Eat smart – get smart

Jacqui Deighan reports that eating well improves study outcomes

When thousands of teenagers around Australia sit their exams, how many of them will be swotting with a can of energy drink and a chocolate bar at their side? How many will have spent the preceding days undernourished from skipping breakfast or powered by caffeine, sugar and cheap fat?

While the media constantly covers the debate about food and obesity, the vital link between food and academic performance is entirely left out of the discussion.

Research links nutrition to cognition

Most students – and quite often their teachers – have no idea that the food they eat can affect their intelligence, behaviour, memory, mood, concentration, problem-solving skills, ability to learn and ultimately their performance outcomes.

They believe results and accomplishments stem from hard work and/or natural intelligence. While this may be true, improving nutritional intake can boost potential and maybe even have a significant impact on their marks.

Worldwide research is still growing in this area but broadly consistent studies link poor nutrition with poor cognition and behaviour. A study of 10,000 children aged between six and 16 undertaken in the UK in September 2007 (www.foodforthebrain.org Food for the Brain Child Survey 2007) compared aspects of diet with behaviour, academic performance and overall health.

The results showed a significant association between diet, behaviour and study scores, with a strong correlation between poor eating habits and poor behaviour and academic performance.

A key finding was that certain foods have a substantially beneficial effect on study outcomes. Director of Food for the Brain and head of the study, Patrick Holford, comments: “The brain is 60% fat. Children who eat good fats, from raw nuts, seeds and oily fish, double their chances of high academic performance. Children who eat damaged fats, in fried food and takeaways, are twice as badly behaved, as well as performing badly at school.”

The findings in most of the research come as no surprise. The foods that feed the brain and nourish the mind are the same ones that keep the body healthy. In essence, some timely hints to students who want to improve their performance and maximise their potential include the basic do's and don'ts of nutrition.

Years of research strongly advocates the need for breakfast to maximise performance at school. Skipping breakfast affects kid’s brain power and results in decreased attention span, diminished mental performance, decreased productivity and reduced energy levels. Breakfast takers are found to have better concentration, more focus and are happier at school (Fit for School: How breakfast clubs meet health, education and childcare needs, New Policy Institute, 1999).

Caffeine doesn’t help

Hydration is a key element to clarity of thought. Even mild dehydration can decrease concentration, attention and short term memory. Water needs to be the beverage of choice to clear the mind and hydrate the body, yet caffeine is relied upon by thousands of late night swotters. Caffeine is not an effective study tool and despite general perception, it actually stimulates depression and impairs mental performance. Studies show that caffeine drinkers have higher levels of anxiety and distress than abstainers, and lower academic performance (American Journal of Psychiatry 1981).

Food additives – once again a forgotten equation in the health stakes and yet consumed voraciously by teenagers every day. High intakes of food additives have been associated with mood swings, aggressive behaviour, poor attention span, impaired memory and intellectual performance (Optimum Nutrition for Your Child’s Mind Patrick Holford 2006); Not a great line up for the conscientious studier.

To improve performance and enhance brain function, students need to concentrate their intake on natural, wholefoods such as fresh fruit and vegetables, salads, nuts and legumes, wholegrain breads, fish, cereals and rice. These will provide the brain with the essential fuel needed to work, study, concentrate, remember, perform and get results.