YOU ARE WHAT YOU EAT! WHAT DOES THIS MEAN IN STIMULANT DEPENDENCE?

C.F. Whitelock, K.D. Ersche, KD Ersche s Addiction Research Lab

Behavioural and Clinical Neuroscience Institute and Department of Psychiatry, University of Cambridge, Cambridge, UK

Introduction: Nutrition has been linked to the development and deterioration of cognitive functions in normal and disordered populations. Drug-dependent individuals show a variety of cognitive deficits and seem to differ in their diets from healthy people. Despite this, there has been very little investigation into the potential relationship between nutrition and cognition in drug dependence.

Objectives: To investigate the effects of nutritional factors on cognitive performance in drug-dependent individuals. **Aims**: To test the hypothesis that stimulant (cocaine or amphetamine)-dependent individuals' and healthy volunteers' diets significantly differ, and that these differences are related to their cognitive performance.

Methods: Stimulant-dependent individuals (N=58) and age-matched healthy volunteers (N=63) completed a Food Frequency Questionnaire to assess usual food intake, a set of computerised neurocognitive tests, and a selection of clinical questionnaires.

Results: Controlling for their levels of education, stimulant-dependent individuals performed significantly worse than healthy volunteers on tests of learning, memory and attention. The nutritional content of stimulant-dependent individuals' diets also differed significantly, controlling for differences in caloric and alcoholic intake. However, whilst healthy volunteers' ingestion of nutrients such as fruit and electrolytes were related to their processing speed in a test of sustained attention, no such relationship was found in the stimulant-dependent group.