

## CORN-FREE GUIDE

## Living without corn...

You might have noticed an uncomfortable feeling soon after ingesting corn or a processed food/meal containing corn. This could be because your body is currently sensitive to corn or not digesting it well.

You may have been experiencing adverse symptoms such as skin rashes, coughing, hot flashes/sweating, increased heartbeat, dizziness and/or a headache which, based on your corn zoomer results, can be associated with an intolerance to corn.

It is completely normal to feel overwhelmed when you attempt to eliminate corn from your diet. Great advice for starting out is to learn first all the names that corn goes by, and remove any suspicious foods from your pantry. Please refer to the last two pages of this handout for hidden sources and alternative names for corn.

You can work with a Vibrant Dietitian to identify the most obvious sources of corn to take out of your diet first or less obvious sources if you have already removed the main sources.

The ultimate goal of working with your health care practitioner and dietitian is to heal your gut, so it can more comfortably digest corn and corn based foods.

## If you already avoid gluten and/or wheat....

If you know by experience or have done previous testing to identify gluten sensitivity and/or celiac disease, you may also be reactive to corn.

This is because corn has a similar protein structure to gliadin- a protein found in wheat to be associated with celiac disease and NCGS (non celiac, gluten sensitivity). Because corn has been the most common alternative to wheat in grain based gluten-free foods, this can be problematic for wheat sensitive individuals who are on a gluten-free diet but not on a corn-free diet. Be sure to work with your Vibrant dietitian toward a diet that is free of gluten/wheat and corn if you are sensitive to both.


## Work with your Vibrant Dietitian to Learn:

A custom plan to replace corn-containing foods you may already be consuming regularly
What foods naturally contain corn
What foods commonly have corn and corn products added to them
What foods might contain hidden sources of corn
Label reading techniques to identify corn-free foods
Practical strategies to avoid cross contamination


## Tips for Dining Out:

Be prepared and research the menu online before you arrive
Explain your corn-free needs to your server
When in doubt, always opt for whole, single foods as opposed to mixed foods. An example of this would be asking for a baked potato, unseasoned rice or unseasoned pasta, quinoa, etc. in addition to a plain piece of grilled fish, poultry or red meat/pork/game meats. Use one -ingredient condiments provided by the restaurant or that you bring into an establishment.

Be careful of alcoholic drinks which could contain corn syrup or be made from corn based alcohol

Sauces and soups are often thickened with cornstarch and breadings/coatings typically contain cornmeal, cornstarch, corn flour, etc. Opt for foods that are cooked alone with little or no condiments/flavor.

Ask for your own condiments to season the food you get at a restaurant such as lemon juice, olive oil, vinegar, whole butter. Be wary of margarines, salad dressings and sauces which could contain corn or corn products.

Try to avoid packaged foods and fast food as they are the most highly processed types of foods.

Most gluten free packaged foods such as pretzels, pasta and crackers are made with corn or a corn by-product. Carefully search on-line or in the store for gluten free products that are also corn free. Some websites exist to direct consumers to products containing corn such as: http://corn-freefoods.blogspot.com/


## Tips for Cooking:

Use tapioca starch, arrowroot starch or potato starch instead of corn starch

Cook with olive oil, coconut oil instead of corn oil
\% Use maple syrup, coconut sugar and/or honey instead of corn syrup


## Additional Resources:

## BOOK



Celeste's Best Gluten-Free, Allergen-Free Recipes: Over 250 Recipes Free of Gluten, Wheat, Dairy, Casein, Soy, Corn, Nuts and Yeast - Celeste Clevenger (Author)

Cookbook and Survival Guide: For the Corn-Intolerant and Corn-Allergic by Laurel Lee Steele PA-C (Author), Merelee Knott (Author), Stephen A. Tilles M.D. (Foreword)

Great websites for tips and resources for avoiding corn - these websites contain long lists of corn based foods and products and are worth checking out if you have a more severe reaction to corn:

## Cornallergygirl.com

Cornfreecommuntity.com

Inthelightofknowledge.com

## Support Groups on the Internet:

The following links are to groups with knowledgeable members to help you avoid as much corn as possible and to help you get back to your healthiest self.

Delphi Forums: Avoiding Corn
Corn Allergy \& Intolerance Group - Facebook


Sources of corn

| Corn flour | Corn extract | Corn syrup | Corn flakes |
| :--- | :--- | :--- | :--- |
| Corn fritters | Hominy | Corn syrup solids | Corn sweetener |
| Corn oil | Hydrolyzed corn | Corn | Grits |
| Corn meal | Hydrolyzed corn protein | Popcorn | Taco shells |
| Corn puffs cereal | Maize | Corn meal | Vegetable oil |
| Corn starch | Modified corn starch | Corn alcohol | Zea mays |
| Corn sugar | Polenta | Cornstarch | Zein |
| Corn chips | Tamales | Corn flour |  |
| Corn gluten | High fructose corn syrup | Corn tortillas |  |

## These Items May Contain Corn from Corn \& Vegetable Oils, Corn Starch and Corn Syrup:

| Commercial soups | Frozen vegetables | Canned fruit | Jams and jellies |
| :--- | :--- | :--- | :--- |
| Peanut butter | Canned vegetables | Frozen fruit | Candies |
| Cold cuts and deli meats | Succotash | Dates | Catsup |
| Ham | Pork and beans | Ice cream | Chewing gums |
| Hotdogs | Creamed vegetables | Sherbet | Sauces |
| Sausages | Bread | Chocolate milk | White distilled |
| Breaded or fried foods | Graham crackers | Milk shakes | vinegar |
| Cheese | Baking mixes | Soy milks | Monosodium |
| Chili | Pancakes | Eggnog | glutamate |
| Chop suey | Pancake syrup | Whiskey, beer, American | Baking powder |
| Chow mein | English muffins | wines and ale | Cake yeast |
| Cheese spreads | Gravy | Carbonated beverages | Bleached flour |
| Fish sticks | Salad dressing | such as soda | Gelatin capsules |
| Instant coffees | Powdered sugar | Lemonade |  |

## There is A Difference Between Corn Allergy and Corn Sensitivity:

Up to 4\% of adults in the United States have a harmful food allergy. Be aware of the symptoms of a type 1 hypersensitivity reaction (found on a different immune system test-lgE antibodies) that can signal a severe allergic reaction which can include:


Tight, hoarse, trouble breathing/swallowing
Shortness of breath, wheezing, repetitive cough
Significant swelling of the tongue, lips
( Becoming pale, blue, faint, having a weak pulse, being dizzy
Rash/hives over more than $25 \%$ of the body
(Widespread redness/flushing
Loss of consciousness (including feelings of excessive sleepiness that you just can't fight- getting to lay down before you pass out still counts as passing out!)

* Loss of motor coordination
* Extreme swelling of the eyes, lips, or anywhere else in the body

Prolonged and or painful diarrhea/intestinal cramping

* Prolonged vomiting

Feeling something bad is about to happen, anxiety, confusion

## References:

1. cornallergygirl.com; https://www.foodallergy.org/sites/default/files/2018-04/FARE-Food-Allergy-Facts-Statistics.pdf
2.https://thehealthyapple.com/corn-free-how-to/\#
