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Two students 'overdosed on caffeine' and in hospital after university experiment

They were taking part in a practical session to test the impact of the stimulant on sporting performance

Jeremy Armstrong

00:42, 10 APR 2015 UPDATED00:50, 10 APR 2015



Overdose: Students in hospital after too much caffeine (Image: Getty)

Two students had to be treated in hospital after "overdosing" on caffeine during a university experiment.

They were taking part in a practical session to test the impact of the stimulant on sporting performance – but both suffered adverse reactions.

A spokeswoman for <u>Northumbria University</u> said: "It is a standard test that is delivered in most UK sports departments.

"The students will return to their studies following the Easter break."

She added that the human guinea pigs were not being identified and no one had been suspended following the incident.

But the university, in Newcastle, will be carrying out a routine investigation into the sudden illnesses.

Symptoms of caffeine overdose can include heart palpitations, vomiting and diarrhoea.

The undergraduates – on an Applied Sport and Exercise Science course – were recovering at home last night.

http://thetab.com/uk/northumbria/2015/04/10/sport-scientists-rushed-to-hospital-after-science-experiment-caffeine-overdose-7534

Accessed: 14 May, 2024



Sport scientists rushed to hospital after caffeine experiment overdose

RICHARD DUGGAN

What a latte bother

A bungling science experiment took a turn for the worse when two students were hospitalised after a caffeine overdose.

An innocent practical session aiming to test the effect of stimulants on sporting performance went horribly wrong when two hapless participants suffered harmful side effects from the chemical.

The unlucky Applied Sport and Exercise scientists are said to be recovering at home after chugging a caffeine drink on the 23rd March.



A Northumbria spokesperson said: "It is a standard test that is delivered in most sports departments around the country.

"Two students had an adverse reaction after consuming a caffeine drink and were taken to hospital. Both received treatment and were subsequently released to go home.

"They will return to their studies following the Easter break.

"The University is investigating the situation in accordance with health and safety policies and procedures."

They did not name the jittery human guinea pigs.

@RJKDuggan

http://www.telegraph.co.uk/news/2017/01/25/university-fined-400k-students-taking-part-caffeineexperiment/

Accessed: 14 May, 2024



Students left fighting for lives after taking enough caffeine for 300 cups of coffee in botched university experiment

Northumbria University

<u>Henry Bodkin</u>

25 JANUARY 2017 • 9:38PM

Two students were nearly killed after they were given enough caffeine for 300 cups of coffee during a botched science experiment.

<u>Northumbria University</u> has been fined £400,000 for the incident in March 2015 which caused Alex Rossetto and Luke Parkin to be rushed to hospital and put on dialysis.

On Wednesday a judge said the two sports science students probably only survived because they were fit and and active young men.

The pair had volunteered to take part in a test aiming to measure the effect of caffeine on exercise, but a basic calculation error meant the second-year students were given 100 times the correct dosage.

Prosecutor Adam Farrer told Newcastle Crown Court that the pair should have been given 0.3g of caffeine in the orange juice mix, but were in fact given 30g.

There is 0.1g in the average cup of coffee.

Newcastle Crown Court heard the calculation had been done on a mobile phone, the decimal point being put in the wrong place and there being no risk assessment for the test.

Mr Farrer said death has previously been reported after consumption of just 18g and the students were left in a "life-threatening condition".

The university, which has more than 30,000 students and a budget of almost £250 <u>million</u>, had switched from using caffeine tablets to powder, which, he said, meant supervision was vital.

But he said: "The staff were not experienced or competent enough and they had never done it on their own before. "The university took no steps to make sure the staff knew how to do it."

The court was told about a catalogue of errors that led to the overdose, which Mr Farrer said "could easily have been fatal".

Mr Rossetto, who has gone on to study a Masters degree at the university, was kept in hospital for six days, reported short-term memory loss and lost 26.5lb (12kg) in weight.

Mr Parkin was treated for two days in intensive care and lost 22lb (10kg) in weight.



The amount of caffeine they should have been given (0.3g) and the amount they were actually given (30g) CREDIT: HEALTH AND SAFETY EXECUTIVE

Both men have since made a full physical recovery but are also proceeding with their own civil claims.

Judge Edward Bindloss said: "The risk here was death.

"It should have been a high priority, a risk assessment should have been carried out and appropriately put into place and appropriate training to reduce the foreseeable risk.

"The test was perfectly proper, the error was in the calculation of the amount of caffeine."

He said: "Both were sportsmen and fit young men. Luckily for them and for everyone they were in the sort of shape that was able to deal with this large amount of caffeine."

A spokesman for the Health and Safety Executive, which brought the prosecution, said it was "happy" with the fine, and hoped it "sent a message" to similar organisations conducting experiments on humans.

Peter Smith, defending, said vice chancellor Andrew Wathey was in court, along with other members of staff, as the human face of the university.

"They are deeply sorry for the breach in this case," he said.

"The university community is a close one and they wish to emphasise that they take the welfare of their students and staff seriously."

A statement from the university said: "The university is genuinely sorry for what happened in this case. This was an isolated incident. We reacted promptly to what took place.

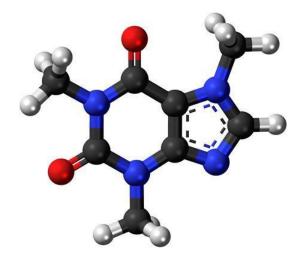
https://www.chemistryworld.com/news/university-fined-in-caffeine-overdose-case/2500343.article

Accessed: 14 May, 2024

University fined in caffeine overdose case

BY <u>EMMA STOYE</u> 2 FEBRUARY 2017

Students given 100 times more caffeine than intended as a result of potentially lethal miscalculation



The caffeine in as little as 80 cups of strong coffee can be lethal – the two students consumed the equivalent of around 300 cups of coffee

Northumbria University in the UK has been fined £400,000 after two students taking part in research were accidentally given a potentially fatal dose of caffeine.

Alex Rossetta and Luke Parkin had been part

of a study that aimed to investigate the effects of caffeine on exercise. Each was supposed to consume 0.3g of caffeine in powder form, but due to a miscalculation they were actually given 30g – equivalent to around 300 cups of coffee. The court heard that the staff responsible were not experienced or competent to calculate the correct dose, and had done so on a mobile phone with the decimal point in the wrong place. After consuming the caffeine Rossetta and Parkin experienced shaking, vomiting and dizziness and were rushed to hospital where they were treated in intensive care. They both made a full recovery.

The university told the court they were 'deeply and genuinely sorry' for the incident.

Emma Stoye Senior science correspondent, Chemistry World

https://www.theregister.com/2017/01/26/northumbria uni caffeine/

Accessed: 14 May, 2024

Northumbria Uni fined £400K after boffin's bad math gives students a near-killer caffeine high

Pair needed dialysis after downing equivalent of 300 cups of coffee

Shaun Nichols in San Francisco

Thu 26 Jan 2017 // 08:04 UTC

Northumbria University in England has been fined £400,000 (\$503,000) after a botched experiment resulted in two students almost dying from caffeine overdose.

Newcastle Crown Court issued the fine on Wednesday after hearing the case of two 20year-old students who, as part of a study on the effects of the stimulant, were mistakenly given as much caffeine as what's in 300 standard cups of coffee.

According to <u>reports</u> from court, Luke Parkin and Alex Rosetta had enrolled in a March 2015 sports science experiment on the effects of caffeine on exercise.

While administering the powdered caffeine for the study, a staff researcher had calculated the dosages on a mobile phone and missed a decimal point in the calculations. As a result, they both ended up getting 30g of the stimulant mixed into orange juice and water rather than the intended 0.3g. One cup of coffee typically has 0.1g of caffeine.

"They suffered violent side effects within minutes of drinking it," said Adam Farrer, prosecuting. "There was dizziness, blurred vision, vomiting, shaking and rapid heart beat. Both required hospital treatment. It was a life-threatening reaction."

While both students lived through their ordeal, they were hospitalized in intensive care and had to undergo dialysis. They each lost about 10kg in weight and struggled with sporting activities. They both eventually made a recovery, though Rosetta is reportedly suffering from short-term memory loss as a result.

"The university and all those involved are deeply and genuinely sorry for the breach in this case," said Peter Smith, defending. "Both students have made good recoveries and both excelled in completing their degrees. There was a system in place but it was inadequate."

The uni admitted it broke health and safety laws, and was ordered to cough up £400,000 plus £26,000 in legal bills. In sentencing, Judge Edward Bindloss noted: "Both

were sportsmen and fit young men. Luckily for them and for everyone they were in the sort of physical shape that was able to deal safely with this large amount of caffeine."

It could have been much worse for the two second-year undergrads.

The believed lethal dose of caffeine is said to be around 18 grams. America's <u>drug</u> <u>watchdog estimates</u> that 170mg per kg of weight would be enough caffeine to prove fatal.

While drinking 300 cups of coffee is never a good idea, regular consumption of the stuff has been linked to <u>increased longevity</u>, as well as <u>improved memory</u>. ®

Accessed: 14 May, 2024

Northumbria University fined £400,000 after botched experiment leaves students fighting for life

Northumbria University has been fined £400,000 plus costs after students Alex Rossetto and Luke Parkin were given 100 times the correct dose

Rob Kennedy Court Reporter

18:20, 25 JAN 2017 **UPDATED**19:18, 25 JAN 2017

Two students were left fighting for their lives after being given the equivalent of 300 cups of coffee by mistake in a botched sports science experiment.

Alex Rossetto and Luke Parkin volunteered to take caffeine as part of a practical test during their course at **Northumbria University**.

But they were given 100 times the intended dose after a mathematical error meant a decimal point was put in the wrong place.

Both young men suffered violent side effects within minutes which left them in intensive care with life-threatening reactions.

A court heard the two 20-year-olds suffered dizziness, blurred vision, vomiting, shaking and rapid heart rates as a result of the botched 'Wingate Test'.

Now Northumbria University, whose vice chancellor and chief executive, Prof Andrew Wathey, was in court for the hearing, has been fined £400,000 plus £26,000 costs after admitting a health and safety breach.

Judge Edward Bindloss, at <u>Newcastle Crown Court</u>, said: "The risk here was death. "The amounts ingested were both potentially fatal and well above the level that is potentially fatal.

"It was known excess caffeine was potentially fatal, it should have had high priority, risk assessments should have been carried out and appropriate checks put into place and appropriate training given.

"The test was perfectly proper, the error was in the calculation of the amount of caffeine.

"Both were sportsmen and fit young men. Luckily for them and for everyone they were in the sort of physcial shape that was able to deal safely with this large amount of caffeine."



0.3g of caffeine which they should have taken (Image: Newcastle Chronicle)

Prosecutor Adam Farrer said the two second year students had volunteered to take part in the experiment on the afternoon of March 23 2015.

The purpose was to measure the effects of caffeine during exercise but they were "erroneously" given "100 times the dose they should have been given."

Both men consumed more than 30g of caffeine rather than 0.3g. There is an

average of 0.1g of caffeine in a cup of coffee and another man elsewhere previously died after taking 18g.

Mr Farrer said: "The prosecution say the resulting overdoses could easily have been fatal."

He added: "It was clearly quite a significant amount of powder.

"During the preparation of the caffeine by the students the calculations had been incorrectly made.

The court heard a doctor at the university had explained the potential dangers of caffeine overdoses in a lecture that morning, referring to three earlier incidents at other locations.

But despite the warning, a miscalculation was then made which quickly caused a bad reaction in the two students when they consumed the caffeine, which was dissolved in orange juice and water.

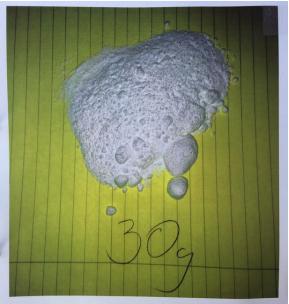
Mr Farrer said: "They suffered violent side effects within minutes of drinking it.

"There was dizziness, blurred vision, vomiting, shaking and rapid heart beat.

"Both required hospital treatment. It was a life-threatening reaction."

Mr Rossetto and Mr Parkin both ended up in intensive care and required dialysis.

Two students were left in intensive care after taking 30g of caffeine in botched sports science experiment. Pic shows 30g of caffeine (Image: Newcastle Chronicle)



Mr Farrer added: "A consultant toxicologist said they were both in a serious and potentially life-threatening condition.

"Had they not been admitted to intensive care they could have died from the caffeine overdoses."

The court heard the students had been allowed to work with technicians to calculate how much caffeine each volunteer should take, according to body mass.

The students' heights and weights were taken correctly but it was during calculations of how much caffeine should be taken per body mass kilo that a mistake with the mathematics was made, due to a decimal point being put in the wrong place.

Mr Farrer said the technicians did not have enough "information, instruction or training" to supervise such practical experimentation on human subjects and that the overdoses were due to "mathematical and general knowledge error".

He added: "Students were entitled to put their trust in the university to ensure their safety.

"The university's failure to follow health and safety requirements was cumulative, persistent, long standing and systemic.

"In this case the degree of foreseeable risk from caffeine experimentation was very high and well known to the university.

"Despite this, there was no suitable and sufficient risk assessment, inadequate supervision, inadequate checks and failure to follow rudimentary health and safety legislation."

The court heard Mr Rossetto lost 12 kilos in weight and Mr Parkin 10 kilos as a result of the experiment and it affected their ability to do sport but both went on to complete their degree and Mr Rossetto has gone on to study for his Masters at the university. Both men have since made a full physical recovery

Judge Bindloss said he was satisfied the university took the incident that "very seriously" and fully cooperated with the HSE investigation and prosecution.

He added: "I am fully satisfied they have acted appropriately and have shown genuine remorse for this incident."

Peter Smith, defending, said: "The university and all those involved are deeply and genuinely sorry for the breach in this case.

"Both students have made good recoveries and both excelled in completing their degrees.

"There was a system in place but it was inadequate.

"There are civil claims for compensation from the two students."

Speaking outside the court, Cain Mitchell, from the Health and Safety Executive (HSE), said they were happy with the fine and hoped it would send out the right message to other organisations that conduct similar experiments.



Representatives of Northumbria University attend Crown Court after two students were left in hospital after taking excessive amounts of caffeine during a research experiment which went wrong, including Professor Andrew Wathey, Vice-Chancellor and Chief Executive (Image: The Chronicle)

A Northumbria University spokesperson said: "The University is genuinely sorry for what

happened in this case.

"This was an isolated incident. We reacted promptly to what took place. This included fully co-operating with the HSE investigation and the subsequent prosecution.

"The university wishes to emphasise that the welfare of students and staff is paramount at all times. Both students, together with their respective families, were provided with every means of assistance which the University could offer.

"Thankfully, the students made a full physical recovery, and both excelled in the results which they achieved in their degrees in the timescale expected.

"All remedial measures have been put in place following a thorough review of practices and procedures so as to avoid any recurrence of what happened in March 2015. We are pleased that the Judge, in his summing up, observed that the University had acted appropriately following the event."