

# Managing knee pain

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Knee pain is a common symptom in people of all ages. It may start suddenly, often after an injury or exercise. Knee pain may also begin as a mild discomfort, then slowly worsen.

The knee is one of the largest joints in the body which carries our body weight. The surface of the bones inside the knee joint is covered by articular cartilage, which absorbs shock and provides a smooth, gliding surface for joint movement.

## What are risk factors for knee pain?

**Biomechanics:** The knee joint is a complicated in its operation and is used frequently throughout the day. Any change in the movement of the joint can cause subtle changes and cause pain and injuries.

**Excess weight:** The stress on the knee joint is increased with excess weight. Obesity also increases the risk of osteoarthritis as the cartilage breaks down more rapidly. Being overweight can put you at greater risk for knee problems.

**Overuse** during repetitive motions as are found during certain exercises or work conditions can cause breakdown of cartilage and lead to pain.

**Sports injury:** Sport activity involved in trauma, fall down on knee; even fracture of bone.

## Causes of knee pain:

- Arthritis – including
- Baker's cyst – a fluid-filled swelling behind the knee that may occur with swelling from other causes, like arthritis
- Bursitis – inflammation from repeated pressure on the knee, such as kneeling for long periods of time, overuse, or injury
- Connective tissue disorders and dislocation of the kneecap
- Iliotibial band syndrome – a hip disorder from injury to the thick band that runs from your hip to the outside of your knee
- Infection in the joint
- Knee injuries – may cause bleeding into your knee, which makes the pain worse
- Osgood-Schlatter disease



rheumatoid arthritis, osteoarthritis, and gout

- Rest and avoid activities that aggravate your pain, especially weight bearing activities.
- Apply ice. First, apply it every hour for up to 15 minutes. After the first day, apply it at least four times per day.
- Keep your knee raised as much as possible to bring any swelling down.
- Wear an ace bandage or elastic sleeve, which you can buy at most pharmacies. This may reduce swelling and provide support.
- Take acetaminophen for pain

along with tendinitis or torn ligaments and cartilage.

## Management of knee pain that has just started

- Sleep with a pillow underneath or between your knees.
- Sometimes may include NSAID or sometimes surgery.

or ibuprofen for pain and swelling.

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## Knee rehabilitation

From the very beginning of the injury to end of the rehabilitation or return to function, a physical therapist can perform physical assessment by evaluating knee examination and laboratory findings. Based on the diagnosis the physiotherapist will plan accordingly by managing pain to recovery function.

## Pain management

Initially ice is very effective in many types of injury, soft tissue

mobilisations, gradually introducing joint mobilisation and stretching within available range. For swelling and pain sometimes ultra sound therapy works mostly.

Gradually introduce muscular strengthening exercise especially quadriceps and vastus medialis (medial compartment muscles), also include back of thigh muscles.

## For knee pain related to overuse or physical activity:

- Always warm up before exercising and cool down afterward. Stretch your quadriceps and hamstrings.
- Avoid running straight down hills – walk down instead.
- Bicycle or swim instead of run.
- Reduce the amount of exercise you do.
- Run on a smooth, soft surface, such as a track, instead of on cement.
- Lose weight if you are overweight. Every pound that you are overweight puts about 5 extra pounds of pressure on your knee cap when you go up and down stairs. Ask your health care provider for help losing weight.
- If you have flat feet, try special shoe inserts and arch supports (orthotics).
- Make sure your running shoes are made well, fit well, and have good cushioning.

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## DOCTOR'S CHAMBER

### Sleepwalking

PROF M KARIM KHAN

Yesterday I got a very interesting case. According to a mother, her son is okay in all respect. His intelligence, dietary habit, social relationship, school performance are good.

But she observed that her son who is seven years old having some sorts of sleep problem. Now a days often at dead of night he step down from his cot and start walking in an around the bed; then again get on to bed and go to sleep.

Mother looked a bit anxious and afraid of the situation, as the child can't remember anything what he did the previous night during sleep.

This is a typical presentation of somnambulism (a.k.a. sleepwalking). I reassured the mother and told her hopefully this will go off in adolescent period (9-19 years) and prescribed clonazepam only.

Somnambulism is an interest to the researcher. These children are found walking around bed, takes water or some food from kitchen and again go to bed and sleeps.

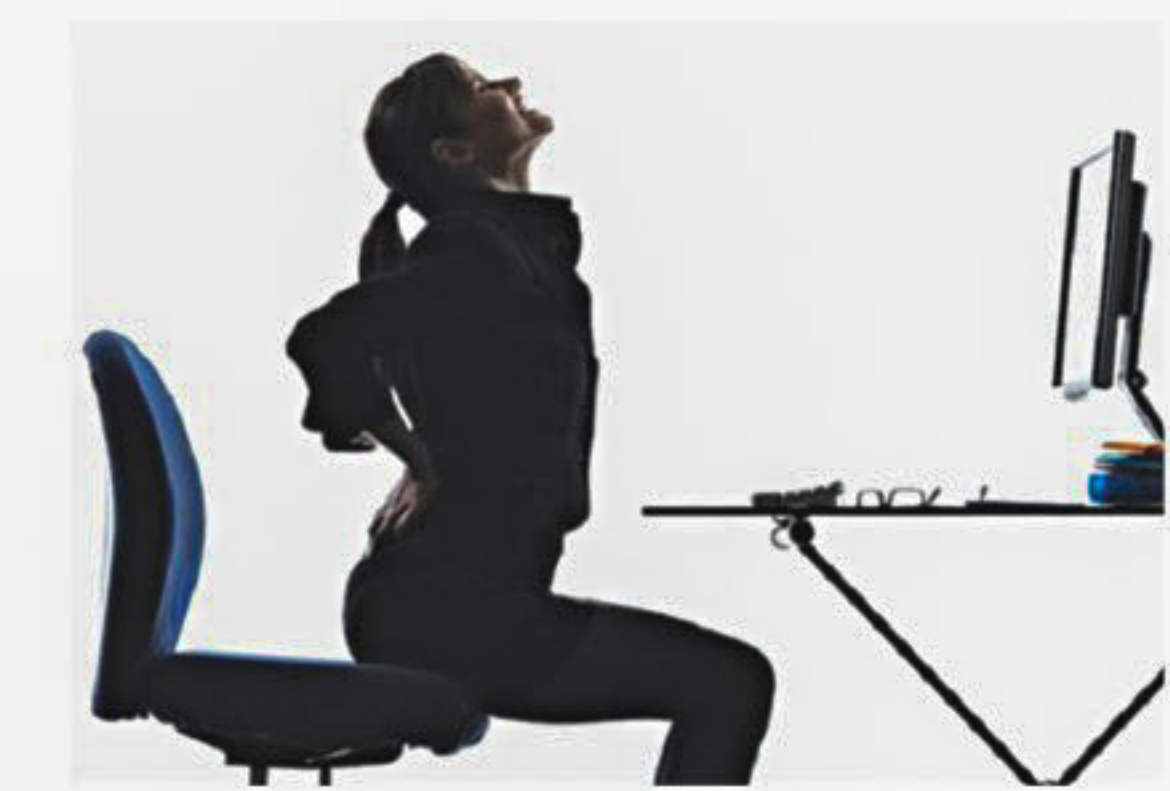
But they cannot remember these activities they did at night, as their consciousness has altered into a state in which it is harder to recall memories. Although their eyes are open, their expression is dim and glazed over. Sleepwalking may last as little as 30 seconds or as long as 30 minutes.

Several experts theorise that the development of sleepwalking in childhood is due to a delay in maturation, may be familial or genetic or may be due to stress and anxiety. Mostly it is unknown. Drug and alcohol consumption has been linked to sleep walking activity.

Anyway this sleep walking problem can happen to your children as well and you should not be very much anxious. Observe it few nights and consult a physician, but don't ignore it.

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## HEALTH bulletin



Fidgetiness may be a marker of a person who is hard-wired to move around a lot.

## Fidgeting while you work might be good for you

People who can't resist fidgeting while they work may want to stop trying to kick the habit, because a new study suggests all that toe tapping and pencil rapping may be good for their health.

Previous research has linked long stretches of sedentary time – whether facing a computer or watching TV – with poor health outcomes even in people who get plenty of exercise, the researchers note in the American Journal of Preventive Medicine.

But in the new study, among women who sat around for five to six hours a day, heavy fidgeting was linked to a significantly lower mortality risk over the study period than staying perfectly still in their chairs.

## Nutritional needs during pregnancy

STAR HEALTH DESK

"Of all the rights of a woman, the greatest is to be a mother", so said the influential writer and linguist Lin Yutang. But we must not forget that every right comes with a responsibility. A pregnant woman has the charge of nurturing the baby; who is entirely dependent upon her for survival. Diet and nourishment are central and should be taken seriously throughout the pregnancy.

Unlike the common saying that you need to eat for two when you are pregnant, the basics of healthy eating remains the same. However, due to the increased physiological needs the basal requirement of certain nutrients increases and they deserve special attention.

Here are the most important ones that you need to keep track of.

**Folate and folic acid:** Folic acid is a B vitamin that is naturally found in fruits, vegetables and legumes. Its synthetic form is called folic acid, and is taken as a supplement. Folate is important to prevent developmental problems in the baby's nervous system (a.k.a. neural tube defects).

Women need an additional 600-800 micrograms of folic acid a day for 3 months before conceiving and during first trimester of pregnancy. Its sources are leafy vegetables, citrus fruits, dried beans, liver, soya products and nuts like almond.

**Calcium:** Calcium is important for strong bones and teeth and is vital for both mother and baby. It helps in normal development of the nervous

system and blood circulation.

Dairy products are the best sources of calcium as they have a higher iron absorption ratio. Broccoli, kale, fortified juices and breakfast cereals are other sources.

**Vitamin D:** Vitamin D improves calcium and phosphorous activity thus strengthening the bones and teeth. Deficiency of vitamin D during pregnancy may cause severe skeletal deformities at birth and may even have an impact on birth weight. The daily Vitamin D requirement is 400 IU of supplement and a decent exposure to morning sun.

Fortified dairy and orange juice, eggs and fish liver oil are good sources of vitamin D. Fatty fishes are also rich in vitamin D, but the intake has to be limited to twice a week, as sea food poses an increased risk of mercury toxicity during pregnancy.

**Protein:** Protein is critical during pregnancy as it supports the baby's growth and the changes in mother's body such as increased breast tissue and blood volume.

Dietary sources of protein include lean meat, mature legumes, dairy, soy and nuts.

**Iron:** Iron requirement increases significantly during the second and third trimester as the volume of mother's blood increases to meet the needs of the placenta and a growing baby. Iron is also important for a strong immune system.

Common symptoms of iron deficiency are constant fatigue, decreased blood volume and poor haemoglobin profile. Including iron

rich foods like chicken, fish (in moderation) and whole eggs will help meet the daily iron requirements. Vegetarian food sources of iron include legumes, nuts and seeds, dried fruits and whole grains.

**Zinc:** Zinc is important for the normal synthesis of DNA, the basic building block of cells. It is therefore, extremely important to maintain sufficient zinc intake to support the rapid cell growth that occurs during pregnancy.

It also improves immunity, accelerates wound healing, and is required for strong bones and normal brain development. Fortified cereals and meat are good sources of zinc. Other sources include shellfish, poultry, beans, whole dried grains and dairy products.

**Iodine:** Iodine is important during pregnancy as it is essential for the baby's brain and nervous system development. The requirement of iodine nearly doubles during pregnancy and can be easily fulfilled by adding iodine rich food in daily diet.

Dairy products, eggs, vegetables and sea foods are good sources; however the actual amount of iodine in these foods is dependent upon the real iodine content of the soil or water they are grown in. Although fish and other sea foods are good sources of iodine, their intake should be carefully monitored to avoid mercury toxicity. Iodine fortified foods like iodized salt is the easiest and most safe way to meet daily requirements.

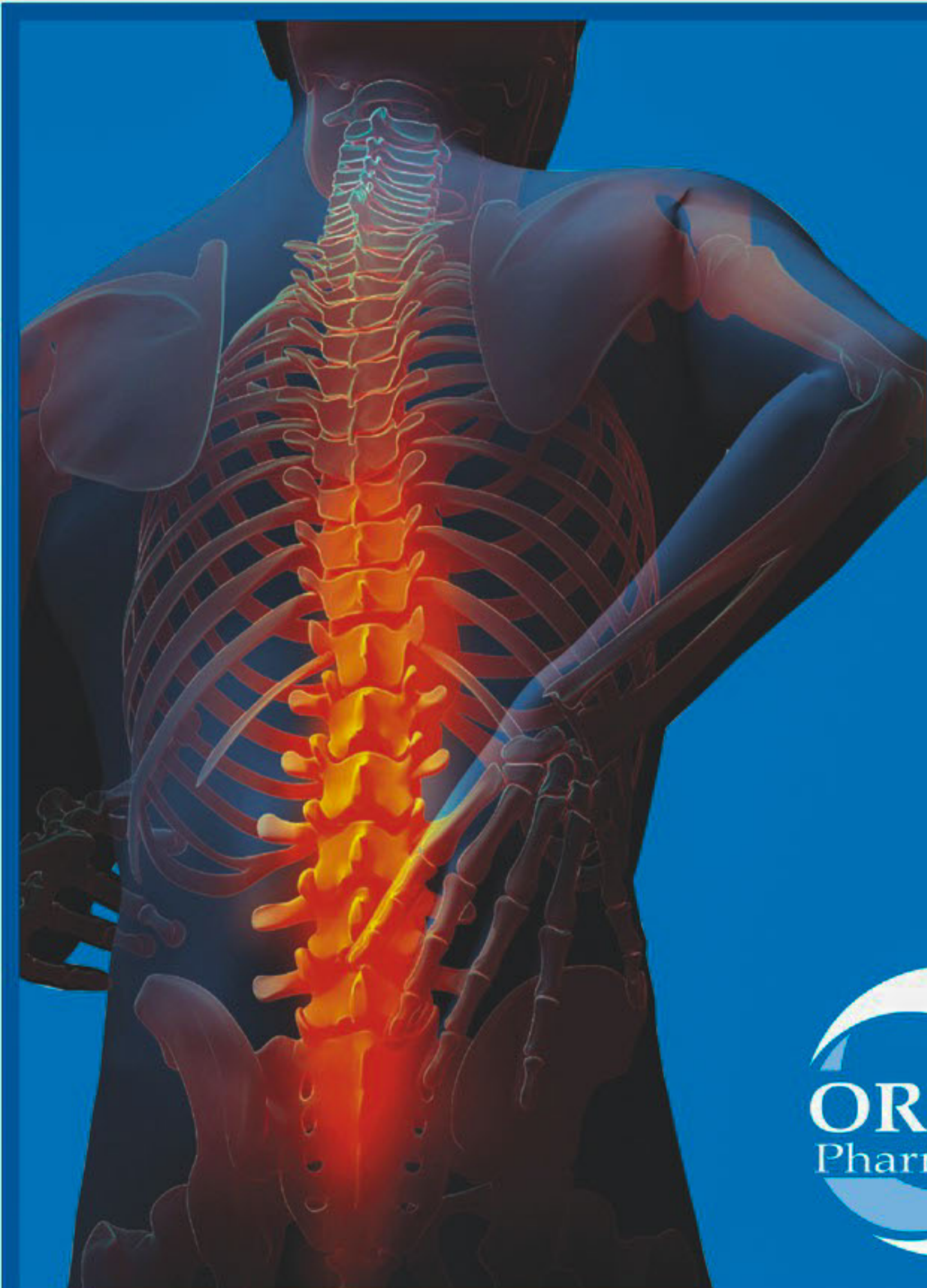


## Nutritional benefits of coconut water

Coconut water is a popular nutritious drink worldwide. Plenty of health ailments are treated with this natural healthy drink. Due to its nutritional properties, it is consumed by people of all ages. Coconut water contains vitamin B and C, and minerals like iron, magnesium, zinc, calcium, phosphorus and potassium. People consume this drink fresh or canned.

- Due to the availability of minerals, coconut water is consumed in case of dehydration.
- Coconut water balances the PH levels in the body and strengthens the tissues.
- Coconut water improves metabolism and burns fat at a faster rate. Thus, it helps reduce weight.
- It prevents the formation of kidney stones by alkalizing the urine. It treats kidney stones as well.
- It keeps the skin healthy and glowing and prevents muscle cramps.
- Coconut water is beneficial for healthy bones and muscles.
- It relieves stress and depression by rejuvenating the body.
- It maintains the balance of electrolytes in the body and thus controls blood pressure levels.
- It regulates the blood circulation and also prevents the formation of plaque thereby preventing heart attacks and other cardio vascular diseases.

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Women are particularly prone to osteoporosis as production of estrogen the female hormone that regulates bone health reduces with age and almost comes to a stop after menopause. So women lose bone mass a lot faster than men up to the age of 70 years.

Although the rate of loss of bone is the same for men and women above 70 years, women have been found to be twice as likely as men to have osteoporosis.

Smoking and excessive alcohol consumption have been found to be a huge contributing factor, along with a sedentary lifestyle. A diet poor in calcium and vitamin D is also a common risk factor

Certain medications like anticonvulsants, glucocorticoids and corticosteroids are known to cause osteoporosis or aggravate bone loss in those who already suffer from the ailment.



# OSTEOPOROSIS CAUSES & REMEDY