

Thiamine, Healthy eating and You: minimising risk of alcohol related brain injury

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Thiamine, Healthy Eating & You

You can help prevent alcohol-related brain injury

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Thiamine and Alcohol-Related Brain Injury

Otherwise known as vitamin B1, thiamine is an essential vitamin. This means your body cannot make it so you must get thiamine from the food you eat every day. Thiamine keeps your brain and heart healthy and also helps release energy from food.

Low levels are very common among those who drink excessive amounts of alcohol. This could be because you are eating too little or because alcohol has stopped your body from using thiamine properly.

A lack of thiamine can cause brain damage over time. This is known as Alcohol-Related Brain Injury (ARBI). This condition can cause long-lasting changes to your brain and lead to:

- attention and concentration difficulties
- poor memory
- difficulties with new learning
- difficulties making decisions
- changes to your balance and coordination
- changes in personality

If you have been drinking a lot of alcohol, taking action now can prevent a future brain injury. If you increase your thiamine levels and make other lifestyle changes, you can help prevent and reduce your risk of developing alcohol-related brain injury.



See more about alcohol and the brain:
How alcohol affects the brain
[HSE.ie](https://www.hse.ie) / www.askaboutalcohol.ie

Am I at risk of alcohol related brain injury?

Do You?

Tick all that apply

Exceed the recommended number of standard drinks per week?



You can check this on the HSE Drinks Calculator here:
<https://www2.hse.ie/wellbeing/alcohol/drinks-calculator>

Drink more than 6 alcoholic drinks at a time? (60g alcohol?)

Drink alcohol every day?

Often go without eating or eat less than 3 times a day?

* The more that apply, the higher your risk.

Why is eating well important?

Eating the right mix of food gives your body everything it needs to be at its best. A balanced diet can make you feel and look healthier. Every organ in your body including your brain, muscles, skin and bones benefits from good nutrition.

A healthy diet:

- Increases your strength
- Helps improve your energy levels
- Helps prevent illness and fight infection
- Protects the health of your brain

A lack of certain nutrients can have lasting effects on your body, especially your brain. If you have been drinking a lot of alcohol, and not eating well, you could be malnourished or have low levels of thiamine. This can increase your risk of developing Alcohol-Related Brain Injury.

Signs you may not be getting enough nourishment

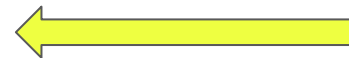
- Poor healing of wounds
- Cracks at the side of your mouth
- Long lasting or repeat infections
- Hair loss
- Nails splitting or breaking
- Changes in bowel habit
- Feeling fatigued even after sleeping
- Loose clothing or dentures
- Low mood
- Nausea

Signs you may be lacking Thiamine:

- Loss of appetite
- Weight loss
- Fatigue
- Muscle weakness
- Irritability
- Feeling down
- Memory loss
- Blurred vision
- Shortness of breath
- Changes to heart rate

If you notice any of these symptoms, talking to your G.P as soon as possible is really important. This will help you understand if reduced thiamine is causing these symptoms and/or if you need treatment in hospital.

Seek medical attention



What can I do to improve my Thiamine levels?

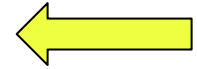
One of the best ways to improve your nutrition and thiamine levels and prevent Alcohol-Related Brain Injury is to make changes around your alcohol use. This is because alcohol can stop your body from using the nutrients it gets from food. Regardless of how long or how much alcohol you have been drinking, it's never too late to make a positive change.

It is much easier and safer to make a change if you have the right support and guidance. You do not need to do it alone. Help is available for anyone in Ireland through the HSE Drugs & Alcohol Helpline 1800 459 459 or email helpline@hse.ie. They will help you find the best service in your local area. It is free and confidential.

There are three ways you can improve your thiamine levels. If you are drinking alcohol regularly, food alone will not increase your thiamine levels. Talk to your GP or alcohol support worker to decide which method is best for you - this might be through diet, or in combination with other forms of thiamine listed here.

Dietary Thiamine	
This is the thiamine you get from your food. By eating regularly and with the right types of food, thiamine levels will begin to rise about 6 weeks after your last alcoholic drink.	
Oral Thiamine Tablets	
Thiamine tablets are used to prevent or treat low levels of thiamine. They can help if you: <ul style="list-style-type: none">• Drink in a harmful or dependent way• Are malnourished or at risk of malnourishment• Planning to, going through or recovering from a detox from alcohol• Have liver disease as a result of alcohol use It's important to take them as prescribed by your doctor as they can stop thiamine levels getting too low. These tablets will work at their best if you also reduce your drinking.	
Thiamine as part of an injection or through a drip	
Some forms of thiamine need to be given in hospital by a trained medical professional. These options are needed for people who are at high risk of Alcohol-Related Brain Injury. It allows thiamine to reach your brain very quickly. You will urgently need this option if you have any of the following: <ol style="list-style-type: none">1. Confusion2. Loss of muscle coordination3. Vision changes (jerking movement in eyes, double vision) You should also be offered this if you are admitted to hospital and are malnourished and have alcohol-related liver disease.	

Diet



Tablets



IM or IV



First steps

If you are reading this you are one step closer to making a positive impact on your life. **What is it you would like to achieve?**

I Would like To...

Tick all that apply

Be healthy	<input type="checkbox"/>
Have more energy	<input type="checkbox"/>
Feel in control	<input type="checkbox"/>
Break old habits	<input type="checkbox"/>
Reduce my chances of getting sick	<input type="checkbox"/>



What are healthy food choices?

The food pyramid on the next page shows the main food groups. A mix of food from each group makes up a healthy diet. Choose more foods from the bottom and less from the top for balance. How many portions of each did you have today? For good hydration remember to include at least 8 cups or glasses of non-alcoholic drinks daily such as water, tea, bovril or milk.

Food groups	What I like	Portions I need	Portions I eat
Fruit & Veg		5-7	
Starchy carbohydrates		3-5	
Milky foods		3	
Protein foods		2	
Fats & Oils		Use sparingly	

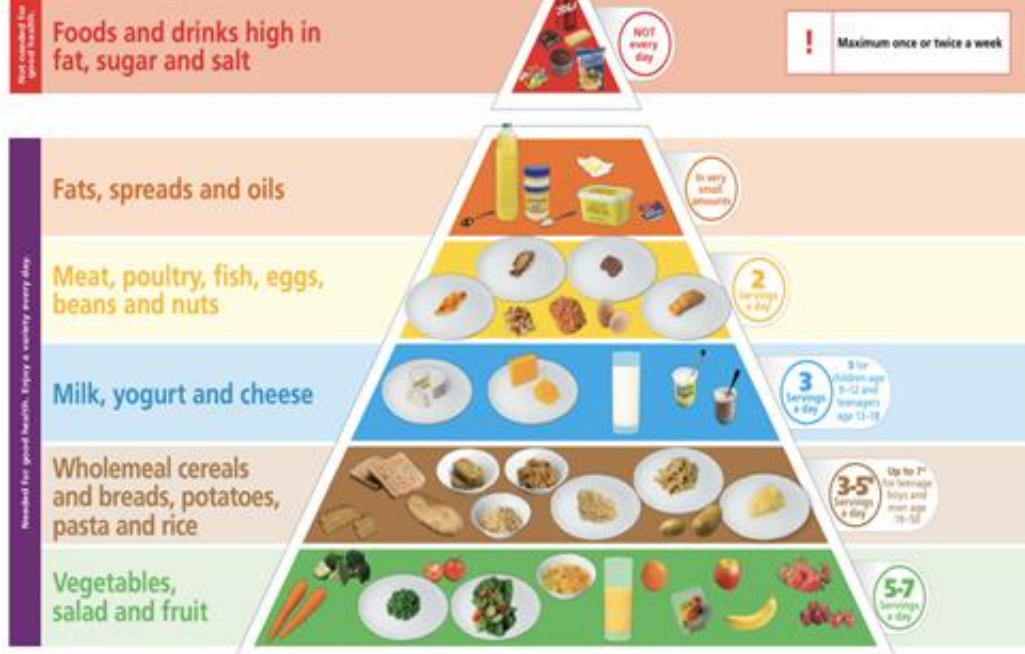
Healthy Food for Life

www.healthyireland.ie



The Food Pyramid

For adults, teenagers and children aged five and over



*Daily Servings Guide – wholemeal cereals and breads, potatoes, pasta and rice

	Child (5-10)	Teenager (11-16)	Adult (16-32)	Adult (33+)		Teenager (11-16)	Adult (16-32)	Adult (33+)
Active	3-4	4	4-5	3-4	↑	3	3-4	3
Inactive	3-5	5-7	5-7	4-5	↓	4-5	4-6	4

There is no guideline for inactive children as it is essential that all children are active.

Drink at least 8 cups of fluid a day – water is best



Get Active!

To maintain a healthy weight adults need at least 30 minutes a day of moderate activity on 5 days a week (or 150 minutes a week); children need to be active at a moderate to vigorous level for at least 60 minutes every day.

Table 2: Thiamin Content of Selected Foods [10]

Food	Milligrams (mg) per serving	Percent DV*
Rice, white, long grain, enriched, parboiled, ½ cup	1.4	117
Breakfast cereals, fortified with 100% of the DV for thiamin, 1 serving	1.2	100
Egg noodles, enriched, cooked, 1 cup	0.5	42
Pork chop, bone-in, broiled, 3 ounces	0.4	33
Trout, cooked, dry heat, 3 ounces	0.4	33
Black beans, boiled, ½ cup	0.4	33
English muffin, plain, enriched, 1 muffin	0.3	25
Mussels, blue, cooked, moist heat, 3 ounces	0.3	25
Tuna, Bluefin, cooked, dry heat, 3 ounces	0.2	17
Macaroni, whole wheat, cooked, 1 cup	0.2	17
Acorn squash, cubed, baked, ½ cup	0.2	17
Rice, brown, long grain, not enriched, cooked, ½ cup	0.1	8
Bread, whole wheat, 1 slice	0.1	8
Orange juice, prepared from concentrate, 1 cup	0.1	8
Sunflower seeds, toasted, 1 ounce	0.1	8
Beef steak, bottom round, trimmed of fat, braised, 3 ounces	0.1	8
Yogurt, plain, low fat, 1 cup	0.1	8
Oatmeal, regular and quick, unenriched, cooked with water, ½ cup	0.1	8
Corn, yellow, boiled, 1 medium ear	0.1	8
Milk, 2%, 1 cup	0.1	8
Barley, pearled, cooked, 1 cup	0.1	8
Cheddar cheese, 1½ ounces	0	0
Chicken, meat and skin, roasted, 3 ounces	0	0
Apple, sliced, 1 cup	0	0

Ref NIH

Basic principles

How should I eat?

What should I eat?

How much will this cost me?

What equipment do I need?

Where do I get Thiamine?

How do I stop drinking?

Barriers

Addiction

Comprehension

Finances

Safe shelter

Mobility

Literacy

Access to cooking facilities

How to eat






Skipping meals or not eating for long periods can make you feel unwell. When this happens you can lose weight, mainly muscle, making you feel weak and unsteady on your feet. If you have lost your appetite it is best to **eat by the clock**. Chew your food well and try to eat something every 2 to 3 hours. This means eating at set times even if you do not feel hungry. Following this pattern will kickstart your appetite and help get your sense of hunger back.



Meal plan

Combining healthy foods rich in thiamine into simple meals with little preparation like those listed below will provide you with the nourishment you need to get well again. Most shops sell these items and there is at least one suggestion that requires no heating or equipment if you do not have easy access to cooking facilities. If you get some reusable cutlery, wash it and keep it with you in case you are buying food when out.

Mealtime	Suggestions - choose one from each section	Equipment required (if any)
Breakfast	<ul style="list-style-type: none"> Fortified whole Grain cereal (weetabix, shreddies, cheerios) with or without milk - can be eaten dry, pour some into a bag to carry around for snacking later Any yogurt with added fruit such as sliced banana or raisins. If no spoon try a drinkable variety such as yops or actimel Wholemeal bread with jam and peanut butter Bacon or sausages on a wholemeal roll 	
Small meals	<ul style="list-style-type: none"> Canned or carton of lentil soup with wholemeal bread roll and butter Canned bean stew with bread Wholemeal bread with marmite Tinned salmon/tuna/sardines on crackers Ham or chicken salad sandwich Baked beans on wholemeal toast 	
Snacks	<ul style="list-style-type: none"> Baked potato with skins on topped with chilli con carne Smoked mackerel with side salad - can have cold Gammon steak with beans and chips Pasta with mince meat & tomato sauce Mince meat with peas and boiled potatoes with skins 	

Mealtime	Suggestions - choose one from each section	Equipment required (if any)
Snacks	<ul style="list-style-type: none"> Fruit Bag of nuts or dried fruit Trail mix (raisin, nuts & seed) Yogurts Milky drinks like mooju, yop, yazoo Breakfast cereal as above 	
Drinks	<ul style="list-style-type: none"> Bovril Fruit juices Milk Smoothies Milkshakes 	

My eating plan

Mealtime	My preferred choice
Breakfast	
Lunch	
Dinner	
Snacks	
Drinks	

When to see a Dietitian

Dietitians are registered health care professionals that provide expert advice on diet and nutrition to treat and prevent disease related malnutrition. Harmful alcohol use can damage vital organs such as your liver and pancreas. If you suffer from related conditions such as diabetes, liver cirrhosis, or pancreatitis your GP or medical team can refer you to a Dietitian for dietary advice that will help. You may also be prescribed specific nutritional supplements.

Useful contacts:

If you need further assistance please reach out to the appropriate service provider


My GP:

HSE Drugs & Alcohol Helpline

Call :1800 459 459 / Email helpline@hse.ie / Visit: www.askaboutalcohol.ie

Samaritans

Call: 116 123 / Email: jo@samaritans.ie / Visit: www.samaritans.org



The Irish Nutrition & Dietetic Institute

Call: 01 2150508 / Email: info@ind.ie

Visit: www.ind.ie for more food facts or to find a dietitian in your area



Healthy food made easy

A 6 week basic cooking and nutrition course, check out the website for details on courses running in your area.

<https://www.hse.ie/eng/about/who/healthwellbeing/our-priority-programmes/healthcommunity-cooking-programmes.html>

Support & Information

If you have any queries relating to this publication you can contact us on the details below:

Alcohol Forum Ireland
Unit B9, Enterprise Fund Business Centre
Ballyraine
Letterkenny
Co. Donegal

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E: info@alcoholforum.org
www.alcoholforum.org

Alcohol Forum Ireland is an Irish charity that provides support, information and services to individuals, families and communities impacted by alcohol harm, while working at the wider level to change Ireland's problematic relationship with alcohol.