The Challenge:
Whilst research exists establishing the connection between eating breakfast and the immediate effects on improved concentration and memory performance, little had been done to examine the links between breakfast and longer term academic achievement. A collaboration of researchers from Cardiff, Swansea and Glasgow studied the importance of breakfast on longer term academic attainment.

The Research:
Over 4000 Welsh primary school children, between 9-11 years of age, took part in the study - looking at the link between eating breakfast and their academic performance in the key stage 2 tests.

Children were asked to record their daily food intake, everything from breakfast and snacks to fruit and vegetables. De-identified data was then logged onto the SAIL databank. The SAIL Databank, based at Swansea University, removes the identities of all the people in the study (to protect their privacy) and allows the information to be studied by researchers.

Researchers conducted a two- fold approach to testing the link between breakfast and results at school.
- Firstly, they engaged with the children testing their more immediate cognitive reactions by asking them to recall all the foods and drinks they had consumed the previous day. This provided an indication as to the role of breakfast in children’s immediate recall capabilities.
- The data was then later linked to the Key Stage 2 test performances of the children involved, allowing researchers to draw links between breakfast and exam performance.

The Results:
The study found that not only were the immediate benefits of a healthy breakfast evident, as tested through next day recall tests, but that there was a positive correlation between healthy breakfast consumption and performance in the more rigorous, set academic testing of the Key Stage 2 tests.

However, a healthy breakfast wasn’t proven to be a ‘fix-all’ solution and, although it was shown to improve overall academic performance. The study found little evidence that eating a healthy breakfast helped to reduce the inequalities that exist in educational outcomes.

The study can be seen as a positive step towards a more joined-up approach to education and health that uses current research in all relevant fields in order to support and nourish the whole child: academically, socially and physically.

The Impact:
A key finding of the study and a strong take home message for parents, carers and schools is that the quality of the food plays just as an important role as a breakfast being eaten. Those children who ate unhealthy breakfast items were observed as having no association between items consumed and educational performance. This would suggest that we need to not only encourage our children to have breakfast, but to help guide, offer and support them to make the right choices.

One way we could do this is by offering a range of foods with so-called ‘slow release’ energy. Evidence shows that these foods, which we identify as being lower on the glycaemic index, offer a slow and steady release of energy throughout the day, potentially having a positive effect on students’ cognitive function. Encouraging easy swaps such as whole grain toast instead of white or porridge oats instead of sugary cereals can help young people ensure their mornings and lives get off to the right start.

Importantly, this study could be vital in helping to align health improvement with the core business of schools, and to argue for the implementation of universal as opposed to targeted interventions.

For more information visit: https://www.researchgate.net/publication/282410321_Association_between_breakfast_consumption_and_educational_outcomes_in_9-11-year-old_children  / https://cronfa.swan.ac.uk/Record/cronfa24789

Enquiries to Sarah Toomey, Communications Officer, Farr Institute CIPHER, s.toomey@swansea.ac.uk