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NAC Information Sheet

NAC: a non-prescription, amino acid supplement used to help heal brain chemistry

The simplest explanation of why NAC is being recommended to help treat addiction is this: drug abuse or drug dependency often damages the chemical transmission system that allows the brain to function properly. NAC (N-acetylcysteine) is a non-prescription amino acid supplement which may help repair this damage. If you have been given this handout, your clinician believes you would likely benefit from taking NAC. NAC is not psychoactive (will not produce any "high" or sense of intoxication). You will not feel any specific effect from taking it, just as you wouldn't feel the effect of taking a vitamin.

Example of how NAC works: when "downer drugs" that produce calming, sedation, and sleep are used (such as alcohol, tranquilizers, GHB, zolpidem and opiates) the brain responds to the calming signal by producing increasing amounts of "upper" chemicals that stimulate the brain. During detox the "upper" chemical system gets stuck in the "on" position, leading to many of the uncomfortable withdrawal symptoms (anxiety, insomnia, shakes, sweats, etc). When used to treat "downer" withdrawal, NAC reduces the over-activity of the "upper" chemical pathway in the brain, helping reduce the severity and duration of withdrawal symptoms and assisting with repairing natural calming brain chemistry.

Research indicates that:

- NAC may also be helpful in decreasing the craving for pot, alcohol, cocaine, and cigarettes
- NAC may also be helpful in treating conditions such as OCD (obsessive compulsive disorder) and other mental health disorders. One of the first research studies revealed NAC helped treat compulsive gambling.
- NAC has been used for many years to treat other medical conditions such as acetaminophen (aka, Tylenol®) overdose.

What is the Recommended Dose of NAC?

Research studies involving NAC have typically used doses of 1,800 mg - 3,600 mg. We recommend a dose of 3,000 mg -3,600 mg per day. This dose range is NOT the same as the dose recommended on the supplement bottle label. At this point a standard dose has not yet been determined. The length of time someone will benefit from taking NAC has also not been determined yet. It appears this should be considered a long-term part of treatment.

How Should You Take NAC?

Despite the fact that NAC does not commonly cause any side effects we recommend starting with <u>one</u> capsule of the strength of NAC you purchase - 500 mg, 600 mg or 1000 mg. Build up your dose by adding one additional capsule per day to reach a total daily dose of 3,000 mg -3,600 mg. **Doses should be divided up and taken 3 to 4 times evenly spaced out during the day.** This is necessary because blood levels of NAC do not remain steady for longer periods of time. Continue taking NAC regularly. Before making any changes to your dose or discontinuing NAC, discuss the issue with your clinician.

While this is unlikely to happen, report any side effects that you feel can be attributed to NAC immediately to your medical clinician.

Where Can You Find NAC?

NAC is available online and at most nutrition stores. NAC comes in 500mg, 600mg and 1000mg capsules. The 1000mg strength is usually only available online. Nearby stores that carry NAC include: Open Sesame (983 Moraga Rd., Lafayette) and Natural Life Foods (two locations: 21 Orinda Way, Suite F, Orinda and 2638 Pleasant Hill Rd., Pleasant Hill). Pharmacies and grocery stores do not typically carry NAC.

For Additional Information:

A review article describing the use of NAC in drug dependencies is available on line, (Kalivas, 2013, "The Story of Glutamate in Drug Addiction and N-Acetylcysteine as a Potential Pharmacotherapy"). A link to this article will soon be available on the New Leaf Treatment Center website.