

The Science & The Scientists

Seeing inside the body with ultrasound

Ultrasonic images are made by sending pulses of high frequency inaudible sound waves – ultrasound – into tissue.



The sound bounces off the tissue and different tissues reflect varying degrees of sound and these echoes are turned into an image. It works like radar, only using sound instead of radio waves.

Medical physicists, clinical scientists and technologists provide scientific, safety, quality control and technical expertise on the use of ultrasound. They ensure the best quality images are achieved.

Almost every hospital department has its own ultrasound machine. As well as the most commonly known usage for checking the health of babies in the womb ultrasound is also used for breast screening, monitoring blood flow to the heart to check it is not under stress, examining the arteries of diabetics to monitor their condition, and checking for potential muscle and ligament damage in physiotherapy.

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