## The HISTAMINE and TYRAMINE Restricted Diet

by Janice Vickerstaff Joneja, PhD., R.D.

Please buy the book, <u>Dealing with Food Allergies by Dr. Janice Joneja</u>, as it is important for reference and understanding the impact of food on mastocytosis, general health and nutrition etc. The book is packed with info on all kinds of food allergies and has several other diets for Soy, Yeast, Nuts, Fish, Sulfites, Colours/Tartrazine, Salicylates, Nickle Allergy, etc. This entire book speaks to the wide range of sensitivities we each may experience, plus explains the immunology & allergy biology in layman's terms. It's an excellent educational resource for us all.

Author notes that "4 weeks on this diet should be sufficient for a person to determine whether this will provide relief" of symptoms.

## November, 2012:- MSC has included minor additions to adjust this diet to include our patient success tips and warnings.

(Note: Many patients find that they are able to have some items on the restricted list; while some items on the allowed list are not safe for them. We suggest you use this diet as a general guideline to start eating healthy while limiting mast cell degranulation. We are often individually variable in food & drink triggers.)

TYPE OF FOOD	FOODS ALLOWED	FOODS RESTRICTED
MILK AND MILK PRODUCTS	Plain pasteurized milk from any animal (most of us do best with Skim or Lactose Free Milk, Coconut Milk, or Goat Milk)  Milk products made without microbial cultures such as:  Panir  Mascarpone*  Ricotta*  *Read the labels carefully to ensure no microbial cultures are included  Ice cream free from any restricted ingredient  Cream	Fermented milk products from any animal, such as: -     Cheese of all types     Cottage cheese     Processed cheeses     Cream cheese     Sour cream     Buttermilk     Yogurt     Kefir      And any other fermented milk products     Foods made with milk products other than those allowed
GRAINS, CEREALS, BREADS, & OTHER BAKED PRODUCTS	<ul> <li>Any pure, unbleached flour or grain</li> <li>Baking-powder-leavened products such as         <ul> <li>Biscuits</li> <li>Quick breads</li> <li>Soda bread</li> <li>Scones</li> <li>Muffins</li> </ul> </li> <li>Homemade or purchased baked goods made with allowed ingredients</li> <li>Crackers without yeast, such as Triscuits™</li> <li>Breakfast cereals with allowed ingredients including any grain without artificial colours or preservatives</li> </ul>	Yeast-risen breads and baked products such as: -     Bread     Pizza Dough     Buns     Pita Bread     Croissants     English Muffins     Crumpets     Crackers With Yeast (Read Labels) Such As Ritz, Saltines  Products made with Restricted Ingredients, such as:-     Anise     Artificial Flavours and/or Colours     Bleached Flour     Cheese     Chocolate     Cinnamon

TYPE OF FOOD	FOODS ALLOWED	FOODS RESTRICTED
GRAINS, CEREALS, BREADS, & OTHER BAKED PRODUCTS continued		<ul> <li>Cloves</li> <li>Cocoa</li> <li>Margarine</li> <li>Preservatives</li> <li>Restricted Fruit Including Jams And Jellies Made With These Fruits</li> <li>Baking Mixes</li> <li>Dry Dessert Mixes</li> <li>Any Food made with or cooked in Oils With hydrolyzed lecithin, BHA, BHT</li> <li>Breakfast Cereals containing Restricted Ingredients</li> </ul>
VEGETABLES	All pure, fresh, or frozen vegetables and their juices except those in the "restricted" columns	<ul> <li>Potato</li> <li>Avocado</li> <li>Broad Beans</li> <li>Green Beans</li> <li>Eggplant (Aubergine)</li> <li>Pumpkin</li> <li>Sauerkraut</li> <li>Spinach</li> <li>Sweet Potato</li> <li>Tomato</li> <li>Over-ripe vegetables</li> <li>Pickled vegetables</li> <li>Packaged salad mixes</li> <li>Packaged peeled vegetables</li> <li>Most commercial salad dressings with vinegar, artificial colour, flavour, or preservatives</li> </ul>
FRUIT	All pure, fresh, or frozen fruit and their juices except those in the "restricted" column  Allowed fruits include: -  Melons such as cantaloupe (rock melon), honeydew, watermelon  Other fruits such as: -  Apple  Pear  Fig  Kiwi  Mango  Passion fruit  Rhubarb  Starfruit  Longans  Lychees  Fruit dishes made with allowed ingredients	<ul> <li>Lemon AND/OR Lime</li> <li>The following fresh, frozen, and canned fruits and their juices:-</li> <li>Berries such as cranberries, blueberries, blackberries, gooseberries, loganberries, raspberries and strawberries</li> <li>Stone fruits such as apricots, cherries, nectarines, peaches, plums, prunes</li> <li>Citrus fruits such as oranges and grapefruits</li> <li>Other fruits such as bananas, grapes, currants, dates, papayas (pawpaws), pineapples, raisins</li> <li>Fruit dishes, jams, or juices made with restricted ingredients</li> <li>Any over-ripe fruit</li> </ul>

TYPE OF FOOD	FOODS ALLOWED	FOODS RESTRICTED
MEAT, POULTRY, AND FISH	<ul> <li>Pure, freshly cooked meat or poultry except those in the "restricted" column</li> <li>Any freshly caught, gutted, and cooked fish EXCEPT those in "restricted"</li> <li>If raw meat is not cooked immediately, store it in the freezer</li> <li>Cooked meat uneaten should be immediately frozen. Histamine rises while cooked foods are resting or refrigerated. Freezing halts histamine rising in cooked foods.</li> </ul>	<ul> <li>ALL Shellfish, roe, and caviar</li> <li>Any fish that has not been gutted and cooked immediately after being caught</li> <li>Commercially canned fish</li> <li>All processed meats such as:- <ul> <li>Pepperoni</li> <li>Salami</li> <li>Bologna</li> <li>Weiners (hot dog)</li> </ul> </li> <li>All pickled meats, eggs, fish</li> </ul>
LEGUMES	All plain legumes (except those in the "restricted" list) such as: —     Lima beans     Dried beans and peas, such as: —     Chickpeas (Garbanzo Beans)     Pinto Beans     White Beans     Navy Beans     Black-Eyed Peas     Black Beans     Lentils (Red, Yellow, Brown)     Split Peas     Peanuts     Pure Peanut Butter	<ul> <li>Green peas</li> <li>Sugar or Sweet peas</li> <li>Red beans</li> <li>Soybeans</li> <li>Tofu</li> <li>Fermented soy products such as - <ul> <li>Soy Sauce</li> <li>Fermented Bean Curd</li> <li>Soybean Paste</li> <li>Shrimp Paste</li> <li>Chili Soybean Paste</li> <li>Miso</li> </ul> </li> </ul>
NUTS AND SEEDS	• All plain nuts and seeds and their flours and butters EXCEPT those in the "restricted" column	• Walnuts • Pecans
FATS AND OILS	<ul> <li>All cold-pressed oils, such as:-</li> <li>Extra Virgin Olive Oil</li> <li>Coconut oil</li> <li>Flaxseed oil</li> <li>Sunflower oil</li> <li>Jojoba oil</li> </ul>	Processed oils containing preservatives such as BHA and BHT
SPICES AND HERBS	• All fresh, frozen, or dried herbs and spices EXCEPT those in the "restricted" column	<ul> <li>Anise</li> <li>Cinnamon</li> <li>Cloves</li> <li>Curry Powder</li> <li>Hot Paprika (Cayenne)</li> <li>Nutmeg</li> <li>Seasoning Packets With Restricted Ingredients</li> <li>Commercial Packaged Foods Labeled With "Spices" Or "Flavoring"</li> </ul>

TYPE OF FOOD	FOODS ALLOWED	FOODS RESTRICTED
SWEETS AND SWEETENERS	<ul> <li>Pasteurized Honey, Sugar</li> <li>Icing Sugar</li> <li>Maple Syrup</li> <li>Corn Syrup</li> <li>Pure Jams, Jellies, Marmalade, And Conserves Made With Allowed Ingredients</li> <li>Plain, Artificial Sweeteners</li> <li>Homemade Sweets With Allowed Ingredients</li> </ul>	<ul> <li>Unpasteurized Honey</li> <li>Chocolate</li> <li>Cocoa Beans</li> <li>Cocoa</li> <li>Flavoured Syrups</li> <li>Prepared Dessert Fillings</li> <li>Prepared Icings, Frostings</li> <li>Spreads With Restricted Ingredients</li> <li>Cake Decorations</li> <li>Confectionery</li> <li>Commercial Candies</li> </ul>
BEVERAGES	<ul> <li>Plain Milk</li> <li>Pure Juices Of Allowed Fruits And Vegetables</li> <li>Plain And Carbonated Mineral Water</li> <li>Coffee *not recommended due to tachycardia masto symptoms. Patients report Maxwell House coffee as less problematic than other brands.</li> </ul>	<ul> <li>Fruit Drinks And Cocktails With Restricted Ingredients</li> <li>Cola Type Carbonated Drinks</li> <li>Apple Cider</li> <li>All Teas, Including Green Tea</li> <li>All Alcoholic Beverages</li> <li>Nonalcoholic Beers And Wines</li> <li>All Drinks With "Flavor" Or "Spices" On The Label</li> </ul>
OTHER	<ul> <li>Baking Powder</li> <li>Baking Soda</li> <li>Cream Of Tartar</li> <li>Plain Gelatin</li> <li>Homemade Relishes With Allowed Ingredients</li> </ul>	<ul> <li>Baker's Yeast</li> <li>All Vinegars</li> <li>Prepared Pickles, Relishes, Ketchup, And Mustard Containing Vinegar</li> <li>Flavoured Gelatin (eg. Jello)</li> <li>Chocolate And Cocoa</li> <li>Mincemeat</li> <li>Yeasts Of The Species Saccharomyces</li> <li>Brewer's Yeast</li> <li>Nutritional Yeast</li> <li>Yeast And Meat Extracts (eg.) Bovril, Marmite, Oxo, Vegemite</li> </ul>

Additional information regarding foods and eating while living with a mast cell disorder:-

The following notes are intended for those who do not have TRUE food allergies. If you have been positively tested as truly allergic to any food or drink below, this will not apply to you. Same warning applies for above listed items within the diet.

Despite this diet, for our disorders, typically we find that avoiding entirely or at least limiting our intake of wheat, sugar/sweets, dairy, spices, processed foods, and preservatives, resolves many of our difficulties with food. Home cooking and/or raw natural foods seem to be safest for us. Most patients have adjusted their food and drink intake to mirror the diets for Celiac disease and/or Irritable Bowel Syndrome. Many of those same foods and sensitivities apply for mast cell disorders. Additionally, many of us are sensitive to Salicylates as well. Dr. Joneja has a full Salicylate Diet in her book.

Regarding meats, histamine rises as meat cooks and continues to rise after cooking. Leftovers are typically not safe for us as we all tend to react badly to precooked foods. It may help you to limit the amount of histamine released in cooked meat by immediately putting it in the freezer after cooking. The freezing stops the histamine release. Whereas refrigeration allows the histamine release to continue in meat. Red Meats are hardest on us as they are usually from animals who had antibiotics injected or were force fed etc. Similar reports from patients regarding Chicken. Many have found that organic meats (not force fed, not injected with antibiotics, not held together with "glue meat") are safest for us. Pork seems okay however Ham is problematic for most.

Raw vegetables (from the Allowed list) seem to offer great benefit for health for most of us. Cooking your vegetables is fine, but raw vegetables deliver greater nutrients. Some patients have reported great improvement in symptoms and illness level by following a completely raw food diet. If you cook fresh vegetables, steaming them will preserve more nutrients and they will also taste better!

Supplements are necessary for most of us. Probiotics, Prebiotics, Omega 3-6-9 and Ester C have been reported as extremely beneficial and helpful in limiting reactions to foods, even those on the restricted list. We suggest the Canadian brand SISU supplements of Dophilus Plus and Citrus Free Ester C taken daily. Alternatively, many patients report Jamieson supplements as safest and most effective. Note about Omega supplements – ensure it is derived from FLAX and NOT from fish.

Top two consistent recommendations from patients repeatedly has been Olive Oil (not olives, just the oil) and Coconut, as being very safe and beneficial. Coconut is available as a butter and an oil which makes it a great alternative to dairy butter etc. Suggested sources are Canadian online store Well.ca or your local health food store for pure organic sources of Coconut butter and oil.

About Chocolate.... Milk chocolate is definitely not helpful. However, occasionally, if you want to have a bit of chocolate, Dark Chocolate is safest and has more health benefits. Be very careful though. Not all of us are able to cheat with the same things. We all react variably to foods and drinks. It's very individual figuring it out.

Dining out is difficult for most of us. We tend to eat at home with freshly prepared meals. This is because restaurant food supplies are sprayed or injected with preservatives to keep them fresh as long as possible. We react to the preservatives (on salads too - lettuce etc.). There is also the risk of a restaurant food prepared on a surface which has residue from other foods, some of which may not be safe for us.

If travelling and/or dining out, many of us often only eat one large meal at end of day or else we take an extra dose of H1 and H2 antihistamines prior to eating a meal. We also keep a bottle of Children's Benadryl Allergy Liquid (or Benadryl tablets) on hand to take 2 sips (equivalent to 2 tablespoons) immediately before or after eating, to help limit reactions. Note that Benadryl passes through your system quickly, so taking an extra dose of meds may be more effective. Taking both an extra dose of meds along with sips of Benadryl is fine if needed. An alternative is creating a snack package of vegetables to nibble on – raw/uncooked, fresh, cleaned, and chopped up.

Alcohols (Beer, Wine, Hard Liquor) and Teas are high in histamine naturally. So those are best avoided entirely. Some are able to have herbal teas without difficulty (Camomile, for instance). Be careful with Green Tea as that, in particular, provokes mast cell degranulation. Some are able to have alcohol in moderation very occasionally.

Coffee is hit and miss with many of us. If you are able to have coffee, freshly brewed is best. Avoid instant and/or flavoured coffees, if you can.

Potatoes and Onions are typically very difficult for most of us. However, patients have reported success with red potatoes and red onions, in moderation and on an irregular basis.

Breads are usually a full AVOID item for us. Patients report tolerating Light Rye Bread without Preservatives, a couple of brands make this bread and it's typically available in most grocery stores. Usually near the deli section. It's pricier than other breads but seems safest for many.