

Cocoa could help stave off cognitive decline

EMMA SORENSEN

AN APPLE a day keeps the doctor away but two hot chocolates a day could help fight cognitive decline in older people, according to a study published in *Neurology*.

US researchers recruited 60 people without dementia over the age of 73.

They drank two cups of hot cocoa per day for 30 days (either

high or low in the antioxidant flavanol) and underwent ultrasounds measuring blood flow to the brain as well as undertaking thinking skills tests to measure neurovascular coupling (NVC).

NVC, or functional hyperaemia, is the close functional and spatial relationship between neuronal activity and cerebral blood flow.

While 18 of the participants had impaired blood flow at the beginning, throughout the study

they showed an 8.3% improvement in blood flow to the working areas of the brain. They also improved their scores on memory tests, the researchers said.

Those with regular blood flow at the start of the study showed no improvement in either blood flow or tests and there were no differences between the flavanol groups.

Researchers concluded that NVC is modifiable, that there is a strong correlation between NVC

and cognitive function, and that both can be improved by regular cocoa consumption in individuals with baseline impairments.

While the authors say their findings are restricted to an elderly cohort with vascular disease, cocoa consumption resulted in higher NVC, better cognitive function and greater cerebral white matter structural integrity.

An accompanying editorial argued that while more work is

needed to prove a causative link between cocoa, blood flow problems and cognitive decline, cocoa consumption may be a strategy to minimise cerebral vascular pathology in neurodegenerative disorders, regardless of its flavanol content. The study is also notable for highlighting the "remarkable potential" for transcranial Doppler ultrasonography to be used as a biomarker for cerebral vascular pathology.

Neurology 81, 3 Sept 2013