

Factsheet 7: Procarbazine and food

Your doctor has prescribed an anti-cancer medicine called procarbazine for you (or your child). Please read this fact sheet carefully before you start taking your anti-cancer capsules.

Procarbazine belongs to a group of medicines that may react with tyramine. Tyramine is a chemical that is present in certain protein-containing foods and drinks.

A reaction may cause an increase in blood pressure. The chance of this happening is very small and the symptoms are usually mild. A reaction is most likely to occur from 7 days after starting procarbazine therapy until 14 days after finishing the course of procarbazine. If the reaction is going to occur it can occur up to 20 minutes after having the food or drink.

The symptoms of a mild reaction might include:

- facial flushing
- rash that may be itchy

Symptoms of a more severe reaction might include:

- sudden onset headache
- pounding heart
- neck stiffness
- sweating, shivering, chills
- nausea or vomiting
- sensitivity to light

The symptoms of **any** reaction should resolve within a few hours. If you are concerned about a reaction you may experience, you can contact your hospital doctor.

Tyramine is released as proteins age and breakdown, therefore it is usually found in foods that are aged, fermented, pickled or smoked. However, it can also be found in protein-containing foods that are improperly stored and allowed to spoil. You or your child should only eat food containing protein if it is fresh.

Some foods and drink must be avoided completely but others you can continue to eat in moderation but start with a small amount first, to ensure they still agree with you. If you still feel well after trying a small amount, more of the same food or others mentioned on the list are unlikely to cause a reaction. However, they could still cause a reaction so avoid eating or drinking them in large quantities. Below is a list of some foods and drinks known to contain high levels of tyramine.

Foods to avoid completely

- Mature or aged cheese, for example: cheddar, stilton, blue cheese, brie
- Pickled fish
- Concentrated yeast or meat extracts, for example: Marmite, Bovril, gravy, stock-cubes (for example: OXO)
- Broad-bean pods

Foods that may be eaten in moderation (see advice above)

Over-ripe fruit	Avocado
Fermented soya beans	Banana
Beer (including alcohol free beer)	Hung game
Wine (including non-alcoholic wine)	Salami/pepperoni/bologna sausage
Lager (including alcohol free lager)	Cured meats
Other alcoholic beverages	Liver
Sour cream	Caviar and smoked fish
Yogurt	Soy sauce and Soya products e.g. tofu and miso

There may be other, more unusual foods you eat that aren't listed here, so remember – only eat food containing protein if it is fresh.

Procarbazine can also interact with alcohol. You may become intolerant of alcohol and it may also cause you to feel sick. Spirits contain little or no tyramine but can still interact with procarbazine because of reduced tolerance to alcohol. Bearing this in mind, it is best to keep alcohol intake to a minimal level, however it is best to avoid alcohol altogether.