



## *Your Monthly Update*

*Dear Colleague*

Welcome to the July 2011 newsletter from Pure Bio Ltd.

### *Did you know:*

A study of 36 Mexican men and women found that taking 4.5 g/day of spirulina for 6 weeks dramatically reduced both systolic and diastolic blood pressure, with the largest decreases seen in the youngest (18-38 years) (Lipids Health Dis, 2007; 6: 33)

The chosen topic for this month is:

## **Panic Attacks**

### **Protocol Summary**

<b>Ranking</b>	<b>Nutritional Supplements</b>	<b>Botanical Medicine</b>
<b>Primary</b>		
<b>Secondary</b>	<a href="#">Fish Oil</a> <a href="#">Inositol</a> <a href="#">Multivitamin</a>	<a href="#">Chamomile</a> <a href="#">Passion Flower</a> <a href="#">Valerian</a> <a href="#">Rhodiola</a> <a href="#">St John's Wort</a>
<b>Other</b>	<a href="#">Tryptophan</a> <a href="#">Magnesium</a> <a href="#">Niacin</a> <a href="#">B-Complex</a>	<a href="#">Bacopa monniera</a> <a href="#">Linden</a>

**Primary** – Reliable and relatively consistent scientific data showing a substantial health benefit.

**Secondary** – Contradictory, insufficient, or preliminary studies suggesting a health benefit or

minimal health benefit.

**Other** – An herb is primarily supported by traditional use, or the herb or supplement has little scientific support and/or minimal health benefit.

## Definition

Generalized anxiety disorder (GAD) is believed to affect two in every 100 UK residents at some time in their life. Anxiety disorders, including panic disorder, are estimated to affect one in every 100 people in Britain. Anxiety is a normal human emotion, but when panic and anxiety symptoms escalate into anxiety attacks and panic attacks, it may become classified as an anxiety disorder.

A panic attack is an exaggeration of the body's normal response to fear, stress or excitement. When faced with a situation seen as potentially threatening, the body automatically prepares itself for danger, by producing quantities of adrenalin (epinephrine) for 'fight or flight'.

## Effects

Adrenalin has the following effects on the body, all occurring within a matter of seconds:

- Increases muscle tone
- Increases the rate of respiration
- Increases the rate and efficiency of cardiac output
- Diverts blood away from the skin and to the muscles, leading to pallor
- Slows down digestion and decreases salivary production, leading to a dry mouth
- Increases sensory alertness
- Increases sweating

## Symptoms of a Panic Attack

- very rapid breathing or feeling unable to breathe
- very rapid heartbeat
- pains in the chest
- feeling faint or dizzy
- sweating
- ringing in the ears
- tingling or numbness in the hands and feet
- hot or cold flushes
- nausea
- a need to void bladder and / or bowel
- feelings of absolute terror
- feelings of unreality, called depersonalisation and derealisation.
  - (During depersonalisation, people feel detached from their body and surroundings, strange and unreal.
  - During derealisation, they feel grounded in themselves, but the world seems distant or strange, and they may feel unsteady on their feet.)

Panic attacks usually peak within 10 minutes and generally last for between five and 20 minutes. Some people report attacks lasting for up to an hour, but they are likely to be experiencing one attack after another, or a high level of anxiety after the initial attack. They can occur at night during sleep.

## Long-term Complications

- If panic attacks are experienced recurrently over a period of time, they may lead to a fear of fear. The body and mind becomes sensitized to the physical effects associated with fear, resulting in an attack whenever something prompts a memory of the original panic. For example, becoming hot, or developing sweaty hands whilst in a warm environment may lead the conscious mind to automatically assume another panic attack is occurring. The anticipation ultimately produces the very panic response that is constantly feared.
- Social phobia or agoraphobia may result as there is a temptation to avoid particular places or situations where attacks have previously occurred; leading to progressively more restrictions on day-to-day activities.
- Depression can ultimately result as the sense of day to day enjoyment and self-confidence becomes undermined.
- Childhood influences can make a person more vulnerable to panic attacks – such issues as separation anxiety from a parent or childhood abuse are possible contributing factors.
- Personality traits, such a constant anxiety, being overly critical or disapproving of oneself or striving to conform to the expectations of others, are common in people who panic.

## Physical causes

There are a number of physical causes that could cause or contribute to panic attacks:

- Hypoglycaemia – often the result of poor eating habits, dieting and fasting
- Hyperventilation
- Digestive problems, particularly food allergies
- The use of antidepressants, particularly the newer ones, may produce panic attacks, especially at first
- Caffeine, cigarettes, alcohol, and certain recreational drugs (such as LSD, marijuana and cocaine) can precipitate a panic attack
- Withdrawal from a drug that has a sedative effect, such as nicotine, alcohol and tranquillizers
- Some prescription medication, including some amphetamines, steroids, anti-asthma drugs, and even nasal decongestants have been reported to increase anxiety
- Organic brain dysfunction may cause balance, co-ordination and visual difficulties, increasing a vulnerability to stress, and agoraphobia.
- Being in chronic pain can be another cause of panic attacks

## Additional Advice

- ★ A number of experts advocate the need to accept the panic attacks when they occur, in order to learn that no harm will come to the individual as a result of them. Fighting an attack increases the level of fear and may allow the panic to take on tremendous proportions. Accepting that a panic attack is unpleasant and embarrassing, but that it isn't life-threatening reduces its power to terrify.
- ★ **Creative visualization and affirmations** are techniques that may be helpful. These techniques can be used to re-train the imagination and to move in a more positive direction.
- ★ **Assertiveness training** can be used when there are aspects of a person's life that are leading to a state of self-confidence being undermined, e.g. family life, job, financial worries.
- ★ **Relaxation techniques** can ease muscle tension and slow down the breathing rate; as well as help the mind to relax
- ★ Hyperventilation commonly leads to panic attacks. Breathing techniques to facilitate abdominal breathing can be very useful during a panic attack.
- ★ **Diet** – rapidly fluctuating blood sugar levels can contribute to symptoms of panic. Avoidance of refined carbohydrates (chocolates, sweets, cakes, biscuits, fizzy drinks, ice-cream etc), together with regular eating patterns will often reduce the occurrence and/or severity of panic attacks. Caffeine, alcohol and smoking all contribute to panic attacks and are best avoided.

## Emergency control of a panic attack

- ★ Cup the hands or hold a paper bag over the nose and mouth and breathe for up to 10 minutes. This raises the level of carbon dioxide in the bloodstream and relieves symptoms.
- ★ Alternatively, run on the spot during a panic attack.
- ★ Carry an object, such as the photograph of a loved one, to anchor you in reality, or finger a heavily textured object, such as a strip of sandpaper. These are distraction techniques which can be very valuable during an attack.

## Therapies

**Psychotherapy** - Emotional conflicts and past difficulties may lead to anxiety, which is released through panic attacks as a way of avoiding painful emotions. Psychotherapy can help a person to understand present reactions in the light of past difficulties, and to overcome them.

**Cognitive behaviour therapy (CBT)** - CBT aims to identify and change the negative thought patterns and misinterpretations that may feed panic attacks

**Behaviour therapy** - Many people develop a pattern of avoiding situations that have previously provoked a panic attack. They may become withdrawn and phobic. Behaviour therapy concentrates on encouraging the person to imagine anxiety-provoking situations, at the same time as practising relaxation. Fears must first be confronted in fantasy and eventually in reality in order to “unlearn” the feelings of panic that are associated with them.

**The Linden Method** - <http://www.thelindenmethod.co.uk/panic-attacks/>

## Nutritional Supplement Treatment Options

**EPA/DHA** - 3 grams per day. In a double-blind trial, fish oil was significantly more effective than a placebo in improving anxiety levels in a group of substance abusers (alcohol, cocaine, and/or heroin). The fish oil used in this study provided 3 grams per day of omega-3 fatty acids and was given for three months.

**Inositol (IP6)** - 4 to 6 grams TID. Inositol has been used to help people with anxiety who have panic attacks. Up to 4 grams TID was reported to control such attacks in a double-blind trial. Inositol (18 grams per day) has also been shown in a double-blind trial to be effective at relieving the symptoms of obsessive-compulsive disorder.

**Multivitamin** – according to practitioner instructions. A double-blind trial found that supplementation with a multivitamin-mineral supplement for four weeks led to significant reductions in anxiety and perceived stress compared to placebo.

**L-Tryptophan (5HTP)** - Animal research suggests that the brain chemical serotonin is involved in the mechanisms underlying anxiety, and double-blind studies have reported that creating deficiencies of L-tryptophan, a precursor of serotonin, worsens symptoms in people with anxiety disorders. A double blind study in China reported that 3 grams per day of L-tryptophan improved symptoms, including anxiety, in a group of people diagnosed with “neurosis.”

**Magnesium** - 200 to 300 mg of magnesium are BID–TID. Magnesium is reported to be relaxing for people with mild anxiety. Some practitioners recommend soaking in a hot tub containing 1–2 cups of magnesium sulphate crystals (Epsom salts) for 15 to 20 minutes.

**Vitamin B3 (niacitol)** - up to 500 mg QID. Vitamin B3 has been shown in animals to work in the brain in ways similar to drugs such as benzodiazepines (Valium-type drugs), which are used to treat anxiety. One study found that vitamin B3 helped people better cope with withdrawal from benzodiazepines.

**Vitamin B-Complex** - In one double-blind study, 80 healthy male volunteers (aged 18 to 42 years) were randomly assigned to receive a daily multivitamin-mineral formula or placebo for 28 days. The multiple formula contained the following: thiamine (15 mg), riboflavin (15 mg), niacin (50 mg), pantothenic acid (23 mg), vitamin B6 (10 mg), biotin (150 mcg), folic acid (400 mcg), vitamin B12 (10 mcg), vitamin C (500 mg), calcium (100 mg), magnesium (100 mg), and zinc (10 mg). Compared with the placebo group, the multivitamin group experienced consistent and statistically significant reductions in anxiety and perceived stress, as determined by questionnaires measuring psychological state. This group also tended to rate themselves as less tired and better able to concentrate.

## Botanical Treatment Options

**Chamomile** - There is evidence from test tube studies that chamomile contains compounds with a calming action. In an eight-week double-blind trial, treatment with a chamomile extract improved anxiety by an average of 50% in people suffering from chronic anxiety. This improvement was significantly greater than the

improvement in the placebo group. The amount of chamomile extract used was 220 mg per day of a product standardized to contain 1.2% apigenin. After one week this was increased to 440 mg per day. Traditionally, one cup of tea is taken three or more times per day to treat anxiety.

**Passion Flower** and **Valerian** - 100 to 200 mg valerian and 45 to 90 mg passion flower TID. Several plants, known as “nervines” (nerve tonics), are used in traditional herbal medicine for people with anxiety, with few reports of toxicity. One study found that a combination of the nervines valerian and passion flower reduced symptoms in people suffering from anxiety. In a double-blind study, 45 drops per day of an extract of passion flower taken for four weeks was as effective as 30 mg per day of oxazepam (Serax), a medication used for anxiety.

**Rhodiola** - 170 mg of a standardized extract BID. In a preliminary study, supplementation with rhodiola (***Rhodiola rosea***) significantly improved measures of anxiety in people suffering from generalized anxiety disorder. The amount used was 170 mg of a standardized extract taken BID for ten weeks.

**St. John’s Wort** – In a double-blind study, St John’s Wort was reported to reduce anxiety in statistically significant measures.

*Caution:* St. John's wort stimulates a drug-metabolizing enzyme (cytochrome P450 3A4) that metabolizes at least 50% of the drugs on the market. Therefore, it could potentially cause a number of drug interactions that have not yet been reported. People taking any medication should consult with a doctor or pharmacist before taking St. John's wort.

**Bacopa** – 300mg per day. Bacopa, a traditional herb used in Ayurvedic medicine, has been shown to have anti-anxiety effects in animals. A preliminary study reported that a syrup containing an extract of dried bacopa herb reduced anxiety in people with anxiety neurosis. A double-blind trial in healthy adults found that 300 mg per day of a standardized bacopa extract reduced general feelings of anxiety, as assessed by a questionnaire.

Other nervines include oats (oat straw), hops, American scullcap, wood betony, motherwort, pennyroyal, and linden.

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