

A guide to delivering a brief intervention for thiamine (Vitamin B1)

GUIDE FOR WORKERS

This guide is designed to assist workers in conducting a brief intervention (BI) with individuals who may be at risk of thiamine deficiency, particularly those who consume alcohol. The aim is to educate relevant people on the importance of thiamine, provide practical advice on how to incorporate thiamine into their routine, provide harm minimisation, and help the person develop a plan to protect their brain and wellbeing.

Why thiamine is important:¹⁻³

Thiamine (Vitamin B1) is vital for converting food into energy and supporting brain and nervous system health. Thiamine is especially important for people who drink alcohol often. Alcohol reduces thiamine in the body, increasing the risk of Wernicke-Korsakoff Syndrome (WKS). WKS can cause memory loss, confusion, and balance problems.

However, alcohol isn't the only cause of thiamine deficiency. Workers should also consider the following situations for intervention:

- Poor diet (including people with eating disorders): Diets lacking thiamine-rich foods (whole grains, meats) put people at risk.
- Long-term health conditions: Issues like Crohn's disease or cancer may impair nutrient absorption. People on kidney dialysis also require thiamine supplements.
- Pregnancy: Increased nutrient needs and poor diet during pregnancy can lead to deficiency.
- Bariatric surgery (procedures that reduce size of the digestive system – e.g. stomach): Post-surgery people may experience reduced nutrient absorption.
- Older age: Older persons often have decreased thiamine levels due to poor absorption or diet.



What is Wernicke-Korsakoff Syndrome (WKS)?

WKS is a brain condition caused by thiamine deficiency. It is often seen in people who drink heavily because alcohol makes it hard for the body to absorb thiamine from food.

WKS has two parts:

- Wernicke's encephalopathy – this is the first stage where someone might feel confused, have trouble seeing, and experience problems with balance.
- Korsakoff's psychosis – this is the second stage which can lead to severe memory loss and difficulty learning new things. It is often irreversible. WKS can make everyday tasks hard and affect a person's ability to live independently.

The good news is that getting enough thiamine can prevent WKS or stop it from getting worse.

Did you know that since 1991, Australia has required thiamine to be added to wheat flour used in bread-making? Just three slices of white sandwich bread (about 100g) provide nearly half of the recommended daily intake of thiamine for a healthy adult.⁴



A 3-step model for a thiamine brief intervention

ASK

Advise

Help

1. ASK

Asking is the most important step. If you never ask, you'll never know.

Start by asking about the person's alcohol use in a way that is respectful and non-judgmental. It's important to build trust and make the client feel comfortable.

Example questions:

"I ask all the people I see about their alcohol use and their diet. Do you mind if we have a quick yarn about both of these?"

"Has anyone ever talked to you about how alcohol can affect your health, like with vitamins such as thiamine?"

"What do you already know about vitamins like thiamine and drinking?"



TIP: Look out for signs of possible thiamine deficiency (e.g., forgetfulness, balance problems, blurry vision). If you think a person may be at risk of thiamine deficiency due to their drinking, from medical issues, or overall poor diet, it's okay to ask them if they have noticed these symptoms.

2. Advise

You don't have to be a specialist to provide helpful information.



TIP: Use the *"Drink alcohol? It's good to know about thiamine"* tool to help explore why thiamine is important, especially for those who drink alcohol regularly. Use simple language and examples that relate to everyday life.

Example messages:

"Alcohol can take away important vitamins from your body, like thiamine, which is needed to keep your heart, brain, and body strong."

"Eating foods high in thiamine or taking thiamine tablets can help protect you from serious health issues."

"Given your current alcohol use and diet, your body and brain might not be getting enough thiamine, and this puts you at risk for some serious health issues."

"Could we look at trying to reduce your alcohol intake and make sure you're getting enough thiamine? Thiamine is like fuel for your brain and body. Without enough, you might have trouble remembering things or walking properly."

3. Help

Help the person make a simple plan to add thiamine into their daily routine. This could include:

- Taking thiamine supplements
- Eating more foods rich in thiamine (whole grains like oats and wheat, meats, fish, beans, seeds and nuts)
- Cutting down on alcohol



NB: If the person is a heavy / daily drinker, advise them to seek medical advice before stopping or cutting back alcohol to avoid severe and/or dangerous withdrawal.

How much thiamine is recommended:

For people who drink alcohol regularly, it's recommended to take 300mg of thiamine a day (100mg three times a day) for a few weeks. If they keep drinking, they should take 100mg of thiamine daily and continue as long as they are drinking.^{2,3}

People with a poor diet should take 100mg of thiamine daily for 4-6 weeks. It's also a good time to focus on improving their overall diet to get the nutrients they need.



TIP: When taking thiamine, it can also be helpful to take a magnesium supplement. Magnesium helps thiamine work better in the body. You can get magnesium from foods like green leafy vegetables, nuts, seeds, and whole grains, or as a supplement if needed.

Examples of ways to help:

- If drinking alcohol regularly - encourage small, achievable goals to drink less, like reducing the number of drinks per day (noting the warning above regarding the risks associated with abrupt withdrawal).
- Work through the *"Drink alcohol? It's good to know about thiamine"* tool:
 - Advise where to get thiamine: Thiamine is available as a tablet formulation and via prescription. You may suggest/arrange a visit to a local health service for a check-up, and to get thiamine supplements from a health food store, pharmacy, or supermarket.
 - Advise how much to take: See information above for guidance.
 - Reminder method: Help the person come up with a system to remember to take thiamine daily, such as setting a phone alarm or using a pill organiser.
 - Foods to include: Discuss ways to improve their diet by including foods rich in thiamine like whole grains, meat, fish, nuts, and seeds.
 - Next check-in: Arrange a follow-up appointment to check on their progress.

Further information:

- [Thiamin | Eat For Health](#) contains further information on thiamine and recommendations for its use based on currently available scientific information.

References

1. Haber P, Lintzeris N, Proude E, Lopatko O. Guidelines for the treatment of alcohol problems. Canberra: Commonwealth of Australia; 2009.
2. McLean C, Ivers R, Antony A, McMahon A. Malnutrition, nutritional deficiency and alcohol: A guide for general practice. Australian Journal for General Practitioners. 2024 03/22 [cited 2024 22 Mar]; 53:[173-8 p.]^pp.]. Available from: <https://www1.racgp.org.au/ajgp/2024/april/malnutrition-nutritional-deficiency-and-alcohol>.
3. Haber PS, Riordan BC. Guidelines for the Treatment of Alcohol Problems (4th edition). Sydney: Specialty of Addiction Medicine, Faculty of Medicine and Health, The University of Sydney; 2021 [cited 2023 29 Aug]. Available from: <https://alcoholtreatmentguidelines.com.au/>.
4. Food standards Australia and New Zealand (FSANZ). Thiamin levels in Australian breads: Results from the 2010 and 2012 national bread surveys [cited. Available from: <https://www.foodstandards.gov.au/sites/default/files/publications/Documents/Thiamin%20in%20bread%20report.pdf>.
5. Martel JL KC, Doshi H, Redding E, Sina, DSF, . Vitamin B1 (Thiamine) [cited. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK482360/>.

This resource was developed by Insight: Centre for AOD training and workforce development, Queensland Health.
©Insight 2025 www.insight.qld.edu.au