



Class: TY BSc

Subject : Yoga

Subject Code:

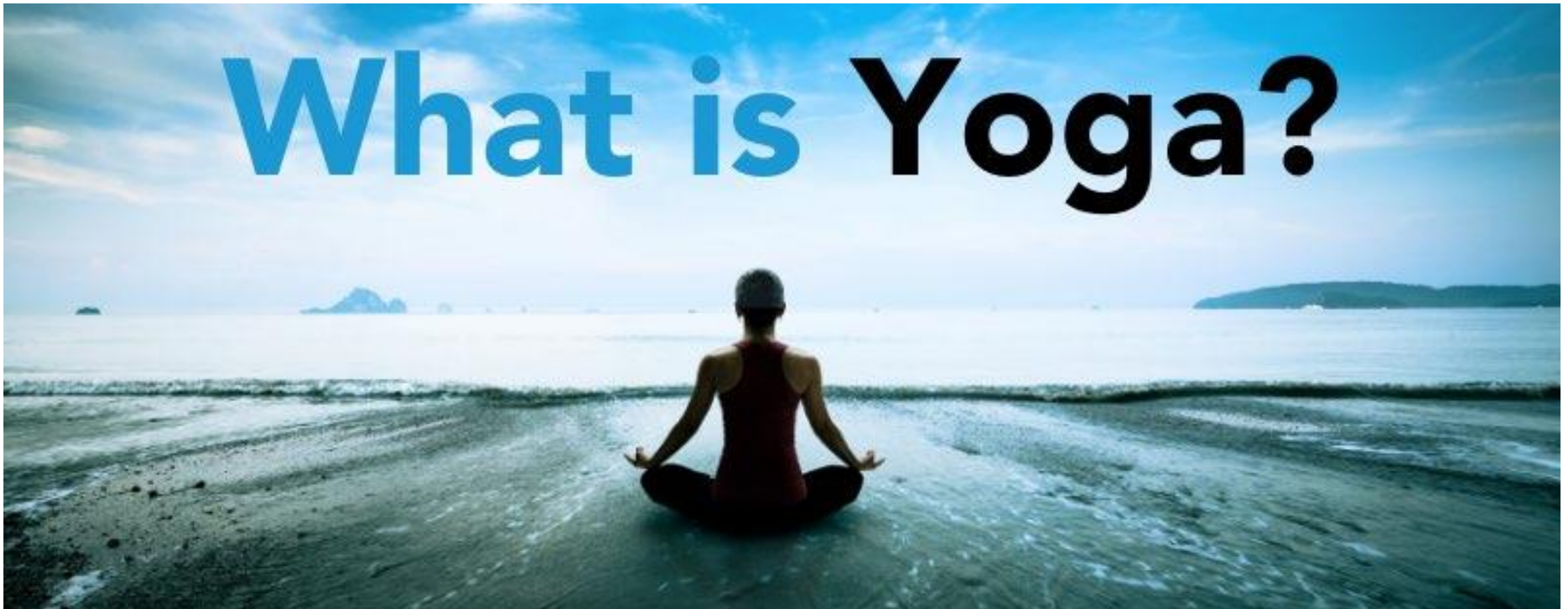
Chapter: Chapter 1

Chapter Name: yoga and it's types

Today's Agenda

1. What is yoga ?
2. Branches of yoga
3. Physiological effects of yoga in daily life
4. Reproductive system

1 What is yoga?



1.1 Origin of the word yoga

First mention of yoga in the oldest sacred texts of Rig veda

Sanskrit roots- 'Yuj' means 'Yoke' or 'to Unite'

Spiritual sense- yoga means 'Union of mind with the divine intelligence of the Universe'

The aim of yoga for health is to bring balance into the physical, emotional & mental state of body

1.2 Definition of Yoga

Maharishi Patanjali is the founder of yoga philosophy says Yoga is concentration

Defines yoga as



which means "stoppage of the fluctuation of mind"

1.2 Definition of Yoga

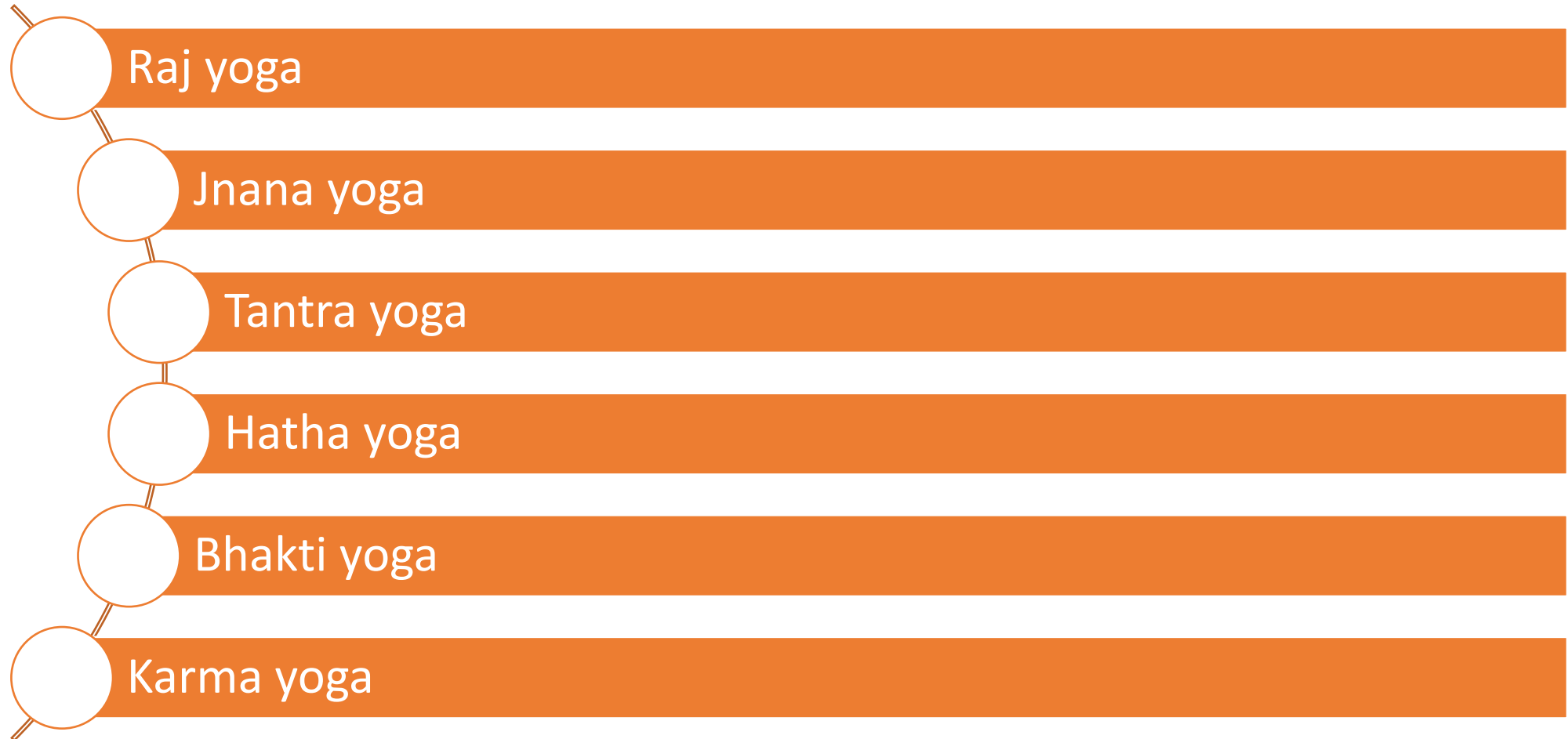
Maharishi Vyasa the 1st commentator of Yoga sutra defines

Yoga is Samadhi- highest level of concentration. Mind gets completely disassociated with external world & gets established in the highest reality



- Vedanta defines "yoga as union of individual soul with the Universal soul"
- Bhagvad Gita defines "yoga in terms of Karma- Yogah karmesu kaushalyam" Excellence in work is Yoga"
- 2nd meaning of Yoga as per Bhagvad Gita is "Samatvam yogah ucchayete" Maintaining the state of mental equilibrium is yoga

2 6 Branches of Yoga



2.1 Raj Yoga

- Raja-Royal, chief, king or highest form of yoga
- Closely linked to Patanjali's 8 fold path also called as classical yoga
- This path is precise & contemplative
- It aims to control the intellect & thoughts through meditation
- A connection with God or consciousness
- Raja yoga requires much self discipline
- This was originally practiced by Brahmins, high caste royals who had the time, the education & the means of practice.

2.2 Jnana yoga

- Jnana means wisdom or knowledge
- This is the yoga of knowing or realizing the truth of oneself
- 1st mentioned around 400BC
- Path of insights & illumination but also difficult
- Priests & scholars are most likely to consider Jnana yoga
- Study of philosophical texts to understand the depths of body, mind & spirit

2.3 Tantra yoga

- Tantra- Tan-to expand, to weave
- It explores all aspects, sensation & energies that weave through the body & mind which actually began as a religion around 500 BC
- The philosophy of human body started to become important to yogic context. Before this much of yoga practice was based upon worship, visualization & meditation.
- Many people confuse Tantric yoga with Spiritualized sex, that's not the case.
- It includes many rituals & is only reserved for a very certain people
- In fact it promotes mindful, purposeful & meaningful sex as opposed to no sex at all
- This is usually passed on orally & secretly from Guru to Shishya
- One should not practice without a Guru as certain texts are omitted or written falsely

2.4 Hatha yoga

- Hatha: Ha-sun, Tha-moon (the physical yoga, the yoga of force)
- Physical yoga practice is intended to balance the Sun & Moon energies within us. State of equilibrium
- Real meaning & essence of Hatha Yoga is a change the physical body & mind by way of experimentation, movement & physical 'force'
- Its derived from Tantra yoga in 1100 A-modern branch of yoga
- Inventor of Hatha yoga is Gorakshanatha who is considered as Maha Yogi or Great Yogi
- Liberation is attained through cultivating Yoga deha (yogic bodies) immune from diseases & free from limitation
- Householders

2.5 Bhakti yoga

- Bhakti means Devotion
- 1st mention was around 300 BC in Bhagvad Gita
- Based upon 'the heart, love & devotion towards a chosen deity' God is an important part of Bhakti Yoga
- Kirtana, Shavasna, Smrana, Vandana, Atma Nivedana

2.6 Karma yoga

- Karma means of Yoga of Action, Religion of love
- Karma derived from Kri-to do
- 1st mention is in 300 BC main focus of Bhagvad Gita
- Selfless service & acting without expectation of benefits
- Benefits to people & world
- Examples of Karma yoga are Mahatma Gandhi, Mother Teresa

Physiological effects of yoga in daily life

3.1 What is Cardiovascular

The blood circulatory system (cardiovascular system) delivers nutrients and oxygen to all cells in the body. The circulatory system includes the **heart, blood vessels and the blood**. It transports the nutrients and oxygen to the tissues and removes carbon dioxide and other waste products of metabolism from the tissues. For this purpose the blood is continuously circulated in the body by rhythmic pumping action of the heart and through a complex network of the blood vessels.

The blood acts as a vehicle that carries the products of digestion from the alimentary canal and the oxygen from the lungs to the tissues. While returning to the heart, the blood brings the toxic substances or the waste products back to the heart. The kidneys, lungs and the skin eliminate these substances when the blood circulates through them. The blood, thus, communicates with all the systems and organs, regulates the water level and the temperature of the body

3.2 Impact of yoga on Cardiovascular health

Yoga's impact on cardiovascular health is multi-dimensional. While not all yoga movements raise the heart rate to suggested aerobic levels, yoga has a positive impact on how efficiently blood moves.

An asana practice can increase blood circulation and decrease levels of cortisol, a stress hormone, in the body. In fact, a study conducted by Kaviraja Udupa et al. in 2003 on 24 healthy young subjects showed significant reduction in basal heart rate and systolic and diastolic blood pressure following 3 months of yoga training.

The lower levels of stress enjoyed by yogis has a significant impact on creating healthier blood pressure. Yoga has also been shown to reduce cholesterol levels, thus reducing the interference of blood flow.

Low-impact, meditative poses can also reduce potentially artery-clogging stress hormones. Examples of such poses are like Sukhasana (Easy Pose) or Child's Pose (Balasana). Several poses and postures in Yoga have an different effect on circulatory system

3.3 Digestive system

Yoga and the “gut-brain connection”

According to the Harvard Medical School, the human gastrointestinal tract is sensitive to our emotions. Feeling angry, anxious, or sad can actually trigger a response in the gut, hence the term “gut-brain connection”. Constant stress and depression may be related to various digestive conditions from mild intestinal distress to irritable bowel syndrome (IBS) and other chronic ailments.

Recent studies have found that the gut-brain connection can also work the other way around, providing strong evidence that gut health, gastrointestinal disease, and mental wellbeing are all connected. Having a less diverse gut microbiome, known as dysbiosis, has been linked to several mental illnesses, including anxiety and depression. Stress reduction can therefore improve digestion, and vice versa. Here, yoga can help again as it has therapeutic effects on stress, anxiety, and depression.

We have seen how yoga can improve and support digestion through specific physical postures and movements, asanas, that massage the internal organs of the digestive tract and strengthen the muscles around it. With continuous practice, yoga can improve blood flow, prevent constipation and bloating, and help with the management of chronic conditions like irritable bowel syndrome (IBS) and gastroesophageal reflux disease (GRD).

3.3 Digestive system

Traditionally Asana means position of the body which contribute to the steadiness of the body and mind and a sense of well-being. Asana can also be defined as postural pattern, one has to achieve this pattern slowly, maintain for some time steadily and release it again in slow and smooth manner.

As Asana is an attitude which is psycho-physiological in nature most of these patterns are based on the natural postures of various animals, birds or even the symbol like tree, lotus etc. A gradual training is given to whole body and mind through particular neuromuscular mechanism involved in different postural patterns .Asana is that which contributes to stability and comfort. Stability here does not mean the stability of only the posture but it indicates the stillness of body and mind as a whole.

3.4 Effect of Yogasana on digestive system

Effect of Yogasana on digestive system- The health of the human body depends on the healthy condition of internal glands and tissues, through elimination of waste matter from the body and the elastic condition of the muscles.

Many Asanas give the internal organs a unique massage, forcing them to perform better. The alternate stretching and contractile movements of the Asanas help muscle to retain their tone. In the upside down posture; the sluggishness of the bowel and constipation are cured. The stomach muscle fall into their proper position, helping to flatten and strengthen a protruding belly. The complete elimination of waste product from the body is promoted by Yogasana which not only massage and activate internal muscles for peristaltic activity but also keep internal organ in their proper places in the abdominal cavity; preventing prolapse of stomach, intestine .

3.5 Nervous system

1. The Sympathetic Nervous System

In today's society, we are always on the go, go, go! Stress is rampant and impacts overall mental, emotional, and physical health.

When the body is in a constant state of movement, the sympathetic nervous system (SNS) is activated. The SNS is a part of the autonomic nervous system that is responsible for the "fight-or-flight" responses in the body. It is activated in times of stress or when a threat may be perceived.

When activated, it can result in anxiety or increased stress, disrupting the overall balance of the nervous system.

2. The Parasympathetic Nervous System

The parasympathetic nervous system (PNS) is the sympathetic nervous system's counterpart in the autonomic nervous system. It is responsible for bringing the body back to a state of homeostasis to counter the stress response.

The PNS is often referred to as the "feed-and-breed" or "rest-and-digest" part of the system.

3.5 Nervous system

Parasympathetic vs. Sympathetic: How Does Yoga Affect Them?

Yoga has been proven to activate the parasympathetic nervous system (the calming part), and is therefore an extremely beneficial practice for psychological and physical balance.

Each branch of the nervous system works opposite one another, so that when one part of the system is activated, the other part is suppressed.

In today's times, the sympathetic nervous system is working harder because we, as a society, are increasingly more stressed and fatigued. This state of upset in the system can lead to poor eating habits, poor sleep, and decreased concentration.

It can also affect mood and emotional responses, thereby affecting emotional and psychological well-being.

3.6 Impact of yoga on Nervous system

As a society, we are increasingly more stressed and fatigued.

One way to bring our bodies out of this permeating and almost constant stress response is through the practice of yoga.

Yoga [pranayama & asana] influences more than just your nervous system.

3.7 Pranayama & Asana

1. Pranayama

- Pranayama, or the “regulation of vital force energy,” is typically translated as breathwork. Regulating and slowing down the breath aids in relaxation.
- There are many types of pranayama and many different techniques used to practice. Two types that have been shown to activate PNS activity are deep, belly breathing and longer exhalations. Pranayama helps suppress the SNS, thereby calming the body and mind.

2. Asana

- There are many yoga postures that can aid in activating the PNS, which – in turn – aids in relaxation and increased emotional and psychological well-being.
- One is Balasana, or Child’s Pose. It’s a basic yoga posture with numerous benefits. Placing your forehead on your mat can immediately soothe and bring a calming effect to the brain.
- *Not sure how it’s done?*
- Another beneficial posture to practice is Bridge Pose, or Setu Bandhasana. It’s a mild inversion that elevates the heart over the head, stimulating the vagus nerve to bring a deeper state of rest and relaxation.
- Another yummy one to try is Legs Up the Wall, or Viparita Karani. It, too, is a mild inversion. Inversions have been known by yogis for some time to bring about calm and rest.

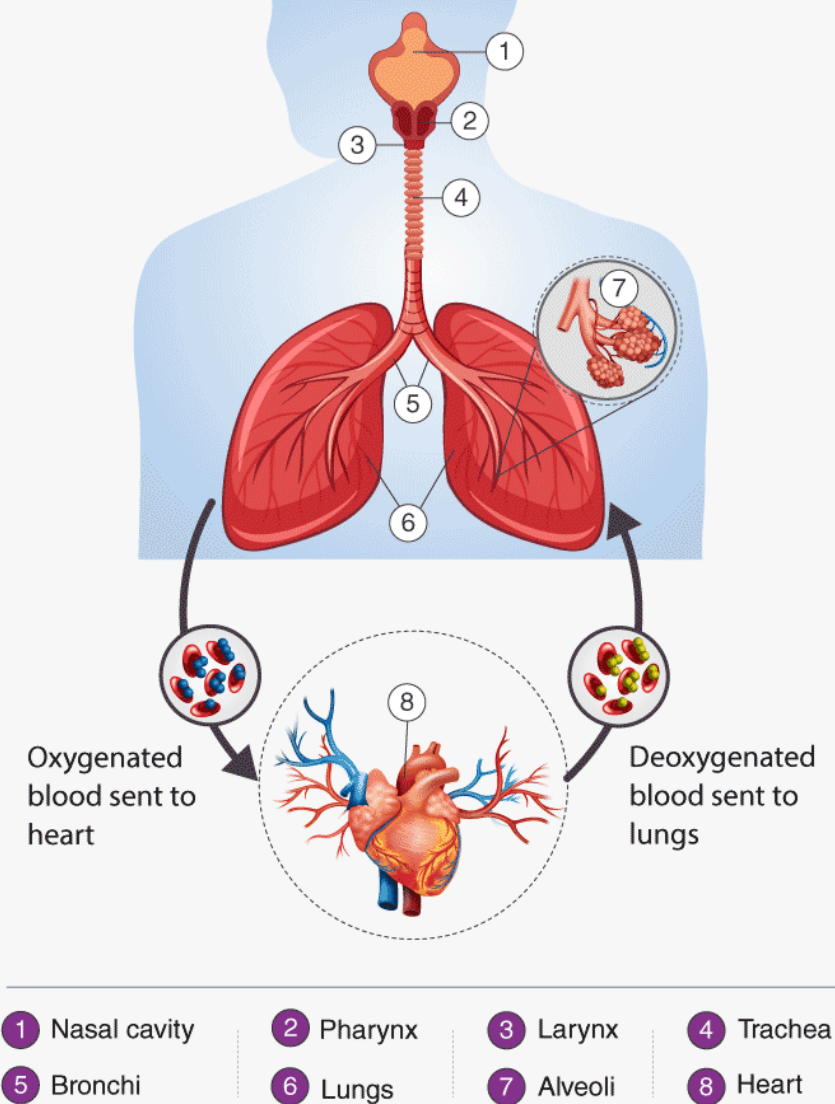
3.8 Respiratory system

What is the Respiratory System?

As defined above, the human respiratory system consists of a group of organs and tissues that help us to breathe. Aside from the lungs, there are also muscles and a vast network of blood vessels that facilitate the process of respiration.

HUMAN RESPIRATORY SYSTEM

BYJU'S
The Learning App



3.8 Respiratory system

Among the diseases that affect the respiratory system are Asthma, Bronchitis, Cold and Respiratory allergies. Yoga is related with health.

With yoga, the mind and body can find relaxation and peace. Its benefits include maintaining good health and happy lifestyle. One style of relaxing the mind and body in yoga is through breathing. For those who desire to live a long and healthy life, breathing 24hrs a day is extremely important. People who develop a good breathing is set to look better, get to finish more activity and have fun and lives longer than others do. Breathing reduces physical and mental fatigue, chest pains and the risk of heart attack. Yoga for respiratory health. For a good life ,you need a good breathe. Yoga increases the efficiency of breathing. Both yoga asanas and yogic pranayama helps in maintaining the health of respiratory system.

Yoga asana and pranayama can help with mild asthma, improving breathing efficiency and many other allergies related to respiratory system.

Yogic management of Respiratory problems: Shatkarma : As a house stands firmly on its foundation, the same way, in the yogic journey our body needs a strong foundation that becomes the base for whole practices of yoga. The base here we talking for our body is the cleansing of our internal system of organs. In the yogic tradition, this cleansing is known as Shatkarma kriyas.

3.9 Impact of asana on respiratory tract

A regular asana practice can also help in strengthening the immune system and in improving blood circulation throughout the body. Through a dedicated practice and with time, the body can experience noticeable improvements and benefits from asanas.

1. Bhujang asana: the cobra pose, it strengthens the mind and help stretchout the chest and lungs. Gives relief from asthma.



2. Matsya asana : the fish pose, helps in strengthening the lung muscles. It also helps in better circulation of blood.



3. Padma sarvangasana : the inverted lotus pose helps in proper expansion of chest and it allows easier passage of the air to the lungs. Also help in strengthening of reproductive system.



3.9 Impact of asana on respiratory tract

4. Ardha matsyendra asana: this is extremely beneficial in providing relief from breathing difficulties, stress, and tension.



5. Sukh asana: it stimulates the blood flow to the lung and also washes out the harmful toxins from the lung muscles. Also helps in treating cough and cough symptoms.



3.10 Impact of Pranayama on respiratory system

When pranayama is combined with yoga, which is a group of spiritual, mental, and physical poses or asanas aimed at unifying the mind and the body and bringing harmony between them, it leads to one attaining supreme control of the mind over the body, liberation, and self-purification. Pranayama asanas can be practiced as either distinct breathing exercises i.e. without yoga poses or can be done between the asanas.

NadiShodhan Pranayam: it clears blocked nostrils, people suffering from cold and cough gets benefits from this. It also removes tension and worries. Gives feeling of peace.

Kapalbhati: it cleanses capillaries, helps in asthma, chronic bronchitis and other nervous disorder, it cleanses the nasal passage and helps in purifying the frontal portion of brain.

Bhramri: clears the throat and nasal passage infections, clears the voice. Make the mind joyful.



BHRAMARI PRANAYAMA
THE HUMMING BEE BREATH



3.11 Benefits of OM chanting

Respiratory rate becomes slower and deeper which results you feel more calm and relaxed.
Lungs absorbs more oxygen than normal
Diaphragm becomes stronger
Removes impurities from breathing tube.

3.12 Musculo skeleton system

The musculoskeletal system, once known as the activity system, is what gives us the ability to freely move our body while also providing support and stability. The musculoskeletal system is composed of the muscles and the skeleton but also the cartilage, tendons, ligaments, joints, and other connective tissue that support and bind tissues and organs together. Many people come to yoga for the benefit of the musculoskeletal system

3.13 Bone

While bone may seem solid and inert like the plastic skeletons in a doctor's office or the white remains found in a museum, the bones in your body are very much alive, playing many life-essential roles and even adapting to the demands placed on them.

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While bone may seem solid and inert like the plastic skeletons in a doctor's office or the white remains found in a museum, the bones in your body are very much alive, playing many life-essential roles and even adapting to the demands placed on them.

Bones also store 98 percent of the body's calcium (Institute of Medicine 2011), which is an essential component of any muscular contraction. Bone releases calcium as needed, then reabsorbs it when not needed

Being rigid structures, bones maintain the form of the body and protect internal organs. But they also create the framework for movement. All voluntary movement, including all movement performed in a yoga practice, happens at joints, which is where two bones articulate. And the loading that occurs during asana practice and other weight-bearing activities is very important to the health of bone.

3.14 How Bones Adapt

Without your realizing it, your bones are adapting every day. While you might not give much thought to gravity, which is pulling you toward the center of the earth at a rate of 9.8 meters per second squared, your skeleton is constantly adapting to it.

In the absence of gravity, as happens with astronauts in space flight, significant losses in bone mass occur. In fact, astronauts lose an average of 1 to 2 percent bone mass per month in space in a phenomenon known as spaceflight osteopenia (Kelly and Lazarus Dean 2017, p. 174; NASA 2001). Most of the loss occurs in the lower limbs and lumbar spine, with the proximal part of the femur losing roughly 10 percent of its bone density for every six months in space, even though the astronauts exercise 2.5 hours per day, six days a week, using springs and vacuum canisters for resistance (NASA 2001).

To maintain bone density and strength, our body requires an adequate supply of calcium and other minerals as well as vitamin D.

3.15 Joints

Coming from the Old French for joined, a joint is the point where two bones come together. While a bone is a solid structure, a joint is, in a way, a nonstructure. It is the space between two bones; it is a relationship between two structures.

Fibrous joints permit very little movement in order to protect the organs behind them. One such example is the joints between the bones of the skull, which hardly move (except during birth) in order to protect the brain. Synovial joints, in contrast, are self-lubricating and provide near-frictionless movement and the bearing of heavy loads.

Synovial joints are the ones we move a lot in yoga asana and include the elbow, shoulder, hip, and knee

3.16 Muscles

While all skeletal movement happens at joints, muscles are the motor behind the movement. Muscles—coming from the Latin word for mouse, perhaps because of how they look as they glide under the skin—generate force, which allows us to maintain and change posture, lift objects, move our bodies through space, and involuntarily pump blood through our arteries and move food through our digestive tracts

3.17 Cartilage

Cartilage is a smooth and resilient type of connective tissue with a firm, gel-like constitution. With its slick and smooth surface, glass-like articular cartilage is an ideal covering of the bone. Cartilage, however, does not have a blood supply, and so it is understood that cartilage is very poor at remodeling or regenerating itself once damaged. This inability of cartilage to repair well is believed to contribute to osteoarthritis—inflammation in the joint that causes pain and stiffness.

Movement is nourishing.

Cartilage needs mechanical stimulation. What little remodeling cartilage might be able to manage occurs as a result of mechanical stimulation of the tissue. Loading and unloading of the cartilage that happens through yoga, exercise, walking, and running can help to keep cartilage healthy.

3.18 Fascia

Fascia has become a buzzword in the yoga community. Here are some of the many claims you might hear about fascia within the yoga or massage community:

- Emotions are stored in the fascia.
- Tightness is in the fascia, not the muscles.
- Fascia gets stuck if we don't move and stretch.
- Yin yoga targets the fascia.
- Massage and foam rolling help break down fascial adhesions

Fascia is “masses of connective tissue large enough to be visible with the unaided eye”

In simpler terms, fascia is commonly described as sheets and webs of fibrous connective tissue found everywhere in the body—and, in even simpler terms, “that white stuff that you find in and around your chicken.”

Reproductive system

4.1 What Is Reproduction?

Reproduction is the process by which organisms make more organisms like themselves. But even though the reproductive system is essential to keeping a species alive, unlike other body systems, it's not essential to keeping an individual alive.

In the human reproductive process, two kinds of sex cells, or **gametes** are involved. The male gamete, or sperm, and the female gamete, the egg or ovum, meet in the female's reproductive system. When sperm fertilizes (meets) an egg, this fertilized egg is called a **zygote**. The zygote goes through a process of becoming an embryo and developing into a fetus.

The **male reproductive system** and the female reproductive system both are needed for reproduction. Humans, like other organisms, pass some characteristics of themselves to the next generation. We do this through our **genes**, the special carriers of human traits. The genes that parents pass along are what make their children similar to others in their family, but also what make each child unique. These genes come from the male's sperm and the female's egg.

4.2 What Is the Female Reproductive System?

The external part of the female reproductive organs is called the **vulva**, which means covering. Located between the legs, the vulva covers the opening to the vagina and other reproductive organs inside the body.

The fleshy area located just above the top of the vaginal opening is called the mons pubis. Two pairs of skin flaps called the **labia** (which means lips) surround the vaginal opening. The **clitoris**, a small sensory organ, is located toward the front of the vulva where the folds of the labia join. Between the labia are openings to the **urethra** (the canal that carries pee from the bladder to the outside of the body) and vagina. When girls become sexually mature, the outer labia are covered by pubic hair. A female's internal reproductive organs are the vagina, uterus, fallopian tubes, and ovaries.

The **vagina** is a muscular, hollow tube that extends from the vaginal opening to the uterus. Because it has muscular walls, the vagina can expand and contract. This ability to become wider or narrower allows the vagina to accommodate something as slim as a tampon and as wide as a baby. The vagina's muscular walls are lined with mucous membranes, which keep it protected and moist.

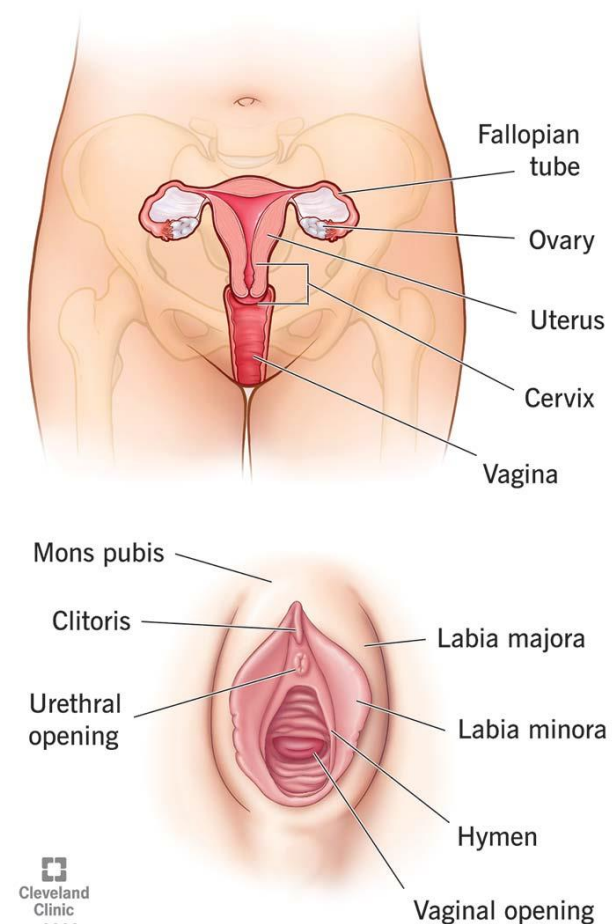
4.2 What Is the Female Reproductive System?

The vagina serves three purposes:

- 1.It's where the penis is inserted during sexual intercourse.
- 2.It's the pathway (the birth canal) through which a baby leaves a woman's body during childbirth.
- 3.It's the route through which menstrual blood leaves the body during **periods**

A very thin piece of skin-like tissue called the **hymen** partly covers the opening of the vagina. Hymens are often different from female to female. Most women find their hymens have stretched or torn after their first sexual experience, and the hymen may bleed a little (this usually causes little, if any, pain). Some women who have had sex don't have much of a change in their hymens, though. And some women's hymens have already stretched even before they have sex.

Female reproductive system
Internal and external



4.2 What Is the Female Reproductive System?

- The vagina connects with the **uterus**, or womb, at the **cervix** (which means neck). The cervix has strong, thick walls. The opening of the cervix is very small (no wider than a straw), which is why a **tampon** can never get lost inside a girl's body. During childbirth, the cervix can expand to allow a baby to pass.
- The uterus is shaped like an upside-down pear, with a thick lining and muscular walls — in fact, the uterus contains some of the strongest muscles in the female body. These muscles are able to expand and contract to accommodate a growing fetus and then help push the baby out during labor. When a woman isn't pregnant, the uterus is only about 3 inches (7.5 centimeters) long and 2 inches (5 centimeters) wide.
- At the upper corners of the uterus, the **fallopian tubes** connect the uterus to the ovaries. The **ovaries** are two oval-shaped organs that lie to the upper right and left of the uterus. They produce, store, and release eggs into the fallopian tubes in the process called ovulation
- There are two fallopian tubes, each attached to a side of the uterus. Within each tube is a tiny passageway no wider than a sewing needle. At the other end of each fallopian tube is a fringed area that looks like a funnel. This fringed area wraps around the ovary but doesn't completely attach to it. When an egg pops out of an ovary, it enters the fallopian tube. Once the egg is in the fallopian tube, tiny hairs in the tube's lining help push it down the narrow passageway toward the uterus.
- The ovaries are also part of the endocrine system because they produce female sex **hormones** such as estrogen and progesterone

4.3 Breasts

The breasts are considered accessory organs of the female reproductive system because of their important role in supplying milk to an infant in a process called lactation. Breast milk is produced by the mammary glands within the breast tissue, which are modified sweat glands.

During the normal hormonal fluctuations in the menstrual cycle, breast tissue responds to changing levels of estrogen and progesterone.

This can lead to swelling and breast tenderness in some individuals. If pregnancy occurs, the increase in hormones leads to further development of the mammary tissue and enlargement of the breasts.

4.4 Menstruation

A period happens because of changes in hormones in the body. Hormones are chemical messengers. The ovaries release the female hormones estrogen and progesterone. These hormones cause the lining of the uterus (or womb) to build up. The built-up lining is ready for a fertilized egg to attach to and start developing. If there is no fertilized egg, the lining breaks down and bleeds. Then the same process happens all over again.

The first commencement of menstruation is referred to as menarche.

4.5 What is the male reproductive system?

The male reproductive system contains internal and external parts. Internal parts are inside your body, and external parts are outside your body. Together, these organs help you urinate (pee), have sexual intercourse and make biological children.

External parts of the male reproductive system:

Most of the male reproductive system is on the outside of your abdominal cavity or pelvis. The external body parts of the male reproductive system include the penis, scrotum and testicles. Another name for these parts is genitals or genitalia.

Penis- The penis is the male organ for sexual intercourse. It contains many sensitive nerve endings, and it has three parts:

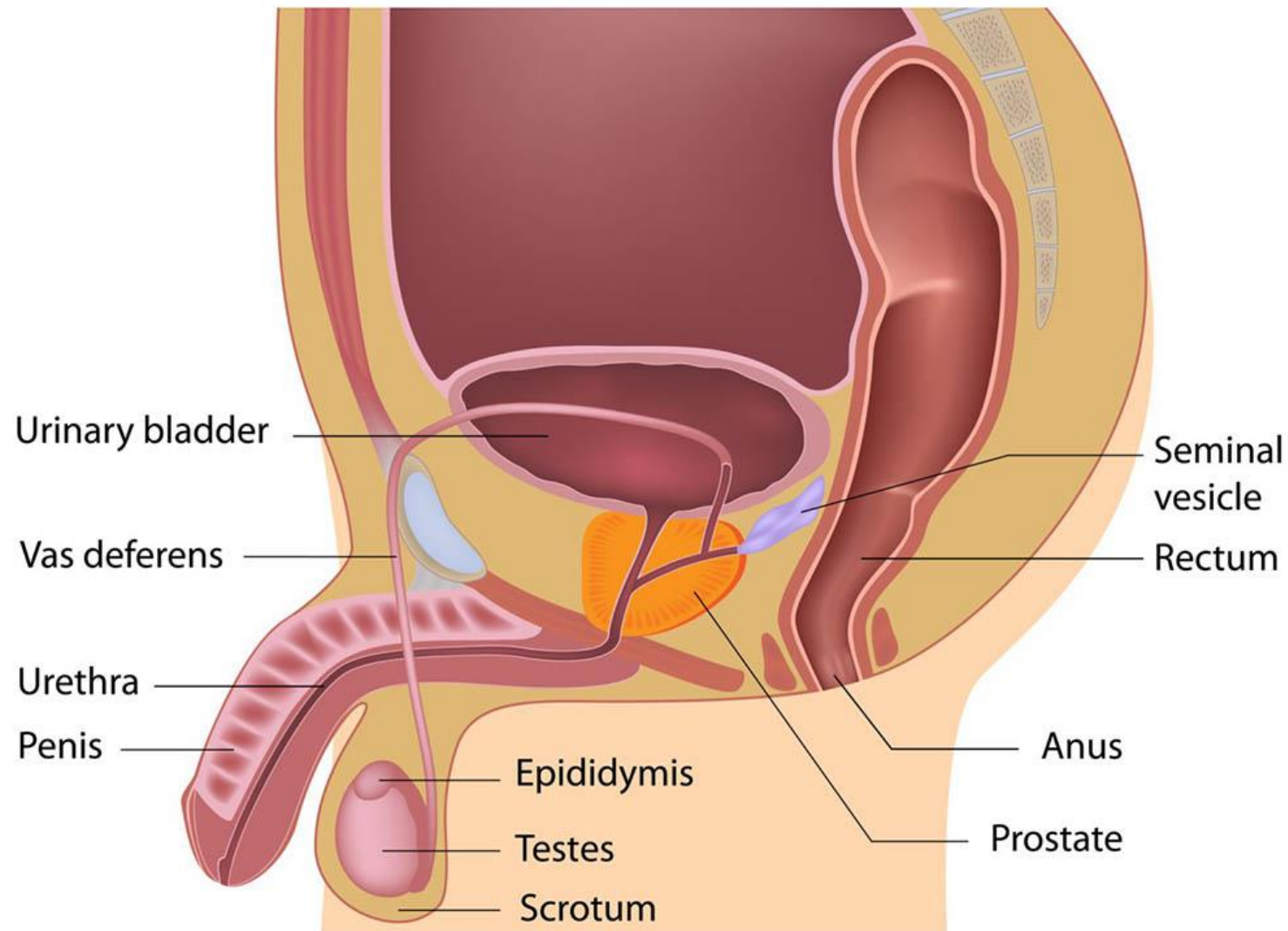
- 1. Root.** The root is the base of your penis. It attaches to the wall of your abdomen.

4.5 What is the male reproductive system?

2. Body (shaft). The body has a shape like a tube or cylinder. It consists of three internal chambers: the two larger chambers are the corpora cavernosa, and the third chamber is the corpus spongiosum. The corpora cavernosa run side by side, while the corpus spongiosum surrounds your urethra. There's a special, sponge-like erectile tissue inside these chambers. The erectile tissue contains thousands of spaces. During sexual arousal, the spaces fill with blood, and your penis becomes hard and rigid (erection). An erection allows you to have penetrative sex. The skin of the penis is loose and stretchy, which lets it change size when you have an erection.

3. Glans (head). The glans is the cone-shaped tip of the penis. A loose layer of skin (foreskin) covers the glans. Healthcare providers sometimes surgically remove the foreskin (circumcision). In most people, the opening of the urethra is at the tip of the glans. The urethra transports pee and semen out of your body. Semen contains sperm. You expel (ejaculate) semen through the end of your penis when you reach sexual climax (orgasm). When your penis is erect, your corpora cavernosa press against the part of your urethra where pee flows. This blocks your pee flow so that only semen ejaculates when you orgasm.

4.5 What is the male reproductive system?



4.5 What is the male reproductive system?

Scrotum

The scrotum is the loose, pouch-like sac of skin that hangs behind the penis. It holds the testicles (testes) as well as nerves and blood vessels.

The scrotum protects your testicles and provides a sort of “climate-control system.” For normal sperm development, the testes must be at a temperature that’s slightly cooler than body temperature (between 97 and 99 degrees Fahrenheit or 36 and 37 degrees Celsius). Special muscles in the wall of the scrotum let it contract (tighten) and relax. Your scrotum contracts to move your testicles closer to your body for warmth and protection. It relaxes away from your body to cool them.

Testicles

The testicles (testes) are oval-shaped organs that lie in your scrotum. They’re about the size of two large olives. The spermatic cord holds the testicles in place and supplies them with blood. There are two testicles, on the left and right side of the scrotum. The testicles make testosterone and produce sperm. Within the testicles are coiled masses of tubes which produces sperm cells.

4.5 What is the male reproductive system?

Epididymis

The epididymis is a long, coiled tube that rests on the back of each testicle. It carries and stores the sperm cells that your testicles create. The epididymis also brings the sperm to maturity — the sperm that emerge from the testicles are immature and incapable of fertilization. During sexual arousal, muscle contractions force the sperm into the vas deferens.

Internal organs of the male reproductive system

Vas deferens The vas deferens is a long, muscular tube that travels from the epididymis into the pelvic cavity, just behind the urinary bladder. The vas deferens transports mature sperm to the urethra in preparation for ejaculation.

Ejaculatory ducts Each testicle has a vas deferens that joins with seminal vesicle ducts to form ejaculatory ducts. The ejaculatory ducts move through your prostate, where they collect fluid to add to semen. They empty into your urethra.

4.5 What is the male reproductive system?

Urethra The urethra is the tube that carries pee from your bladder outside of your body. If you have a penis, it also ejaculates semen when you reach orgasm.

Seminal vesicles The seminal vesicles are sac-like pouches that attach to the vas deferens near the base of the bladder. Seminal vesicles make up to 80% of your ejaculatory fluid, including fructose. Fructose is an energy source for sperm and helps them move (motility).

Prostate gland The prostate is a walnut-sized gland that rests below your bladder, in front of your rectum. The prostate adds additional fluid to ejaculate, which helps nourish sperm. The urethra runs through the center of the prostate gland.

Bulbourethral (Cowper) glands The bulbourethral glands are pea-sized structures on the sides of your urethra, just below your prostate. They create a clear, slippery fluid that empties directly into the urethra. This fluid lubricates the urethra and neutralizes any acids that may remain from your pee.

5 CONCLUSION

Yoga is the oldest and the most effective exercise. Yoga helps to improve one's lifestyle. Just by adding yoga whether its asana, pranayama or meditation one can live healthy and peaceful life. It helps in balancing the physical as well as mental health.

The aim of yoga is to attain physical, mental and spiritual health. In this fast moving world yoga helps you to be present & it increases your memory helps you to focus better also helps in making better decisions. In only 4 weeks you can see or feel good changes in your physical, mental and spiritual health