

## More to Know!

Using tobacco directly or any product of tobacco in the form of cigar, cigarettes, *bidis*, *hookah*, *gutkha*, etc., is harmful. Use of tobacco most commonly affects the tongue, lungs, heart and liver. Smokeless tobacco is also a major risk factor for heart attacks, strokes, pulmonary diseases and several forms of cancers. There is a high incidence of oral cancer in India due to the chewing of tobacco in the form of *gutkha*. Stay healthy; just say NO to tobacco and its products!

## Do You Know?

Smoking is injurious to health.

Lung cancer is one of common causes of deaths in the world. The upper part of respiratory tract is provided with small hair-like structures called cilia. These cilia help to remove germs, dust and other harmful particles from inhaled air. Smoking destroys these hair due to which germs, dust, smoke and other harmful chemicals enter lungs and cause infection, cough and even lung cancer.



## Think it over!

### Organ donation

Organ donation is a generous act of donating an organ to a person who suffers from non-function of organ(s). Donation of an organ may be done by the consent of the donor and his/her family. Anyone regardless of age or gender can become an organ and tissue donor. Organ transplants can save or transform the life of a person. Transplantation is required because recipient's organ has been damaged or has failed by disease or injury. In organ transplantation the organ is surgically removed from one person (organ donor) and transplanted to another person (the recipient). Common transplantations include corneas, kidneys, heart, liver, pancreas, lungs, intestines and bone marrow. Most organ and tissue donations occur just after the donor has died or when the doctor declares a person brain dead. But some organs such as kidney, part of a liver, lung, etc., and tissues can be donated while the donor is alive.

## Do You Know?

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**Table 7.1 : Some important hormones and their functions**

S. No.	Hormone	Endocrine Gland	Functions
1.	Growth hormone	Pituitary gland	Stimulates growth in all organs
2.		Thyroid gland	Regulates metabolism for body growth
3.	Insulin		Regulates blood sugar level
4.	Testosterone	Testes	
5.		Ovaries	Development of female sex organs, regulates menstrual cycle, etc.
6.	Adrenaline	Adrenal gland	
7.	Releasing hormones		Stimulates pituitary gland to release hormones

A traditional technology is helping India's "waterman" save thousands of parched villages and transform the lives of thousands of villagers in one of India's most arid regions. In "two decades of efforts of Dr. Rajendra Singh, 8,600 *johads* and other structures to collect water have been built in Rajasthan," and "Water had been brought back to a 1,000 villages across the state." In 2015, he won the Stockholm Water Prize. It is the most prestigious award which honours a person who contributes to the conservation and protection of water resources for the well-being of the planet and its inhabitants.

Indian texts such as Upanishads and Smritis contain many descriptions on the uses and management of forests, and highlight sustainability as an implicit theme. One hymn from *Atharva Veda* || 12.1.11 ||, later translated into English in the book *Atharva Veda — the Sanskrit Text with English Translation*, written by Devi Chand in 1997, reads:

yirayaste parvatā himavantoraṇyam te pṛthivī syonamastu  
babhruṃ kṛṣṇāṃ rohiṇiṃ viśvarūpāṃ dhruvāṃ bhūmi pṛthivīndraguptām  
ajitohato akṣatodhyaṣṭhām pṛthivīmaham ||12.1.11|| (*Atharva Veda*)

“O Earth! Pleasant be thy hills, snow-clad mountains and forests; O numerous coloured, firm and protected earth! On this earth I stand, undefeated, unslain, unhurt.”

Another hymn that reveals utilisation and regeneration principles from *Atharva Veda* || 12.1.35 || reads:

yatte bhūme vikhanāmi kṣipraṃ tadapi rohatu  
mā te marma vimrgvari mā te hrdayamarpipam ||12.1.35|| (*Atharva Veda*)

“Whatever I dig out of you, O Earth! May that have quick regeneration again: may we not damage thy vital habitat and heart.”