Caffeine combats stress, has potential to prevent depression, memory loss, new study finds

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New research has found caffeine can help manage stress and potentially prevent conditions like depression and memory loss.

An international team of scientists from Portugal, the United States and Brazil studied how caffeine could reduce the impact of stress on the brain.

Rodrigo Cunha from Portugal's University of Coimbra said his team fed mice caffeine in their drinking water, then put some of the animals under stress.

He says the caffeine had a calming effect on the mice.

"If the animal is not stressed there isn't a very evident change in physiological parameters or behaviour," he said.

"However, if you introduce changes to the lifestyle of the animals, what we see is they cope much better."

Associate Professor Cunha and his team found caffeine blocked a stress-related chemical and prevented associated issues such as memory loss.

"What caffeine is doing is not to make the system work better," he said.

"What caffeine is doing is avoiding the system going into the wrong way of working.

"So it's a prevention of a deterioration, rather than an improvement."

Associate Professor Cunha said previous studies had found caffeine could help to reduce depression, but it was not clear whether it was the act of buying caffeine or the caffeine itself which cheered people up.

"This study was the first to establish a causal link," he said.

"It is indeed caffeine. Because mice didn't go to the coffee shop, mice didn't spend more time with each other.

"All those factors were controlled. The only variable was the intake of caffeine."

However, Associate Professor Cunha said humans had very different brains to mice and that further investigation was needed.

He said the latest study was a step towards better treatments for stress and associated illnesses by designing more potent and selective caffeine molecules to target the receptor and to eventually develop drugs that may interfere with mood dysfunction.
History will be made today when Justice Michelle Gordon is sworn in as the newest High Court of Australia judge, replacing her husband Justice Kenneth Hayne on the bench.

The appointment of the highly regarded judge has been widely welcomed by the law community.

Constitutional law expert Professor George Williams from the University of New South Wales said the Government should be commended for its choice, despite the quirky family connection.

"I think people were wondering before the appointment whether the Government would make it in light of her family connection," he said.

"Surely that is not something in this day and age that should be a relevant factor.

"Her appointment should be considered on its merits and there's no doubt that it's a very strong appointment indeed."

Justice Gordon has already had a high-profile career as a Federal Court judge, especially in commercial and tax law.

Last year she heard the consumer watchdog's case over claims Coles had used unconscionable conduct towards its suppliers, ending with a $10 million penalty against the company.

Justice Gordon also ruled against ANZ on late payment of credit card fees.

This ruling was recently overturned by the full bench of the Federal Court, and is already slated for a High Court challenge.

If it is heard, Justice Gordon will have to sit out of the case.

However, Professor Williams said Justice Gordon has already had a good record with the High Court, with several of her judgements upheld following an earlier challenge.

One of those was in 2009, when the court agreed that football players should be allowed a tax deduction for their management fees.

Professor Williams said Justice Gordon's past success augurs well for her new career.

"She's had a good record on appeal to the High Court," he said.

"That shows her capacity to deliver decisions that might perhaps even influence her future judges, her future colleagues on the High Court in terms of making sure that she's not just a lone voice but someone who is able to be part of the majority."
"Not only is she a commercial law expert but in particular she brings a formidable intellectual capacity to the court."

At age 51 Justice Gordon does not have to retire until 70, meaning she could be on the High Court bench for the next 19 years.

Professor Williams said the appointment will not just put a fresh face on the bench but a fresh approach.

"She'll be bringing to the court a particular perspective of people of that generation and indeed a formidable mind that would suggest she's likely to be a successful High Court judge."

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