

# Safety alert! The use of caffeine on human subjects in school projects

The Biology Team at SSERC has, for some time, been uneasy about students administering caffeine in various forms to other students in school/college for the purposes of investigating caffeine's cognitive and physiological effects. While we are aware that protocols exist 'out there' for ways in which such investigations may be carried out in schools, our misgivings have remained.

Over time we have received enquiries from various schools/colleges about investigations proposing the delivery of caffeine via cups of coffee, 'energy drinks' and in tablet form. Some proposed investigations have related to senior students giving their peers caffeine, some have alarmingly proposed giving caffeine to younger groups of students, for example, to 'the whole of second year' and then measuring how fast they can run. We have advised that these investigations should not be done. Having ourselves sought the advice of a consultant toxicologist on this matter, we are reassured that our advice is sound.

We recently posted the following statement on the teachers' discussion forum, SYNAPSE:

*At SSERC we are aware that protocols do exist for carrying out investigations into the effects of caffeine on human subjects. However, following recent discussions with a consultant toxicologist, it is our advice that such investigations should not be carried out in school.*

*Caffeine can promote a range of physiological changes in the body, some of which may be adverse in certain individuals.*

*Caffeine is addictive and stopping taking it after a period of use may cause symptoms in some people.*

*Caffeine may also react adversely with some prescription drugs.*

***Our current advice is that a substance known to have physiological effects on the subjects who consume it should not be administered in school for the purpose of investigation.***

*Additionally, we would make the point, relating to investigation design, that uncontrollable confounding variables in such an investigation make the generation of meaningful data difficult.*

You should note that SSERC is the specialist Science and Technology Health and Safety Adviser for local authorities, and for independent schools who are members of SSERC. Should you wish to carry out investigations on human subjects using caffeine you would need to carry out a detailed risk assessment and seek your employer's permission to proceed. ◀