

# 90 minutes of high-speed stress

Formula One drivers experience physical and mental pressures which would leave the average driver exhausted after only three laps of a grand prix circuit

## Head

Sideways pressure of about 32kg on a fast bend. Angle of neck can be forced through 90°

## Vision

Perspective distorted during braking. Car can slow from 290kmh to 95kmh in under 2 seconds

## Legs

Hips experience G-forces of up to 100kg. Foam padding can help support legs but drivers risk cramp from constriction

## Arms and hands

Downforce at 240kmh increases car weight to 1.5 tonnes. Arms under constant tension to control wheel. Hands blistered from changing gear 2,400 times during a typical race

## Heart rate

180–210 beats/minute

## Dehydration

Body overheats as driver is unable to perspire freely. Up to a litre of fluid is lost, mostly from the blood system. Driver can lose concentration as he becomes weaker. Tube allows driver to sip water

