

LISTENING: Listen to a radio programme about cancer treatment and complete the gaps. You will listen twice. 9

1. The purpose of the programme is to spread information about various METHODS/THERAPIES/OPTIONS/MODES to treat cancer.
2. The CANCER/CANCEROUS/ABNORMAL cells differ from healthy cells in that they do not know how to die and they MULTIPLY/PROLIFERATE/GROW uncontrollably.
3. Besides CT scans, some other imaging tests usually performed are X-RAY and MRI SCAN.
4. After either type of biopsy done, as mentioned by the speaker, the RECOVERY PROCESS is dependent on the type of biopsy.
5. The best type of treatment for cancers without metastases is SURGERY.
6. LASER THERAPY is the operative procedure which can be done without hospitalization.
7. The outcome of such therapy may not TAKE /LAST long.

ENGLISH IN USE/VOCABULARY

1 Word formation. 10

An extremely high percentage of RENAL calculi contain calcium. (REN)
Losing weight, being active and not smoking can help prevent VASCULAR diseases. (VESSEL)

The newest option to ADMINISTER insulin is inhalation. (ADMINISTRATION)
The OCCURENCE of pancreatic cancer in smokers is twice than of non-smokers. (OCCUR)
Carcinoma of the testes is also called TESTICULAR cancer. (TESTICLE)
The time period from infection with HIV to the development of DETECTABLE antibodies in the blood is usually one to three months. (DETECT)

An ovarian cyst may develop from a/an UNRUPTURED follicular cyst. (RUPTURE)

Genital herpes is a/an INCURABLE (CURE) disease, after you get it you won't get rid of it.
Many DISORDERS (ORDER) can also affect the male and female reproductive system.

2 Write appropriate terms for the definitions below. 10

FALLOPIAN TUBE/OVIDUCT/UTERINE TUBE = the tube extending from the upper lateral portion of the uterus that carries the ovum to the uterus
GYNECOLOGY/OBSTETRICS/NEONATOLOGY = a medical field specializing in pregnancy, labour and delivery
WOMB/UTERUS = the organ that receives the fertilized egg and maintains the developing fetus during pregnancy
EPIDIDYMIS = coiled tube on the surface of the testis that stores sperm until ejaculation
SEMEN/EJACULATE = the thick secretion that transports spermatozoa

HYPOPHYSIS/PITUITARY GLAND _____ = a small endocrine gland at the base of the brain. The anterior lobe secretes growth hormone and hormones that stimulate other glands; the posterior lobe releases ADH and oxytocin manufactured in the hypothalamus.

ISLETS OF LANGERHANS _____ = clusters of endocrine cells in the pancreas that secrete hormones that regulate sugar metabolism.

PARATHYROID GLAND _____ = four to six glands on the posterior surface of the thyroid. They affect calcium metabolism

URINE _____ = the fluid excreted by the kidneys. It consists of water, electrolytes, urea, other metabolic wastes, and pigment

RENAL PELVIS _____ = the expanded upper end of the ureter that receives urine from the kidney

3 Fill in the gaps with one missing word. 10

FILTRATION

Filtration is the **MOVEMENT/PASSING/PASSAGE** _____ of water and dissolved **NUTRIENTS/ELEMENTS/MINERALS/IONS** _____ through a membrane from an area of higher pressure to an area of lower pressure. In the body, the pressure of blood in the capillaries is **HIGHER** _____ than the pressure of the interstitial fluid, or the fluid surrounding the body's cells. Thus, through filtration, blood **PLASMA** _____ (fluid portion of blood) and nutrients such as amino acids, glucose, and vitamins are forced through the capillary **SYSTEM/NETWORK/MEMBRANE** _____ into the surrounding interstitial fluid to **BE** _____ used by the cells.

The pressure of the blood in the glomeruli is higher than in other types of capillaries in the body. This high pressure forces plasma, dissolved waste substances, and small proteins out of the glomeruli and into the Bowman's capsules. The process is called glomerular filtration. Blood cells and larger proteins are **TOO/VERY** _____ large to be forced out of the glomeruli, so they remain in the blood. The pressure in a Bowman's capsule is low and its inner _____ membrane _____ is _____ **PERMEABLE/SEMI-PERMEABLE/FENESTRATED/POROUS** _____, so the material that filters out **OF*** _____ a glomerulus passes into the capsule. The fluid and material in a Bowman's capsule is referred to as renal filtrate, **WHICH** _____ is very much like blood plasma, except it contains very little protein and no blood cells.

* ... FILTER STH. OUT OF STH. OR FILTER FROM

4 Complete the gaps. 4

Mammography is a radiographic study of the breast used to **DETECT/REVEAL/SCREEN/FOLLOW/PREVENT/DIAGNOSE** _____ breast cancer.

Prostatectomy is a surgical **REMOVAL** _____ of the prostate.

The obstetrician had to finally use **FORCEPS/HANDS/STRENGTH/FORCE** _____ to pull the baby's head out of the birth canal.

We'll have to make four **SUTURES/STITCHES** _____ to close the wound on your chin.

5 Choose the best option. 6

1 Renal failure may _____ **to** a need for kidney dialysis.

A lead B result C occur D cause

2 Carcinoma of the bladder has been linked to occupational _____ to chemicals, infections and smoking.

A exposing B expose **C exposure** D exposuring

3 Testosterone is responsible for the secondary sex characteristic changes in men, which include growth of facial hair, growth of pubic hair and _____ of the voice.

A deep **B depth** C deepen D deeper

4 Carcinoma of the prostate is a malignant growth within the prostate gland creating pressure on the _____ part of the urethra.

A upend B uppish C upper D topper

5 An _____ - too much, or a deficiency - too little, of circulating hormones causes a wide range of medical conditions.

A excessive B excessing C excess D excessivity

6 When a hormone is missing, treatment may be by _____ therapy, for example injections of insulin.

A replace B replacement C remove D removal

READING: Read the following text and decide if the statements below are true or false.

Boosting men's testosterone levels could potentially reduce deaths from heart disease and type 2 diabetes, UK doctors and scientists say.

A team in Sheffield has shown the sex hormone has a "major impact" on the way sugar and fat are handled by the body. At the Endocrine Society's annual meeting, they said low testosterone was common in type 2 diabetes. Experts said the field was being "turned upside down" as testosterone was previously considered a villain. It was thought to explain why men are more prone to heart disease. There are also concerns about the damaging impact of testosterone, as seen in bodybuilders who abuse the hormone.

Fatty issue

Type 2 diabetes is often related to obesity. Piling on the pounds has a negative impact on testosterone as the fat launches a twin attack on the hormone. It releases chemical signals to reduce production and it actively breaks down the hormone into oestrogen. A fifth of people with type 2 have symptoms of low testosterone affecting mood, energy and sexual performance, the researchers said.

Dr Daniel Kelly used testosterone-deficient mice to show that the hormone was heavily involved in how sugar and fat were processed.

With no testosterone, the liver and muscles were less able to take up sugar, and fat was diverted from under the skin to clog up the liver and arteries. Dr Kelly told the BBC News website: "We know men with low testosterone are at greatly increased risk of type 2 diabetes and cardiovascular disease as well." His findings start to explain why, as well as suggest that hormone replacement therapy to restore testosterone to its normal level or "physiological window" could improve health. "It's detrimental to have testosterone levels that are too low, but if we go above the physiological window then there are effects there as well, so it would require careful monitoring," Dr Kelly added.

Massive burden

Prof Hugh Jones, a consultant physician at Barnsley Hospital who was also involved in the work, describes diabetes as the "cancer of the 21st century" that is going to be a "massive" burden on healthcare systems. He said: "What we're trying to show is that testosterone significantly affects the way sugars and fats are used within the body and has a positive effect when you return testosterone to normal. „If studies do show that replacing testosterone to normal is safe, and that is key, then it would increase the lifespan of many men."

The research, however, missed out on half the population. No-one is contemplating testosterone therapy in women as it would lead to masculinisation. How similar biological processes are controlled in women has not yet been uncovered, although a prominent role for oestrogen is suspected.

UNCOVER=REVEAL/SHOW

'Replacement therapy'

Prof Ashley Grossman, an endocrinologist at the University of Oxford, said: "We used to think that testosterone was one of the 'bad guys' and accounted for the adverse metabolic phenotype of men compared to women, and their tendency to more heart disease. "Now the field is turned upside down as testosterone is seen to have majorly positive effects. "However, there is a commercial push for older men to have testosterone replacement therapy, and there is some scepticism among clinicians that this is more financially rather than clinically driven.

"Nevertheless, these data do suggest that very low levels of testosterone in ageing males might not be good."

1 Testosterone influences considerably the metabolism of saccharides and lipids. T/F

2 The fat affects the levels of the male hormone in two ways. T/F

3 20% of people having diabetes 2 experience problems associated with testosterone levels. T/F

4 With high levels of testosterone, the body has difficulties processing sugar. T/F

5 Testosterone therapy is recommended to women as well. T/F

6 It is not known if the metabolism is influenced in women in the same way as in men. T/F

!7 Testosterone makes men more protected against certain diseases. T/F NOT CLEAR, DEPENDS ON THE LEVELS

8 There's a concern that the motivation behind testosterone replacement therapy might be money. T/F