

# The Call for Corn Masa Fortification

Compared to other racial and ethnic groups, Latine people in the United States face about 1.4 times higher rates of neural tube defects (NTDs)<sup>1</sup> like spina bifida, which can cause mild to severe disabilities, <sup>2</sup> and anencephaly, which results in stillbirth or infant death.<sup>3</sup> Because consuming sufficient folic acid (a synthetic form of vitamin B9) before or during early pregnancy reduces the risk of having a baby with a NTD, the U.S. Food and Drug Administration (FDA) began encouraging manufacturers to add folic acid to staple foods like wheat flour, bread, and pasta in the 1990s.<sup>4</sup>

Unlike these other flour-based products, it was not until 2016 that FDA began allowing manufacturers to fortify corn masa flour,<sup>5</sup> the main ingredient in foods like corn tortillas and tamales that are staples in the Mexican diet and consumed by many Latine people in the United States.<sup>6</sup> FDA predicted that corn masa fortification would lead to an increase in folic acid intake among Mexican American women of reproductive age from 164 mcg/d to 206 mcg/d and help close the gap in rates of NTDs.<sup>5</sup> Unfortunately, recent data show the predicted impact has not been realized.<sup>67</sup>

### The State of Corn Masa Fortification Today

A recent CSPI report looked at 59 corn masa flour products from 17 different companies and 476 corn tortilla products from 134 different companies, all sold across the United States between 2018-2022, as well as a comparison group of 505 wheat flour and 865 wheat tortilla products.<sup>7</sup> It found:



- Only 8 of the corn masa flour products (14%) and none of the corn tortilla products (0%) contained folic acid.
- By comparison, 401 of the wheat flour products (79%) and 731 of the wheat tortilla products (85%) contained folic acid.

These findings are consistent with earlier studies, including one from 2018 that found 2 of 20 corn masa flours in Atlanta grocery stores (10%) contained folic acid,<sup>8</sup> and two studies that were unable to identify a single fortified corn tortilla product in U.S. grocery stores.<sup>8,9</sup>

# The food industry needs to do more to ensure that consumers have access to fortified corn masa products!

# Call to Action for Manufacturers

• Manufacturers should add folic acid to all corn masa products sold in the United States and communicate with their ingredients suppliers and FDA to address any barriers to fortification.

# Call to Action for Ingredients Suppliers

• Ingredients suppliers should make available corn masa flour that is fortified with 0.7 mg folic acid per pound and advertise its availability to customers.

## Call to Action for Retailers

• Retailers should commit to carrying fortified corn masa products and communicate such commitments to food manufacturers and consumers.

### Call to Action for Consumers

Until the food industry makes fortified corn masa products widely available...

- Consumers—especially those buying food for people who are or may become pregnant—should look for the words "folic acid" in the ingredients list when buying corn masa flour.
- Consumers should consider buying enriched wheat tortillas or making corn tortillas at home from fortified corn masa flour until ready-made fortified tortillas become available.
- To help demonstrate demand, consumers should let retailers know they are looking for fortified corn masa products.
- To ensure sufficient folic acid intake, consumers who are or may become pregnant should also take a multivitamin supplement containing folic acid.<sup>10</sup>



Maseca- and Masa Brosa-brand corn masa flours.

CSPI is advocating for widespread fortification of corn masa flour and corn tortillas to increase folic acid intake and help close the racial/ethnic gap in NTD rates. Read our full report, "Failure to Fortify: How companies are neglecting to take a simple step that could save Latino/a/e lives" <u>here</u>.

#### For more information, please contact the CSPI at policy@cspinet.org.

#### References

<sup>7</sup> Moraga Franco C & Greenthal E. Failure to Fortify: How companies are neglecting to take a simple step that could save Latino/a/e lives. Center for Science in the Public Interest. 2022.
<sup>8</sup> Redpath B, Kancherla V, Oakley GP. Availability of Corn Masa Flour and Tortillas Fortified With Folic Acid in Atlanta After National Regulations Allowing Voluntary Fortification. *JAMA*. 2018;320(15):1600.

<sup>9</sup> Kancherla V, Averbach H, Oakley GP, Jr. Nation-wide failure of voluntary folic acid fortification of corn masa flour and tortillas with folic acid. *Birth Defects Res.* Jul 1 2019;111(11):672-675.

<sup>10</sup> U.S. Centers for Disease Control and Prevention. Folic Acid Recommendations.

https://www.cdc.gov/ncbddd/folicacid/recommendations.html

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<sup>&</sup>lt;sup>1</sup> Williams J, Mai CT, Mulinare J, et al. Updated Estimates of Neural Tube Defects Prevented by Mandatory Folic Acid Fortification — United States, 1995–2011. *MMWR Morb Mortal Wkly Rep*. 2015;64(1):1-5.

<sup>&</sup>lt;sup>2</sup> U.S. Centers for Disease Control and Prevention. What is Spina Bifida? https://www.cdc.gov/ncbddd/spinabifida/facts.html

<sup>&</sup>lt;sup>3</sup> U.S. Centers for Disease Control and Prevention. Facts about Anencephaly. <u>https://www.cdc.gov/ncbddd/birthdefects/anencephaly.html</u>

<sup>&</sup>lt;sup>4</sup> 61 Fed. Reg. 8781-8797.

<sup>&</sup>lt;sup>5</sup> 81 Fed. Reg. 22176-22183.

<sup>&</sup>lt;sup>6</sup> Wang A, Rose CE, Qi YP, Williams JL, Pfeiffer CM, Crider KS. Impact of Voluntary Folic Acid Fortification of Corn Masa Flour on RBC Folate Concentrations in the U.S. (NHANES 2011-2018). *Nutrients*. Apr 16 2021;13(4).