Consumer Information Sheet - Brain Training

Centre for Healthy Brain Ageing (CHeBA)

Never Stand Still | Medicine | School of Psychiatry

Brain training involves repeatedly doing mental exercises that require different cognitive abilities such as memory, attention and problem solving. Brain training is becoming increasingly popular and there are many commercial products promoting themselves as ways to restore and improve brain function.
The universal idea is "*use it or lose it".*

How does having an active brain help?

The adult brain continues to change and develop across the life span. This dynamic capacity of the brain to change in response to new tasks and activities is termed *neural plasticity.* In particular, neural plasticity refers to physical changes that occur to your brain cells – and the connections between them – in order for the brain to learn and process new information. For optimal neural plasticity and brain development, we need to stay mentally active and challenged.

Does brain training work?

Being mentally active and stimulating your brain improves brain health. However there are no specific products or packages that have been scientifically shown to work for everyone. Some scientific studies have shown that brain training can improve mental speed, attention, memory and problem solving. In general these improved performances are on the trained task, and may help improve and maintain general mental function.

More scientific research is needed. There are still many questions regarding brain training- such as how much is required, how often should we train, and if brain training can lead to reducing the risk of dementia.

What brain training products are available?

There are many commercial brain training products available. Each product has its own strengths and weaknesses, however as many of the products have free trials you can try exercises of the program to find the one that suits your needs prior to purchasing it.

Questions to ask to help you choose the right brain training product to suit your needs:

1. Is the product based upon scientific research?
2. Does the product provide a structured program?
3. Does the product identify what kind of brain function is being trained?
4. Does it include different types of exercises challenging different types of brain functions?
5. Do the exercises get harder and change to keep challenging me?
6. Is the product easy and fun to use?
7. What are the costs involved?

For more general information about brain training go to: www.sharpbrains.com

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What other brain training products are available?

There are other types of products available in bookshops and educational stores that claim to provide brain stimulating activities, but these have no clear supporting evidence. There are also several books offering different types of mental challenges and activities such as the MENSA Ultimate Mental Challenge puzzles, and the workout for the Balanced Brain, and there are game cards, various puzzles, and handheld devices with other activities for speed and attention. Several books on memory are also available which provide strategies to improve memory, such as developing mnemonics. These strategies can be effective but they are not in the same rubric as brain training.

What's the most important feature of any brain training product?

Our reviews of the area suggest that multi-domain brain training is more likely to lead to meaningful benefits. This means that you 'cross-train' your brain, exercising several different mental functions such as memory, problem solving and attention span. Training only one cognitive domain (such as memory) does not seem to be as effective as multi-domain brain training. The product must be easy to negotiate, user friendly, with clear instructions, including limited intrusive pop-up advertisements, with capacity to adjust for visual and hearing impairments, and providing helpful progress reports and feedback.

Are there other options for brain activity besides Brain Training products?

Yes. Research indicates that participation in engaging leisure activities with mental, social and physical components can keep our brain healthy and reduce our risk for dementia. Trying something new is very challenging and stimulating for the brain, particularly if it means learning new information and skills and involves ongoing practice. The key is to remain curious and keep trying new stimulating activities. Some activities to try include:

- Learn a new language – enrol at your local community college, access online language training, or buy a learn-a-language CD.
- Study something that interests you - enrol in TAFE, Community Courses, Probus, Rotary, etc.
- Learn to dance – try ballroom dancing, ballet, South American or Zumba, Contact a dance school near you.
- Learn a new artistic and craft pursuit, like painting, knitting, carpentry, drawing or embroidery.
- Start a new hobby, such as gardening, bird-watching or bush-walking.
- Volunteer. Contact your local council or Church for volunteer roles, or look online at http://www.volunteeringaustralia.org/.
- Play bridge or other card games – check out the Australian Bridge Federation.
- Join an interest group or political group that suits your beliefs and get involved in their projects and attend information sessions.
- Travel. Plan a local or overseas holiday and conduct research so you can learn more about the places you are visiting.

This consumer information sheet was updated by Dr Nicola Gates and approved by Scientia Professors Perminder Sachdev and Henry Brodaty, Co-Directors of the Centre for Healthy Brain Ageing (CHeBA) on 12 May 2015.