

## 2 December 2003 – BBC Website Vitamins 'help treat depression'

**Vitamin B supplements may help people to fight depression, research suggests.**

Scientists found that people with depression responded better to treatment if they had high levels of vitamin B12 in their blood. They suggest taking vitamin B supplements may be a way to boost the effectiveness of anti-depressants.

The research, by Kuopio University in Finland, is published in the journal BMC Psychiatry. The researchers monitored 115 outpatients who were receiving treatment for depression over a six-month period. They measured vitamin B12 levels in the patients' blood when they first came to the clinic, and again at their six-month check up.

The patients who responded fully to treatment had higher concentrations of vitamin B12 in their blood at both the start and the end of the study than those for whom treatment was less effective.

The association remained significant even after other factors such as smoking and drinking habits, type of treatment received, and family history of depression were taken into consideration.

Lead researcher Professor Jukka Hintikka told BBC News Online the finding was potentially significant as many people do not respond to anti-depression treatments.

### Theories

He said it was possible that vitamin B12 was needed to manufacture substances called monoamines. A shortage of these compounds in the central nervous system is thought to be linked to depression.

Another theory is that vitamin B12 deficiency results in an accumulation of another compound called homocysteine, which may enhance depression.

Professor Hintikka said more work was needed to corroborate the results. "It is still too early to suggest generally that patients should take vitamin B12 or any other vitamin supplements to treat depression.



Supplements may be a good idea

**"As many as three in four cases of depression are neither recognized nor treated." Amelia Mustapha**

"But it is possible that the use of vitamin B supplements might help to prevent depressive symptoms in cases of low intake of these vitamins."

### B12 increase

Previous research has shown elderly patients with depression responded better to treatment if they took a supplement containing vitamins B1, B2 and B6. This supplement indirectly increased the level of vitamin B12 in these patients' blood.

Another study found people with low levels of the vitamin B12 may have a higher risk of developing Alzheimer's disease.

Vitamin B12 is naturally found in animal foods including fish, milk and milk products, eggs, meat, and poultry.

More than 2.9 million people in the UK are diagnosed with having depression at any one time.

Seven out of ten recorded suicides are by people affected by depression - a total of 7,000 lives lost every year in the UK and Ireland.

Amelia Mustapha, of the charity Depression Alliance, said: "Whilst we applaud the focus on positive ways to treat this prevalent illness, the concern is that at present as many as three in four cases of depression are neither recognized nor treated, and options for some treatment involve long waiting lists or are simply not available."

### FIND OUT MORE

Food and Behaviour Research (FAB Research) is a charitable organisation dedicated both to advancing scientific research into the links between nutrition and human behaviour and to making the findings from such research available to the widest possible audience.

Please visit our website for further information on this and related topics. Sign up there for our FREE Email alerts - and if you'd like to see more research done in these areas, please join us or make a donation.