











In this issue:

-  *Higher vitamin D levels improve cognitive function in older men*
-  *Folic acid prevents congenital heart defects*
-  *Semen quality may depend on dietary antioxidants*
-  *Older people need more sun*
-  *Preconception folic acid may reduce premature births*
-  *Cereal and milk is the new sports supplement*
-  *DASH diet reduces women's risk of heart failure*
-  *Calcium-fortified ice cream ideal booster for bones?*
-  *Tai Chi improves pain in arthritis sufferers*
-  *Ginger quells nausea from chemotherapy*

Welcome to naturalhealthreview.org Issue 16.

We have some interesting studies on preconceptional folic acid this month, showing that not only does it protect against neural tube defects, it may also protect against severe congenital heart defects and reduce the risk of premature birth. For men, we have a study showing the benefits of dietary antioxidants for sperm quality, and the importance of vitamin D for cognitive function. I hope you enjoy this issue and look forward to receiving your feedback.

Kind Regards,

Dr Shaun Holt

shaun@naturalhealthreview.org

Higher vitamin D levels improve cognitive function in older men

The facts:

- 3,000 middle-aged and elderly men participated in a European study to examine the link between vitamin D levels and cognitive function.
- Men with higher levels of vitamin D were found to process information faster and have a greater attention span than those with lower levels.
- Vitamin D is primarily synthesised in the skin after sun exposure but is also found in certain foods such as oily fish.



Dr Shaun Holt:

Vitamin D is a hot topic at the moment and this study has found that men with higher levels of vitamin D performed better in neuropsychological tests assessing attention and speed of information processing. The study was large, over 3,000 males were tested, but as usual with these types of studies, further research is needed to see if vitamin D supplementation in the elderly can prevent the common age-related decline in cognitive functioning.

<http://jnnp.bmj.com/cgi/content/short/jnnp.2008.165720v1>



**Independent commentary
by Dr Shaun Holt,
BPharm (hons), MBChB (hons)**

Folic acid effective in preventing congenital heart defects, Canadian research shows



The facts:

- This Canadian study investigated the effects of mandatory fortification of grain products with folic acid in 1998 on the incidence of severe congenital heart defects.
- The number of babies born with severe congenital heart defects was reduced by just over 6% in the 7 years after fortification.
- Canadian women who are trying to get pregnant are still encouraged to take additional folic acid supplements.

Dr Shaun Holt:

We know that folate supplementation in populations, such as adding it to grain, can reduce the number of cases of neural tube defects such as spina bifida. New research from Canada shows that it can also reduce the incidence of congenital heart defects by more than 6%. Natural sources of folate include fruit and green vegetables, but these might not provide sufficient amounts for pregnant women and therefore most gynecologists recommend supplements in addition to a healthy diet rich in folic acid.

<http://dx.doi.org/10.1136/bmj.b1673>

Disclaimer: *naturalhealthreview.org features summarised interpretations of published studies and reflects the opinions of the writer rather than those of the research groups or scientific journals. Readers should consult a health professional before using any Natural Health products. Although naturalhealthreview.org welcomes feedback, we cannot provide opinions or guidance on individual cases.*

Privacy Policy: *Research Review will record your details on a secure database and will not release it to anyone without prior approval. You have the right to inspect, update or delete your details at any time.*

Semen quality may depend upon antioxidants in man's diet

The facts:

- This study investigated the effects of nutrient intake on sperm quality in Spanish men attending 2 private fertility clinics.
- Thirty men with poor sperm quality and 31 men with normal sperm quality had their dietary habits and nutrient consumption compared.
- Men with normal sperm quality were found to eat a lot more antioxidant nutrients and less protein and fat than men with poor semen quality.

Dr Shaun Holt:

With declining fertility rates, one theory has been that diet may be partly responsible and this small study adds weight to that theory, finding that low antioxidant intake is associated with low reproductive capacity in semen. Spanish researchers working at infertility centres said: "a healthy diet is not only a good way of avoiding illness, but could also have an impact on improving seminal quality. What we still do not understand is the difference between taking these vitamins naturally and in the form of supplements. In the studies we are going to carry out in the United States (where the consumption of vitamins in tablet form is very common) we will be looking at the role of supplements".

<http://dx.doi.org/10.1016/j.fertnstert.2008.10.075>



Older people need more sun, expert urges

The facts:

- 3262 middle-aged and elderly Chinese men and women were assessed for vitamin D levels and metabolic syndrome (a combination of disorders that increase the risk of developing heart disease and diabetes).
- Vitamin D deficiency was common and was linked to an increased chance of having metabolic syndrome and insulin resistance.
- Because aging skin appears to be less efficient at forming vitamin D, older people may need to spend more time in the sun than younger people to get the same protective levels of vitamin D.

Dr Shaun Holt:

We're seeing more and more vitamin D studies – it seems to have benefits in a large number of conditions as does omega-3 fish oil. This study from China suggests that vitamin D, which can be obtained from supplements or from having plenty of skin exposure to sun, may reduce the risk of developing heart disease and diabetes. The researchers pointed out that "as we get older our skin is less efficient at forming vitamin D and our diet may also become less varied, with a lower natural vitamin D content. When we are older we may need to spend more time outdoors to stimulate the same levels of vitamin D we had when we were younger".

<http://care.diabetesjournals.org/content/early/2009/04/14/dc09-0209.abstract>

Taking folic acid supplements before conception linked to reduced risk of premature birth

The facts:

- The association between pre-conceptual folate supplements and the risk of premature birth was evaluated in 34,480 pregnant women.
- Women who took folic acid for at least 1 year before conception had a 70% lower risk of delivery between 20 and 28 weeks and a 50% lower risk of delivery between 28 and 32 weeks than women who didn't take folic acid supplements.
- The risk of preterm birth decreased as the duration of preconceptional folate increased, and was the lowest in women who took folic acid for at least a year before conception.

Dr Shaun Holt:

It's not that pregnant women need another reason to make sure that they get enough folic acid before they conceive and during pregnancy, but this huge cohort study found that preconceptional folate supplementation is associated with a 50%–70% reduction in the incidence of early spontaneous preterm birth. Around 1 in 8 babies in Western countries are born before 37 weeks of gestation (premature) and they are more likely to have breathing difficulties and learning or developmental disabilities. The study was not perfect though and a large randomized controlled trial is needed to prove the findings from this observational study.

<http://www.plosmedicine.org/article/info:doi/10.1371/journal.pmed.1000061>



Cereal and milk is the new sports supplement

The facts:

- This study compared the effects of whole grain cereal plus non-fat milk with those of a carbohydrate-electrolyte sports drink on recovery after endurance exercise in 12 trained cyclists.
- Using a protocol that reflected a typical exercise session, the subjects warmed up then cycled for 2 hours at a comfortable work rate, before having either the cereal/milk or the sports drink.
- Muscle recovery after endurance exercise was found to be the same with cereal/milk as it was with the sports drink.



Dr Shaun Holt:

This study has prompted headlines such as “Cereal And Milk Is The New Sports Supplement”! It was a small study of 12 athletes and the main finding was that glycogen repletion, the replenishment of immediate muscle fuel, was just as good after whole-grain cereal consumption as with sports drinks and that some aspects of protein synthesis were better. The researchers concluded that a bowl of whole-grain cereal with a splash of skimmed milk may be a smarter move than investing in a high-priced sports drink.

<http://www.jissn.com/content/6/1/11/abstract>

Diet prescribed to lower blood pressure also reduces women's risk of heart failure

The facts:

- 36,019 middle-aged and elderly women participating in a Swedish study were assessed to see if a diet consistent with DASH guidelines (plentiful in fruits, vegetables, low-fat dairy products and whole grains) would reduced their risk of developing heart failure.
- 443 women developed heart failure during the 7-year follow-up period.
- Women with a diet consistent with DASH guidelines had a much lower risk of heart failure than women with a poor diet.

Dr Shaun Holt:

The DASH diet (Dietary Approaches to Stop Hypertension) has been shown to reduce blood pressure, but can it prevent heart failure, which is one of the common consequences of raised blood pressure? The diet has lots of fruits, vegetables, low-fat dairy products and whole grains - foods that are high in potassium, magnesium, calcium and fibre, high in protein, and low in fat. This huge observational study of 36,000 women in Sweden found that those with a diet which most resembled the DASH diet had the lowest rates of heart failure.

<http://archinte.ama-assn.org/cgi/content/abstract/169/9/851>



Calcium-fortified ice cream ideal booster for bones?



The facts:

- 16 Dutch volunteers ate breakfast with calcium-fortified butterfat ice cream, calcium-fortified coconut oil ice cream or a glass of reduced-fat milk.
- The amount of calcium absorbed after each of the ice cream formulations was the same as that absorbed after milk.
- Ice cream may therefore be a useful means of delivering calcium.

Dr Shaun Holt:

It seems so obvious: many people need more calcium and ice cream contains similar levels to milk, so why not have an ice cream that delivers a lot of calcium but not too many calories. This small study assessed two test products and found that it did indeed lead to a reasonable amount of calcium being absorbed. "These findings indicate that absorption of calcium from both ice cream formulations is as good as milk and illustrate that the typical ingredients and frozen format of ice cream do not negatively influence calcium absorption," said the researchers.

[http://www.adajournal.org/article/S0002-8223\(09\)00163-1/abstract](http://www.adajournal.org/article/S0002-8223(09)00163-1/abstract)

Tai Chi improves pain in arthritis sufferers

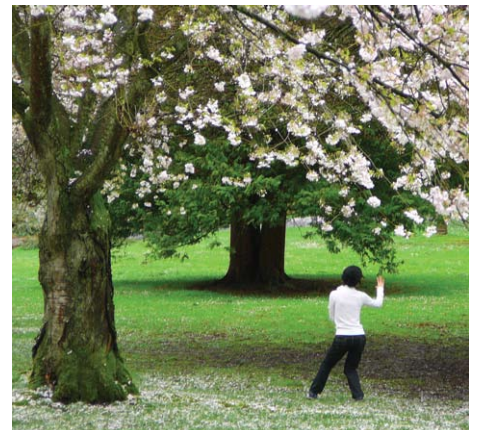
The facts:

- This study reviewed the findings of 7 trials of Tai Chi in people with musculoskeletal pain (arthritis or chronic tension headache).
- Tai Chi tended to reduce pain and disability, and improve physical performance and quality of life.
- The studies were mostly low-quality though and their results need confirmation in a well-controlled trial.

Dr Shaun Holt:

Tai Chi is a form of exercise that is regularly practiced in China to improve overall health and well-being. We know that exercises that lead to muscle strengthening and stretching can help arthritis pain, so can Tai Chi help? This study looked at all previous studies and found that Tai Chi has a small positive effect on pain and disability in people with arthritis, but there was not much data and some of the studies were not of a good quality and so bigger and better studies are needed before this can be strongly recommended, although it is highly unlikely to cause any harm.

<http://dx.doi.org/10.1002/art.24515>



Ginger quells cancer patients' nausea from chemotherapy

The facts:

- 644 cancer patients scheduled for chemotherapy were given placebo or ginger 0.5g, 1g or 1.5g (in addition to standard anti-vomiting drugs) for 3 days before and 3 days after chemotherapy.
- Patients who took the lower doses of ginger had a 40% reduction in nausea compared with those who took placebo.
- The investigators suggested that by taking the ginger prior to chemotherapy, its earlier absorption might have had anti-inflammatory properties.



Dr Shaun Holt:

Most people undergoing cancer chemotherapy suffer from nausea and vomiting. Ginger is well known to help these symptoms, so would it help these patients? This placebo-controlled, double-blind study of 644 cancer patients found that there was a large reduction in symptoms of nausea and vomiting in those taking the ginger. This is the first large study to demonstrate this effect and therefore ginger can be strongly recommended.

<http://tinyurl.com/m2aoxg>



To subscribe or view all [naturalhealthreview.org](http://www.naturalhealthreview.org) issues go to www.naturalhealthreview.org

To unsubscribe email office@naturalhealthreview.org with unsubscribe in the subject line.