

# USANA Technical Bulletin

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## Anxiety

### Description

- Anxiety is a feeling of apprehension, worry, uneasiness, or dread, especially of the future. A certain amount of anxiety is normal and stimulates the individual to purposeful action. Excess anxiety interferes with efficient functioning of the individual.<sup>1</sup>
- Diagnosed anxiety disorders are classified into five basic types: phobias, generalized anxiety disorders, panic disorders, obsessive-compulsive disorders, and post-traumatic stress disorder.<sup>2</sup>

### Causes

- The causes of clinical anxiety range from drug withdrawal (some phobias) to alterations in the brain's biochemistry (panic disorders) to conflict (generalized anxiety disorder).<sup>2</sup> Because of the complexity of the brain and a person's psychological make up, diagnoses and causes may overlap.

### Types

- The severity of a person's anxiety can range from mild to very severe. Anxiety is a problem when the severity is inappropriate or when it interferes with normal daily functions.

### At Risk

- Drug abusers including alcoholics are susceptible to anxiety attacks especially during withdrawals.<sup>3</sup> People with a wide variety of psychological or medical disturbances are at risk.

### Prevention and Management

- It is often important to address any psychological factors underlying anxiety.
- Physicians often prescribe various medications to help control severe anxiety.
- Anxiety may be associated with elevated blood lactate level and an increased lactate to pyruvate ratio.<sup>4</sup> This ratio is increased by alcohol, caffeine, and sugar, and deficiencies in niacin, thiamine, or magnesium.
- Avoiding or reducing consumption of alcohol<sup>6</sup>, caffeine<sup>7</sup>, and sugar<sup>9</sup> may reduce anxiety.

- Vitamin B Complex: In an observational study, 7 of 12 agoraphobia (fear of open spaces) patients were deficient in the vitamin B complex.<sup>5</sup>
- Calcium: Several case reports suggest low calcium levels may be associated with an organic anxiety syndrome.<sup>6</sup>
- Inositol: Inositol may have a calming effect.<sup>7</sup>
- Magnesium: Deficiency is often associated with anxiety.<sup>8</sup>

## Sources of Additional Information

- <http://www.npadnews.com/>

## Abstracts

**Rudin DO. *The major psychoses and neuroses as omega-3 essential fatty acid deficiency syndrome: substrate pellagra. Biol Psychiatry 1981 Sep;16(9):837-50.***

Pellagra was once a major cause of three behaviorally different mental disorders-schizophreniform, manic-depressive-like, and phobic neurotic - plus drying dermatoses, autonomic neuropathies, tinnitus, and fatigue. In this preliminary study all three of the corresponding present-day mental diseases are found to exhibit, statistically, the same pellagraform physical disorders but to ameliorate not so much with vitamins as with supplements of a newly discovered trace omega-3 essential fatty acid (w3-EFA), which provides the substrate upon which niacin and other B vitamin holoenzymes act uniquely to form the prostaglandin 3 series tissue hormones regulating neurocircuits en block. Since present-day refining and food selection patterns, as well as pure corn diets, deplete both the B vitamins and W3-EFA, the existence of therapeutically cross-reacting homologous catalyst and substrate deficiency forms of pellagra are postulated, the first contributing to the B vitamin deficiency epidemics of 50-100 years ago, the second to the more recent endemic "Diseases of Western Civilization" which express in certain genetic subgroups as the major mental illnesses of today.

## References

- <sup>1</sup> Taber's Cyclopedic Medical Dictionary. 16<sup>th</sup> ed. Philadelphia:FA Davis Company; 1985. p 120.
- <sup>2</sup> Diseases. Springhouse (PA): Springhouse Corporation;1993. p 52-66.
- <sup>3</sup> Roelofs SM. Hyperventilation, anxiety, craving for alcohol: a sub acute alcohol withdrawal syndrome. Alcohol 1985;2(3):501-5.
- <sup>4</sup> Buist RA. Anxiety neurosis: The lactate connection. Int Clin Nutr Rev 1985;5(1):1-4.
- <sup>5</sup> Abbey LC. Agoraphobia. J Orthomol Psychiatry 1982;11:243-259.
- <sup>6</sup> Werbach M. Nutritional Influences on Mental Illness. Tarzana (CA):Third Line Press. p 52-53.
- <sup>7</sup> Pfeiffer C. Mental and Elemental Nutrients. New Canaan (CT):Keats Publishing Company; 1975.
- <sup>8</sup> Seelig MS et al. Latent tetany and anxiety, marginal Mg deficit and normocacemia. Dis Nerv Syst 1975;36:461-65.