

# *It's all in the* **MIND!**

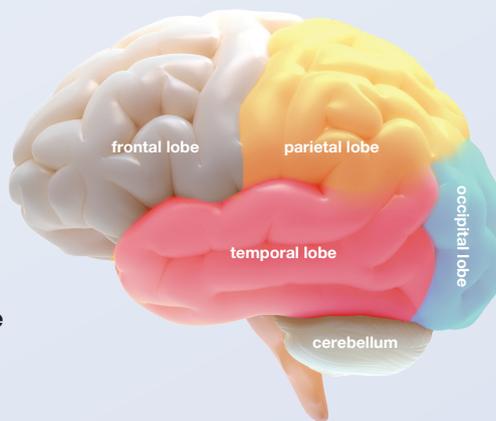
The numbers are stark and alarming. We all want to be smart and stay sharp as we go through life - but the facts and figures tell a different story about our cognitive abilities. According to recent statistics, cognitive decline and disorders classed as “Dementias” are affecting increasing numbers of people around the world.<sup>1</sup> The word dementia actually means “deprived of mind.” It’s a catch-all term that covers progressive memory loss, thinking difficulties, changes in personality and dwindling ability to perform everyday activities.<sup>1,2</sup> It is a multi-faceted condition that not only affects the individuals who have it both financially and emotionally, but their families or caregivers as well.

**In 2016, dementia was ranked as the fifth leading cause of death globally and the sixth leading cause in the United States.<sup>3</sup> The numbers of people afflicted are expected to triple by the year 2050,** posing a massive healthcare and financial burden to all nations.<sup>1</sup> There are many types of dementia caused by different brain conditions. The most common type of dementia is Alzheimer’s. Most attempts to develop drugs to treat Alzheimer’s and other forms of dementia have not been successful. There is an increasing awareness that treating dementias at a late stage is futile and interventions should start early in life. Put simply, dementia is a condition that is best addressed by a whole lifestyle approach. PREVENTION and adopting a healthy lifestyle is so important! Great nutrition is a big part of that.

## **The Incredible Brain**

The brain is remarkable and the most complex organ in our body. It produces our thoughts, feelings and lets us experience the world around us. For an adult, this organ weighs in at just over 1.3 kg. Although this represents just 2% of the total body weight, it consumes 20% of the body’s oxygen supply and more than 25% of the body’s glucose

or body’s energy supply when at rest!<sup>4</sup> The brain is actually about 78% water! Remarkably the brain has a very high fat content. Fats make up about 50% of the dry weight of the brain overall. Protein is also very important to the structure of the brain, making up about 40% of the dry weight. When we piece it together and understand its contents, we see that this incredible organ needs a lot of support and energy and nutrition play a big role.

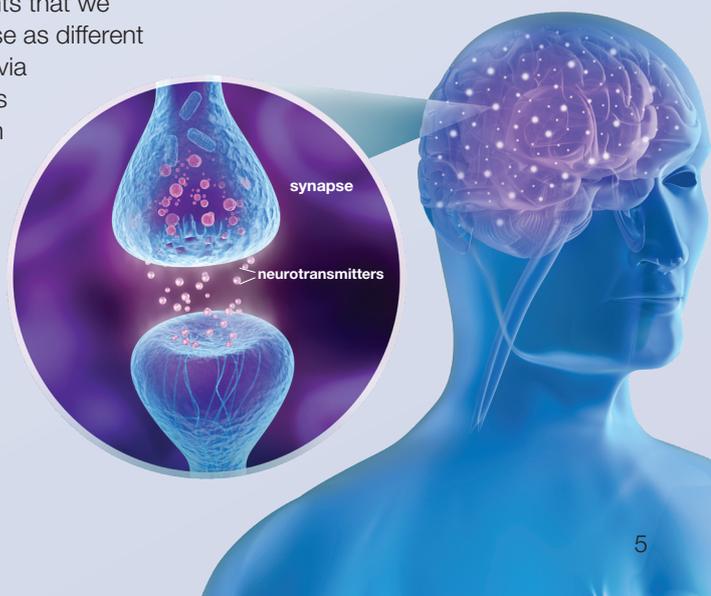


The human brain has about 86–100 billion **neurons** or **nerve cells**. It is now known that we have the ability to make new brain cells throughout our lives — a process called neurogenesis. It used to be thought that brain cells started to die off when a brain is fully developed in early adulthood and it was believed that these cells were not replaced! Each nerve cell or neuron can typically make contact with up to ten thousand others, via junctions or contact points that we call **synapses**. Think of these as different phones that are connected via phone wires and these wires help with the communication among us. Neurons and “neural connections” are responsible for how we think and perceive the world around us. Our brains form a million new connections for every second of our

lives. The pattern and strength of the connections is constantly changing with our experiences in life. These changing connections help us store memories and shape our personalities. Neural connections are made with the help of substances that we call **neurotransmitters** and by electrical signals within individual neurons or nerve cells.

## **With a Little Help From Our Friends!**

In the last five years, there has been a totally new way of looking at brain health after the discovery of what we call the **microbiota-gut-brain axis**. It seems that the type of microbes found in the lining of the digestive tract can influence our brain in different ways. Quite unbelievable at first — a bit like science fiction. In fact, since the early 2000s it has been known that our gut microbes can produce most of the neurotransmitters present in the human brain. In relation to how our gut may affect our mood, one example of this action is the gut bacteria’s ability to make serotonin, our happiness neurotransmitter.<sup>5</sup> **Recent research has associated the presence of certain bacteria with a more positive mood.<sup>6</sup> And as we know, what we eat certainly has the capability to influence the composition of the gut microbiota.**



## Balance your Life, Balance your Brain!

It is never too late to switch to a healthier lifestyle. Much of what you need to do to enjoy good brain health are simple things that you can easily do in your everyday life to keep you in top cognitive shape. In fact, this means following the general good advice about leading a healthy lifestyle given to us for the general prevention of chronic diseases.



### 1 Achieve Balance in Your Life

Challenge your brain and learn new things every day to promote **mental activity**. Scientists have found that challenging the brain with new activities helps to build new brain cells and strengthen connections between them. This helps to give the brain more 'reserve' or 'back up' in case of loss or damage to brain cells. Higher levels of mental activity throughout life are consistently associated with better brain function and reduced risk of cognitive decline and dementia.

Fill your week with **social interactions** and fun — be involved in the community! This definitely helps keep those important neural connections! Social activities that involve both mental activity and physical activity such as dancing and team sports for example, provide even greater benefit for brain health and reducing the risk of dementia.



**Exercise** at a healthy level for you. Do something that you enjoy. Exercise creates more energy producing powerhouses (mitochondria) in the brain as well and can increase the levels of protective substances in the brain.

Make sure you always have enough high-quality **sleep**. This is known to be so important to the recovery processes of the brain. High quality sleep also helps with regulating your emotions and emotional memory.<sup>7</sup> Many things can help you with improving your sleep. You can set an alarm to help you stick to a schedule of when you should start getting ready for bed or you can set a reminder for a consistent time to wake up. Try to avoid heavy or large meals directly before bedtime, limit the use of displays from mobile phones or computers before bed time (blue light emitted can disrupt sleep) and work on your physical activity as this can help with sleep.<sup>8</sup>

**NeoLife's Herbal Rest & Relax** can be a wonderful help to assure you of a great night's sleep.

Manage **stress** levels. Negative stress can really impact the brain causing neurons to die off ahead of their time! Stress is one of those things that can not only impact your brain but can impact you at a deeper emotional level. Try to work on stress management such as getting either professional help or working on meditation. Deep breathing and meditation can be helpful to relax your muscles. Exercising regularly can help with management of stress.



### Herbal Rest & Relax

#686 – 60 tablets

Helps calm your body, quiet your mind and renew your positive outlook, so you can rest with ease.

- Promotes restful sleep and refreshed awakening
- Contains eight herbs in an effective, balanced mix to help rest and relax
- Lemon balm, skullcap, schisandra and passion flower promote calm relaxation
- Damiana and St. John's Wort help lift mood and support healthy sleep patterns
- Verbena and German Chamomile provide a complementary effect



## 2 Drink Alcohol Only in Moderation and Eliminate Tobacco Use!

This suggestion follows what is recommended for maintaining good heart health. It's important to ensure that your body is not being compromised by toxins from high alcohol and tobacco use.

## 3 Follow a Healthy Diet – What's Good for the Heart is Good for the Brain!

Recent science confirms that there is a very strong link between mid-life heart health and the later risk for developing dementia.<sup>9</sup>

The strongest dietary patterns for optimal cognitive health and prevention of dementia appear to be the Mediterranean diet (MEDI-diet) and a diet pattern appropriately called the MIND diet.<sup>10,11</sup> The MIND diet is a combination of the MEDI-diet and the Dietary Approaches to Stop Hypertension (DASH) diet.<sup>12</sup> The DASH diet is a low sodium, nutrient-packed diet which is known to lower blood pressure and was developed in the '90s to attempt to tackle risk factors for heart health.<sup>12</sup> These diet patterns typically contain plenty of colourful vegetables and fruits, healthy fats from fish and olive oil, whole grains, beans, lean protein sources and also wine at a low level. The MIND Diet also recommends restricting 5 categories of foods - red meat (4 servings a week allowed), butter and margarine, cheese, pastries and sweets, and fried and fast foods.



Both of these powerful diet patterns, the MEDI- and DASH-diet, have shown effects on reducing blood pressure and improving aspects of cognitive performance. In some recent work published by Dr. Martha Morris at Rush University in the U.S. the MEDI diet was compared to the DASH diet and the MIND diet for effects on cognitive health. Almost 1,000 subjects aged 58 - 98 took part in this study for between 2 to 10 years.<sup>11</sup> All 3 diets were judged to have brought a reduction in the rate of cognitive decline of about 50%. But even modest followers of the MIND diet still achieved good results.

### Top Food Choices to Keep in Mind!

#### MEDI Diet

Fruits  
Vegetables  
Legumes  
Nuts  
Fish  
Seafood

#### DASH Diet

Fruits  
Vegetables  
Whole Grains  
Poultry  
Fish  
Nuts

#### MIND Diet

(a combination of MEDI diet and DASH diet)

#### EAT:

|                                       |                  |
|---------------------------------------|------------------|
| <b>Berries</b>                        | <b>Seafood</b>   |
| <b>Green leafy + other vegetables</b> | <b>Nuts</b>      |
| <b>Whole Grains</b>                   | <b>Beans</b>     |
| <b>Poultry</b>                        | <b>Wine</b>      |
|                                       | <b>Olive Oil</b> |

#### RESTRICT:

-  Red meat
-  Butter & margarine
-  Cheese
-  Pastries & sweets
-  Fried & fast foods



## Great Support and Tips for Keeping Your Brain in Shape!

NeoLife product solutions can help fill important gaps in our diet and provide foundational whole food nutrients, micronutrients and polyphenols which help feed and protect the active brain. In fact, NeoLife nutritionals can help us achieve a diet pattern more like that of the MEDI-diet or the MIND diet.

## NeoLife Nutritionals and Herbals for Brain Fitness and Balance!

### Keep your blood glucose in balance!

Glucose is vital to support the brain's ability to carry out its many demanding tasks such as transmitting electrical nerve impulses and making neurotransmitters.<sup>13</sup> A lack of a steady glucose supply affects all cognitive processes and in particular, memory. In fact, it is known that when glucose is not able to be used effectively there can be accelerated cognitive decline. There are many similarities with the problems of glucose metabolism in the brain and in the body. In fact, Alzheimer's is often referred to as Diabetes Type III.<sup>14</sup> NeoLife has long since pioneered the area of steady energy and "glycaemic control" with groundbreaking products such as NeoLifeShake.



**Make sure you get enough healthy fats and phospholipids** to help build and support the working brain.<sup>15</sup> Incredibly,

emerging research suggests that omega-3 docosahexaenoic acid (DHA) supplementation can help delay the natural reduction in brain volume (shrinkage) that occurs with age.<sup>16</sup> That's impressive! **NeoLife's Omega-III Salmon Oil Plus** and **Tre-en-en Grain Concentrates** contribute important healthy fats. **Get enough quality protein and amino acids.** Amino acids from protein are vital; for example, tyrosine and tryptophan act as important building blocks for the neurotransmitters dopamine and serotonin respectively.<sup>17</sup>

**Keep topped up on nutrients which support energy metabolism.** B-group vitamins are known to play key roles in energy metabolism and this helps power the working brain, which has such high demands. Ongoing research is assessing just how the individual or combined B-

### Blood glucose management (glycaemic control):

- NeoLifeShake  
#690 - Creamy Vanilla  
#691 - Berries n' Cream  
#692 - Rich Chocolate



### Healthy fats for the working brain:

- Omega-III Salmon Oil Plus, #641
- Tre-en-en Grain Concentrates, #639



### Quality proteins and amino acids for neurotransmitter production:

- NeoLifeShake  
#690 - Creamy Vanilla  
#691 - Berries n' Cream  
#692 - Rich Chocolate



### Energy metabolism:

- Pro Vitality, #665
- CoQ10, #648
- Formula IV, #606
- B-Complex Threshold Control, #612



### Powerful phytonutrient protection:

- Carotenoid Complex, #660
- Cruciferous Plus, #658
- Flavonoid Complex, #659
- Tré, #664



### Mental acuity and performance:

- NeoLifeTea, #693



### Relaxation and sleep:

- Herbal Rest and Relax, #686



vitamins may play a role in cognitive decline and there are some promising studies.<sup>18</sup>

### Protect your body and mind with powerful phytonutrients!

Phytonutrients may be helpful to lower "neuroinflammation" to help protect membranes of brain cells. One example here relates to the ongoing activity in the field of carotenoid research.

High carotenoid intake through life may provide significant benefits, not only to eye health and immune function, but also to cognitive function.<sup>19,20</sup>

Numerous recent scientific publications have implicated polyphenols (such as anthocyanins, flavonoids and curcuminoids) as being great for the brain.

As you may be aware, polyphenol research is a real hot topic today, as the mechanisms of the tremendous cognitive benefits of polyphenols unfold.<sup>21-24</sup>

Emerging science also suggests that the polyphenols from the spices turmeric and cinnamon can even play a role in enhancing memory!<sup>25,26</sup>

### Consider a herbal boost for challenging times and for recovery!

Get the extra support you need during long days at work or at times of great demand. With polyphenol rich extracts from green, white and black tea and also NeoLife Herbal Blend with *Rhodiola rosea*, *Panax ginseng* and *Codonopsis pilosula* (or poor man's ginseng), **NeoLifeTea** can be a real boost. These kinds of herbs are known to help increase mental alertness, optimise performance and help us deal better with the stress of our daily lives.<sup>27</sup> When it's time to power down and rest, look no further than **Herbal Rest and Relax** to encourage a great night of restorative sleep!



## In a Nutshell

Dementia is on the rise, to a large extent because we are living longer. About 30% of the population over 80 have dementia. Dementia reduces a person's ability to live independently and caring for people with dementia is a big burden to society, both emotionally and financially.

**1** Dementia is not a single condition but a group of related disorders. Alzheimer's type dementia is what we hear about the most, but there are others and each type affects the brain differently.

**2** Dementia is perhaps not as well understood as other chronic problems like heart health issues, but the same modifiable lifestyle factors are important to help prevent it.

**3** It is known that how well a brain ages depends on genes and lifestyle. Healthy lifestyle choices are known to be so important to the brain, just like the rest of the body!

**4** Food choices and overall diet pattern through life play an incredibly important role in reducing the chances of early cognitive decline.

**5** Healthy food choices (or patterns of eating) such as the Mediterranean (MEDI) diet and the MIND diet which are rich in fruits and vegetables, healthy fats (like omega-3 and olive oil), whole grains, nuts and seeds, beans and lean sources of protein are advised.

**6** NeoLife Nutritionals/Herbals can play a role in the overall holistic lifestyle approach to maintaining peak cognitive shape through life.

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