

Telegraph 1st August 2007

# End of 'yuppie flu' jibes as scientists prove chronic fatigue is a disease

By Sarah Knapton

CHRONIC fatigue syndrome is an inflammatory disease which could soon be diagnosed through a simple blood test, scientists have said.

For decades, the illness was largely dismissed by sceptics as "yuppie flu", because no cause could be found.

But new research is the first to show a concrete reason for the condition: chronic inflammation, driven by the immune system.

Chronic fatigue syndrome (CFS), which is also known as myalgic encephalomyelitis (ME) affects around 250,000 people in Britain and is characterised by extreme tiredness, muscle pain, sleep

disorders, headaches and flu-like symptoms. Because it often occurs following an illness, infection or traumatic event, such as a car accident, scientists suspected that it could be caused by the immune system failing to shut down properly. Antivirals and anti-inflammatories have also helped some people.

Researchers at the Stanford University School of Medicine discovered that people suffering the symptoms of CFS showed increased levels of 17 proteins produced by the immune system.

The bigger the rises, the more severe the condition. "There's been a great deal of controversy and confusion surrounding ME/CFS, even whether it is an actual disease," said Dr Mark Davis,

professor of immunology and director of Stanford's Institute for Immunity, Transplantation and Infection. "Our findings show clearly that it's an inflammatory disease and provide a solid basis for a diagnostic blood test."

In research published in *Proceedings of the National Academy of Sciences*. The scientists analysed blood samples from 192 patients with ME/CFS symptoms and compared them with samples from 392 healthy control subjects.

The results showed that levels of immune system secretions called cytokines were lower in patients with mild forms of ME/CFS than in the control subjects, but elevated in patients with severe cases.