



Nutrition in alcohol and other drug issues

Foreword: Nutrition plays a complex role in people's mental health. Trust, respect, and hearing each person's lived experience is crucial to being able to provide appropriate and safe nutrition counselling. It is important to uphold truly person-centred care alongside evidence-based practice, and to acknowledge that mental health is multifactorial and more complex than diet alone.

Purpose of this resource

The aim of this resource is to improve the knowledge and skills of graduate and emerging dietitians working with people who are experiencing alcohol and other drug concerns, with a view to providing support for professional development through evidencebased discussions and practice tips.

Definitions of alcohol and other drug dependence

Substance use can be considered on a continuum: non-use, experimental use, recreational use, regular use, and compulsive/ dependent use. People can move up and down this continuum, and can be at different points with different substances (1). Alcohol and other drug dependence typically refers to substance use patterns that negatively impact a person's mental and physical health, and to challenges in reducing or ceasing consumption or use despite multiple efforts by a person to do so (2). Although there is no safe level of alcohol consumption (3), these harms are distinct from alcohol dependence (4). Similarly, while recreational use of illicit and legal substances poses risks to biopsychosocial health, these concerns are distinct from substance dependence (5, 6).

Prevalence

The misuse of alcohol, and both legal (pharmaceuticals, caffeine, nicotine) and illicit drugs (amphetamines, cannabis, cocaine, opioids, inhalants, and hallucinogens) can pose significant social, emotional and physical risks, particularly for people with mental health conditions. People who report higher levels of psychological distress are at least twice as likely to report recent illicit drug use, and are more likely to drink more than four standard drinks on one occasion (AIHW, 2020). In 2019, 16.4% of Australians had used an illicit drug in the past 12 months; people with mental health concerns are 2.1 times more likely to self-report recent nonmedical use of pain-killers and 1.8 times more likely to report cannabis use than the general population. Alcohol is the most used drug in Australians, with 25% of the population drinking alcohol in quantities that exceed the single occasion risk (7).

Comorbidity with alcohol and drug dependency

There is a higher rate of mental health problems, including anxiety and depression, among people who experience challenges with alcohol and other drugs. The co-occurrence of both challenges is typically known as 'dual diagnosis' (8, 9).

The aetiology of dual diagnosis is complex and multi-directional; for some people, existing mental health challenges can lead to substance use as a way of coping or managing distress, and for others, substance use may precede mental health symptoms (10, 11). It is estimated that substance use concerns will occur at rates between 50 and 70% in mental health settings, and between 40 and 80% of people with substance use concerns will also experience co-occurring mental health challenges (5). In 2019, an Australian study found 47% of drug users had experienced a mental health problem in the preceding six months, with depression (70%) and anxiety (61%) the most commonly reported problems (12).

Common nutrition issues

Nutrient deficiencies may result from poor intake during substance use ('primary deficiency'), or inadequate physiological absorption and utilisation caused by substance use ('secondary deficiency') (13, 14). Excessive alcohol intake and drug use can cause damage to the digestive tract, resulting in associated gastric problems including constipation, diarrhoea, indigestion and poor appetite. The use of alcohol and other drugs can also co-occur with physical health conditions that impact nutritional needs, including cirrhosis, hepatitis, heart disease and Type 2 diabetes (15). There is a higher rate of cooccurrence of physical health concerns among people with substance use disorder who also have mental health concerns (9).

Common nutrition issues present during and after substance use include:

Weight changes: Appetite suppression is a common side effect of substance use, and eating may not be a priority for active users of drugs and alcohol. This is particularly common with cocaine and methamphetamine use (16). Some substances such as cannabis can increase

appetite, leading to increased intake of nutrientpoor foods. The high energy and low nutrient content of alcohol may result in weight changes and nutrient deficiencies (17). These weight changes often continue into detoxification and recovery, as a person's nutrient intake changes. Additionally, poor dental health has been identified as a common and significant issue which can restrict nutritional intake among people who use alcohol and other drugs (18).

Nutrient imbalances: Reduced food intake and the consumption of nutrient-poor foods can both contribute to nutrient deficiencies during substance use. Malnutrition is prevalent among individuals with high alcohol and drug use (19), and may not always be detected through screening tools such as the Subjective Global Assessment (SGA) (13). Damage to the digestive system through drug and alcohol use can also impair the body's ability to absorb, metabolize and store vitamins and minerals. Common vitamin deficiencies include vitamins A, C, D and E, thiamine, as well as iron and other trace minerals (14, 17).

Eating patterns: People who use substances may not have regular meals, may experience subjective binge eating following a period of substance use, and may have reduced social eating occasions (19, 20). After detoxification and during opioid use treatment such as methadone therapy, cravings and consumption of high sugar foods are commonly reported (21, 22).

Food insecurity: Food insecurity is experienced at much higher levels for people who use substances or who have dual diagnosis. People who have mental health concerns alongside substance use disorders often experience challenges of food security, as well as insecure housing, and high rates of trauma, incarceration and intersectional disadvantage (23-27). See also: MHANDI resource - Food security.

Category	Common examples ('street names')	Nutrient-hormone interaction
Opioids	Oxycodone ('oxy'), fentanyl ('apache'), Morphine, Methadone ('dollies'), Pethidine, Codeine ('lean'). Heroin ('dope', 'smack').	Bowel symptoms including nausea and constipation. Vitamin and mineral deficiencies. Poor appetite, changes in blood glucose, bowel changes including constipation.
Benzodiazepines	Diazepam, temazepam and alprazolam ('downers', 'pills', 'benzos', 'diaz', 'bars').	Nausea, changes in appetite.
Analgesics	Paracetamol and ibuprofen in preparations combined with codeine.	Bowel symptoms including constipation.
lmage-enhancing drugs	Anabolic steroids, phentermine and human growth hormones ('pumpers', 'roids', 'juice').	Appetite and weight changes.
Amphetamines	Cocaine ('snow', 'blow'), Methamphetamine ('speed', 'ice', 'meth', 'crystal'), MDMA ('ecstasy', 'molly', 'mandy', 'E').	Appetite and weight changes, oral health, malnutrition. Vitamin and mineral deficiencies.
Alcohol	('grog', 'booze', 'juice', 'turps')	Weight gain, appetite changes, malnutrition, cirrhosis, thiamine deficiency.
Cannabis	Marijuana ('bud', 'pot', 'weed', 'grass', 'dope', 'ganja', 'MJ', 'reefer').	Appetite and weight changes.

Specific nutrition considerations for common drugs of misuse

Table 1: Common misused drugs identified in the National Drug Strategy (28)

Body image and weight concerns

Australian research suggests up to 60% of women who misuse substances have an eating disorder (29); up to 80% of people with dual diagnosis experience binge eating episodes; and up to 25% are diagnosed with Eating Disorders Not Otherwise Specified (22). Eating disorders may lead to substance use via the use of substances to control weight and appetite, and substance use may lead to eating disorders due to the neurological and psychological impacts of substance-induced changes in appetite and weight (14, 30, 31). Importantly, once a person's appetite and intake improves, associated weight gain may discourage recovery and contribute to relapse, particularly among women. Additionally, malnutrition is known to occur in people with substance use disorders regardless of weight status (13).

It may be appropriate to screen for eating disorders, disordered eating, and body image concerns. In these cases, it is necessary to work with a multidisciplinary team. See also: MHANDi resource - Working in a mental health care team

Supporting people in recovery from addiction

Professional dietary advice on eating well and other healthy lifestyle behaviours such as regular exercise and adequate sleep can help to improve a person's physical, mental and emotional wellbeing during recovery (20, 32). However, in the early stages of recovery from alcohol or other drug use, people may not be in a position to prioritise re-establishing good eating habits, particularly if they are experiencing additional challenges such as insecure housing and psychological distress. Dietitians can support people in recovery by monitoring and managing common nutrition impact symptoms, such as nausea, anorexia and gastrointestinal symptoms such as diarrhoea, fluid and electrolyte losses, and assessing nutrient status (21).

Practical tips when working with a person using alcohol or other drugs

Other factors which may significantly impact a person's wellbeing and their food choices include financial resources, level of food security, food literacy, social support and quality of housing.

It is essential to work in a multidisciplinary team, and to refer a person to relevant support services such as social work, if they are seeking assistance with other priority issues. Clients may feel unsafe to report drug or alcohol use, so it may be helpful to offer additional support services such as a social worker, counsellor or psychologist, or national and state services such as Lives Lived Well and ReachOut.

Additional resources

- Australian Drug Foundation, The Power of Words: adf.org.au
- Network of Alcohol and other Drug Agencies: nada.org.au

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Afterword: When working to improve the mental health and wellbeing of others, it's also important to look after your own mental health. Personal life stress, and stress related to work can affect your mood, thoughts and feelings in different ways, at different times. Remember to be mindful of your own wellbeing and make time to take care of your mental health at work, such as debriefing, taking a short walk/ break outdoors, seeking support, and practicing self-care. If any of the topics discussed in this resource brought up any distress for you, you can find helpful resources at *Beyond Blue*, *Head to Health*, and *Mental Health Australia*.

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