# SEPTEMBER - CHALLENGE YOUR BALANCE

As we age, our balance tends to deteriorate, but this can be trained.

Balance is a coordination between the senses, the brain, and the muscles. Good balance allows you to stay on your feet when the bus starts moving or when something unexpected happens.

# What is balance?

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### The sense of balance - the vestibular sense

Located in the inner ear, this system helps detect movements and changes in the position of the head. The vestibular sense works together with vision and proprioception to help us move safely and effectively. For example, when you spin around quickly and then stop suddenly, you may feel dizzy because the fluid in the inner ear canals is still moving. This sends signals to the brain that you are still in motion, even though you have stopped. This interaction is crucial for adjusting your body position and avoiding falls.

# The sense of vision

The eyes provide visual information about our surroundings and help us navigate and maintain balance. We are all familiar with the feeling of sitting in a train and thinking it is moving, even though it is the train next to us that is moving. It is our sense of vision that is tricked into believing that our train is moving, causing our system to prepare for the sensation of movement.

# **3** The sense of muscles and joints - the proprioceptive sense

This is the body's ability to sense its own position in space, which comes from sensory receptors in the muscles, tendons, and joints. Balance is a coordination between vision, muscles, and coordination. For example, you are probably familiar with the feeling of wanting to lift a crate of soda bottles, thinking they are full. If the bottles are actually empty, you might lose your balance because you have exerted too much force for the task.

