

Gut Feeling at the Park

Because your body has its own way of detecting accelerations, you can easily detect acceleration on rides without the use of manufactured accelerometers. This collection of sensing devices your body uses to measure accelerations could be called a "natural accelerometer". Let's take a look at how your "natural accelerometer" detects different kinds of accelerations.

When you experience ...

Direction of Acceleration	Physics Term	Gut Feeling
Upwards	Vertical	You feel pressed into your seat. The greater the acceleration, the more squished you feel.
Downwards	Vertical	You feel like you are rising out of your seat. Your stomach feels like it's in your throat. You feel queasy.
Forwards	Longitudinal	You feel pushed back against your seat. Your head and shoulders may swing backwards.
Backwards	Longitudinal	You feel pushed forward against the safety harness. Your head and shoulders may lurch forward.
Left or Right	Lateral	You slide sideways across the seat. Your shoulder may be pressed against the side wall or your ride partner. Your head or knees may bang against the side wall.