



MAHA and the "Inverted Food Pyramid"

Scott Montgomery

Director, Food Fortification Initiative
scott.montgomery@ffinetwork.org



Enhancing Grains for Healthier Lives



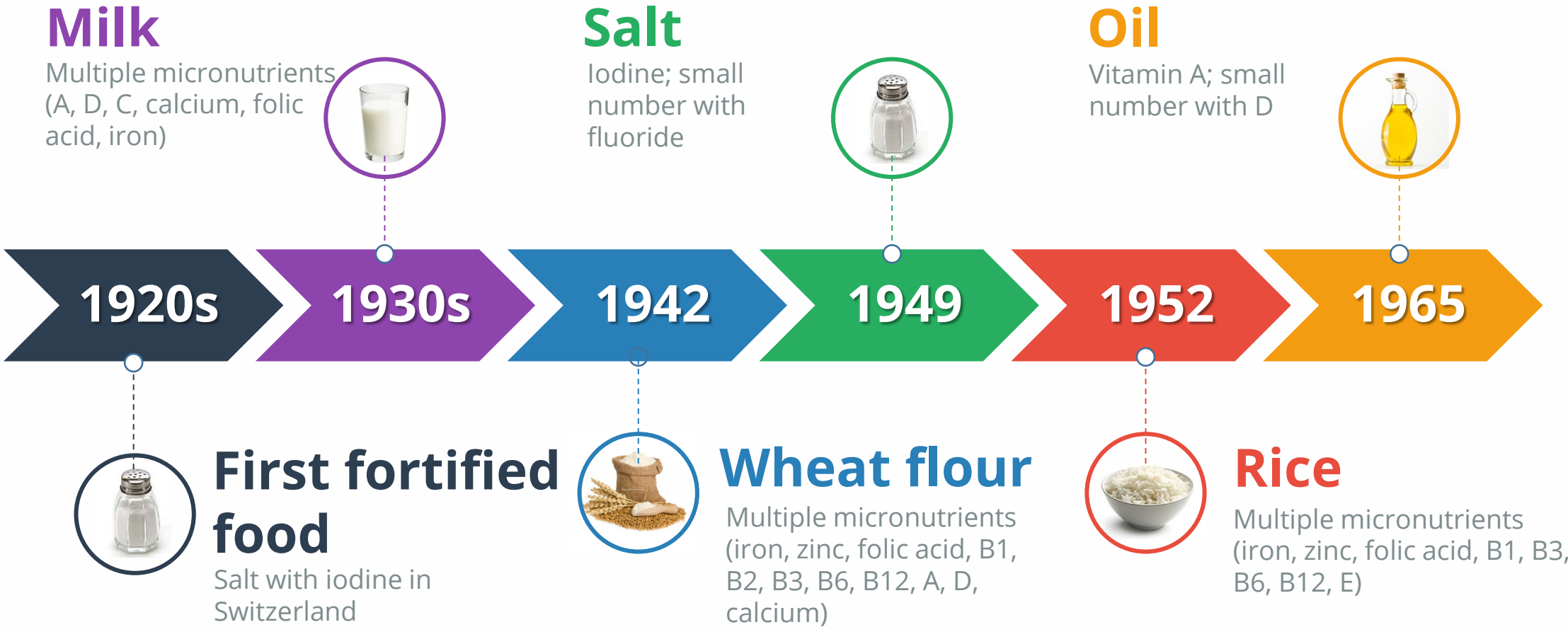
About the Food Fortification Initiative (FFI)

- Non-profit organization that provides technical assistance to fortify/enrich industrially milled wheat flour, maize flour, and rice
- 20+ years experience
- Based in Atlanta, GA, USA

FFI'S UNIQUE MODEL



Food Enrichment and Fortification Has Been Practiced for 100+ yrs



Cereal Grain Enrichment in the US

A win for Americans' health

Fortification of wheat and dry corn products:

- ✓ Is good for everyone: reduces risk of heart disease, cancer, anemia, and more
- ✓ Prevents over 1,000 serious birth defects of the brain and spine in the US each year²



Anencephaly occurs when the brain does not form. (Image: CDC)



Spina bifida occurs when the spinal cord does not close completely. (Image: CDC)

It Is Very Difficult to Eat Enough Food Folate to Prevent Birth Defects

	Dietary folate equivalents (micrograms)
23 spears cooked asparagus	460
4 cups raw spinach	440
2 cups cooked black beans	420
2 slices of beef liver	370
48 fresh strawberries	480
4.5 cups cooked broccoli	450



Without folic acid, women need 450 micrograms of dietary folate equivalents daily to prevent neural tube defects

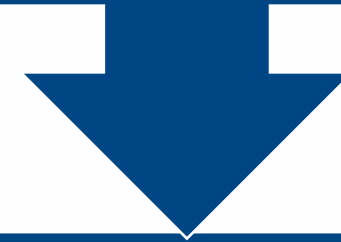
Cooking destroys folate, and certain cooking methods (e.g., draining water) will remove more folate than others.

Supplementation Recommendations Alone Are Not Effective

Why doesn't supplementation alone work?

- 50% of all pregnancies are unplanned
- Neural tube defects form in the first 4 weeks of pregnancy, often before a woman knows she's pregnant

Recommendations on folic acid supplementation resulted in “no detectable improvement” in incidence of neural tube defects



All women capable of becoming pregnant are encouraged to

take folic acid supplements

AND consume food fortified with folic acid

Botto et al. 2005

How are US dietary guidelines usually created?

- Guidelines are issued every five years, based on recommendations from an advisory committee made up of nutrition professionals
- Most recent committee recommendations mention that pregnant people need to get enough folate
- Most recent guidelines disregarded a number of the recommendations from the advisory committee, such as those on protein intake

What are the dietary guidelines used for?

- Previously: to guide health professionals and nutrition policymakers as on nutrition advice
- Current version: to guide dietary habits of general public
- Inform federal nutrition programs

Current Guidelines Are Vague and Can Be Contradictory

- “Prioritize fiber-rich whole grains.”
- “Significantly reduce the consumption of **highly processed, refined** carbohydrates, such as white bread, ready-to-eat or packaged breakfast options, **flour tortillas**, and crackers.”
- For older adults: “When dietary intake or absorption is insufficient, fortified foods or supplements may be needed under medical supervision.”



New Dietary Guidelines vs Actual Diets

Dietary Guidelines

1. Emphasis on supplementation
2. Eat enriched foods “under medical supervision”
3. Reduce consumption of refined grains (e.g., white bread and flour tortillas)

Reality

1. Most people do not take supplements as recommended
2. Enrichment standards formulated to be safe and effective for all Americans
3. Despite years of whole-grain recommendations, consumers prefer refined grain options

Dietary Guidelines Are Aspirational

- “In general, US dietary intakes do not align with recommendations in the Dietary Guidelines for Americans”
- People eat what they can afford and what fits with their lifestyle. Enrichment adds nutritional value to foods that people already eat
- Whole grain consumption is growing, but still represents a minority of the flour produced



Image: Microsoft stock photo

MAHA, Cereal Grain Consumption, and Enrichment

- The Make America Health Again (MAHA) movement perceives European diets as healthy.
- Europeans eat a significant amount of wheat products.
- Europe experiences extremely high rates of neural tube defects. Most grain products are unenriched.

Consumption of wheat flour products in Western Europe	
Country	Grams per person per day
Denmark	176
France	211
Italy	272
Portugal	200
Spain	183
UK	233
USA	169

Data source: FAOSTAT



People with a MTHFR variant can safely consume folic acid

No matter which MTHFR genotype a woman has, she can increase her blood folate concentration to a level to help prevent a neural tube defect by consuming 400 mcg of folic acid each day before and during early pregnancy.

Scan for
more
information



[Crider et al. 2019](#)

What FFI Is Doing

- Working with producers through Millers for Nutrition (M4N) to educate the public on the health benefits of fortified foods
- Advocating to the American Bakers Association for continued use of fortified flours
- Coordinating with other public health partners to continue to emphasize the public health gains in the US due to fortification

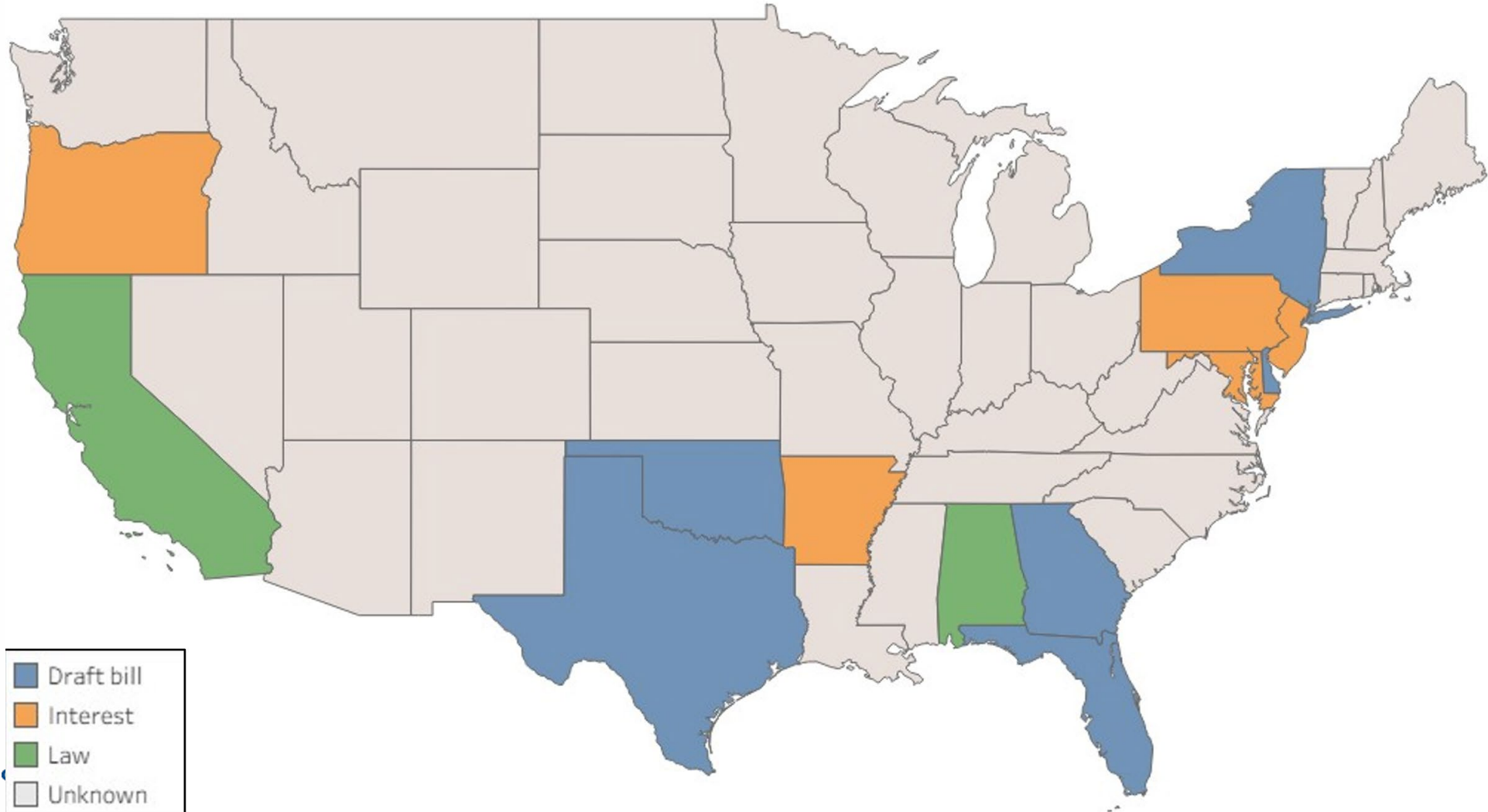


Image: Microsoft stock photo



**Millers
for
Nutrition**

Masa Enrichment – US State Mandates





Enrichment and Fortification Is a Health Win for Everyone

We all have a duty to fight misinformation

Questions?

- As a non-profit organization, our concern is ensuring people have access to healthy foods and helping ensure a level playing field for producers
- Feel free to come discuss any comments or concerns – we are at the Miller Milling booth

Check out
our website



Enhancing Grains for Healthier Lives

scott.montgomery@ffinetwork.org