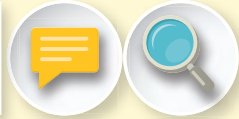




The Bits and Bobs



The reproductive systems of animals are hugely varied in their structures and functions. For this article, we will focus on the reproductive systems of male and female humans.

The **male reproductive system** has some easily recognisable and commonly referred to parts as well as quite a few hidden and often unheard of bits, all of which are equally as important. The overall functions of the male reproductive system are to produce and transport sperm into the female system and to produce hormones in order to maintain the system.

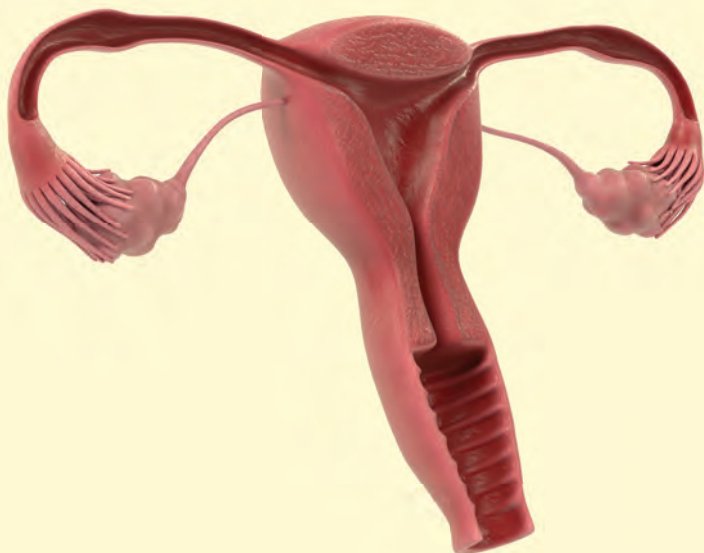
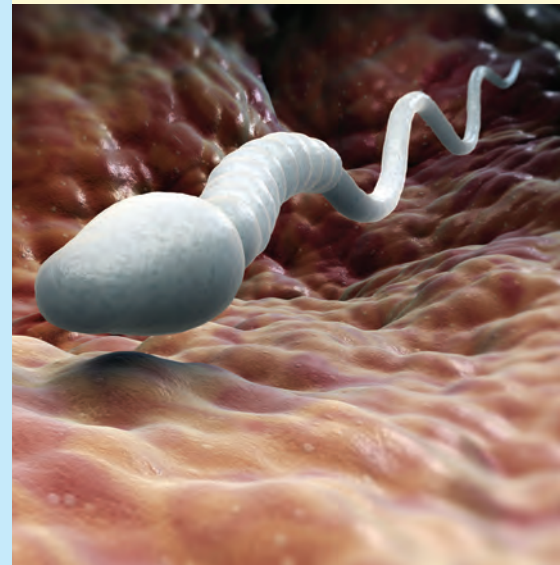
The penis is the external male sex organ, which consists of a shaft through which a tube called the urethra runs. This tube allows urine to leave the body and to transport semen to the female's vagina during sexual intercourse. The penis contains spongy tissue that can fill with blood to become erect (hard) which allows the penis to be inserted into the vagina easily.

The other external male organs are the testicles which are suspended outside of the body in order to keep the temperature cool for sperm production. The testicles are covered and protected by a pouch of skin called the scrotum.

The sperm (male gamete) is made in the testicles and stored in the epididymis. This is a tightly coiled tube that covers the rear of each testicle. The epididymis holds the sperm until it has matured and gained the ability to swim. The sperm travel up another tube called the sperm duct, to the prostate gland, located below the bladder where they are mixed with seminal fluid to produce semen.

The seminal fluid is made in the seminal vesicle which is located behind the prostate gland. It is a white solution that contains the energy and other chemicals needed by the sperm to function and travel the epic journey to the fallopian tubes and fertilise the egg.

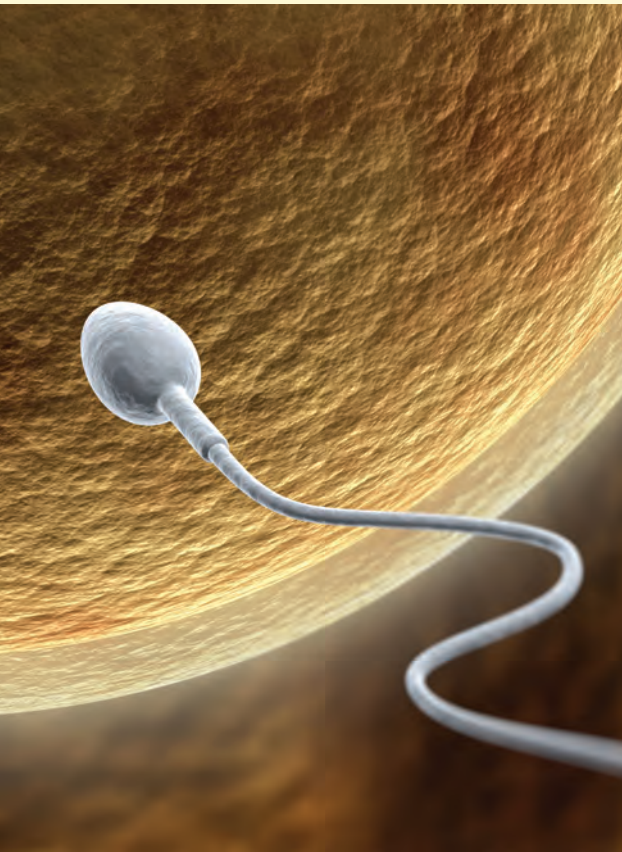
Two other organs that can be seen in most reproductive system diagrams are the bladder and the anus. The bladder is joined to the urethra above the prostate gland. The bladder is a hollow sac that stores urine. The anus can also be seen, this connects the large intestine with the outside world and allows faeces to be removed.



The **female reproductive system** has the main functions of producing eggs needed for reproduction and providing a site for fertilisation and implantation of the embryo so that it can grow and develop safely. As well as this, it also produces hormones to maintain the reproductive cycle (menstruation cycle). It is very different to the male system starting with the fact that most of the parts are internal.

The external parts and opening are collectively referred to as the vulva. The vulva itself is composed of several different parts such as the labia and clitoris. The vulva opens up into a muscular tube called the vagina, which is where the penis is inserted and ejaculates into during sexual intercourse.

The vulva then leads onto the cervix which is a narrow (8 mm diameter) tube that allows sperm to enter the uterus from the vagina. The cervix also produces a large amount of mucus to make it easier for the sperm to move.



Once through the cervix, you reach the uterus or womb. It is a fleshy, blood-rich hollow organ that periodically has a thick lining. If the female doesn't become pregnant, this lining breaks down and exits via the vagina as the period or menstruation. Many animals such as horses and cows reabsorb the lining so don't experience periods.

The uterus is the area that the foetus develops in. The thick blood-filled lining is where the embryo first implants and receives its nourishment from.

At either side of the top of the uterus are the fallopian tubes or oviducts. These are tubes that join the uterus to the ovaries. Ova (eggs) travel from the ovaries at the end of the fallopian tubes to the uterus and sperm (if present) will fertilise the ovum inside these tubes. Each fallopian tube has a separate ovary at its end. These resemble a pouch of marbles and have the function of making eggs (ova). Within the ovaries are follicles of varying sizes that contain the developing eggs. When an egg matures, the follicle bursts and releases the ovum into the oviduct where it becomes available for fertilisation. Usually, only one egg is released each month and the ovaries take turns at doing this.

The female also has an anus for the expulsion of faeces and a bladder for the storage of urine. The bladder sits in front of the uterus and has a tube called the urethra which takes the urine out to the vulva.



Mating Rituals and Weird Mating Habits



Animals can be truly bizarre! Forget about going to the movies, buying flowers or updating their social media status! They go to extreme lengths and perform a range of weird behaviours to find a mate. I recommend you don't try any of the following methods to try and find a boyfriend or girlfriend.

Example One: Praying Mantis

Most species of praying mantis are predators that feed on flies, beetles, crickets and even small scorpions, lizards, frogs, birds, snakes and fish. They lie in wait until the prey comes close enough then they launch and grab them with their spiked front legs.

Praying mantises will perform mating dances to attract and confirm a mate. Once mating has been agreed upon, the male will climb on the back of the female and begin to mate with her. Sometimes during mating, the female will bite the head off the male which causes him to jerk around wildly and results in the sperm being ejaculated. Other females will wait until the male has finished then as he dismounts she will eat him. This is known as sexual cannibalism, and while it is common in 90% of species, it only occurs in around 20% of matings.

The female then lays her eggs in a special foam produced in her abdomen that hardens like a shell around the eggs protecting them.

