

The Right Fuel

You missed breakfast to catch the best of the weather and you've been flying all day. You are hungry, tired and – fortunately – you've just caught yourself about to make a very silly mistake.

Pilot error is regularly put down to fatigue. It's often assumed that fatigue is caused by a lack of sleep.

The tiredness, however, may not be the result of a late night, but from what you've eaten, or not eaten, before flying.

The breakfast that was missed, the fluids not consumed, and the lunch you are now late for, may have more to do with that potential silly mistake than you realise.

Pilots know their aircraft needs fuel and the right sort, but often act as if the same doesn't apply to them.

Eating healthy food lifts energy and reduces the risk of fatigue. According to the Ministry of Health, that includes vegetables, fruit, whole grain foods, low fat milk products, nuts, seeds, and protein sources such as fish, chicken and eggs.

The right foods, in the right quantities at the right times, allow pilots to remain active and alert.

"Flying schools regularly see young pilots preparing for a two to three hour afternoon flight," says CAA's Principal Aviation Examiner, David Harrison, "with a lunch that consists only of the latest caffeine drink to keep them going."

In the last two or three years, three student pilots have passed out at the controls. The students were stood down from training for several months, while their incidents were fully examined. In each case, it was found that their lapses of consciousness were due to lack of food and or water.

Those highly caffeinated and sugary drinks undoubtedly make the individual alert and active.

For a while.

When individuals consume high quantities of sugar, the pancreas releases insulin to lower blood sugar levels.

But the pancreas releases too much insulin for the relatively easy task of breaking down the simple sugars contained in modern drinks.

The body cannot distinguish between them, and complex carbohydrates that require large amounts of insulin to break them down.

It's that excess of insulin that causes the energy deficit, about 30 minutes after drinking an ironically-named 'energy' drink.

Those insulin-activated crashes cause tiredness, and tiredness can make an individual clumsy, easily confused, and more prone to making mistakes.

It's not just young and inexperienced pilots who use inappropriate fuel to keep them going. In today's time-poor world, even some commercial pilots will grab a quick coffee instead of eating a sandwich, before returning to the flight deck.

But a meal rich in complex carbohydrates – potatoes, brown rice, whole wheat bread, kumara, oatmeal-type cereals – will sustain a pilot a lot longer than a chocolate bar or a can of their favourite fizz.

And keep that pilot genuinely alert, and safe. ■

