

WMO-ME CHAPTER

FITNESS & SALAH IS DIRECTLY
PROPORTIONAL TO EACH OTHER

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PURPOSE

- ▶ Intro
- ▶ Salah Rakaat
- ▶ Salah Postures
- ▶ Energy expenditure
- ▶ Prayer Health benefits on human body.
- ▶ Salah and yoga
- ▶ Literature Review / Evidence

Medical Science Provd



Long Sajda:
No Heart problem's.
Increase eye sight.
Brain work and Face Beauty.

Rukoo with Straight Legs:
No Knees / Joints Problem's

Straight Standing After Rukoo:
No Back Bone Problem's

MUSLIM PRAY Improves Digestive System
In Short PRAY is a full body tonic.

Allah Pak Har Muslim ko 5 Times Namaz Padhnai ki Toufeeq ata Farmaye..

INTRO

- ▶ There are numerous physical and physiological benefits of Salat because almost all the muscles of the body and joints are exercised during Salat.
- ▶ Each position involves the movement of different parts of the human body in ways that encourage health and wellbeing.
- ▶ The physical activity breaks the monotony of chores he is involved in besides being an excellent form of exercise.
- ▶ It involves with physical activities which includes standing, bowing prostration and sitting consecutively.

It is significant to perfect all of the movements of the prayer, rather than haphazardly rushing through them because each movement has a purpose.

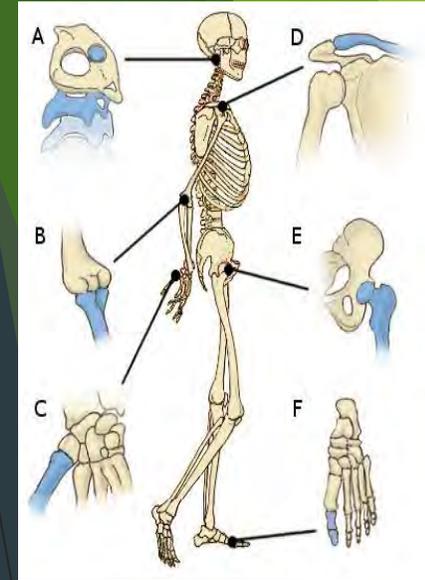
RAKAAT DURING SALAH

- ▶ Namaz (prayer) is performed by Muslim believers which must be performed at least 5 times a day.
- ▶ Each prayer has a certain number of repetitive units called Raka'a and a total of seventeen are prayed during the day.



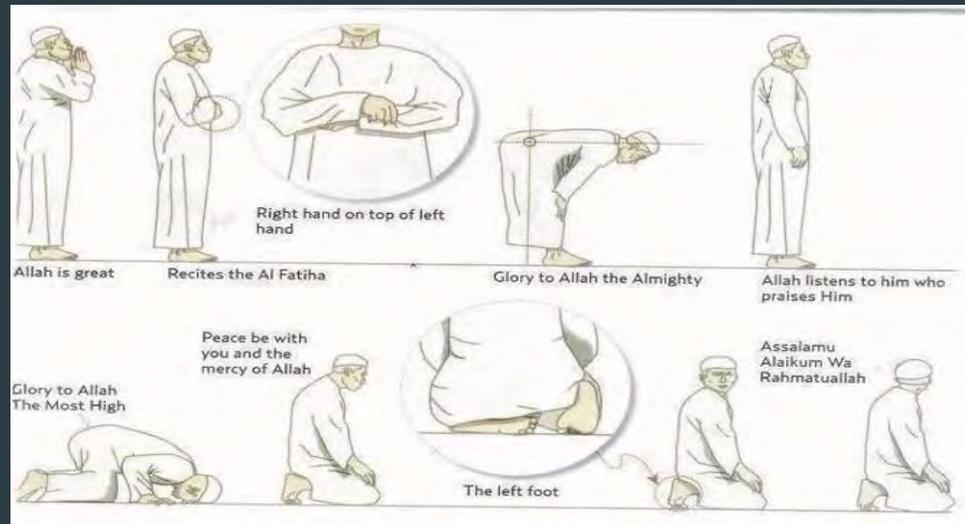
	Table of Prayer Rakats						Farz
	Sunnat	Farz	Sunnat	Nafil	Witr	Nafil	Muakkadah
	Sunnat	Farz	Sunnat	Nafil	Witr	Nafil	Waajib
Fajr	2	2	-	-	-	-	Total Rakats
Zohr	4	4	2	2	-	-	4
Asr	4	4	-	-	-	-	12
Maghrib	-	3	2	2	-	-	8
Isha	4	4	2	2	3	2	7
							17

- ▶ Various movements including standing, ruku, sujood and sitting. Joints involved in prayer contains shoulders, wrist, elbow, metatarsophalangeal, proximal and distal Interphalangeal, jaw joint, spinal cord, pelvis, knee, ankle, subtalar, metatarsophalangeal and atlantoaxial.
- ▶ Muslim prayer is having similar effect like gentle exercise that makes muscles contracts isometrically and isotonicly (Jing et al., 2012)
- ▶ Different studies prove the medical benefits along with spiritual benefits of Salat. So Salat can be considered as a new form of physical activity due to its multiple dimension positive effect on overall health.



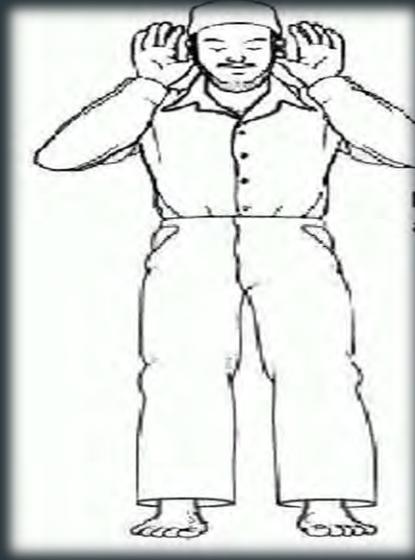
SALAH POSTURES

- ▶ Prayers are comprised of several movements and postures. It includes a certain number of rakaat, each rakaat consisting of a series of 7-9 postures.
- ▶ The series of postures is fixed, and it's repeated a number of times for each act of prayer.



Takbir (standing)- Posture 1

At the Beginning The individual raises his hands to the level of his ears .



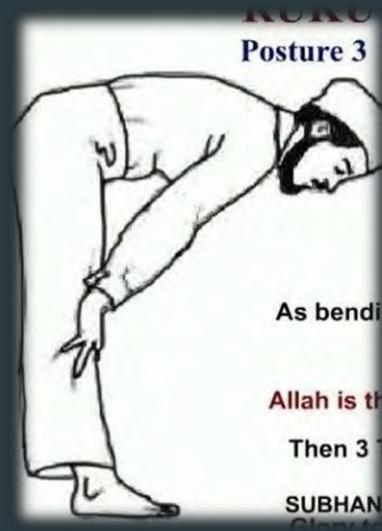
AL-Qayyam (standing) -Posture 2

- ▶ Lowering of the hands to the waist, shoulders relaxed, encouraging relaxed breathing.
- ▶ Upon standing, body weight is evenly distributed on both feet so that the back does not take all the strain.



Ruku (bowing)-Posture 3

Bowing with hands rested on the knees and the back held straight for a few seconds and the person rises back to erect posture.



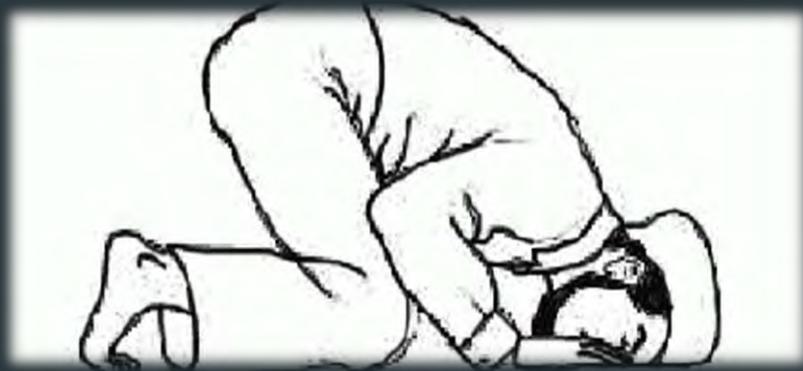
Qayyam (Standing)- posture 4

- ▶ After (Bowling)forward bending and returning to standing position.
- ▶ Tension is released in muscles as they relax.



Sujud (prostration)- Posture 5

- ▶ The individual goes down on his knees and rests his hands and forehead on the ground in prostration known as Sajdah.
- ▶ Increases the elasticity of joints. Furthermore, the increased blood flow to the head as it is lowered below heart level can reduce high blood pressure.
- ▶ It also have a positive effect on brain functions such as memory and concentration



Julsa/Tashahhud (sitting) Posture 6

- Sitting on the floor in a manner that the muscles at the front of the ankle and foot stretched, with toes extended, knee and hip flexed.
- Lower back in good posture will help to strengthen core muscles.



Sujud (prostration)- Posture 7

- ▶ Repetition of the deep prostration within a few seconds.



Julsa/Tashahhud (sitting)- Posture 8

Muscles at the front of the ankle and foot stretched, with toes extended, knee and hip flexed.

Lower back in good posture will help to strengthen core muscles



Sa'alam (Turn head to the right and left while sitting) - Posture 9

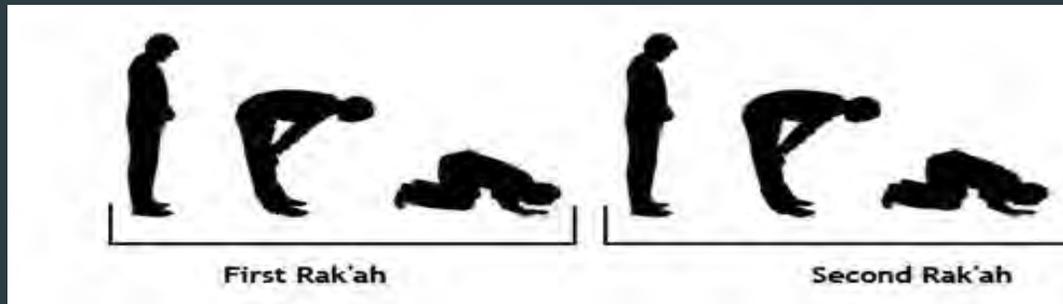
Turning the head to each side improves the range of motion of the neck, stretching muscles with gentle repeated movements



Over-all Posture Performed

For example, before sunrise, two rakaat or 14 postures must be performed. Thus, each Muslim is under obligation to perform 119 postures per day, that is 3750 postures per month and 42,840 postures per year.

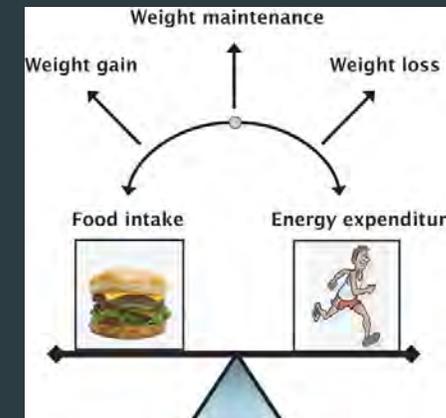
Suppose, if a person live up to an average of 50 years, Salah being obligatary from the age of 10 years, he would have performed Approx 1,713,600 postures compulsorily in this lifetime.



Ref: (www.yogamag.net/archives).

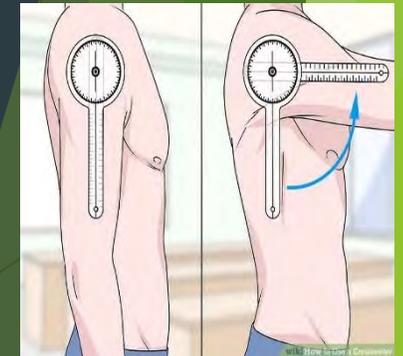
Energy Expenditure

- ▶ Each Rakka lasts between 3 and 6 minutes.
- ▶ The energy cost of two and four Rakka prayers in 32 male and female adults. He found that Namaz have a positive effect on metabolic function. For an 80 kg person, energy cost of daily prayers was about 80 calories a day, and could be considered a form of physical activity that enhances fitness (<http://www.healthline.com/health/fitness-exercise>).



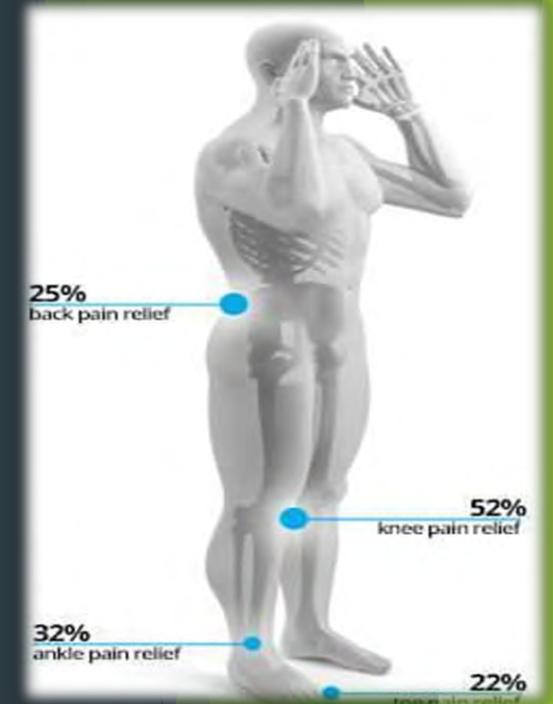
Musculoskeletal work during prayer

- ▶ During Namaz, we perform continuous gentle muscle contraction and relaxation with perfect harmony and balance.
- ▶ Salah involves type of stretching and isometric contractions exercise.
- ▶ The various postures of Namaz were studied and a range of joint motions were measured by Goniometer, an instrument for measuring angles.
- ▶ Strengthening of ligaments and tendons, preventing muscle tears, positive effect on the joints, the removal of the accumulated electrical charge in the body.
- ▶ The postures of the prayers stretch various muscles and nerves, giving a constant physical therapy to all the joints of our bodies. This protects arthritis, and reduces back pains and disc problems.



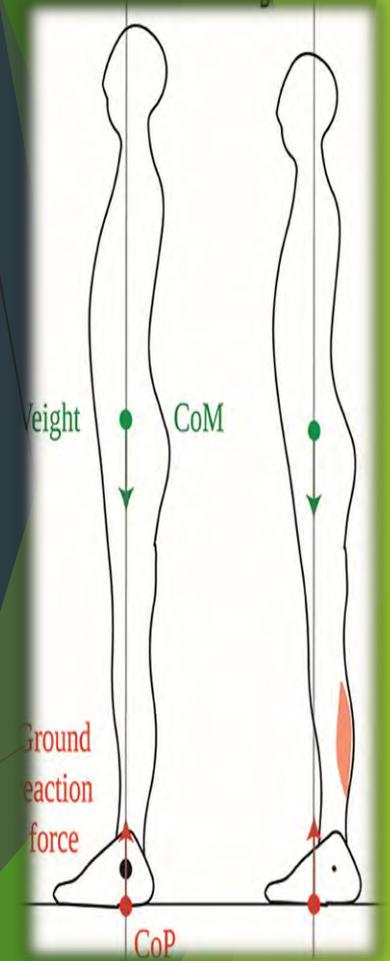
Physical Health benefits of TAKBEER /Qiyyam

- ▶ By raising our hands in the beginning of the prayer for takbeer, Muscles of upper and lower back are loosened. Elbows bent, shoulder joint gently stretched. The shoulder blades and lower back are brought into a helpful neutral position with core muscles active.
- ▶ Biceps brachii (BB) muscles contraction in healthy subjects during takbeer
- ▶ Several studies have been made about the movement of the muscles when we start standing up, then raising both hands placed on the takbir and put on the stomach can enlarge the chest cavity & lungs will feel spacious and move the muscles in both hands.
- ▶ Vision is sharpened by focusing upon the floor, where head will prostrate.
- ▶ Straightening back improves posture. This position straightens the back and improves posture.



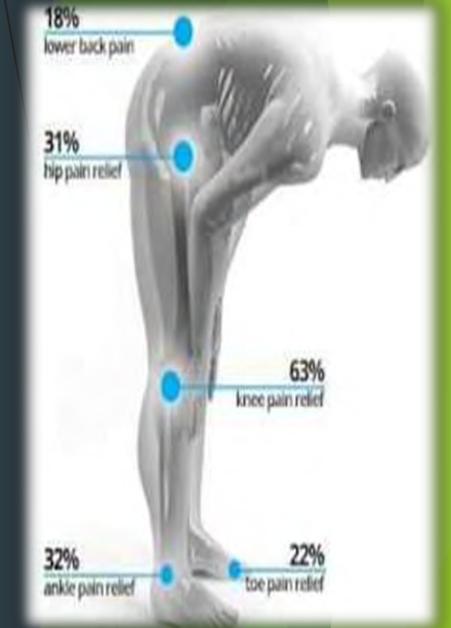
Physiological Benefit of Qiyam: Effect on equilibrium / vestibular

- ▶ During Qiyam , there is an even distribution to both feet.
- ▶ This will ease the nervous system and balance the body. The body is charged with positive energy.
- ▶ Postural reflex, and tonic labyrinthine reflex are initiated by the force of gravity on the receptors of otolithic organs in the utricle of the inner ear, and are effected via the vestibulospinal tracts. Maximal effect occurs in the supine position and minimal effect occurs when the head is down 60 degrees below the horizontal plane in the prone position. The tonic labyrinthine reflex is responsible for the contraction of the limb extensor muscles. Thus, the various positions of salat from the vertical natural position to prostration helps in the maintenance of steadiness of postural equilibrium.
- ▶ Muslims usually keep their eyes fixed on the site of prostration. This visual fixation together with proprioceptive systems, vestibular systems, and the various postures provide a complex positional sense in the brain stem and cerebellum.



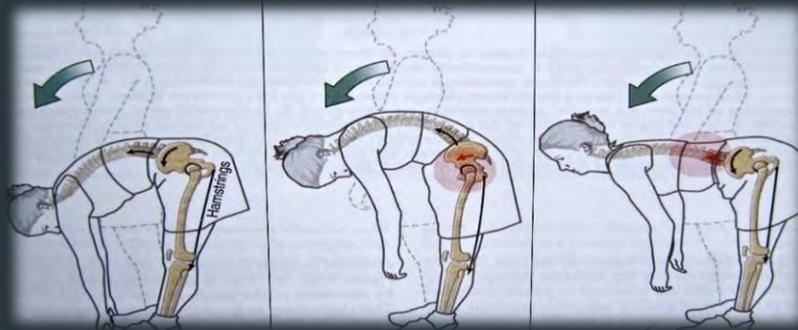
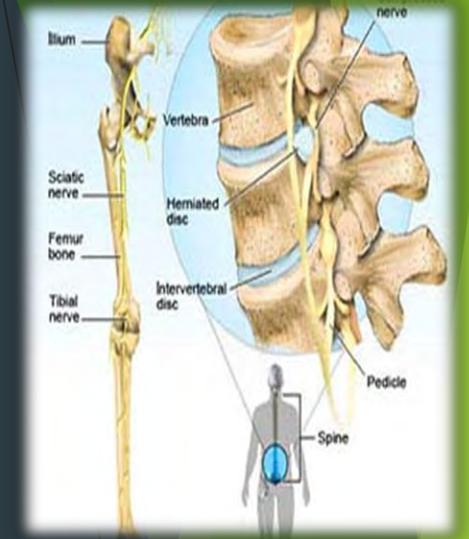
Physical Health benefits of Ruk'u

- ▶ The forward bending position of Namaz (Ruk'u) is good for your lower vertebral column.
- ▶ Muscles of the lower back and back of the thighs and calves are fully stretched as the waist is bent
- ▶ Ruku is effective in developing flexibility to shoulder, elbow wrist, knees and ankle regions.
- ▶ Blood flows into upper portions of the body.



Physical Health benefits of Ruku

- ▶ Forward bending in Ruku' distract the vertebrae which reduce the risk of nerve compression thus helps to control backache and spinal diseases.
- ▶ Elongating and aligning the spine, which decompresses lower back.
- ▶ Control of bending the lower back and hips works core muscles, both in forward bending and returning to standing position.



Physiological Benefit of Ruku :Effect on Digestion

- ▶ Salat is an excellent form of exercise to prevent indigestion.
- ▶ In the morning when stomach is empty, a Muslim is required to offer fewer number of Rak'aat whereas in the evening after the dinner we offer an extra number of Rak'aat
- ▶ Ruku exerts abdominal pressure thereby eases constipation and peristaltic movements. This is an effective pose for elimination of flatulence and excess fat.
- ▶ During Ruku, the kidney experiences a sort of massage thus helpful to kidney problems as well.



Physical Health benefits Jalsa/Sitting

- ▶ This is the best pose for relaxing the muscles, including those related to the spine.
- ▶ Muscles at the front of the ankle and foot stretched, with toes extended, knee and hip flexed. Lower back in good posture will help to strengthen core muscles.
- ▶ In tashah'hud position, our hip, elbow, knee joints, backbone, wrist joints move in a way that it provides a form of relaxation to our entire body.
- ▶ The right heel bent and the other feet weight is on it.
- ▶ It helps in curing varicose veins and joint pains, increases flexibility, and strengthens the pelvic muscles.

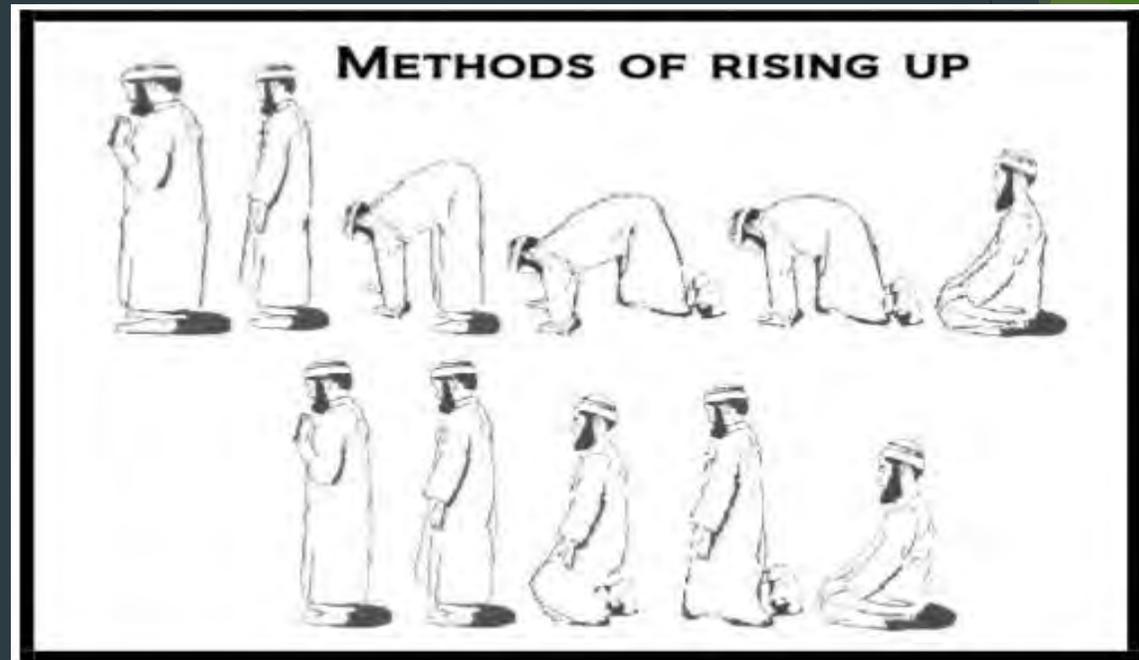


Squatting during Salah

- ▶ When a person gets up from the squatting position to the standing position, his weight is concentrated on the ball of the feet, which improves the strength of the back muscles, thigh muscles, knee muscles and leg muscles.
- ▶ The chief muscles used to sit and stand are your leg and hip muscles (especially quadriceps, hamstrings and glutes), your abdominals and other core muscles, and often, some muscles in your upper body too.

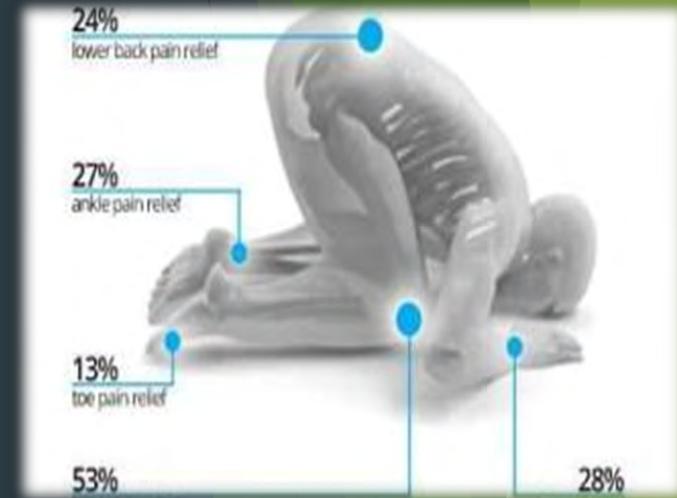


Our Muscles have to work harder to bend and extend your hip and knee joints through the greater range of motion, from positions where your leverage isn't always great



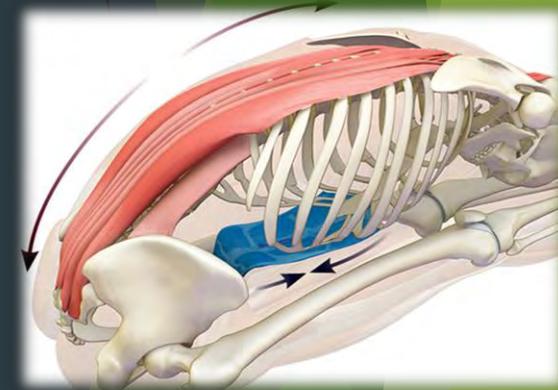
Physical Health benefits of Sajdah

- ▶ Sajdah is very beneficial in the proper functioning of brain, lungs, body muscles, joints and entire vertebral column
- ▶ Lower back flexed, postural neck muscles are working to control neutral head position in lowering down, then lifting from the floor.
- ▶ While performing Sajdah, the toes are experiencing stretch which is good for better health of the body.
- ▶ Increases elasticity of joints



Muscle work during Sujud

- ▶ Sujud brings the spine into the forward bending direction which widens the space between the facet joints, releasing the pressure on the traversing nerves consequently reducing the backache and sciatica due to Spinal stenosis.
- ▶ Back muscle stretched : Latissimus dorsi & Erector spinal muscles.
- ▶ Unlocking of facet joints: When you move slowly and mindfully, you can practice moving segmentally through the spine, imaging you are moving one vertebra at a time.
- ▶ Due to the prolonged predominance of sitting in our daily activities, tighten hip muscle, Hip flexion movement in repetition of sujud and jalsa release this area.
- ▶ Relax tension around the sacroiliac area. Hence help with sacroiliac instability.



Neck & Upper Extremity movement during Sujud

- ▶ In the unique position of Sajdah the neck muscles get best exercise. They have to bear the load when the forehead lies at the ground hence the neck muscles become stronger.
- ▶ One can note the tense pressure at the neck muscles in the position of Sajdah specially the active motion of the neck and the facial muscles when the head is being lifted and it will be noticed that they are in a very active motion. More strong cervical muscles mean the cervical vertebra will be better protected.
- ▶ Strength of cervical muscles is important as the head rests upon cervical vertebra supported by cervical musculature.
- ▶ Sujud helps to ease neck myalgias or cervical spondylosis as the neck muscles particularly become very strong due to the **34 sajdah** offered daily in five prayers.
- ▶ The hands are then specifically stretched out and thence the forearm as well as arm muscles are supposed to bear the weight in the Sajdah position. It gives good exercise to the muscles of the upper limb.

Holy Prophet in a hadith advised not to put the forearms flatly on the ground but to keep them elevated above ground and this is better for the forearm and arm muscles.



Sujud- Physiological benefit

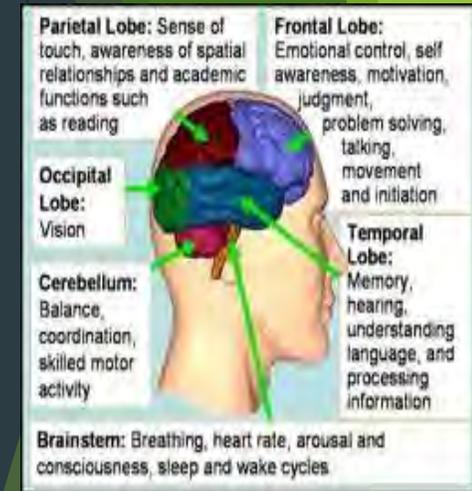
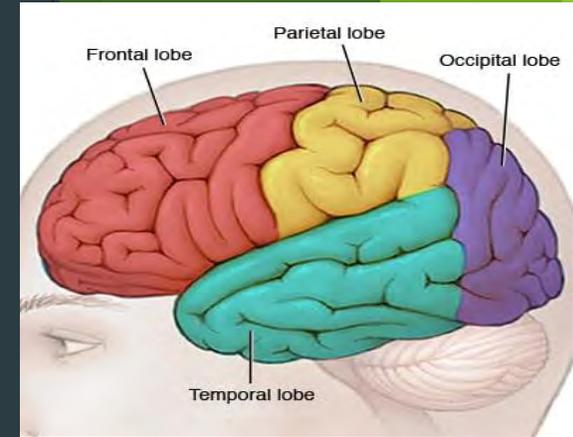


- ▶ Prostration is a unique position as this is the only position in which brain (or head) becomes lower than the heart, and hence the blood gushes towards the brain with full force.
- ▶ Sujud **is the most important position in prayer. This position stimulates the brain's** frontal cortex. It leaves the heart in a higher position than the brain, which increases flow of blood into upper regions of the body, especially the head and lungs. This allows mental toxins to be cleansed.
- ▶ Knees forming a right angle allow stomach muscles to develop and prevents growth of flabbiness in midsection.
- ▶ Increases flow of blood into upper regions of body, especially the head (including eyes, ears, and nose) and lungs; allows mental toxins to be cleansed by blood.
- ▶ Maintains proper position of fetus in pregnant women. Reduces high blood pressure.



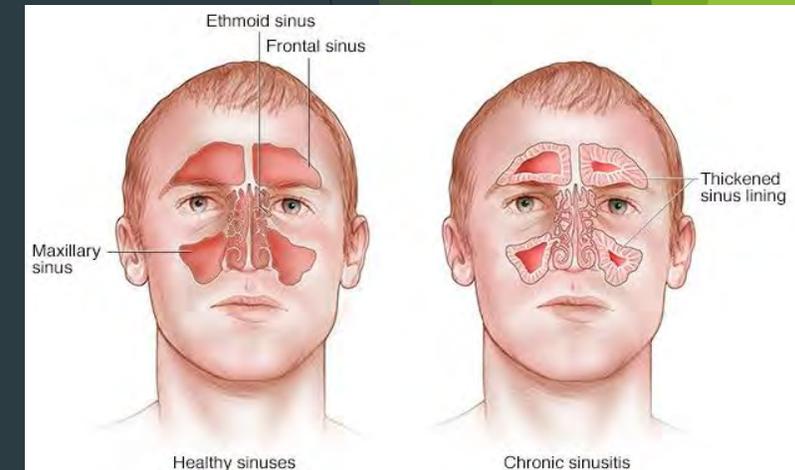
Sujud- Physiological benefit : Effect on Neurological System

- ▶ The electrostatic charges are dissipated and discharged, when the frontal lobe of the brain is put on the ground, in sujud.
- ▶ Frontal lobe is associated with reward, attention, short-term memory tasks, planning, and motivation.
- ▶ Sujud allows extra blood supply to enter the brain, which enables the brain to become more healthier, plus has a positive effect on the memory, vision, hearing, concentration & the psyche.
- ▶ In doing sujud, there is less chance of getting: headache, spasms, aches, etc due to the fact that the electrostatic charges are dissipated and discharged.
- ▶ Sajdah helps to maintain smooth blood to the brain region, reduces the chances of brain hemorrhage and headache due to smooth blood flow to the head region.



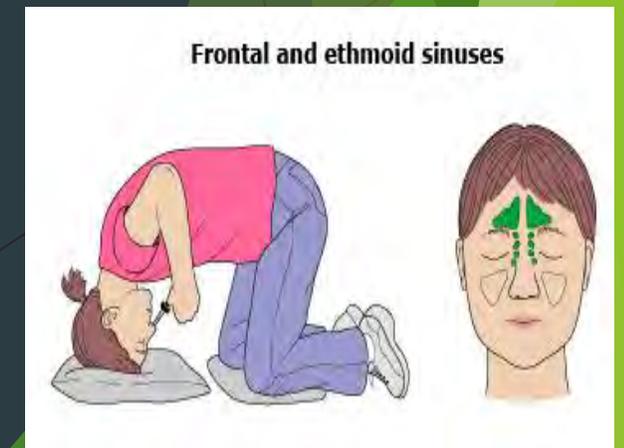
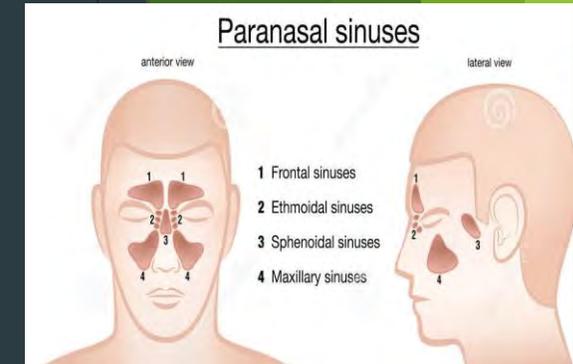
Sujud- Physiological benefit : Effects on sinus

- ▶ Exercises can be good alternative treatments for sinus problems.
- ▶ Yoga posture similar to Ruku'u Energizes the head and respiratory area; helps clear sinus congestion.
- ▶ The widely recognized (Adho Mukha Svanasana) Similar to Saijda posture is also helpful in relieving sinus congestion.
- ▶ When you do sujud there is drainage of sinuses (frontal sinus) and there are fewer chances that a person will have sinusitis, that is inflammation of the sinus.



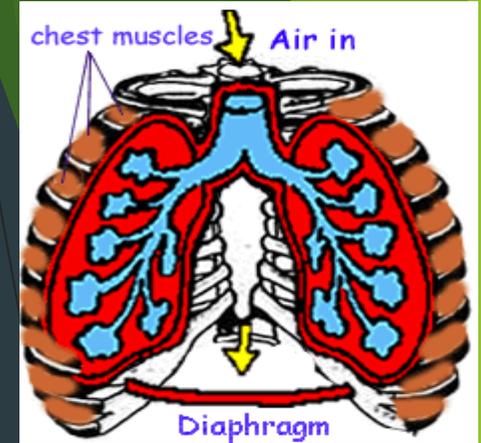
Sujud- Physiological benefit : Effects on sinus.

- ▶ Normally during the day, the human beings have an upright posture. The maxillary sinus, the opening is in the upper medium part. The secretions cannot be drained, due to the upright posture which people have.
- ▶ Therefore when you do sujud, there is drainage of the maxillary sinus, which is very healthy, and decreases the chances of infections occurring.
- ▶ It also causes drainage of secretion of the frontal sinus, ethmoid sinus as well as the sphenoid sinus. This all decreases the chances of a person getting sinusitis. Moreover, someone who has sinusitis, the sujud is a natural treatment.



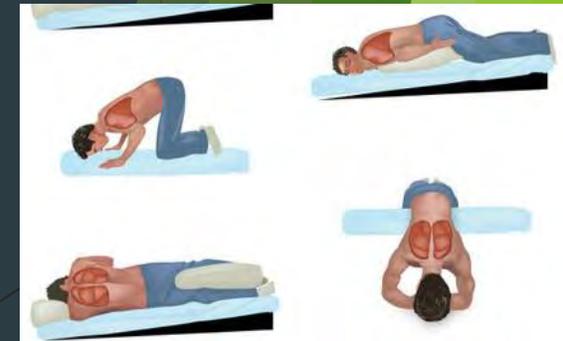
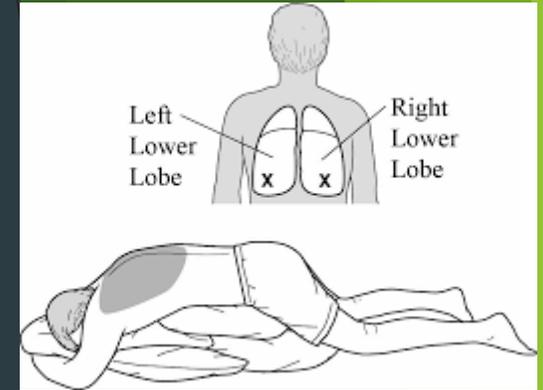
Sujud- Physiological benefit : Effects on lungs capacity

- ▶ Normally when you breathe, only 2/3 of the lung capacity is used.
- ▶ The remaining 1/3 of the lung capacity, the air remains in.
- ▶ Therefore, it is only 2/3 of air which comes in as fresh air, when you breathe and 2/3 goes out.
- ▶ The remaining 1/3 is called as: residual air.
- ▶ When you do sujud, the abdominal viscera, they press against the diaphragm. The diaphragm presses against the lower lobes of the lungs, which causes the person to exhale the 1/3 residual air. Once this residual air goes out, more fresh air comes in, which is responsible for a healthy lung. There are less chances of having diseases of the lungs.



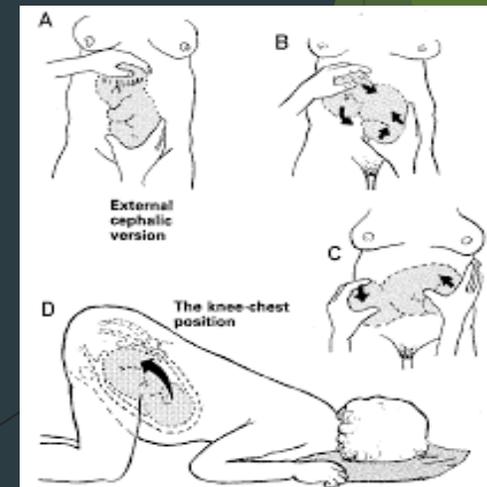
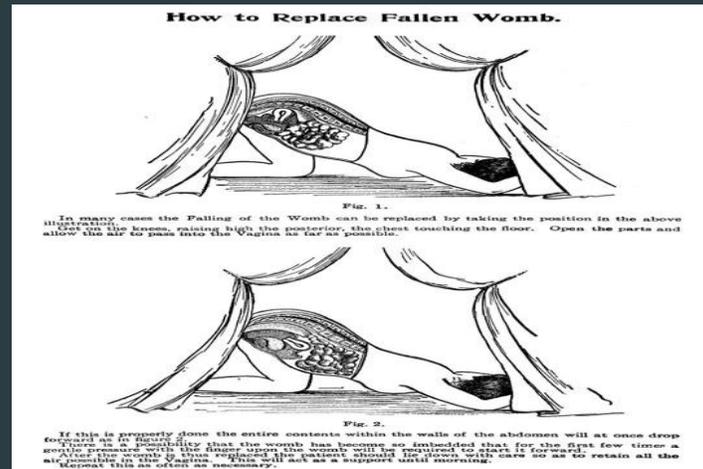
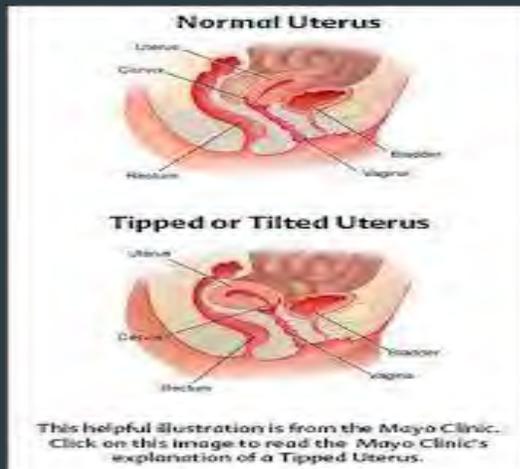
Sujud- Physiological benefit : Postural Drainage

- ▶ The sujud position is also a natural treatment for a person suffering from bronchitis, which is inflammation in the lungs.
- ▶ The sujud position also causes drainage of the secretion of the bronchial tree, thus prevents bronchitis. It prevents the accumulation of the secretion in the bronchial tree.
- ▶ It is also helpful in other pulmonary (lung) diseases, in which secretion are acclimated. Besides this, other things like: dust and bacteria can accumulate, which the sujud is a prevention from.



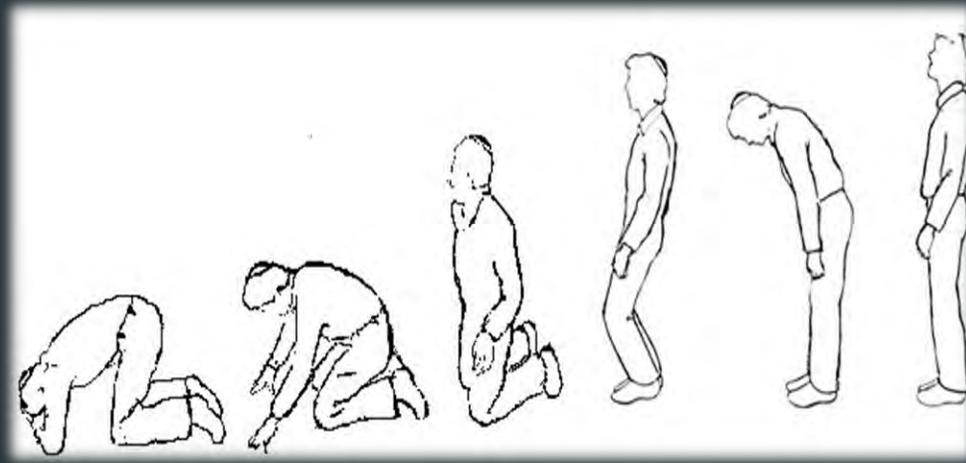
Sujud- Physiological benefit : Effects on women's Health

- ▶ Position of Sajdah is also said to be a good treatment for the retroversion of uterus, means the uterus is tipped backwards so that it aims towards the rectum instead of forward towards the belly.
- ▶ Breech baby opening exercise is similar to sajida position, which helps to stretch and lengthen the utero sacral ligaments and also creates space for the baby to move their head downwards.
- ▶ <https://www.youtube.com/watch?v=5hXFRrdr0CQ>



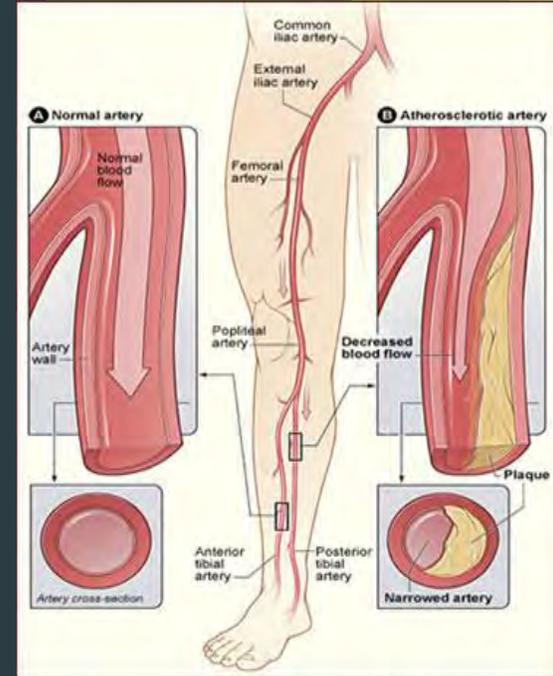
Sujud- Physiological benefit : Effect on reproductive Organs

While getting up from prostration, the perineal muscles are again actively mobilised and this gives strengthens the muscles associated with the male reproductive system.



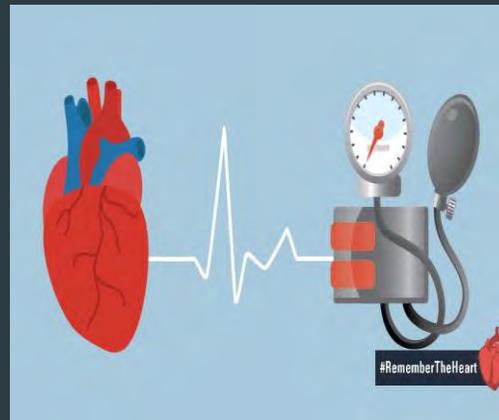
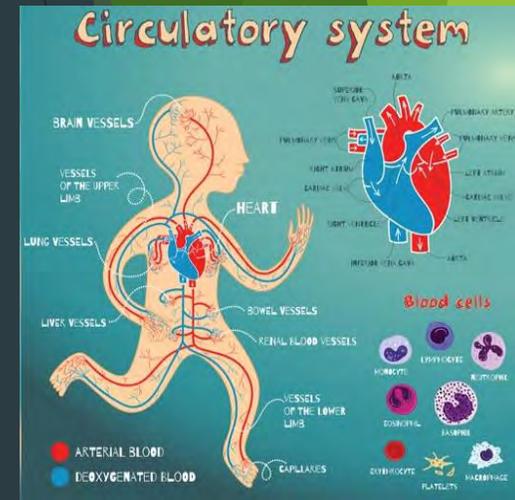
Sujud- Physiological benefit : Effects on Peripheral vascular Circulation

- ▶ During standing in Qiyam, our heart is below our brain, it levels when bowing down in **Ruk'u** and in Sajida Brain is below the heart which pumps blood to brain with extra force. This force will be higher because normally heart need to pump blood against gravitation and now its easy when brain is down the heart.
- ▶ The various motions have a great impact on blood flow in the human brain. Because of variations in arterial mean pressure in the body, prostration helps in improving cerebral circulation and avoiding ischemic brain disease.
- ▶ In the sujud, the weight is concentrated on the knees, and your legs are flexed. The soleus and the gastrocnemius muscles (muscles of the leg) are also called the peripheral heart, because it has an extensive venous return, which is responsible from increasing venous return, of the lower heart of the body



Sujud- Physiological benefit : Effects on Cardiovascular system

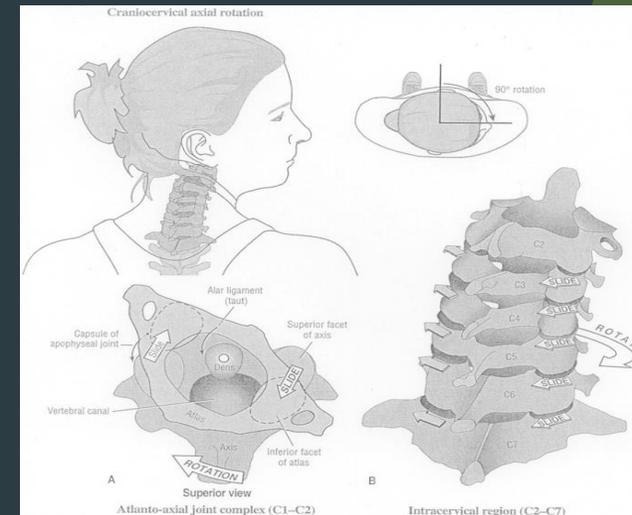
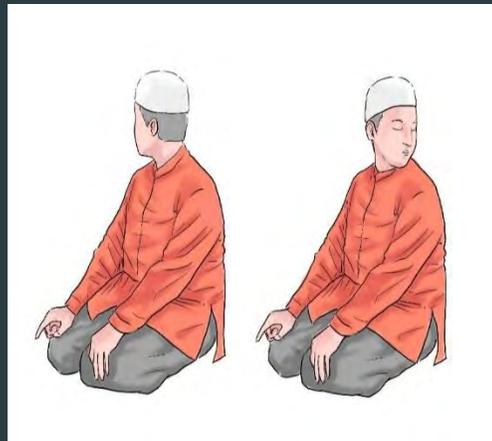
- ▶ When you do sujud, due to the decrease of the gravitational force, there is extra venous return from the abdominal organs. Therefore, the extra venous return (volume of blood returning to the right atrium of the heart) is increased, which makes the Heart Healthy.
- ▶ The study proves that standing and prostration positions of Salat produced the highest and the lowest HR, respectively. The systolic and the diastolic BP decreased significantly after performance and a greater reduction in BP was observed during performance of Salat.



Health benefits of Sala'm

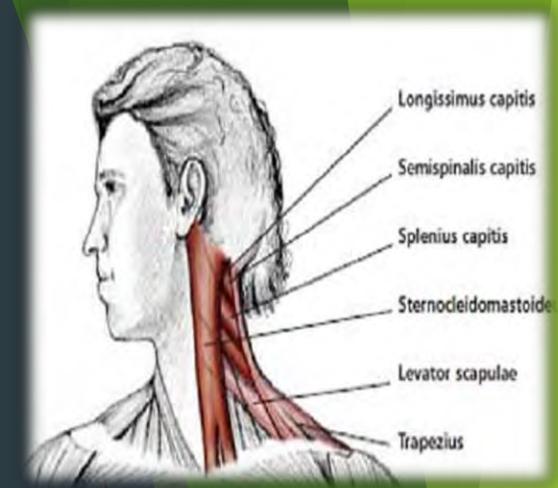
- Salam is the excellent form of neck and upper vertebra exercise.
- The head performs rotator movements over the cervical vertebra.
- Namaz's Salam is which is helpful in loosening the neck joints and also helps to relax the shoulder and upper back muscles. Salam helps to refresh all the nerves passes through the neck, thus good in case of headache and contend migraine.

<https://youtu.be/bfHG66UnW88>



Muscle Work during Sala'm

- ▶ Sala'm causing muscle contraction and neck rotation exercises hence beneficial for neck Range of motion.
- ▶ Neck Side Rotation and scapular movement.
- ▶ Sternocleidomastoid, rotatores longi, semispinalis capitis, and semispinalis cervicis. Scalenes acting in contralateral head rotation.
- ▶ The levator scapulae muscle is attached at the top four cervical vertebrae (C1 to C4) and runs down the side of the neck to attach at the top of the shoulder blade (scapula).



SALAH & YOGA

- ▶ A number of attempts have been made to relate salah to a popular ancient form of physical acts and meditation. Yoga has been known for its scientific basis as a healthy lifestyle practice for thousands of years.
- ▶ Today, Yoga, regardless of its religious affiliation, has become one of the most popular fitness practices all over the world
- ▶ Salah postures are similar to yogic postures and Muslims have had the blessing of Salah that has since 1400 years become an integral part of their daily activities with physical, psychological, social and spiritual benefits therefore Salah, while being performed as a religious obligation, can simultaneously give all the benefits of yoga.
- ▶ Namaz are gentle, simple exercises suitable for all ages and conditions.



▶ Salah

- ▶ During prayer, a Muslim must devote himself and surrender completely to Allah. It's a meeting between the Muslim and his Creator, thus he should think only about Allah. A Muslim is required to focus during prayers and leave out all life distractions and connect with Allah during that time.

▶ Yoga

- ▶ Meditation or Dhyna, from a Yogic point of view, is described by Yoga International as “The mind is clear, relaxed, and inwardly focused. When you meditate, you are fully awake and alert, but your mind is not focused on the external world or on the events taking place around you.”

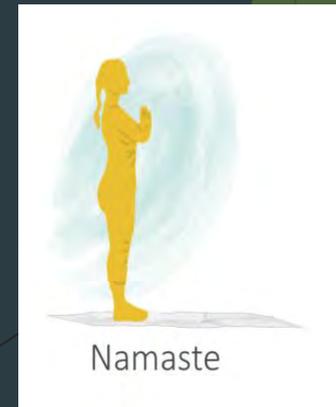
▶ Qayam

- ▶ **Muslim starts by Takbir “Allah Akbar”** while standing straight then with the hands placed in a manner to perform **the start of Salat “Qayam.”**
- ▶ The standing posture in prayers ensures a straightened back & posture.



▶ Namaste

- ▶ The word itself means “Bow me you” or “I bow to you,” Yogis place the hands together at the heart chakra to increase the flow of divine love, bowing the head, closing the eyes.



▶ Ruku'

- ▶ Ruku' is the forward bending position in Muslim's prayers. It is a humbling act of bowing down to Allah, letting go of one's pride and submitting to Allah.



▶ Ardha Uttansana

- ▶ Ardha Uttansana fully stretch the muscles of the lower back, front torso, thighs, and calves. Blood is pumped into the upper torso. This position tones muscles of the stomach, abdomen and kidneys.



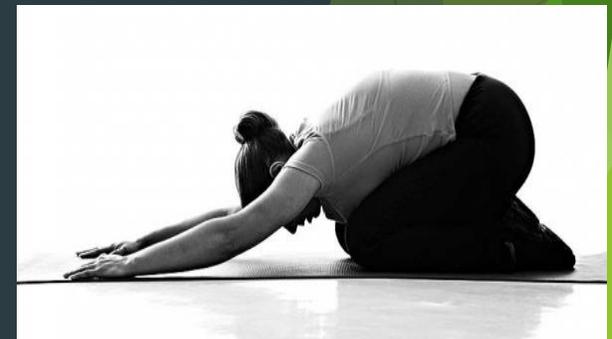
▶ Sujud

- ▶ The most important part in prayers is the Sujud, where the forehead touches the ground. It is mentioned in a Hadith that this is the position where the Muslim is most near to Allah.



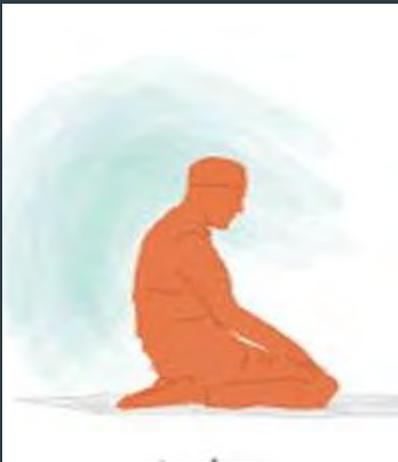
▶ Balasana

- ▶ Yoga pose called Balasana (Child pose) is stretching pose.



▶ Julus

- ▶ Julus: One of the main postures during Muslims' prayers is the Julus. Where a Muslim recites the Tashahhud in the second and last Rakka of the prayer.



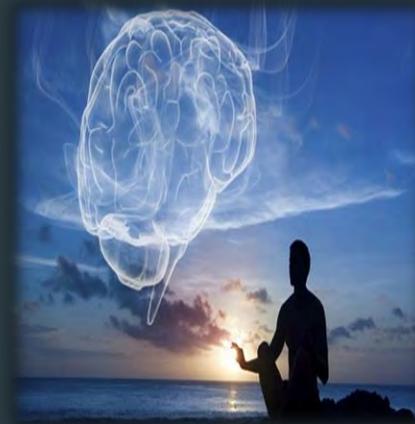
▶ Varjasana

- ▶ Varjasana is the term used by Yogis to describe that same pose. The pose helps in calming the mind, which stimulates the body to relax.



Salah : Effect on mental health

- ▶ Prayer is a kind of psychological therapy that helps in calming and soothing the soul as well as relieving all tension [20].
- ▶ In one of the studies by Doufesh [22], found that parasympathetic activity increases and sympathetic activity decreases, thus regular Salat practices help in promoting relaxation, minimizing anxiety.
- ▶ Worshippers have to stand and concentrate their minds on praying. A reactive depression is common in geriatric and disabled persons. The determination to pray has a remedial action on depression.



Effect on mental Health- Contd.

- ▶ One study was done to find out the mental health and self concept among Muslim those Who Practice Regular Namaz and Tilawat -EQuran and Muslim those Who Do Not Practice Namaz Regularly.

The result of this study conclude that Muslim those who Practice Regular Namaz and Tilawat -E- Quran have significantly high mental health than Muslim those who do Not Practice Regular Namaz and Tilawat -E- Quran.

- People today are exposed to many daily frustrations. They are also propounded with many electrostatic charges from the atmosphere. These charges are precipitated on the central nervous systems (CNS) which becomes supersaturated. One has to get rid of these extra charges, otherwise, there is the possibility of headaches, neck aches, muscle spasms, etc.

The use of anti-depressants, tranquilizers and other mood-altering drugs could be reduced or eliminated with the practice of Sujud



Research & Evidence



Prostration is the only position in which the head is in a position lower than the heart and therefore, receives increased blood supply. This surge in blood supply has a positive effect on memory, concentration, psyche and other cognitive abilities

(Al- Gazal, 2006; Ayad , 2008 Turkey)

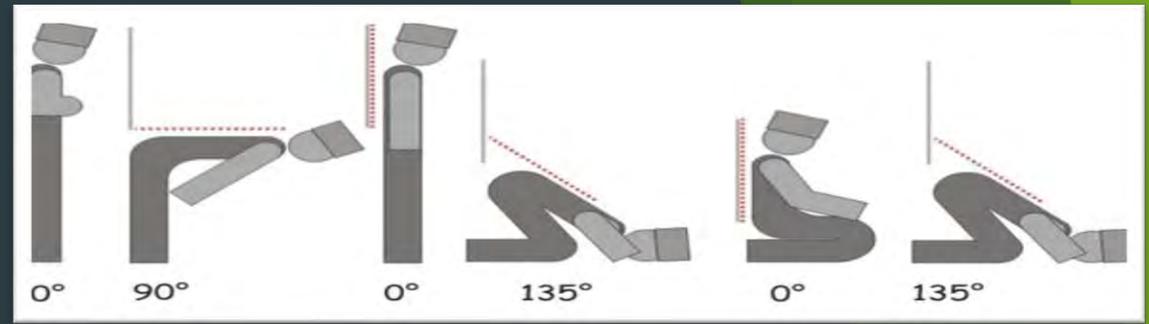
A recent study investigating the alpha brain activity during Muslim prayers has reported increased amplitude in the parietal and occipital regions suggestive of parasympathetic elevation, thus indicating a state of relaxation

(Doufesh, 2012 Malaysia)

Study was conducted on patients with regular back pain and pregnant mothers from the Malay, Indian and Chinese communities. Findings from the study showed that the ‘ruku’ (bowing with hands resting on knees) and ‘Prostration’ positions could be used as therapy as it helped relax the spinal canal and reduces the risk of pressure on the spinal nerve.

(Malaya’s biomedical engineering. Uni department 2014)

Research & Evidence



UM Medical Centre Cardiology Consultant Specialist Prof Dr Wan Azman Wan Ahmad said that 12 ‘rakaat’ (unit for a set of actions in a prayer) equaled to 30 minutes of light exercises daily as recommended by health experts

(zurairfm.wordpress.com/2009 Malaysia)

The dynamic balance was assessed by using a Balance Master. Group performing Islamic prayer regimes were having statistically significantly better dynamic balance than the non-practicing healthy subjects. The results of this study support the hypothesis that Muslim prayers benefits and improves the human physiological function, especially balance.

(Dr Nabeela Nazish¹ , Dr Nidhi Kalra² 2018, Dehli India)

Three postures in Namaz have been investigated and compared to similar stretching exercise, which were takbeer, bowing and prostration. This proves that Namaz has musculoskeletal effect like stretching. As part of spiritual act, the doers also perform slow and moderate exercise at the same time which could benefit their health

(Ibrahim and Siti, 2012 Turkey)

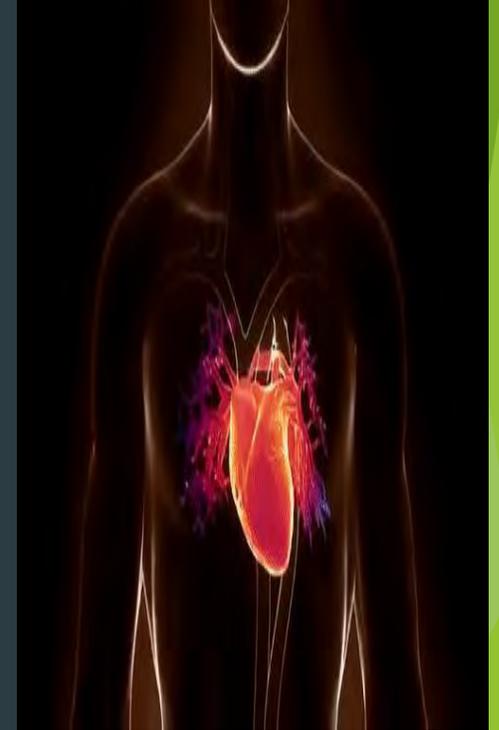
Research & Evidence

The Effect of Prostration (Sajda) on Cerebral Blood Flow Velocity

Results: Basilar artery mean velocities were 39.25 ± 11 cm/s and 50 ± 10.5 cm/s in sitting and prostration position, respectively (23% increase velocity, $p < 0.05$). No significant difference were found between males and females, $p = 0.25$. The results indicated that cerebral vasoconstriction resistance did not has not occurred to prevent brain over perfusion during prostration.

Conclusion: our study indicate that prostration increase cerebral blood flow in healthy subjects and may be beneficial in elderly and stroke patients

(J. Rafsanjan Un iv. Med. Sci. 2008 IRAN)



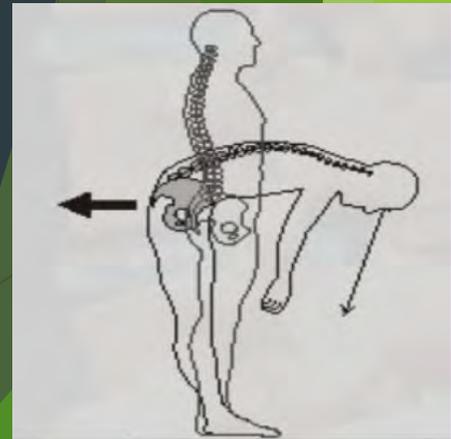
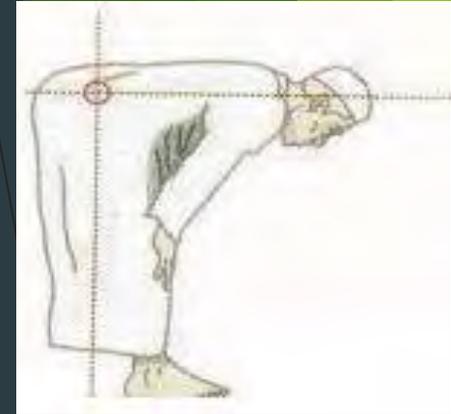
Research & Evidence

An ergonomic study of body motions during Muslim prayer (i.e., **Salāt**) using digital human modelling presented in an International US Journal, A factorial analysis is conducted considering four main factors: population, gender, percentile, and prayer posture.

For healthy individuals, It was found that all the main factors and one interaction effect (back angle × knee angle) are significant. It was also found that there is an inverse relationship between the time spent on each prayer posture and the back compression force affecting the person during that.

(Faisal & Mohammed 2017)

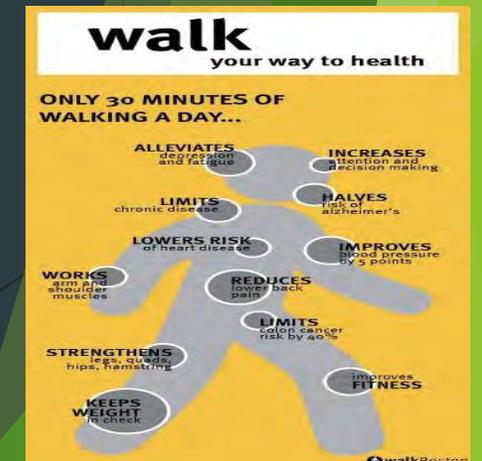
“Holy Prophet Muhammad used to elongate the position of Ruku (bending) and Sajdah positions and he advised to do so. In the light of the above facts it is appropriate to say that from medical point of view as well this advice is a golden rule for health.”



Virtue of walking towards Mosque

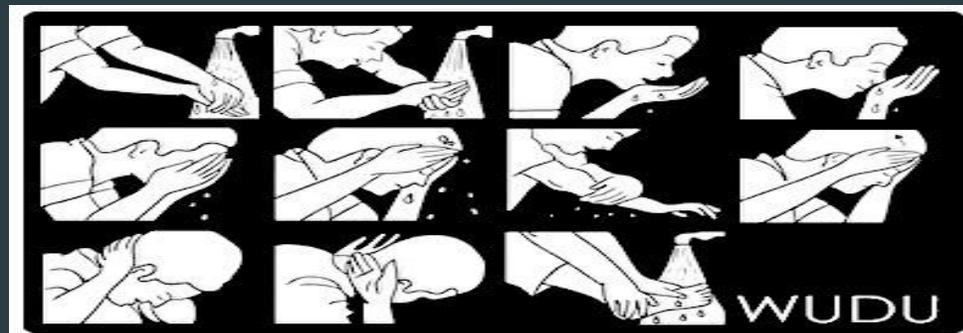
- ▶ Walking to the mosque is a form of exercise in and of itself, which brings innumerable benefits.
- ▶ It plays a major role in strengthening the body and giving energy, body will be able to fight disease and sickness.
- ▶ walking helps to get rid of fat , inactivity and sitting too much, above all obesity.
- ▶ Remedy against heart disease, improve the circulation.
- ▶ A remedy for mental exhaustion and thinking too much, because it restores to mind to its natural state and helps one to relax, physically and mentally.

“There is a great reward for walking to the mosque, and that the worshippers who will have the greatest reward are those whose houses are further away”



Overall Cleanliness and Hygiene

- ▶ One of the most obvious benefits of the daily Salah is the overall cleanliness and purity that the individual achieves.
- ▶ It keeps you in a constant state of purity. Before every Salah, a Muslim must perform ablution, which is cleansing of the mouth, nose, face, ears, neck, hands, arms and feet.
- ▶ Staying in a constant state of cleanliness leads to healthier skin and an overall healthy hygiene. It rids one of germs, allergens and various forms of infections and diseases, which are caused by poor hygiene.
- ▶ The recent Netflix docuseries “[Pandemic: How to Prevent an Outbreak](#)” illustrates how the Islamic ritual washing, known as “wudu,” may help spread a good hygiene message.
- ▶ <https://www.thenews.com.pk/print/647989-ablution-practice-might-have-cut-covid-19-risk-in-uk-muslims-report>



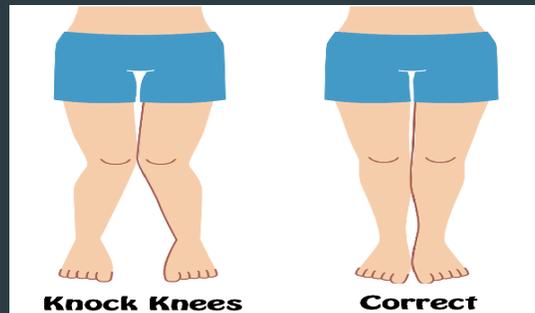
Hip arthritis / hip replacement

- ▶ Dr Hussam Rahmeh (Orthopedic Surgen at TW Hospital AbuDhabi, it has been observed that said Muslim population in east has less prevalence of Hip Osteoarthritis / Hip Replacement surgeries as compare to western Non-Muslim population because of frequent Hip movement during Ruku'u and Sajida.
- ▶ If the movement from one position to the next in prayer is slowly and smoothly performed, prayer can prevent joint problems.



Precautions- Use modified position

- ▶ Sujud may increase intracranial pressure , in case of Hydrocephalus, Brain Trauma , Meningitis, craniotomy recent eye surgery, tumor, precautions should be taken in acute stage.
- ▶ Genu valgum, known as knock-knees, is a knee misalignment that turns your knees inward. The deformity may get worse sitting on one feet Julsa posture, same goes for Scoliosis patient as well. Modified position would be preferred in such cases.



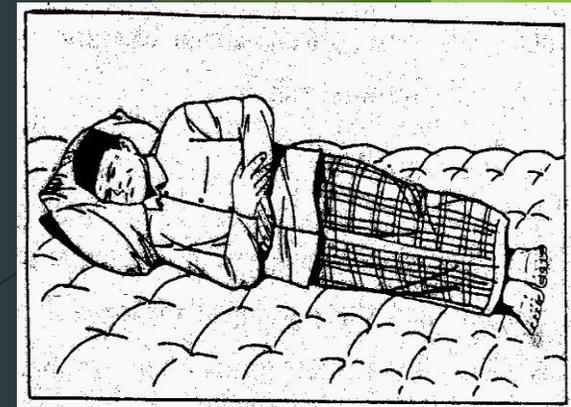
What if I can't pray in these positions due to my pain?

Islam allows flexibility in the positions of prayer during illness.

As Prophet Muhammad (Peace Be Upon Him) said,

“Pray while standing and if you can't, pray while sitting and if you cannot do even that, then pray lying on your side”.

(Al-Bukhari 2:20, 218).



CONCLUSION

Finally it must be reminded that prayer is not meant to be an exercise. However there are a lot of medical advantages associated with it as explained by modern medicine.

Still the best blessing is the peace of mind, which a person derives by the accomplishment of his duty to Allah by fulfilling an obligation.

حَيَّ عَلَى الصَّلَاةِ ►

حَيَّ عَلَى الْفَلَاحِ

Come to prayer.

Come to success.

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JAZAKALLAH KHAIR

THANKS YOU