5 ways to reduce your risk of Alzheimer's disease

Over the last couple of years there has been increased media attention on dementia; whether this has been focusing on new methods of treatment, drug trials, diagnostic or screening tests (such as the Food for the Brain Cognitive Function Test) we cannot ignore the dominance that dementia and forms of the illness, such as Alzheimer's Disease (AD), have within today's media channels. And now the UK government is set to stage Challenge on dementia 2020, its next step in the effort to combat dementia over the next five years.

One in six over the age of 80 years has dementia, with the current estimated cost to the UK at £26 billion per annum. With all this media activity the one story that often gets lost is the fact that the risk of developing dementia can be reduced, and this is due to modifiable risk factors – here we are referring to elements that are within our control to correct, changes that you can make today!

We have analysed the top 5 most important of these risk factors and summarised them for you below:

1. Check your blood homocysteine level Homocysteine is an amino acid that is naturally created within our bodies, but if certain important chemical pathways in our bodies are not working optimally, due to factors including genetics, lifestyle and diet, then levels of this amino acid can build up. High levels can have a toxic effect on our bodies, they are a known risk factor for AD and there is strong evidence that lowering homocysteine levels can help in the prevention of cognitive decline. Approximately 30% of the general population, and half those over 65, have high levels but levels can be measured simply through a blood test, and can be naturally reduced through dietary amendments and supplementation of B vitamins.

2. Ensure a good level of omega 3 fats in your diet Omega 3 fats are essential fats that we have to obtain through our diet or supplementation. Good sources to add into your daily meals are dark green leafy vegetables such as kale, broccoli and spinach, flaxseeds, chia seeds, walnuts and, most of all, oily fish; in fact eating just one serving of oily fish a week is associated with halving the risk of AD. For those that do not eat fish, an omega 3 supplement would be recommended.

3. Be active! Far too many of us lead a very sedentary lifestyle, by increasing our daily exercise not only can we improve cognitive function in addition gentle exercise both lowers stress levels and high blood pressure - both of which can be contributing factors to the onset of cognitive issues. An easy and affordable way to improve on daily activity would be to purchase a pedometer and ensure you are reaching the recommended steps per day.

4. Increase your intake of polyphenol rich foods Polyphenols are the active substances found in plants which have antioxidant properties. Antioxidants can help protect our bodies against oxidative stress, which refers to the damage that harmful chemicals can do to our bodies and that are linked to a number of illnesses, including neurodegenerative diseases, such as AD. By increasing consumption of these foods we can help lower the risk of cognitive decline and ill-health. Foods that are naturally high in polyphenols include seasonings such as cloves, peppermint, rosemary and star anise, raw cacao (make sure you read our 'Research round-up' feature below),
flaxseed and chestnuts. It is also recommended to include a wide range of fruit such as berries and vegetables in your diet to optimise as many different variations of polyphenols as possible.

5. Be aware of the effect mid-life smoking can have on your health There is evidence to suggest that both mid-life smoking and smoking in general can contribute to the development of dementia in later years. Furthermore, by eliminating smoking general health and well-being can be improved with the added benefits of increased energy levels, less stress and the risk of other serious health conditions, such as cancer and heart disease.

To give you an idea on how modifying these risk factors can be of benefit, it is predicated that if the factors with the strongest risk - high homocysteine, low physical activity and mid-life smoking - are eliminated, then one in three cases of AD can be avoided. We outline this further in our new research project ‘Action on Alzheimer’s’ and to read more on this work please click here.

This chart shows you how common each risk factor is (Prevalence %), what percentage of Alzheimer's cases are attributed to it, how easy is it to change and how strong is the existing evidence is that changes will make a difference.

<table>
<thead>
<tr>
<th>Risk factor</th>
<th>Prevalence (%)</th>
<th>% of AD attributed to risk factor (PAR%)</th>
<th>Ease of changing</th>
<th>Evidence for effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>High homocysteine level, lowered by B vitamins</td>
<td>30</td>
<td>22</td>
<td>Yes</td>
<td>Strong</td>
</tr>
<tr>
<td>Low fish &amp; omega-3 intake</td>
<td>49</td>
<td>22</td>
<td>Yes</td>
<td>Moderate</td>
</tr>
<tr>
<td>Low physical activity</td>
<td>34</td>
<td>22</td>
<td>Moderate</td>
<td>Moderate</td>
</tr>
<tr>
<td>Low intake of polyphenol rich foods</td>
<td>75</td>
<td>up to 20</td>
<td>Yes</td>
<td>Weak</td>
</tr>
<tr>
<td>Mid-life smoking</td>
<td>20</td>
<td>11</td>
<td>Moderate</td>
<td>Weak</td>
</tr>
</tbody>
</table>

(Please note that the evidence, based on intervention studies, is graded as weak for most risk factors because of the absence of studies, rather than the absence of evidence of effect from studies. This is largely because very little available funds for dementia research are spent on prevention research).

At Food for the Brain, we continue our research into dementia prevention as we wish to educate our readers as much as possible about how to delay, and in some cases prevent the onset of dementia. With your help we can further this research and education, please support us by donating within your means at the link below, or calling us on 0300 365 0130.

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14th March: Brain Health
A conference focusing on the first effective treatment for Alzheimer’s and MCI

Memory loss associated with Alzheimer’s has been reversed for the first time. It was done with a combination of nutrition and functional medicine – and we’ve got the man who did it. UCLA and Buck Institute’s Prof Dale Bredesen, MD.

Click here now for more info, and to secure your place
Calling all chocoholics!

A new study has examined the benefits of cocoa on cognitive health. Participants were men and women between the ages of 61-85 years old with no current cognitive impairment. After analysis on the effect a drink made with three varying strengths of cocoa flavanols (a naturally occurring polyphenol and antioxidant), results indicated an improved cognitive function in those consuming the drink with higher quantities of the flavanols.

Although promising research, more is required for us to fully understand why cocoa flavanols appear to be of benefit. Nevertheless, Dr. Desideri, lead author on the paper, comments that “The results of this study are encouraging – they support the idea that diet, and specifically a diet rich in cocoa flavanols, can play an important role in maintaining cognitive health as we age.”

Cocoa has particularly high amounts of these antioxidant rich flavanol properties; however, it is best consumed in its purest form, raw cacao, or enjoyed occasionally in a good quality dark chocolate bar with at least 70% cocoa solids. Cocoa can be added to smoothies, baked goods and even added to some savoury dishes to deepen flavour, such as in this month’s recipe.

Recipe of the month

Chilli con carne (serves 4)

Ingredients

- 450g lean organic beef mince
- 2 tsp coconut oil or olive oil
- 1 onion, diced
- 2 cloves of garlic, crushed
- 1 red pepper, diced
- 2 tsp ground cumin
- 1 tsp chilli powder
- 1-2 tsp crushed chilli flakes (according to taste)
- 250g mushrooms, sliced
- 1 x 400g chopped tomatoes
- 3 tbsp tomato puree
- 4 tsp reduced salt bouillon powder
- 1 x 410g kidney beans
- 1 tbsp of raw cacao, or 2 x squares of good quality dark chocolate with 85% cocoa content
Directions

1. Cook the mince in a large frying pan until it starts to turn grey/brown, scoop out any fat that appears with a teaspoon. Set aside.

2. Heat the oil in a separate pan and fry the onion, garlic and pepper for a couple of minutes.

3. Add the cumin, chilli powder, raw cacao/dark chocolate and chilli flakes to the pan with the vegetables and cook for a further 5 minutes until soft.

4. Add the mushrooms to the pan and cook for a further 5 minutes until soft.

5. Add the mince together with the chopped tomatoes, tomato puree, bouillon powder and kidney beans. Cover and simmer for 1- to 15 minutes, until the vegetables are soft and flavours have developed. Season with black pepper.

Recipe adapted from 'The Low-GL Diet Cookbook' by Patrick Holford and Fiona McDonald Joyce.