

## MIGRAINE TRIGGER FOODS LIST

**KEY:** **C** - Citric Acid, **H** - Histamine, **N** - Nitrates, **G** - Glutamate or MSG,  
**P** - Putrescine, **T** - Tyramine, **V** - Vanilloid receptor

Food Type	Trigger Compounds	Additional Comments on Specific Foods
<b>Food additive Glutamate</b>		
*Check ingredients labels carefully.  Found in most ready packet sauces & meals Deli meats Savoury biscuits	G	<p>Glutamate comes in many forms including <i>Monopotassium Glutamate</i> (E 622), <i>Calcium Glutamate</i> (E 623), <i>Monoammonium Glutamate</i> (E 624), and the most used <i>Monosodium Glutamate</i> (MSG), (E 621).</p> <p>As MSG is viewed unfavourably by some consumers, food companies often avoid using the term 'MSG' on ingredient labels and instead use terms like "natural flavours", "flavouring", or "flavour enhancer". For more information on glutamate in food refer to (chapter 3, section 3.7)</p> <p>Glutamate is present in a wide variety of savoury and sweet foods, including chips, snacks, pizzas, ready-to-eat meals, and meat products, instant soups and charcuterie meats, tinned foods, milk chocolate.</p> <p><b>Magnesium Glutamate (E 625)</b> rarely used except in low sodium meat products.</p> <p><b>Yeast Extract (E620)</b> added to some foods like soy sauce and cheese for a savory flavour. Also found in canned soups and stews, frozen dinners, and salty snacks.</p> <p><b>Gelatine (E441)</b> obtained from animal products. The gelatine is highly processed and can contain around 8-9gm per 100g.</p>
<b>BEVERAGES</b>		
Alcohol (ethanol)	V	Vanilloid 1 receptor (TRPV1) functions as a sensory monitor in the walls of blood vessels and reacts to any anomalies in the blood that it deems as noxious and triggers vasodilation and inflammation.
Orange juice	P, C	fruit juice contains particular high levels of putrescine
Mandarin juice	P, C	
Grapefruit juice	P, C	
Red wine	H, T, V,	
Soybean milk	P	Negligible amounts, depending on the amount consumed.
Soft drinks	G, C	Many soft drinks including tonic water contain glutamate with the terms "natural flavours", "flavouring".
Cordials	G, C	

<b>CONDIMENTS</b>		
Fish sauce Tomato paste Ketchup Soy sauce Worcestershire sauce	G G G, C G	These products are naturally high in glutamate and may also have glutamate additives to enhance flavour.
<b>DAIRY PRODUCTS</b>		
Hard Cheese: Parmesan Cheddar Gouda	G, H, T G, H, T G, H, T G, H, T	Hard cheeses are dense, which means they contain more protein. More protein results in greater production of glutamate, tyramine, and histamine during aging, increasing the potential for triggering symptoms.
Soft Cheese: Brie Camembert Gorgonzola Roquefort Blue cheese	G, H, T G, H, T G, H, T G, H, T G, H, T	Soft cheeses generally contain less protein, resulting in lower amounts of these compounds. However, certain aged soft cheeses can still produce enough glutamate, tyramine, and histamine to be a concern.
<b>FRUIT</b>		
Bananas	P	
Oranges	P, C	Fresh and unprocessed oranges have incremental amounts of putrescine
Grapefruit	T, P, C	
Lemons & Limes	C	
Purple Passion Fruit	P, C	
Watermelon	N	More likely a trigger if eaten in large amounts
<b>MEATS</b>		
Pork roast, chops, sausages	G H H, G, N	Unlike other animal proteins, pork has a natural but unusually high amino acids of histidine and glutamic acid both in the lean meat and fat. This will produce histamine and glutamate during cooking and storage.
Chicken	H, T	Increases with processing, storage, cooking, leftovers
Bacon	H, G, N	
Ham	H, G, N	
Pastrami	H, G, N	
Fish	H, G, T, P	Increases with storage, freezing, cooking, and kept as leftovers
shellfish	H, G, T, P	Increases with storage, freezing, cooking, and kept as leftovers
<b>Grains</b>		
Rice Wheat Barley Oats	G	Grains contain small amounts of bound glutamate—about 10 to 16 mg per 100 grams. Cooking, especially in liquids, can release glutamate, which may be a concern for sensitive individuals. Breads and baked goods usually cause fewer issues, but it's still good to be mindful. A few of my patients have reacted to white rice when it's cooked in a lot of fluid, like in risotto, but not when it's simply steamed.

NUTS		
Walnuts	G	About 658 mg of glutamate per 100 gm. Be aware of nut butter
Pistachio	P	
SWEETS		
Ice-creams	G	Some ice- creams have MSG. This may be labelled as 'Food additive 621' or 'flavour enhancer 621' natural flavour
Chocolate	G	ingredient labels will use terms like "natural flavours", "flavouring",
Sweets / Candies	C, G	Many commercially packaged treats like lollies, gummies, candies etc.) contain citric acid and glutamate.
VEGETABLES		
Asparagus	H, T	Concentration of amines vary greatly and depend on freshness and storage time of vegetable products.
Aubergine	H, T	
Avocado	G, H, T	The active compounds are relatively low compared to foods like tomatoes or cheese, and since avocado is typically eaten raw, most migraine sufferers do not react adversely to it.
Chard	T	
Corn	G, P	
Capicum	G	
Kelp dried	G	
Mushrooms	G, P	
Peas	G, P	
Peppers Green	P	
Soybeans	P	
Soybean sprouts	P	
Spinach	H, T, N	
Tomatoes	H, G, T	The tomato pulp contains the highest amount of glutamate with an average of 140-250mg per 100gm of tomato. The cherry tomato is the most potent of all tomatoes.
Wheat germ	P	
Ginger	V	Some highly sensitive individuals react to both ginger and capsaicin, as both activate the vanilloid receptors. These receptors function as a sensory monitor in the walls of blood vessels and reacts to any anomalies in the blood that it deems as noxious and triggers vasodilation and inflammation.
Chili peppers	V	capsaicin

