

Kapalbhati - **Myths & Reality** by Dr. Satish Pathak

<https://www.youtube.com/watch?v=yPm8M3OqVxo> Uploaded 12 Jan 2013

Dr Pathak, a retired heart surgeon, points out that most modern diseases, such as heart disease, high blood pressure, asthma and diabetes mellitus, are caused by our lifestyles and not by pathogens. The reductionist approach of modern medicine cannot cure these chronic diseases. He states that often it is the occasional exertion of a heart unused to exercise that causes heart attacks. He claims that several of his patients have avoided heart surgery and medication for asthma by practising yogic breathing.

He focuses on the need to enhance the huge capacity of the lungs to oxygenate the blood. He says that the normal breath only lowers the diaphragm by about 1 cm and that the diaphragm can be displaced down by 7 to 8 cm with deep breathing exercises to increase lung capacity. He demonstrates his versions of Ujjayi (deep breathing) and Kapalbhati, pranayama and explains the physiological processes which make them beneficial. These methods not only cause the expulsion of foreign substances from the lungs and respiratory passages but they also generate heat which dries up the excess moisture in the lungs, the retention of which provides a breeding environment for pathogens.

Dr Pathak also explains why the holding of the breath is an important part of pranayama. Holding the air breathed in causes air pressure and movement in the lungs, which open up the alveolar ducts. He recommends these methods of cardiac breathing to avoid heart attacks and other diseases. Transcript of his video is at:

06:35 Correlation between **chakras and nerve plexus**.

12:05 bronchial tract lined by **mucus membranes**
 Secretes 1 litre of water per day; moistens dry air
 Dust particles are trapped by cilia.
 Ribs connected by intercostal muscles

14:10 Rib cage and **diaphragm**

Normal breathing – diaphragm moves by 1 cm
 Deep breathing moves by 7 to 8 cm.
 The rib cage permits the expansion of the lung
 Vital (total) capacity of the lung is ~4500 – 4600 ml
 Normal capacity is 500 ml
 So, only taking in 1/9th of oxygen
 Unless we do breathing exercises like Ujjayi and Kapalbhati, the muscles cannot respond to sudden need for extra oxygen.

20:15 Kapalbhati – but he seems to be demonstrating bhasrika without forceful exhalation.

As he says there are variants on all breathing methods.

Practice for 15 mins

23:30 Expels dust and keeps lungs elastic and blood flow increases

The exercise ejects dust with microbes, so they do not remain and multiply in the lungs to cause disease.

Lungs produce 1 litre of water per day – 50% used to lubricate the mucus membranes. The rest provide an environment for bacteria to breed. Daily practice of kapalbhati will generate heat and evaporate any excess water.

- 29:00
- 30:00 Pranamaya is not just the breathing but involves blocks (now used in box breathing)
If we take a deep breath and lock it in (by tucking the chin down) the air cannot escape but will try to find a way out and move from alveoli to alveoli expanding them and making them elastic.
Do a half breath (not deep breath) so that the alveoli adapt gradually.
Practising in the morning will keep the lungs elastic all day.
- 32:06 This practice also exercises the 29 feet of intestines. The fat in the bowels will melt.
So, the diaphragm can move down further drawing in more oxygen.
- 34:25 **Deviated nasal septum**; may need repeated surgery since the cartilage will re-grow.
But, Kapabhati will prevent the re-growth of the cartilage.
- 36:27 Ujjayi – friction breathing – but much more forceful to generate heat and liquefy the mucus for expulsion. Arm positions vary – but raising arms above head increases upper lung capacity, which is not normally used.
- 38:45 All these breathing techniques are done with eyes closed. So external thoughts are reduced making the blood pressure come down. Dr Pathak recommends Kapalbhathi as cardiac breathing for heart patients, who have avoided surgery.
- 39:12 Trachea constricts in asthmatics causing wheezing during exhalation. Kapalbhathi can prevent not just heart attacks but also asthma since it helps to expand the trachea.
- 41:16 General advice.