture 2 – Cross the right leg, using your hands to place the outer side of the right foot on the thigh of the left leg. The instep is on the groin and the foot turned upward. Then place your left foot on your right thigh in a similar way. Keep the knees on the ground. Place your hands on your knees and form the gjan mudra. Tilt the head forward slightly.

Dhyana veerasana

Starting position

In the basic sitting position, with palms on the mat (Picture 1).

Action

Cross the left leg, putting your left heel next to your right buttock, while keeping the instep on the mat. Then cross your right leg, placing it in a similar way beside your left buttock. Keep your knees above each other. Put your hands on your knees (Picture 2).

Precision points

Be careful to keep the spine upright and to breathe regularly.

Purposes

This asana stimulates the ovaries and other sexual organs. It also influences the metabolism. It is recommended as a prevention of diabetes.

Picture 1 – In the basic sitting position, with palms on the mat

Picture 2 – Cross the left leg, putting your left heel next to your right buttock, while keeping the instep on the mat. Then cross your right leg, placing it in a similar way beside your left buttock. Keep your knees above each other. Put your hands on your knees.

Types of Meditation

Meditation concentrating on the motionlessness of the body

This technique can be performed in any meditation asana, with the hands possibly in gján mudra. We select a pose, make sure it is comfortable and stay in it for 30 minutes without moving. The only movements are the ones related to breathing. We start by focussing on the rhythm of breathing. If there is any need to move, we only register and observe it, but we do not move. We feel that our body is solid (e.g. like stone, plaster or concrete). Then we observe any changes in the depth of breathing and its rhythm. We perceive the gradual calming and silencing the mind. We remain in this resting state until the end of meditation. We finish the technique with three repetitions of the mantra "Om".

Meditation Ajapa Japa

The technique can be performed in any meditation asana. It works with breathing and mantra repetition ("So Ham" or "Om"). We focus our attention on repeating the chosen mantra, the rhythm of its sound. We repeat the mantra in the rhythm of our natural breath. After a certain period of time, we do not need to repeat the mantra any more, it begins to resonate in our mind, "it becomes a part of us." The breathing rhythm can change – it can slow to 15 breaths per minute or even to 2-3 breaths per minute. The length of the meditation depends on how advanced our meditation practice is.

Meditation on inner silence

The technique can be performed in any meditation asana. The meditation on inner silence or inner peace focuses on the ability to think and search for the sources of our inner anxiety. If we uncover this source, we pay attention to it until our mind is saturated with this source of restlessness. Then comes the time to "get rid of it so it never comes back ". This is how we process the information coming to us from the outside, but also the information stored in our consciousness in the form of thoughts, emotions, phobias and so on. Subsequently, some images can be washed out of our subconscious mind, which can be difficult to understand or grasp. These are necessary to be processed too, to understand their meaning, and then to let them go. If we let this state go away, our mind becomes clean and empty and we are enveloped in inner silence and tranquility.

Meditation in yoga nidra

The technique can be performed in any meditation asana. Yoga nidra, or yoga sleep, is a state when our mental activity is similar to the state of deep sleep, but the mind is conscious. This state resembles the time before we fall asleep, when the body and mind are in a deep physical, mental and emotional relaxation. As a meditation technique, it is advisable to practise it for at least 30 minutes. First, we begin to prepare, we adjust the body to a relaxation position and relax. We continue by inserting our wish into our consciousness and repeating it. We gradually feel individual parts of the body; we perceive our inner space, our feelings and breathing. We use visualization. Yoga nidra ends in a conscious recall of our wish.

Sample lesson

The sample lecture is offered as one of the variants you can use for inspiration. The general principle of yoga lessons is to begin the lecture with the full yogic breath. It is also suitable to include the activating breathing technique of Bhastrika Pranayama afterwards. The initial warm-up follows, such as Khatu Pranam, for about 5-10 minutes. The number of repetitions depends on the pace of the respiration, we repeat 4-8 cycles generally. The following asanas should be chosen to activate the entire endocrine system, to stimulate the ovaries, adrenals, thyroid gland and pituitary gland. Beginners perform asanas statically together with full yoga breath. Slightly advanced people perform them dynamically. In asanas, when stated, their performance can be combined with the Bhastrika or Ujjayi Pranayama techniques. Short relaxations are good to perform throughout the whole lecture in Savasana. The duration of these short relaxations is individual. It usually takes up to 3 minutes. The final relaxation should last at least 15 minutes. After the relaxation, meditation can be included. It is suitable to practice it in one of the sitting asanas. The meditation should last 10 minutes in beginners, this practice is good to extend gradually to 20, ideally 30 minutes.

60-minute sample lecture:

Introductory part (15 minutes)

- Full Yogic Breath
- Bhastrika Pranayama
- Khatu Pranam

Main part – asanas from the sitting positon (8 minutes)

- Shashank bhujangasana (adrenal glands and ovaries)
- Ardha matsyendrasana (pancreas, adrenal glands and ovaries)
- Marjariasana (adrenal glands and ovaries)

Main part – asanas from the standing positon (12 minutes)

- Tiryaka tadasana (ovaries and adrenal glands)
- Kati chakrasana (thyroid)
- Utthita lolasana (adrenal glands and hypophysis)
- Dolasana (ovaries and hypophysis)
- Ardha Chandrasana (hypophysis)

Main part – asanas from the lying positon (10 minutes)

- Bhujangasana (thyroid, adrenal glands and ovaries)
- Dhanurasama (thyroid, adrenal glands and pancreas)
- Kandharasana (thyroid and ovaries)
- Sarvangasana (thyroid and hypophysis)

Final part – relaxation (15 minutes)

- Relaxation with the awareness of individual parts of the body

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