

ADDICTION RECOVERY

Introduction

Addiction is America's most-neglected disease. According to a study conducted at Columbia University, "40 million Americans age 12 and over meet the clinical criteria for addiction involving nicotine, alcohol, or other drugs." That is greater than the number of Americans with heart disease, diabetes, or cancer! An estimated *additional* 80 million people in this country are "risky substance users." This means that, while not technically addicted, they use tobacco, alcohol, and drugs in ways that threaten public health and safety. The cost to government related to addiction is nearly \$500 billion annually.

Nearly 50,000 people died of drug overdoses in the United States in 2015. This is greater than the number of deaths attributed to motor-vehicle accidents, homicides, and suicides combined! Overdose deaths from opiates (narcotic painkillers like OxyContin, Percodan, and methadone, as well as heroin) have become the fastest-growing drug problem in the United States.

Anyone can become an addict if he or she uses mood-altering substances. There are many reasons people become addicted, but nobody begins by believing they will become a slave to the substance and that it will consume and control their life. Some people begin experimenting with drugs or alcohol to feel high. Others begin because of a legitimate health problem requiring prescription pain medication. And some are genetically-prone to addiction. In any case, we can help!

Imagine living life to the fullest without the use of drugs or alcohol. Imagine drugs or alcohol no longer monopolizing your life. Living life sober is the way to *genuine* health, happiness, and satisfaction! For those looking to overcome their addiction to drugs or alcohol, our program offers a *genuine* solution and the first step to successful recovery and returning to a normal life.

Our outpatient program provides a powerful jump-start to sobriety by restoring mental clarity and eliminating or profoundly reducing the cravings that drive relapse. We combat addiction at the very source: Your brain. The good news is, with our help, the brain *can* be healed! And what used to take months or years can now be accomplished in just 10-14 days.

Our holistic and natural approach helps restore normal brain physiology, and helps put the brain back to a healthy state. By combining clinical neuroscience with metabolic and nutritional medicine, our cutting-edge treatment balances and improves brain function by restoring optimal nutrient levels, hormones, and essential brain chemicals to help people overcome addiction. This alleviates the overwhelming craving for drugs and alcohol, and virtually eliminates the need to ever use addictive substances to feel normal.

Drugs and alcohol are potent neurotoxins (brain poisons). As such, they fundamentally alter the very structure and function of the brain. The resultant damage causes the brain to atrophy (shrink), neural pathways to shift, neurotransmitters to diminish, and cellular receptors to lose their sensitivity. These alterations can adversely affect a person's intellect, emotions, personality, and the ability to make good decisions. Additionally, they can put a person at risk for developing early-onset Alzheimer's disease.

Addiction is magnified by an unhealthy brain because the person is using drugs or alcohol to feel better. If you stop the use of drugs or alcohol without addressing the underlying brain dysfunction, therapy will be incomplete and relapse is likely. However, once the brain is functioning better, the person will have more energy, improved mental clarity, and greater emotional resolve to understand and stop their compulsive behavior. This results in a new ability to make choices that are helpful and self-supportive instead of harmful and self-destructive, and enable the person to actively engage in the overall recovery process.

The Struggle to Overcome Addiction

The harsh reality is, overcoming addiction can be extremely difficult, and majority of people who try to give up an addiction will ultimately fail. This is called “relapse” and it occurs because drugs and alcohol cause profound and long-lasting changes in brain chemistry. Addictions are exacerbated by an unhealthy brain because the person is using substances to feel better. Although many substances reward a user with feelings of intoxication or euphoria, this gratification comes at a severe cost. As such, the highs are followed by lows that can be devastating.

When a chemically-dependent person is denied access to a substance to which he or she is addicted, the brain goes into a turmoil that manifests itself in the physical symptoms of withdrawal. These symptoms may include irritability, anxiety, depression, agitation, insomnia, hot and cold sweats, muscle aches and pains, abdominal cramping, nausea, vomiting, diarrhea, tremors, and hallucinations.

Conventional addiction treatment that relies solely or mostly on psychotherapy or behavioral counseling too often yields disappointing results. The “revolving door” of relapse is one of the most persistent hindrances to successful outcomes. In addition, it is idealistic and naïve to think one can rise above addiction on their own, or in a treatment program that is not properly structured.

Most drug rehab programs are ultimately ineffective because they fail to treat the underlying factors that create and/or sustain destructive addictive behavior. Therefore, addicts will continue to use chemical substances to “self-medicate” to achieve a sense of normality. Cellular receptors have lost their sensitivity, and this leads to an increased use of substances to feel pleasure or simply to feel normal. People will continue to use drugs, or will relapse, until their brain function is first improved. All the psychotherapy and behavioral counseling in the world cannot overcome this! The fact is, you simply cannot “talk” a person out of a biochemical craving that has gained dominance in their lives.

Psychological issues associated with addiction do need to be addressed. However, addressing these issues is easier and more effective when the person has greater mental clarity and freedom from unrelenting cravings. Only then is genuine and lasting addiction recovery truly possible. Using such an approach, we can help people who have failed with other programs to reach a new level of comfort and control.

A Better Solution

When a person stops taking drugs, their brain can eventually heal on its own (provided they don't relapse). This period of drug-free adjustment can be a lengthy and painful process that can take months to years. This can be physically difficult and emotionally devastating for the addict and their family. There is a better way! Our process reverses the imbalances that can disrupt brain chemistry, and restores and accelerates the natural healing ability of the brain. By using a drug-free and non-addictive combination of neuroactive hormones, amino acids, vitamins, minerals, and co-enzymes, we can:

- Promote rapid detox without the agony of intense withdrawal symptoms.
- Eliminate by 70-100% the ceaseless and overwhelming cravings that are the primary cause of relapse.
- Begin to reverse the damage that drug or alcohol abuse has done to the brain.
- Address the neurochemical imbalances that are at the root of addiction.
- Begin to reverse brain atrophy by stimulating the growth of new brain cells.
- Reset the brain and re-establish old (original) neural pathways.
- Replenish neurotransmitters (chemical messengers in the brain).
- Restore sensitivity of cellular receptors.
- Reduce fatigue, apathy, and despair.
- Reduce anxiety, depression, and compulsive behavior.
- Replenish and rebalance the brain to restore normal cognitive function.
- Restore mental clarity, emotional balance, and a true sense of well-being.
- Improve pain tolerance.
- Provide optimism and motivation about returning to an addiction-free life.

Our treatment program utilizes oral and intravenous (IV) compounds that are administered over a 10-14-day period by a registered nurse under a doctor's supervision. Ten days are needed for addiction to **painkillers**, such as Dilaudid, Fentanyl, Lortab, OxyContin, oxycodone, Percocet, and Vicodin; **alcohol**; **heroin**; **marijuana**; **sedatives**, such as Ambien and Lunesta; and **tobacco** (nicotine). Fourteen days are needed for those coming off **methadone**; **Suboxone**; **cocaine**; **stimulants**, such as Adderall, methamphetamine, and Ritalin; and **benzodiazepines**, such as Klonopin, Valium, and Xanax. (Note: The response of people addicted to benzodiazepines is less predictable, but overall, treatment is effective. Those with *multiple* addictions may need 14-16 days of treatment.)

On Days 1-4, treatment typically lasts 8 hours. On Days 5-10, treatment time can decline to 6 hours. On Days 11-14, treatment may last 4 hours. The symptoms of withdrawal vanish quickly, and the cravings begin to subside soon after. Between the 4th and 8th day, patients typically report feeling energized and having a profound sense of mental clarity and ability to focus. By the end of the 10-14 days, patients report little or no craving or desire to use drugs or alcohol. At that point, with armed with improved cognition and absence of unrelenting cravings, patients can begin to function normally, work, be present for their families, and enjoy the lives they had nearly destroyed.

Each day of the treatment, the nurse inserts an IV catheter into a vein. The patient relaxes in a comfortable recliner while the IV solution is slowly infused through the vein. Most people relax or sleep, watch TV, listen to music, read, or check their email. Snacks and meals are provided.

The IV ingredients are made by US-licensed compounding pharmacies. While other programs utilize addictive medications such as methadone or Suboxone, we use only non-addictive medications and all-natural substances, so you do not have to worry about substituting one addiction for another.

Treatment is very safe. Infusions are well tolerated and any side effects are negligible and subside at the end of the infusion. The most commonly reported side effect is feeling slightly flu-like which passes rapidly. Patients don't need cardiac or respiratory monitoring. At the end of each day, they return home or to their hotel room.

Patients must complete the entire series of treatments to receive the full benefits. To ensure the results are not eroded over time, patients are given a booster IV infusion every three months for the first year, as well as recommended use of oral supplements. If a person does relapse, a one- or two-day IV treatment is usually sufficient to get back on track to an addiction-free life. The goal is to strengthen and stabilize sobriety, especially for 5+ years. At that point, studies have shown that the chances of relapse drop dramatically.

The cost for treatment is \$850 per day for the 10-14-day treatment. Treatment includes in-office medications, supplements, and physician fees. Other offices charge \$1,200-\$1500 per day for similar treatment. At-home medication (if needed) and supplements are extra, as is drug counseling.

The Power of IV Therapy

IV therapy is a method of administering concentrated solutions of vitamins, minerals, and other therapeutic substances directly into the bloodstream, bypassing the digestive tract where many nutrients may be partially lost due to poor absorption. It is a safe and highly effective method for quickly restoring key substances needed for energy production and optimal cellular function. It can be a very powerful tool in the prevention and treatment of a wide variety of chronic diseases, and it is especially useful in the treatment of addiction.

By temporarily creating higher-than-normal blood levels of important nutrients, IV therapy drives these nutrients straight into the cells within seconds by delivering them directly into the body's circulation. This provides better bioavailability compared to oral nutrients, and avoids side effects like nausea, heartburn, and diarrhea that can accompany high oral doses. The resultant cellular repair and revitalization can be rapid and dramatic.

The Importance of Optimizing ATP Production

From the electric-powered devices we use in our homes to the gasoline-powered cars we drive; everything needs a source of energy (power) to function. The human body is no different. Instead of electricity or gasoline, the body is powered by an energy source called adenosine triphosphate (ATP) which is made from the food we eat by the tiny capsule-shaped cellular structures called

mitochondria. Mitochondria are often referred to as the “powerhouses” of the cells. They generate energy in the form of ATP that our cells need to do their jobs.

It is ATP that powers the highly energy-intensive cellular mechanisms needed to maintain our health and fight disease, such as tissue regeneration; preventing cell injury and death; DNA and cellular repair; killing of bacteria, viruses, and cancer cells; and removal of toxins, just to name a few. Without sufficient energy in the form ATP, our body’s ability to carry out its normal functions is undermined.

Recent discoveries in cellular biology have found that the root cause of disease (and even aging itself) may all boil down to decaying energy production. When mitochondria become dysfunctional (decrease in the number and/or function of mitochondria) and the supply of ATP drops, our cells face an energy crisis, and the body is unable to function normally to maintain our health and fight disease. We now understand that mitochondrial health translates to overall health, and we now know that drugs and alcohol are toxic to mitochondria. More and more medical researchers are finding that mitochondrial dysfunction and the resultant ATP deficiency may be an unrecognized healthcare crisis.

While mitochondria dysfunction affects various parts of the body in different ways, the brain is particularly susceptible to it. Brain function is especially dependent on energy. Your brain requires an enormous amount of energy to function normally. A single brain cell consumes nearly *5 billion* molecules of ATP per second—at rest!

Having an effective way to stimulate mitochondrial activity and produce more ATP represents a breakthrough approach in the fight against drug and alcohol addiction. By using a combination of IV and oral nicotinamide adenine dinucleotide (NAD), coenzyme Q10 (CoQ10), and magnesium, we can dramatically increase mitochondrial output of ATP.

NAD is a derivative of vitamin B3 (niacin), and is a naturally occurring co-enzyme that plays a key role in metabolism and energy production in each of our 100 trillion cells of the body. NAD is a central component of glycolysis, the citric acid cycle, and the electron transport chain, which are all involved in cellular respiration and the production of ATP for energy.

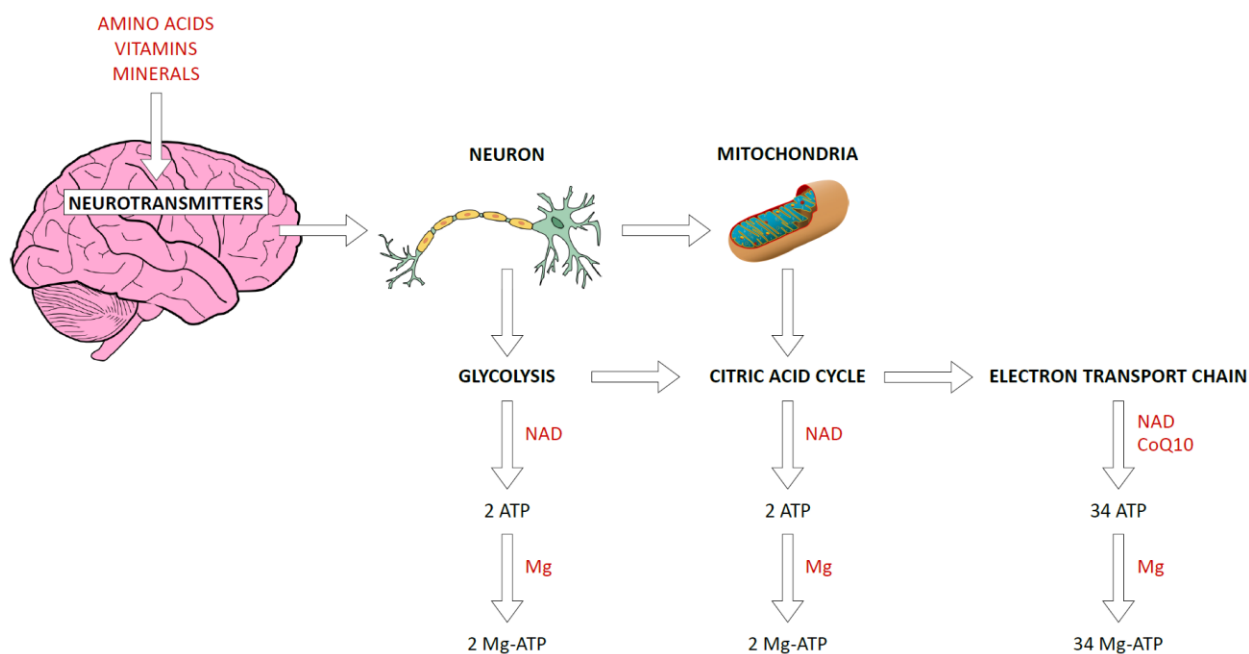
NAD fluctuates between NAD⁺ and NADH. NAD⁺ is the oxidized or active form. NADH is the reduced or inactive form. Having a high NAD⁺-to-NADH ratio is crucial for good health. Low ratios are associated with drug and alcohol addiction, as well as a long list of other medical conditions, including neurodegenerative diseases, obesity, metabolic syndrome, and diabetes.

NAD is almost like “rocket fuel” for the brain. Optimizing NAD⁺ levels allow brain cells to operate at full-energy status, and provide the brain with the vital energy needed to support and hasten its inherent and natural healing abilities. Besides drug and alcohol addiction, research and clinical experience has shown the following mental-health and neurological conditions may improve by administering NAD:

- ADHD
- Alzheimer’s disease
- Amyotrophic Lateral Sclerosis (ALS)

- Anxiety
- Chronic fatigue
- Depression
- Fibromyalgia
- Insomnia
- Ischemic stroke
- Migraine headaches
- Multiple sclerosis
- Parkinson's disease
- Post-traumatic Stress Disorder (PTSD)
- Traumatic Brain Injury

CoQ10 plays a central role in the production of ATP due to its activation of the electron transport chain in the mitochondria. In addition, ATP requires magnesium (Mg) to be biologically active. What is called ATP is actually Mg-ATP. Our treatment literally floods the brain with nourishing and highly-therapeutic NAD, CoQ10, and magnesium, as well as important vitamins, minerals, and amino acids.



Your Doctor

Dr. Daniel Thomas, DO, MS: Dr. Thomas earned his medical degree from Des Moines University and served his hospital internship at Northwest General Hospital in Milwaukee, Wisconsin. Because medical education only *begins* in medical school, he didn't stop there. In addition to a medical degree, Dr. Thomas earned a post-doctoral Master of Science degree in Metabolic and Nutritional Medicine from the University of South Florida College of Medicine. This advanced degree provided a deeper understanding of cellular biochemistry and human physiology than was taught in medical school. It gave him a greater appreciation of the intimate connections between chronic disease, metabolic dysfunction, and faulty nutrition. In addition, it

allowed Dr. Thomas to offer a higher level of care, and gave him the practical knowledge on how to use the science of metabolic and nutritional medicine to improve health, reduce the effects of aging, and increase lifespan. Out of the 900,000 physicians in the United States, less than 0.01% have this important and cutting-edge degree.

In addition to a Master's degree, Dr. Thomas has a post-doctoral Graduate Certificate in Metabolic Endocrinology and another in Brain Fitness & Memory Management—both from the University of South Florida College of Medicine. This was followed by a Fellowship in Integrative Cancer Therapies with the Metabolic Medical Institute. He also has a Bachelor of Science degree in Biochemistry from Andrews University and a Certificate in Plant-Based Nutrition from Cornell University. Dr. Thomas is a recipient of the Physician's Recognition Award from the American Medical Association, a Certified Personal Trainer with the American College of Sports Medicine, and a member of the American Academy of Anti-Aging Medicine.

In his clinical practice, Dr. Thomas sees patients 3½ days per week. He spends the other days poring over medical journals and researching medical articles, reading medical books, listening to lectures, or attending scientific conferences. Dr. Thomas is committed to staying abreast of the latest medical findings that can be used to improve the health and well-being of his patients.

Your Nurse

Dr. Sylvia Torres-Thomas, PhD, RN: Dr. Torres-Thomas is a seasoned registered nurse and a published clinical researcher with over 30 years of experience. She earned her Doctorate of Philosophy (PhD) in Nursing from the University of Central Florida (less than 1% of nurses have a PhD). While there, she received the prestigious Order of Pegasus award. Dr. Torres-Thomas was also chosen as a Rising Star of Scholarship and Research at the International Nursing Research Congress in 2015. She is former Professor of Nursing at Herzing University in Orlando.

Dr. Torres-Thomas also has a Master of Science degree in Nursing Education from the University of Central Florida, and a Bachelor of Science degree in Nursing from Andrews University. She has given numerous scientific presentations at regional, national, and international conferences. Dr. Torres-Thomas is a member of Sigma Theta Tau, the National Nursing Honor Society.

In addition to her numerous credentials, to demonstrate better the remarkable healing power of nutrition to patients, and to more effectively teach them how to prepare delicious and healthy meals, Dr. Torres-Thomas was trained as a professional natural foods chef at the Rouxbe Cooking School.

Getting Started to Lasting Recovery

We look forward to helping you or your loved one. If you would like more information about our advanced and effective program, please call 352-729-0923.

Bibliography

Akoury, Dalal: Stress, Pain and Addiction Affect the HPA, HPG, and HPT Axis: Part 1: *The Townsend Letter*, October 2014; p.69-74.

Akoury, Dalal: Stress, Pain and Addiction Affect the HPA, HPG, and HPT Axis: Part 2: *The Townsend Letter*, November 2014; p.64-71.

Akoury, Dalal: The Role of NAD⁺/NADH in Neurodegenerative Diseases and Addictions. *The Townsend Letter*, July 2014; p.56-61.

Cleary JP: The NAD deficiency diseases. *J Orthomol Med*, 1986; 3: 49-53.

Javed A Khan, Farhad Forouhar, Xiao Tao, and Liang Tong: Nicotinamide adenine dinucleotide metabolism as an attractive target for drug discovery. *Expert Opin Ther Targets*, 2007 May;11(5):695-705.

O'Hollaren, Paul: Diphosphopyridine nucleotide in the Prevention, Diagnosis and Treatment of drug Addiction. *West. J. Surg., Obst. & Gynec.*, 213-215, May-June 1961.

S. Owen, P. Norris, S. Broom Gibson, R. Mestayer: Neurotransmitter Restoration Therapy for the Treatment of Substance Abuse. NRT Study presented at the Society for Neuroscience 2012.

Su-Ju Lin, Leonard Guarente: Nicotinamide adenine dinucleotide, a metabolic regulator of transcription, longevity and disease. *Curr Opin Cell Biol*, 2003 Apr;15(2):241-6.

Susan L Broom, Richard F Mestayer, Elizabeth Stuller, Douglas W Cooke, Jeanne M Carson, Karen R Simone, Paula Norris, Paula Hotard: Intravenous administration of nicotinamide adenine dinucleotide significantly reduces self-report craving ratings associated with opiate withdrawal. NAD Study Presented at Society for Neuroscience 2014.

Verdin, Eric: NAD⁺ in aging, metabolism, and neurodegeneration. *Science*, 350.6265 (2015): 1208-1213.