What is ALD?

- **4** ALD stands for Adrenoleukodystrophy
- 🖊 This combined word is made up from Adreno Leuko Dystrophy
- **4** Adreno refers to the Adrenal Glands which are found on the top of each of our kidneys
- 🖊 Leuko is the Greek word for "white"
- Dystrophy means a medical condition in which part or parts of our body become weaker
- 4 ALD is a genetic disorder which we mainly inherit from our mother as it is X-linked which means that it comes from an X Chromosome. It can be inherited from the Father however they can only pass it on to their daughters. Mothers have two X Chromosomes whilst fathers have one X and one Y *
- ALD is a genetic medical disorder which is caused by a faulty gene (mutation) that cannot complete its task as it should and this causes an abnormally large build up of Very Long Chain Fatty Acids (VLCFAs) in our Adrenal Glands (Adreno), Brain (Cerebral) and Blood Cells. Our brain cells (Neurons) which send messages to our body have a protective white (Leuko) coating on them which is known as Myelin and it is destroyed by the very high amount of these acids which also causes the nerve cells to die
- ALD has a number of forms which can affect both male and female. Cerebral ALD can affect young boys, male teenagers and male adults, however it is mainly found in young boys
 - Childhood Cerebral ALD (CCALD) which mostly affects the brains of our children aged between 4-10 years
 - Adrenomyeloneuropathy (AMN) is the name that ALD is known by when it affects males from teenhood up to adulthood. It chiefly affects the spinal cord and rarely the brain
 - Female ALD is also known as Adrenomyeloneuropathy (AMN) and affects only those mothers that carry the faulty gene. Its symptoms are serious but much less severe than the male form of AMN and can occur from late teens onwards **
 - Addison's Disease is caused by the damaging build up of those Very Long Chain Fatty Acids (VLCFAs) in our Adrenal Glands which stop them making the necessary amount of chemicals (hormones) for our body to operate properly. 80% of males with ALD will have Addison's Disease whilst 10% will actually be diagnosed with ALD because it was identified by their doctor.

*Please refer to Information Brochure How is the ALD Gene Inherited for more detailed information

** Please refer to the information Brochure Symptoms for more detailed Information

