Treating addiction involves restoring neurochemical balance, so diet & nutrition may play key roles in that process.

The American Dietetic Association (ADA) has officially recognized that, “Many debilitating nutritional consequences result from drug and alcohol abuse. Chronic nutrition impairment causes serious damage to the liver and brain, which reinforces the craving for more drugs and alcohol and perpetuates the psychological aspect of addiction.”

Furthermore, the ADA suggests, “Nutrition makes a difference in the rate and quality of physical recovery, which prepares individuals to function at a higher level in treatment – cognitively, mentally, and socially.”

Rebalancing Neurochemistry

Many persons simply do not eat enough food or the right foods when they are preoccupied with drug-taking. When they do eat, drugs of abuse and alcohol keep the body from properly absorbing and breaking down nutrients and expelling toxins.
Formidable Barriers Persist After 40+ Years

Stigma, Misperceptions Continue

The World Health Organization very recently acknowledged that substance dependence (addiction) is a disorder of altered brain function brought on by the use of psychoactive substances that affect normal perceptual, emotional, and motivational processes in the brain. In short, addiction is a disease; yet, many persons — including some healthcare professionals — still consider addiction as essentially a moral, character, or behavioral problem.

This has led to the stigmatization of persons with addiction. And, as Herman Joseph, PhD notes in this edition of AT Forum, the stigma surrounding methadone maintenance treatment (MMT) still persists, even though MMT has a 40-year history of demonstrated success in helping persons with opioid addiction.

As part of the stigma, some reports in the mass media have created a perception that MMT patients are getting “high” on methadone, selling some of their take-home doses, and harming innocent victims as a result. However, a new report from the Center for Substance Abuse Treatment (CSAT) — titled “Methadone-Associated Mortality: Report of a National Assessment” — basically exonerates MMT clinics as the major source of diverted methadone that has created problems.

This report should help dispel misperceptions, but that will only happen if the document is widely distributed and used. In this edition, Mark Parrino of AATOD, and CSAT’s Wesley Clark and Bob Lubran, comment on the importance of the report and its potential impact. Every MMT clinic should have a copy on hand to share with local community leaders and the press (it is readily available via the Internet; see bottom of page 5).

NEW SURVEY: Food For Recovery?

Our venture in this edition into diet and nutrition as essential ingredients of addiction treatment and recovery (see “Feeding Recovery”) represents new ground for the MMT field. It makes sense that the disruptions of opioid abuse on chemical balance in the brain could be restored, at least in part, via nutritional therapies. However, this is a complex area, complicated further by the many dietary supplements — vitamins, minerals, amino acids, and other agents — promoted as providing varying benefits.

We look forward to reader feedback on this topic; perhaps, submitting their own articles or helping to guide us in development of future articles. As a start, we want to survey current opinions and practices in the MMT field.

Please respond to the following 5 questions:

1. Do you believe nutrition plays a central role in addiction recovery?  
   - Yes;  - No;  - Don’t know.
2. Does your MMT clinic assess patients’ nutritional status?  
   - Yes;  - No;  - Don’t know.
3. Are patients educated about proper nutrition during recovery?  
   - Yes;  - No;  - Don’t know.
4. Are patients routinely prescribed any of the following (check all that apply):  
   - Special diets;  - Vitamins and/or Minerals;  - Supplements (e.g., amino acids);  - Other (please specify).

5. Are you responding as a  - patient or  - clinic staff member?

There are several ways to respond to AT Forum surveys:

A. provide your answers on the postage-free feedback card in this issue; B. write, fax, or e-mail [info below]; or, C. visit our web site to respond online. As always, your written comments are important for helping us discuss the results in an upcoming article.

Stewart B. Leavitt, PhD, Editor  
ATFeditor@comcast.net

Addiction Treatment Forum  
P.O. Box 685; Mundelein, IL 60060  
Phone/Fax: 847-392-3937  
Internet: http://www.atforum.com  
E-mail: Feedback@atforum.com
The World Health Organization recently recognized that, “The stigma associated with substance use and dependence can prevent individuals from seeking treatment, and can prevent adequate policies regarding prevention and treatment from being implemented.”

Nearly a decade ago, in the most comprehensive investigation to date of stigma surrounding methadone maintenance treatment (MMT), Herman Joseph stated, “No other medication in the history of modern medicine has been so unjustly maligned.” (Also see box below.)

He further observed, “The stigma that methadone patients feel is a real phenomenon and in comparison with other social stigmas appears to be entrenched in the collective social consciousness of the country at every level of society.”

Since drug addiction often is perceived as being self-inflicted, compassion for those afflicted is not usually forthcoming. According to advocacy groups like NAMA (National Alliance of Methadone Advocates), the stigma attached to methadone treatment is almost as painful as being addicted to heroin, if not more so. Therefore, to be accepted in society MMT patients often remain silent about their treatment and their accomplishments while maintained on methadone.

Rarely has a therapy been so thoroughly evaluated for effectiveness and safety yet subjected to such regulation and prejudice. Immediate solutions for overcoming the stigmatization of methadone and MMT patients remain elusive.

Feedback / Feedforward from Herman Joseph, PhD

AT Forum asked Herman Joseph to provide an update of his impressions relating to the stigma surrounding methadone treatment since he completed his landmark work on the subject in 1995, titled: Medical Methadone Maintenance: The Further Concealment of a Stigmatized Condition.* Here are his observations.

Since I wrote my dissertation on stigma, it has been posted on the Internet and quoted widely. This broke the ice and stigma is now an important topic at meetings that I attend. Whether my dissertation had anything to do with this I cannot say; however, it was the first major work on this topic and many people are now aware of it.

Because of the spread of addiction, HIV, and hepatitis C, methadone treatment has been implemented in about 47 countries. There are approximately 500,000 persons worldwide in methadone treatment, with about 215,000 in the United States.

However, even after 40 years of methadone maintenance treatment (MMT), the stigma persists in the social work, medical, political, criminal justice, harm reduction, and psychology fields. There is still a long way to go, although educational programs are being belatedly planned.

Professional Biases, Persistent Barriers

The medical profession still harbors powerful biases and prejudices. For example, impaired physicians may be prevented from being treated with methadone by state medical committees, and they can lose their licenses if treated with the medication.

Also, patients may conceal their methadone status from doctors, nurses, and social workers when they enter hospitals for surgery, medical procedures, or other treatment. These patients fear not receiving proper pain relief, being withdrawn from methadone, or being regarded as less than human. Pain patients who are prescribed methadone may be subjected to the same social stigma and, therefore, may reject this most effective pain medication.

In my opinion, the stigma and its attendant misunderstandings among professionals and political leaders during the past 40 years have been just as responsible for the spread of HIV, hepatitis C, and infectious diseases associated with addiction as any risk behaviors manifested by drug-addicted poor persons. The helping professions and political leadership in many parts of the country are still part of the problem by preventing the development of accessible methadone programs.

Another egregious barrier is the lack of methadone treatment within the criminal justice system and negative attitudes among judges, district attorneys, and probation and parole staff. MMT patients may be ordered to withdraw from methadone, enter alternative treatments, or face a jail sentence despite the shining example of the Rikers Island KEEP detoxication and methadone maintenance program in New York City. KEEP has not been widely emulated except in very few jurisdictions.

Such stigma and lack of treatment exist despite the recommendation of the NIH consensus panel on the Effective Treatment of Opiate Addiction.** The panel stated that methadone treatment should be available to all persons under legal jurisdiction.

“Substitution” Misperception

The all-too-common phrase “substituting one addiction for another” binds heroin addiction, with all its baggage, to methadone treatment. Alan Leshner, PhD, former director of NIDA, indicated that this phrase was one of the most destructive descriptions of MMT. It oversimplifies and incorrectly describes the role of methadone in the treatment of addiction. Furthermore it perpetuates the stigma hindering expansion of methadone programs, and it negatively influences perceptions of the general public and political leaders.

Therefore, no matter how responsible, honest, productive, or successful the methadone patient may be, the phrase conveys the discredited belief of a character defect or weakness
of personality that is not “cured” until the patient withdraws from methadone. Physicians and others in methadone programs must educate patients, their families, and significant others about the disease of addiction. They should stress that methadone is not a heroin substitute but a medication that corrects, but does not cure, the impairments caused by heroin addiction.

Ambivalence, Exclusion, & Discrimination

Patients and untreated heroin addicts have incorporated the social stigmatization of methadone into their own thinking about the medication. Old “street myths” – e.g., methadone “rots the bones” – still exist. MMT patients therefore harbor ambivalence and an invisible stigma about methadone.

In general, methadone patients have been excluded from housing and social services that are available to other citizens or to participants in “drug-free” programs that reject methadone maintenance as a legitimate treatment. Even 12-step programs such as AA and NA have not permitted methadone patients to fully participate in meetings. Therefore, methadone patients have formed their own 12-step groups to address polysubstance abuse and other issues.

Patients adjust their whole lives to conceal the stigma and hide the fact that they are in methadone treatment. Because of the stigma, stringent regulations, and ambivalence, untreated heroin addicts may not enter treatment at all and, if they do, they leave prematurely.

Other barriers to entering MMT persist, especially for homeless addicts, and many of these persons do not receive treatment. Outreach workers also may harbor biases against methadone programs and do not educate street addicts or make appropriate referrals.

Despite this, the methadone clinic system at present treats large numbers of poor, destitute, homeless patients who are visible to the public. Therefore, the public identifies methadone treatment with dysfunctional patients who may divert or misuse the medication, rather than focusing on patients who are employed, stable, and compliant with treatment.

News media, with biased reporting, add to the stigma directed toward methadone programs. Patients who are employed and stable remain invisible and are rarely the topic of TV or major news items.

Impressions from sensational media reporting have helped to mobilize communities against the establishment of new MMT programs. While most programs do adhere to regulations and try to deliver quality services, a small number of them may not be properly administered, which gives rise to questionable practices.

This may result in sensational media reports and community opposition to methadone treatment. However, over the past decade, federal, state, and local regulations and guidelines have resulted in MMT program improvements and high rates of accreditation.

In response to these issues and concerns, patient advocacy groups such as NAMA have expanded internationally to educate patients about addiction and methadone treatment. NAMA assists methadone patients in fighting stigma and oppressive, unjust regulations in countries throughout the world.

Expand Office-Based MMT

Methadone programs themselves may add to the patient’s feelings of stigmatization. Some may adopt stricter regulations than state or federal standards, adding to the excessive control that patients experience in treatment.

For many patients, the services and controls of the clinic may be a necessary first step in their treatment. Eventually, however, patients who do not need the regimen of a clinic should be transferred to methadone medical maintenance programs in the offices of private physicians – with pharmacies filling methadone prescriptions, if possible – or in other medical environments, such as primary care centers.

Unfortunately, except for a few programs and the network in New York State, office-based methadone treatment for stable patients has not been adequately expanded in this country. Thousands of patients who could benefit from methadone medical maintenance in settings other than the traditional clinic remain in the clinics subject to regulations targeted to multi-problem, non-compliant patients.

While some clinics have differentiated their patient population, others have not. At some point in their treatment, patients should have the option of remaining in their clinic programs or being transferred to office-based methadone medical maintenance where the treatment is individualized within the mainstream of medical practice.

However, there is still social stigma directed toward patients in methadone medical maintenance programs and it is a destructive social force. These highly functional patients may conceal their enrollment in methadone treatment from employers, friends, and family for fear of loss of jobs and personal rejection.

Family members may regard methadone as just a substitute drug and pressure patients to withdraw. They believe incorrectly, as does the general public, that the patient is still an addict and gets a “high” from methadone. If a patient should be tired or yawn from routine fatigue, he/she may be perceived as “stoned on methadone.”

Despite the persistent social stigma in medical maintenance, patients’ self-esteem improves and they are better able to deal with the stigmatization imposed by society. Perhaps, with buprenorphine provided in office-based practices, stigma directed toward opioid-agonist therapy overall, including methadone, will be reduced.

With advances in neurobiology and the behavioral sciences, a fuller understanding of addiction, pain management, and agonist therapy is currently emerging. The stigma and misunderstandings targeted against MMT hopefully will be reduced or eliminated. Addiction should be regarded as a metabolically/behavioral condition that can be treated with methadone and applicable psychosocial services, similar to diabetics who require medication and, in many cases, other support services.


Methadone-associated mortality,” the report stated. Methadone prescribed by physicians as a painkiller appeared to be a major source of the problem; however, the panel found that opioid analgesics overall were involved in drug abuse cases and associated problems.

**Good News Ignored**

While this was good news for the MMT community, it suggested that there are challenges ahead for healthcare practitioners in safely prescribing potent analgesics. The CSAT panel offered a number of recommendations addressing needs for further information gathering, education, and approaches for countering misinformation about methadone treatment. [Also see Clark/Lubran interview in side box on page 6.]

Unfortunately, although this was a breakthrough report, it received practically no attention from news media. This was especially disappointing considering the abundance of accusatory reports about methadone and MMT in the past. [See Parrino interview in side box.]

---

**This is One Methadone Story That Deserves More Attention**

Opinion: Mark W. Parrino, MPA

Mark Parrino is President of AATOD (American Association for the Treatment of Opioid Dependence) and was one of three CSAT-panel co-chairs, besides Seddon R. Savage, MD and Bruce A. Goldberger, PhD.

**AT FORUM:** Why do you suppose the Methadone-Associated Mortality report was largely ignored by the news media?

**MARK PARRINO:** We sent an AATOD press release to about 45 media outlets, including print journalism, radio, and TV. None of them ran a story, which didn’t surprise us. I suspect the reason is that news media favor negative stories, raising the specter of sensationalism or that something is wrong. They are not going to focus on stories that say, “By the way, MMT programs are not at fault; it’s someone else.”

**ATF:** Do you think this relates to the stigma that has traditionally surrounded methadone?

**PARRINO:** I don’t believe the media have a specific desire to further stigmatize MMT programs; rather, they seem to do so unwittingly. Their view is that any negative events surrounding methadone make for a good story.

News outlets love irony, preferring headlines like “Former medicine is now a killer drug.” It’s quick, attention grabbing, and, of course, inaccurate. However, a need for absolute accuracy often doesn’t seem to deter the media.

**ATF:** What about medical organizations and their media outlets; surely this would be important to them?

**PARRINO:** I haven’t seen any significant responses from those groups. I can understand why they might not want to draw attention to this issue, since their members could be the ones prescribing methadone for pain that ends up influencing methadone-related mortality.

I’m hoping that what has been a disappointing initial response will become a better-rounded response in the future. For example, they could take greater responsibility for educating their memberships about diagnosing substance abuse and dependency.

**ATF:** Is there a broader issue at stake here, extending beyond this report?

**PARRINO:** Yes, it can have great importance for influencing future decisions regarding methadone treatment policy at all levels.

Stories surrounding methadone influence how legislators think at the federal level, how state governors think, and how county or city authorities think. Unless this more favorable methadone story gets told the past negative stories retain prominence.

I think this is why there needs to be a constant nurturing of local news media by the addiction treatment community. That way, when there’s some good news about methadone it will get greater attention.

The way I look at the Methadone-Associated Mortality report is as an insurance policy. When the next news report on methadone is being crafted, we have something positive to reference.

**ATF:** Do you think every MMT program should have a copy of the report on hand to use with local news media and other groups? [See info box on where to get a copy.]

**PARRINO:** I’ve written to Dr. Clark (Director of CSAT) requesting that his agency widely distribute it. I also asked that he forward the report to national medical societies and organizations.

**ATF:** The report offers a number of substantive recommendations that would be of value to both the addiction treatment and pain management fields; do you foresee anything being done about those?

**PARRINO:** That’s a question for CSAT’s leadership. What are they willing to do? What is in their best interests? For example, would a standardized case definition of methadone-associated death be of value to them? I think that it would.

Also, since CSAT seems interested in main-streaming opioid addiction treatment, I think it would be in its best interests to have a better-informed medical community. And, if they want more physicians involved in prescribing buprenorphine this will require ongoing education. Pharmacies also should be involved, educating consumers as prescriptions are filled.

---


Disclosure: Stewart B. Leavitt, PhD, Editor, AT Forum, served as an independent researcher/writer, assisting CSAT and its contractors in developing the report.
The Report Is Only A Beginning

Government Viewpoint

As a followup to the interview with Parrino [see sidebox], AT Forum spoke with H. Westley Clark, MD, JD, MPH, Director of SAMHSA’s Center for Substance Abuse Treatment (CSAT) and Robert Lubran, MS, MPA, Director of CSAT’s Division of Pharmacologic Therapies.

AT FORUM: Dr. Clark, beyond its initial release early last February, how has CSAT been distributing the Methadone-Associated Mortality report?

WESTLEY CLARK: The report has been posted at our web site [see info box] and it will be further disseminated as widely as our budget allows once it is printed. We’ll be sending copies to more than 1,000 individuals in professional groups and the addiction treatment community.

However, there needs to be some caution so we don’t over-sell the safety of methadone. It is safe and useful when used appropriately, but there are some limitations and problems when it is misused. The report seeks to dispel misperceptions.

ATF: How is the federal government addressing the recommendations of the report?

CLARK: A project has been established allowing SAMHSA to tackle those recommendations that blend with our program priorities and principles. A workgroup will be convened to develop a plan, timelines, and expected products.

Some recommendations – like developing uniform methadone-death case definitions and standards for toxicologic testing – involve multiple agencies, so our strategy is to work with other groups in facilitating and/or participating in the achievement of those objectives.

ATF: What about gathering more timely data to keep track of problems?

CLARK: We’ll continue working with DAWN [Drug Abuse Warning Network] to expand that dataset and provide more information. We also have ongoing relationships with the DEA, FDA, and NIDA.

We’re trying to make methadone an integral part of the larger prescription drug issue, highlighting it but including methadone as one member of a whole family of drugs. That way, methadone treatment programs don’t get singled out. We’ll work with AATOD, consumer groups, and others if it becomes clear that a more methadone-centered approach is needed.

ATF: Two other recommendations of the report were better training for health professionals and more education for the public – might those go hand-in-hand?

CLARK: We do agree that better training and education are essential, but we need to work with other partners in this endeavor.

Therefore, we’re working with the pain community. Also, the Office of National Drug Control Policy (ONDCP) has made this a national priority. So it’s safe to say that data-gathering and health professional training are high priorities for the entire administration.

We do have a media campaign for the public on prescription drug abuse. This uses public service announcements and brochures in conjunction with the FDA.

ATF: Are there educational efforts also being specifically directed toward addiction treatment providers?

ROBERT LUBRAN: We’ve been supporting the development by experts in the field of a new Medication-Assisted Treatment - Treatment Improvement Protocol Publication (MAT-TIP) for the field. This will combine and update a number of TIPs that have existed in the past for educating professionals in the opioid-agonist therapy [e.g., MMT] field. It should be coming out toward the end of this calendar year.

We’re also working with AATOD to present a session at their national conference this fall that will address concerns about prescription drug abuse. Beyond that, we will be reaching out to the opioid treatment community to provide a series of workshops emphasizing best practices approaches.

All the topics haven’t been decided, but we’re looking at ongoing efforts to educate staff and patients about methadone and about responsible practices, especially when it comes to take-home doses. This isn’t a crisis, but problems do come up periodically and there is a need for constant reminders for administrators, staff, and patient-advocacy groups that appropriate and safe practices need to be reinforced.

Feeding Recovery
Continued on Page 1

Nutrient deficiencies may contribute to negative mood states serving as obstacles to recovery.

In one clinical study, more than three-quarters of patients being treated for addiction were classified as having unsatisfactory nutritional states, with malnutrition predominating. Such patients were typically deficient in a number of vitamins, minerals, proteins, and fatty acids.

Addictive substances – such as heroin, cocaine, alcohol, and marijuana – affect food and liquid intake, taste preference, and body weight. Opioids can alter cholesterol, calcium, and potassium levels. Potassium is especially important because an imbalance in this electrolyte can influence cardiac problems.

Nutritional supplements – e.g., vitamins, amino acids, herbal products – and other nutrients are believed capable of restoring proper neurochemical balance in the brain. Also, eliminating or reducing certain substances (sugars, simple starches, caffeine) and increasing protein intake may help rebalance brain chemistry.

During recovery, improved nutrition also can help heal physical damage to the body caused by nutrient depletion. However, nutrition is often neglected by patients and it might be unlikely to take top priority in addiction treatment programs.

Food-Mood Connections

Depression and other mental illnesses commonly found in drug abusers have been at least partially attributed to nutritional deficiencies, undiagnosed hypoglycemia (low blood sugar), and/or unidentified food allergies. Advocates of nutritional therapy claim that these conditions can be treated through special diets, vitamin and mineral supplements, and regular exercise.

A patient with a stable emotional state is more likely to abstain from substances of abuse. However, nutrient deficiencies may contribute to negative mood states – including anxiety and depression – serving as obstacles to recovery.

For example, thiamine deficiency, common in alcohol abusers, can lead to depression and irritability. Iron deficiency, frequently occurring in drug and alcohol users, can result in anemia with symptoms such as lethargy and decreased mental function.

Continued on Page 7
Feeding Recovery
Continued from Page 6

An important relationship of blood-sugar levels and mood is often emphasized in the literature. For example, alcohol can cause such levels to peak and then dip rapidly.

Even moderate falls in blood glucose can cause irritability, and more rapid glucose cycling can cause severe aggression in persons with antisocial personalities. Such peaks and troughs, particularly associated with diets rich in refined sugar (e.g., “junk foods”), also can negatively affect cognitive performance, even if the person does not become clinically hypoglycemic.

Deficiencies of nutrients like B-complex vitamins and amino acids can have seriously negative effects. Certain amino acids are critical building blocks for the brain’s neurotransmitters that regulate mood and emotions.

Deficiencies of nutrients like B-complex vitamins and amino acids can have seriously negative effects. Certain amino acids are critical building blocks for the brain’s neurotransmitters that regulate mood and emotions.

For example, tryptophan is a precursor of serotonin, which is important in combating depression. However, adequate amounts of vitamins B3 and B6 are needed to convert tryptophan to serotonin.

Recovery-Friendly Diets

Basic recommendations for a healthy and balanced diet have changed little over the years. The US Department of Agriculture’s Food Guide Pyramid emphasizes ingredients from five major food groups, with each providing some, but not all, necessary nutrients. However, this can be difficult for many people to understand and put into daily practice.

Furthermore, even if it can be achieved, this balanced diet could need adjusting for persons with unbalanced brain chemistries due to years of substance abuse. Research has demonstrated that the brains of drug addicted persons become chemically altered as substances of abuse diminish or destroy key neurotransmitters.

Addiction recovery programs might consider how they can reload those essential chemicals to foster biochemical repair processes and restore more normal function. The ingredients of a “recovery-friendly”

Continued on Page 8

Reader Survey: Lapses & Relapses; Beginning Or End Of Recovery?

AT Forum featured an article last fall (2003;12[4]) discussing how drug lapses (slips) and relapses can be sometimes discouraging facets of methadone maintenance treatment (MMT). In followup to that, readers were surveyed regarding the incidence of those events at their clinics and the drugs most typically involved.

Lapses/Relapses Common?

There were 104 responses, with three-quarters representing clinic staff. On average, roughly half of patients experience lapses and about a third relapse to illicit drug use at some point (see graph).

When Do Events Occur?

As might be expected, drug lapses and relapses most likely occur early in treatment. Nearly 70% of all lapses and almost half of relapses were reported during the first three months. The vast majority of these events – 92% lapses, 78% relapses – occurred within six months of entering MMT. See cumulative graph.

One respondent suggested that it can take up to six months before patients become stabilized on methadone and in their personal lives. Illicit-drug use during that time is not really a relapse because they never achieve stability.

Beyond the first six months, lapses become relatively less common than relapses; although, the percentage of patients experiencing either event greatly diminishes. However, as one patient respondent noted, lapses can occur at any time and for many different reasons.

What Drugs Are Involved?

Readers also were asked what drugs were most commonly involved in lapses/relapses. Cocaine was ranked at the top, followed by benzodiazepines and then heroin. Next came other opioids, cannabis, and alcohol ranked approximately equally.

One MMT clinic director commented that, with proper methadone dosing, opioid relapses become “extremely uncommon.” However, he added, cocaine use presents a serious problem for MMT programs.

Another reader stated that, with methadone being widely prescribed for pain, some persons are coming into treatment for methadone addiction. And, it can be very difficult to stabilize such patients who already may be taking high doses of methadone.

It should be acknowledged that the data provided by readers was unlikely to be based on comprehensive analyses of clinical records. Therefore, survey results reflect general impressions of trends rather than precise indications of patient outcomes or MMT program effectiveness. Finally, when analyzed separately, data submitted by staff versus patients were not significantly different.
Rationales for the effects of nutrition on addiction recovery seem to have merit, but relatively little is known for certain based on sound clinical research.

Feeding Recovery
Continued from Page 7

diet may vary from what a non-addicted person would require and could be a dramatic departure from what the patient is used to consuming.

Amino acid supplementation is believed to help restore critical neurotransmitters in the brain, such as: endorphins, enkephalins, dopamine, GABA, norepinephrine, and serotonin. Along with this, multi-vitamin/mineral supplements are recommended since many of these serve as cofactors in neurotransmitter synthesis. They also help restore overall health in typically malnourished patients.

Herbal and other plant-derived products also have been promoted by some authors for use in addiction treatment. Various proprietary mixtures have been marketed with claims of efficacy; however, large-scale controlled clinical trials in humans have been lacking.

Challenges & Caveats

Scientists seem to agree that substances of abuse may cause nutritional deficiencies; however, a direct link between these and addiction has not been fully accepted. Also, the notion that special diets and/or nutritional supplements may be viable adjunctive or stand-alone treatments for addiction requires further research.

Nevertheless, given an appreciation of the possible importance of diet during recovery and an interest in better nutrition, there are some obstacles and concerns to overcome, such as:

- The nutritional component of addiction recovery does not appear to be an exact science and it must be individualized for meeting particular patient needs.
- Patients must be motivated to change their eating habits and have access to recommended nutritional items. They also need to know how to shop for and prepare nutritious foods.
- Some patients may not have the financial resources to purchase appropriate foods and/or supplements.
- Some foods and nutritional supplements may negatively interact with prescribed medicines, such as methadone, antidepressants, and other drugs.
- The prescription of multiple pills and tablets (e.g., vitamins, herbal products, others) in persons already known to have a preference for using chemicals to control their mental states may pose problems.
- Dietary supplements are available at health food stores everywhere and via the Internet, which may promote inappropriate consumption. Patients need to understand that they should not take any products without the approval of clinic staff.
- Clinic medical staff must become familiar with the many nutritional supplements available, their applications, and potential for harmful interactions. This can be a daunting task.

Some specialists recommend that treatment providers should assess patients for malnutrition and provide appropriate diet and nutrition education. And, they should look to qualified nutritionists or dieticians for guidance as appropriate.

The rationales for how nutrition may affect addiction recovery seem to have some merit. However, relatively little is known for certain in this area based on sound clinical research, so appropriate caution is advised.

What is the role of diet and nutrition in MMT programs? Respond to the AT Forum reader survey. See page 2 (“From Editor” column) and the feedback card in this edition.
Addiction Treatment Forum is supported by an educational grant from Mallinckrodt Inc., a manufacturer of methadone and naltrexone.

Please respond to the following 5 questions:
1. Do you believe nutrition plays a central role in addiction recovery?
   □ Yes; □ No; □ Don’t know.
2. Does your MMT clinic assess patients’ nutritional status?
   □ Yes; □ No; □ Don’t know.
3. Are patients educated about proper nutrition during recovery?
   □ Yes; □ No; □ Don’t know.
4. Are patients routinely prescribed any of the following (check all that apply):
   □ Special diets; □ Vitamins and/or Minerals; □ Supplements (e.g., amino acids);
   □ Other (please specify). _________________________________________.
5. Are you responding as a □ patient or □ clinic staff member?
 □ Please add me to your mailing list (Mailing within U.S. only. Outside U.S. see www.atforum.com).
 □ Check here if you would like to be notified via e-mail when the AT Forum Web site is updated monthly.

E-mail address: ___________________________ Phone: ___________________________

Name: ___________________________ Title: ___________________________

Institution: ___________________________ Address: ___________________________

City: ___________________________ State: ___________________________ Zip: ___________________________ Country: ___________________________
Use the attached card to answer the questions on Nutrition or to be added to the Addiction Treatment Forum mailing list.