

Communications Toolkit: Advocating for Healthier Communities and Folic Acid Fortified Corn Masa

Introduction

Fortifying corn masa products in the US with folic acid, a form of vitamin B9, provides a tremendous opportunity to transform lives, prevent birth defects, and reduce inequities in our food system. Though many staple foods in the US are required to be fortified with folic acid, corn masa products—a key staple of the Hispanic community—are not. Lack of access to fortified foods contributes to Hispanic communities in the US experiencing disproportionately higher rates of neural tube defects (NTDs), serious birth defects of the brain and spine.

To this end, the [Food Fortification Initiative](#) has compiled a toolkit with resources to support Hispanic health champions' advocacy to build awareness of the importance of fortifying corn masa with folic acid and generate change among vendors, manufacturers, and consumers of corn masa products.

Who is the toolkit for?

This toolkit is for anyone interested in strengthening health in the Hispanic/Latino community. We have divided the toolkit into sections based on our key audiences: vendors of corn masa products (e.g. grocery stores), manufacturers of corn masa products, and consumers of corn masa products.

What's included in the toolkit?

- [Background information](#)
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 - [Suggested social media posts and graphics](#)
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Background Information

- What are neural tube defects?
 - [Neural tube defects](#) (also known as NTDs) are severe birth defects that involve the brain and spine. The most common NTDs are spina bifida and anencephaly. These birth defects can result in severe disability, miscarriage, or infant death.
 - Spina bifida results from the spine's failure to close properly during the first month of pregnancy, often before a woman knows she is pregnant.
 - Approximately [50–70% of NTDs are folic acid sensitive](#), meaning they may be preventable with sufficient folic acid intake before and during early pregnancy.
- What is folic acid?
 - [Folic acid](#) is the man-made form of vitamin B9. It is required by all humans for DNA synthesis and cellular growth.
 - Maternal intake of 400 mcg of folic acid daily before and during early pregnancy can help prevent NTDs.
- What is fortification?
 - Food fortification is the [addition of micronutrients \(vitamins and minerals\) to commonly consumed foods such as flour or oil](#). Fortifying staple foods means that people who regularly eat staple foods have consistent access to essential nutrients that promote health and prevent disease.
 - Fortification is a [proven way to prevent NTDs](#).
- Fortification and NTDs
 - As a result of the strong link between folic acid intake and NTD prevention, in 1998 the United States Food and Drug Administration (FDA) required that all enriched cereal grain products include folic acid. Folic acid fortification already prevents about 1,300 NTDs in the U.S.
 - An estimated 50% of U.S. pregnancies are unplanned, so fortification helps those not taking dietary supplements to maintain higher levels of blood folate leading up to and in the early days of a pregnancy, even if unanticipated.
 - This [lifetime cost of spina bifida is about \\$791,000](#)—preventing spina bifida via fortification (adding folic acid to enriched cereal grains) in the U.S. has resulted in an estimated \$603M savings annually.
- Why fortify corn masa flour?
 - Hispanic communities in the United States experience disproportionately high rates of neural tube defects. [Hispanic women are 19% more likely than non-Hispanic women to have a pregnancy affected by a neural tube defect.](#)
 - Corn masa and corn masa products were not included in the FDA folic acid fortification mandate. In an effort to rectify this oversight, the FDA allowed for the voluntary fortification of corn masa flour with folic acid in 2016.
 - Despite this allowance, only an [estimated 5.8% of corn masa products in the United States are fortified with folic acid](#).



- A recent study estimated that [127 NTDs could be prevented annually by increasing folate status among Hispanic women whose sole folic acid source is through fortification](#). Folic acid fortification of corn masa and corn masa products can help prevent future neural tube defects for babies, save lives, and build a healthier future for all Americans.

Key Messages

- In the US, Hispanic/Latina women are 19% more likely than non-Hispanic White or Black women to have a pregnancy affected by a birth defect of the brain and spine. These birth defects can result in severe disability, miscarriage, or infant death.
- Consuming foods fortified with folic acid helps prevent birth defects of the brain and spine.
- 94% of corn masa in the US is not fortified with folic acid.
- How to take action:
 - Producers – Add folic acid to your corn masa products to support healthier pregnancies and healthier babies in your community.
 - Vendors – Stock and promote folic acid-fortified corn masa flour products to help your customers meet their nutritional needs and support healthy pregnancies.
 - Consumers – look for corn masa flour and other products that have “folic acid” on the ingredient list or Nutrition Fact label.

Suggested Social Media Posts and Graphics

How to Participate

- Share with your networks on LinkedIn, Facebook, X/Twitter, and Instagram
- Tag suggested partners

	LinkedIn	Facebook	X/Twitter	Instagram
FFI	@Food Fortification Initiative (FFI)	@Food Fortification Initiative	@FFINetwork	@FFINetwork
CDC	@Centers for Disease Control and Prevention	@CDC	@CDC_NCBDD	@CDCgov
National Birth Defects Prevention Network	N/A	@NBBDPN	@NBBDPN	@NBBDN
Secretary Becerra	@HHS Office of the Secretary	@Xavier Becerra	@SecBecerra	@AGBecerra
FDA	@FDA	@U.S. Food and Drug Administration	@US_FDA	@FDA
CSPI	@Center for Science in the Public Health Interest	@Center for Science in the Public Health Interest (CSPI)	@CSPI	@CSPI_NutritionForAction
Producers of corn masa products				

- Use campaign hashtags
 - Relevant anytime:
 - #MejorConÁcidoFólico / #BetterWithFolicAcid
 - #BirthDefects
 - #FolicAcid



- #fortify
 - #fortification
- September 9-13, 2024 - National Folic Acid Awareness Week:
 - #HealthyBeginnings / #PrincipiosSanos
 - #FortifyWithFolicAcid
 - #InMyFolicAcidEra/ #MiEraDeÁcidoFólico
- September 15 – October 15, 2024 - National Hispanic Heritage Month:
 - #HispanicHeritageMonth
 - #HispanicHeritage
 - #MesDeLaHerenciaHispana
 - #HispanaHerencia
- Use suggested images/infographics

Posts for Producers

X/Twitter

- @FDA mandates #folicacid fortification of enriched cereal grains to prevent #BirthDefects. Yet, corn masa flour, a staple among US Hispanics, is not included. Fortifying it could prevent hundreds of birth defects of the brain and spine annually. Learn how you can help: <<https://bit.ly/fortify-masa>> #MejorConÁcidoFólico
- #Fortification of corn masa with #folicacid is an affordable way to help prevent #BirthDefects like anencephaly and spina bifida. 📺 While lifetime costs for spina bifida are \$792K per person, folic acid fortification costs <\$1 per metric ton. <<https://bit.ly/fortify-masa>> #MejorConÁcidoFólico
- #DYK in 2020, 61K #BirthDefects were prevented globally due to folic acid fortified flour? 🌱 That's ~169 healthier babies every day! You can boost the number of healthy babies in the US by fortifying corn masa with folic acid. <<https://bit.ly/fortify-masa>> #MejorConÁcidoFólico
- Only 6% of the total US corn masa volume contains folic acid. CA is acting to increase the amount that is fortified and prevent #BirthDefects by pursuing laws to mandate folic acid #fortification of corn masa flour. <<https://bit.ly/fortify-masa>> #MejorConÁcidoFólico
- US food producers contribute to the health of Americans by adding vitamins and minerals to everyday foods like wheat flour. 🌱 Recent @FFInetwork market assessment in CA & TX finds that only 13% of corn masa products were #fortified with folic acid. <<https://bit.ly/fortify-masa>> #MejorConÁcidoFólico
- @HHS recognizes that all Americans' health is stronger with folic acid fortification. @SecBecerra hosted a roundtable in 2024 with corn masa product producers and distributors to discuss strategies to increase the number of products that are fortified. <<https://bit.ly/fortify-masa>> #MejorConÁcidoFólico

LinkedIn and Facebook:

- A new Food Fortification Initiative report finds that only ~6% of the total U.S. corn masa volume contains folic acid, putting Hispanic women at greater risk of having a baby with a #BirthDefect of the brain and spine.

Since 1998, @FDA has mandated the fortification of enriched cereal grains with folic acid (form of vitamin B9) to prevent birth defects. Adding folic acid to foods helps prevent about 1,300 birth defects every year in the U.S. However, due to classification differences, corn masa flour was not included from this mandate, and fortification is currently voluntary.

This limited adoption of voluntary corn masa flour fortification contributes to Hispanic women being 19% more likely to have a birth defect-affected pregnancy than non-Hispanic women.

Expanding folic acid fortification of corn masa flour could prevent hundreds of birth defects each year, reducing health disparities and improving health outcomes for the U.S. Hispanic community. <<https://bit.ly/fortify-masa>> #MejorConÁcidoFólico

- Not all heroes wear capes. Food fortification is one of the most affordable strategies to prevent #BirthDefects of the brain and spine, like spina bifida. Food producers are the heroes that make fortification happen. 🌟

The estimated lifetime costs for medical care, developmental services, special education, and caregiver time for people with spina bifida amount to \$792,000. In contrast, the average cost of fortification is less than \$1/metric ton of corn masa. For wheat flour products, this investment in fortification yields approximately \$603 million in annual savings in the U.S. by preventing cases of spina bifida.  <<https://bit.ly/fortify-masa>> #MejorConÁcidoFólico

- In the U.S., all enriched cereal grains must be fortified with folic acid to prevent micronutrient deficiencies and #BirthDefects. However, corn masa flour fortification is voluntary, and it is estimated that <6% of the corn masa supply in the US is fortified. This means most people who rely on corn masa as a staple do not benefit from existing fortification policies.

Voluntary fortification has not significantly reduced birth defects. Hispanic women are more likely to have a pregnancy affected by birth defects of the brain and spine than non-Hispanic women.

Given California's status as the state with the highest Hispanic population, legislators are taking steps to address this issue by pursuing laws to mandate folic acid fortification of corn



masa flour, with the aim of reducing health disparities and improving maternal and infant health outcomes. <<https://bit.ly/fortify-masa>> #MejorConÁcidoFólico

- Food producers in the US contribute to the health of Americans by adding vitamins and minerals to products such as enriched wheat flour and fortified breakfast cereals. 🌱 This move prevents 1,300 birth defects of the brain and spine each year!

But a recent Food Fortification Initiative market assessment in California and Texas found that only 13% of corn masa flour, corn tortillas, tostadas, and taco shells in the stores surveyed were fortified with folic acid. If these corn masa products were fortified, hundreds of additional birth defects of the brain and spine could be prevented each year.

💛 Join the movement for change and learn how you can start fortifying corn masa products with folic acid: <<https://bit.ly/fortify-masa>> #MejorConÁcidoFólico

- The US Government recognizes that all Americans' health is stronger with folic acid fortification of corn masa products. @Secretary Xavier Becerra hosted a roundtable earlier this year with representatives of large manufacturers and distributors of corn masa flour products to discuss strategies to increase the commercial availability of food products that are fortified with folic acid. Learn more: <<https://bit.ly/fortify-masa>>

Posts for Vendors

X/Twitter

- US Hispanic women face the highest risk of pregnancies affected by #BirthDefects of the brain and spine. By selling folic acid fortified corn masa products in stores, you can help reduce this risk and improve health. Learn more: <<https://bit.ly/fortify-masa>> #MejorConÁcidoFólico
- #DYK in 2020, 61K #BirthDefects were prevented globally due to #folicacid fortified flour? That's ~169 healthier babies every day! Boost the health of babies in your community by making folic acid fortified corn masa products easily accessible to consumers. <<https://bit.ly/fortify-masa>> #MejorConÁcidoFólico
- A recent @FFInetwork assessment in CA & TX finds that only 13% of corn masa products sold in markets were #fortified with #folicacid. Be part of the change and ask your suppliers for folic acid fortified corn masa products. <<https://bit.ly/fortify-masa>> #MejorConÁcidoFólico
- As a vendor, the food you carry on your shelves makes a difference. You can help prevent hundreds of #BirthDefects every year in the US by ensuring your community has access to folic acid fortified corn masa products. <<https://bit.ly/fortify-masa>> #MejorConÁcidoFólico

- @HHS recognizes that all Americans' health is stronger with folic acid fortification. @SecBecerra hosted a roundtable in 2024 with corn masa product producers and distributors to discuss strategies to increase the number of products that are fortified. <<https://bit.ly/fortify-masa>> #MejorConÁcidoFólico

LinkedIn and Facebook:

- Of all Americans, US Hispanic women face the highest risk of pregnancies affected by birth defects of the brain and spine. By selling folic acid fortified corn masa products in stores, you can help reduce this risk and improve health.

Doctors recommend that women who may become pregnant consume 400 micrograms of #folicacid prior to and at least 28 days after conception. However, this is before most women know they are pregnant. Selling folic acid fortified corn masa products is a simple, effective way to ensure that mothers get the nutrients they need, reduce disparities, and strengthen the health of your community. 🤝

Learn more: <<https://bit.ly/fortify-masa>> #MejorConÁcidoFólico

- #DYK fortification of wheat flour is recognized as one of the 10 greatest public health achievements?

In 2020, 61,677 birth defects of the brain and spine were prevented globally due to flour being fortified with folic acid, a form of vitamin B9. That's an average of 169 healthier babies every day!

With the help of vendors like you, increasing the availability of foods such as folic acid fortified corn masa flour could help prevent hundreds of birth defects of the brain and spine annually in the US. Learn how you can save lives: <<https://bit.ly/fortify-masa>> #MejorConÁcidoFólico

- As a vendor, the food you carry on your shelves makes a difference. 🛒

A recent Food Fortification Initiative market assessment in California and Texas found that only 13% of corn masa flour, corn tortillas, tostadas, and taco shells were fortified with folic acid. If these corn masa products were fortified, hundreds of birth defects of the brain and spine could be prevented and lives could be saved each year.

Be part of the change and ask your suppliers for folic acid fortified corn masa products. <<https://bit.ly/fortify-masa>> #MejorConÁcidoFólico

- The US Government recognizes that all Americans' health is stronger with folic acid fortification of corn masa products. @Secretary Xavier Becerra hosted a roundtable earlier

this year with representatives of large manufacturers and distributors of corn masa flour products to discuss strategies to increase the commercial availability of food products that are fortified with folic acid. Learn more: <<https://bit.ly/fortify-masa>>

Posts for Consumers

X/Twitter

#DYK some #BirthDefects can be prevented by getting enough folic acid, a form of vitamin B9? Taking supplements and eating foods #fortified with folic acid, like some types of corn masa flour, are easy ways to ensure you are getting enough of this nutrient.

<<https://bit.ly/fortify-masa>> #MejorConÁcidoFólico

- Getting 400 micrograms (mcg) of folic acid daily can help prevent #BirthDefects of the brain and spine. Choosing foods that contain folic acid, like some types of corn masa flour, and taking supplements can ensure you're getting enough of this nutrient. Learn more: <<https://bit.ly/fortify-masa>> #MejorConÁcidoFólico
- 🗣️ Doctors recommend that women of reproductive age consume 400mcg of #folicacid to help prevent birth defects of brain and spine. One way to increase your intake is through your diet. 📖 Look for folic acid in the ingredient lists of foods like corn masa flour. <<https://bit.ly/fortify-masa>> #MejorConÁcidoFólico
- @HHS recognizes that all Americans' health is stronger with folic acid fortification. @SecBecerra hosted a roundtable in 2024 with corn masa product producers and distributors to discuss strategies to increase the number of products that are fortified. <<https://bit.ly/fortify-masa>> #MejorConÁcidoFólico

LinkedIn and Facebook:

- Did you know that daily folic acid consumption can help prevent birth defects of the brain and spine?

To increase your intake, look for foods fortified with folic acid (form of vitamin B9), like some types of corn masa flour. You can also ensure you get enough of this essential nutrient by taking daily supplements. Getting enough folic acid can help promote a healthy pregnancy and prevent birth defects. <<https://bit.ly/fortify-masa>> #MejorConÁcidoFólico

- 🗣️ Doctors recommend that women consume 400 micrograms of folic acid, both before and during early pregnancy.

To achieve this, look for folic acid in the ingredients list of foods like certain types of corn masa flour. Daily folic acid supplements can also help ensure you meet the recommended intake.

Not able to find foods fortified with folic acid in your local grocery store? Ask your grocer to stock them. 🛒 Prioritizing folic acid is essential for promoting healthy pregnancies and preventing #BirthDefects of the brain and spine.

Learn more: <<https://bit.ly/fortify-masa>> #MejorConÁcidoFólico

- The US Government recognizes that all Americans' health is stronger with folic acid fortification of corn masa products. @Secretary Xavier Becerra hosted a roundtable earlier this year with representatives of large manufacturers and distributors of corn masa flour products to discuss strategies to increase the commercial availability of food products that are fortified with folic acid. Learn more: <<https://bit.ly/fortify-masa>>

Information sheets and flyers [can be found here](#).

Email template for sharing toolkit:

Suggested email subject: “Fortified corn masa communications toolkit”

Dear colleague,

I am writing to share the release of the [Food Fortification Initiative's communications toolkit](#) focusing on neural tube defects (NTDs) and fortified corn masa. The mandatory fortification of enriched cereal grains prevents over 1,300 NTD cases in the US annually but misses subpopulations that do not regularly consume these fortified products. As you may know, the Hispanic/Latino community experiences higher rates of NTDs such as spina bifida and anencephaly than their White or Black counterparts. This disparity has multiple contributing factors, but potential solutions include increased uptake of supplementation, and increased coverage of fortified corn masa. Unlike enriched cereal grain products, fortification of corn masa is voluntary, rather than mandatory.

Multiple surveys have shown that a minimal number of corn masa products currently in the market are fortified with folic acid. This [toolkit's](#) goal is to encourage increased production, sale, and consumption of fortified corn masa products to help reduce NTDs in the US. On the linked page, you will find more information on the background of this issue, suggested social media posts, and relevant research that you could use. There are also informational flyers targeted at raising awareness among producers, vendors, and consumers.

Use these products on your various social media platforms and collaborative networks. Two upcoming opportunities for sharing these messages include National Folic Acid Awareness week (September 8-14) and National Hispanic Heritage Month (September 15-October 15). In addition,

this toolkit can be used to complement other partner resources from [CDC](#) and the [National Birth Defects Prevention Network](#). Please share this toolkit with anyone who may be interested in its use.

If you have any questions regarding the toolkit, feel free to reach out to the Food Fortification Initiative at info@ffinetwork.org.

Key Reports and References

1. Centers for Disease Control and Prevention. [Recommendations for the Use of Folic Acid to Reduce the Number of Cases of Spina Bifida and Other Neural Tube Defects](#).
2. Centers for Disease Control and Prevention Grand Rounds: [Additional Opportunities to Prevent Neural Tube Defects with Folic Acid Fortification](#).
3. Centers for Disease Control and Prevention. [Global NTD Prevention](#). cdc.gov. Published December 20, 2022.
4. Centers for Disease Control and Prevention. [Folic Acid](#). cdc.gov. Published June 15, 2022.
5. Food and Drug Administration. [21 CFR 172.345 -- Folic acid \(folacin\)](#).
6. Food Fortification Initiative. [Corn Masa in the US: Supply Chain, Market, and Fortification](#). Food Fortification Initiative; 2024.
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12. [Prevention of neural tube defects: results of the Medical Research Council Vitamin Study](#). MRC Vitamin Study Research Group. *Lancet*. 1991;338(8760):131-137.
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14. Stallings EB, Isenburg JL, Rutkowski RE, et al. [National population-based estimates for major birth defects, 2016-2020.](#) *Birth Defects Research*. 2024;116(1).
15. Wang A, Fothergill A, Yeung LF, Crider KS, Williams JL. [Update on the impact of voluntary folic acid fortification of corn masa flour on red blood cell folate concentrations—National Health and Nutrition Examination Survey, 2011–March 2020.](#) *Birth Defects Research*. 2024;116(3):e2321.
16. WHO, FAO, UNICEF, GAIN, MI, FFI. [Recommendations on wheat and maize flour fortification meeting report: interim consensus statement.](#)