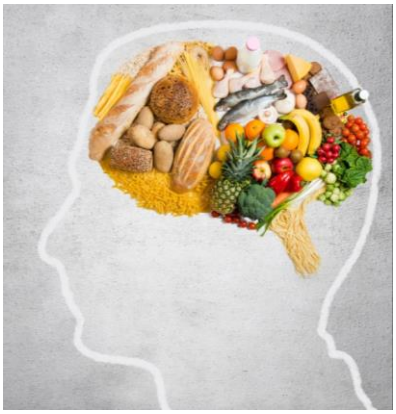
FOOD FOR LEARNING



What people eat has a significant influence on their ability to learn. As trainers, we should try to influence or control what people eat for meals and snacks either before or during training. We can increase and improve learning by providing food that boosts learners' concentration, alertness, brain function and memory. There is a wealth of research into the impact of different types of food on our ability to learn. Here are some of the key facts, with recommendations on what food to provide and what to avoid to improve the effectiveness of the training:

FATS

Healthy fats provide energy for the brain. Polyunsaturated fats result in 20% more retention of learning than saturated fats. Omega 3 and omega 6 oils are necessary for transmitting signals between brain cells. Omega-3 oil can be found in oily fish, nuts, seeds and dark leafy greens and omega 6 oils in nuts and seeds.

PROTEINS

Tyrosine is an amino acid (protein) which is used to make dopamine - a hormone associated with enthusiasm and happiness. When people are enthusiastic and happy they learn more. Tyrosine is found in almonds, avocado, bananas and meat.

Amino acids (components of proteins) also form receptors in the brains that aid cell communication and brain function. The best types of protein for this are found in raw unsalted nuts, chicken, fish and yogurt.

SUGAR

Glucose is a sugar that improves both memory and attention. Research has shown that when people learn tasks quickly, the glucose reserves in their brain are depleted and therefore need replenishing. The more of a cognitive challenge a task is, the more the brain glucose is depleted. Glucose is found in wholegrains and fruit – especially in grapes

Eating refined carbohydrates (sugar and white bread products), leads to fluctuating blood sugar levels which cause periods of high energy followed by an energy slump and drowsiness. The fibre found in complex carbohydrates helps to stabilise the blood glucose (sugar) levels, so meals and snacks should only contain complex carbohydrates such as wholegrain cereals including, oatmeal, bran, brown rice and in beans and pulses.

VITAMINS AND MINERALS

Vitamin C is needed by the body so that it can absorb iron, which increases attention, memory, perception and hand-eye co-ordination. Vitamin C is found in fruit and vegetables including oranges, peppers, strawberries, blackcurrants, broccoli, brussels sprouts and potatoes.

Vitamin B12 boosts memory and brain health, and a deficiency in vitamin B12 can cause memory problems. Vitamin B12 is found in eggs, milk, dairy products, meat, and fortified breakfast cereals.

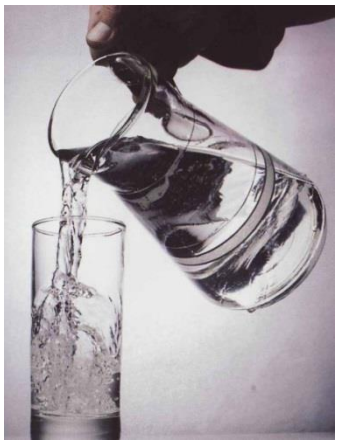
Vitamin E is a powerful antioxidant that helps protect nerve cells in the brain. It can be found in vegetable oils, almonds, peanuts, spinach, carrots, avocados and wholegrains.

Zinc is necessary for brain and nerve cells to grow and repair themselves and to "cement" new connections between neurons and is essential in the formation of memory. Zinc is found in seeds and nuts, as well as red meat.

Calcium helps maintain the electrical environment of the brain, regulating nerve transmission, and helping to clean harmful substances from the brain. Calcium is found in milk, cheese and dairy foods, green leafy vegetables, soya beans and tofu, and nuts.

ANTIOXIDANTS

Antioxidants are shown to improve learning capacity, memory function and motor skills. They are critical for the repair and protection of neurons, neutralise damaging free radicals and build healthy connections between brain cells. Antioxidants (which include flavonoids and carotenoids) are found in colourful fruits and vegetables such as pomegranates, blueberries, strawberries, apples, grapes, beans, artichokes, cabbage, broccoli, asparagus, avocados, beetroot and spinach. Dark (70% cocoa) chocolate in small quantities is also a good source of flavonoids.



WATER

For successful learning to take place, the brain needs to be properly hydrated. About 75% of the brain is water and when the body lacks water, brain cells and other neurons shrink and the biochemical processes involved in cellular communication slow. A drop of as little as 1 to 2% of fluid levels can case the brain to process information more slowly, impair short-term memory, reduce attention span. Water should always be provided for learners through the course, not just during breaks.

Meals during training should be light, and snacks and nibbles should be available for people to pick at throughout the day, as this is shown to improve performance, attention and learning. These meals and snacks should be packed with the brain-friendly foods in the "Food for Learning" list below and should avoid the items on the "Food to Avoid" list.

Food for Learning

- Oily Fish such as salmon, tuna, mackerel, and sardines
- Leafy Green vegetables including spinach, kale, and cabbage
- Brightly coloured vegetables such as carrots and red peppers
- Beans, lentils and pulses
- Fruits including grapes, Pomegranates, oranges, bananas
- Berries - especially blueberries and strawberries
- Avocados
- Whole grains such as oats and brown rice
- Nuts including almonds and walnuts, cashews, hazelnuts, brazil nuts and peanuts
- Seeds including pumpkin, sunflower, flax, and sesame seeds
- Nut butters such as peanut or almond butter or tahini
- Dark (70% coca solids) chocolate

Food to Avoid

- Refined sugars
- Saturated fats
- White bread and refined wheat products
- Artificial food additives such as sweeteners, colouring, and preservatives
- Caffeine

Come to a course or hire our training/meeting space at the Salthouse and you'll get delicious, great value Food for Learning, provided by our wonderful caterers, Event Horizon, so that you and your learners have a fantastic learning experience. Visit www.the-salthouse.co.uk for more information.