

Amine Sensitivity

What are Amines?

Amines are organic compounds that are formed within foods due to the breakdown of proteins. Proteins are naturally broken down in foods as they age and the cooking, processing and maturing processes all increased amine content. Amines also increase in content as fruits ripen such as in avocado and bananas.

Where are Amines most commonly found?

There are a variety of different types of amines, both found in foods and also in substances created by our body. These include;

- Dopamine
- Serotonin
- Adrenaline
- Histamine (eg. wine)
- Tyramine (eg. Cheese)
- Phenylethylamine (eg. Chocolate)

The highest amine foods are usually your processed meats, organs, fermented foods, soy sauce and cheeses. Browning, grilling, charring and overcooking will all increase amine levels.

What is amine sensitivity?

Amine sensitivity is the inability for the body to process an excessive amount of amines at a given time. The amount of amines a person can handle at any period varies between individuals and there can be a cumulative effect in the body. A person sensitive to amines may react to certain high amine foods such as cheeses and processed meats. Those with a defective MAO gene can cause the breakdown of amines to be slowed, increasing the potential for amines to build up in the body causing negative reactions.

Common symptoms of amine sensitivity

Symptoms vary between individuals as can the severity of the reactions. Amine sensitivity may show itself at any time throughout a person's life. Common symptomatic reactions include;

- Migraines and headaches
- Behavioural problems in children
- Aggressive children
- Bed wetting in children
- High blood pressure
- Depression
- Eczema
- Inability to focus
- Hangover type feeling
- Stomach aches
- Constipation
- Rhinitis

If you are suffering from some of the above symptoms and feel you may have an amine sensitivity, the best way to assess the situation is a trial for two weeks avoiding foods containing very high and high levels of amines from the list provided. Symptoms will disappear or greatly reduce if amines are a causative factor. You could also try the Amine Challenge, increasing amine foods for 3-5 days and see if your symptoms get much worse. Eg. Eat 2-3 large ripe bananas, cocoa powder and milk, canned sardines, dark chocolate daily and assess your symptoms, you may react after one day or it may take a few days for strong reactions if you are amine sensitive

Amine Content of Common Foods

FRUIT					
Negligible	Low	Moderate	High		Very High
Apple	Blackcurrant	Dates	Avocado	Mandarin	
Apricot	Grapefruit	Kiwifruit	Banana	Pineapple	
Peach	Honeydew	Lime	Coconut	Plum	
Pear	Rockmelon	Orange	Fig	Raspberry	
Strawberry		Passionfruit	Grapes		
Cherry		Pawpaw	Lemon		

VEGETABLES					
Negligible		Low	Moderate	High	Very High
Asparagus	Lettuce		Broccoli	Eggplant	Sauerkraut
Cabbage	Onion		Cauliflower	Mushroom	Spinach
Carrot	Potato		Olives	Tomato	
Celery	Soy Beans		Pickles		
Corn	Turnip				
Cucumber	Zucchini				

MEAT, CHICKEN, FISH, EGGS					
Negligible	Low	Moderate	High	Very High	
	Eggs	Canned salmon	Aged Meats	Anchovies	Organ meats
	Beef (<2days old)	Chicken liver	Bacon	Beef liver	Pate
	Fish-white	Beef, chicken, lamb > 2 days old	Canned sardines	Canned tuna	Salami
	Lamb(<2days old)		Frozen fish	Fish – smoked	Sausages
	Turkey	Frozen meat	Gravy with meat juice	Pickled meats	Smoked meats
	Veal (<2days old)	Fresh Tuna	Ham / Pork	Meat pies	

DAIRY and SOY PRODUCTS					
Negligible	Low	Moderate	High	Very High	
Cottage cheese	Jaalsberg cheese		Mild Cheese	Blue cheese	Mozzarella
Ricotta Cheese				Brie cheese	Parmesan
Soy Milk				Camembert	Soy Sauce
Tofu				Edam	Swiss
Yoghurt				Leicester	Miso

BEVERAGES					
Negligible		Moderate	High	Very High	
Coffee	Tea	Ale	Beer	Choc & cola flavoured drinks	
Gin	Vodka	Champagne	Port	Cocoa / Drinking chocloate	
Lemonade	Whiskey	Sake	Wine – red & white	Orange juices	
Milk		Stout	Vinegar	Vegetable juices	

SWEETS and NUTS					
Negligible	Low	Moderate	High	Very High	
Carob	Caramel	Brazil Nut	Cocoa	Dark Chocolate	
Golden syrup	Almonds	Sesame seeds	Milk Chocolate	Black Walnut	
Maple syrup	Cashews	Sunflower Seeds	White Chocolate		
Sugar	Pistachio		Peanuts		