



**Building an
equitable and sustainable
WI Kernza Supply Chain:**

*Balancing the needs and growth
of Supply and Demand*



Average Commodity Grain Farm-gate Price

(pre-cleaned, pre-processed)

USDA-reported Farm-gate Grain Prices

	2020 - 2024	
WI Corn 56 lbs/bu	\$3.26 - \$7.12/bu	\$0.06- \$0.13/lb
<i>US Avg</i>	<i>\$3.41-\$7.09/bu</i>	<i>\$0.06-\$0.13/lb</i>
MN Spring Wheat 60 lbs/bu	\$5.31-\$9.01/bu	\$0.09-\$0.12/lb
<i>US Avg</i>	<i>\$4.73-\$8.80/bu</i>	<i>\$0.08-\$0.15/lb</i>
MN Malting Barley 48 lbs/bu	NDA	NDA
<i>US Avg</i>	<i>\$4.92-\$7.66/bu</i>	<i>\$0.10-\$0.16/lb</i>

Sources:

2024, NASS. *Agricultural Prices: Farmers Received*. National Agricultural Statistics Service (NASS), Agricultural Statistics Board, United States Department of Agriculture (USDA). 27 September 2024.

2023, NASS. *Agricultural Prices: Farmers Received*. National Agricultural Statistics Service (NASS), Agricultural Statistics Board, United States Department of Agriculture (USDA). 31 October 2023.

2020, NASS. *Agricultural Prices: Farmers Received*. National Agricultural Statistics Service (NASS), Agricultural Statistics Board, United States Department of Agriculture (USDA). 30 October 2020.

USDA-reported Farm-gate Grain Prices

WI Corn 56 lbs/bu	\$3.26 - \$7.12/bu	\$0.06- \$0.13/lb
----------------------	--------------------	-------------------

USDA-reported Farm-gate Grain Prices

WI Corn 56 lbs/bu	\$3.26 - \$7.12/bu	\$0.06- \$0.13/lb
----------------------	--------------------	-------------------

Income				
	220 Yield	\$ 4.00 price		\$ 880.00
Variable Expenses				
Seed			\$ 125.00	
Fertilizer			\$ 170.00	
Chemicals			\$ 100.00	
Fuel			\$ 25.00	
Repairs and maintenance			\$ 40.00	
Supplies			\$ -	
Utilities			\$ 5.00	
Crop drying and storage			\$ 30.00	
Hauling and marketing			\$ 20.00	
Crop insurance			\$ 20.00	
Labor - hired			\$ -	
Operating interest			15	
	Total variable expenses		\$ 550.00	\$ 550.00
Overhead Expenses				
Land charge (rent or opportunity cost)			\$ 250.00	
Economic depreciation of capital assets			\$ 50.00	
Insurance,building repairs, taxes			\$ 20.00	
interest on farm term loans				
Return on farmer's equity			\$ 100.00	
Return on unpaid labor/management			\$ 50.00	
	Total overhead expenses		\$ 470.00	\$ 470.00
	Return per acre			\$ (140.00)
	Breakeven price to cover variable costs		\$ 2.50	
	Breakeven price to cover ALL costs		\$ 4.64	

USDA-reported Farm-gate Grain Prices

WI Corn 56 lbs/bu	\$3.26 - \$7.12/bu	\$0.06- \$0.13/lb
----------------------	--------------------	-------------------

WI Commodity Grain Growers are Losing Money, even *WITH* subsidies and crop insurance benefits

Income				
	220 Yield	\$ 4.00 price		\$ 880.00
Variable Expenses				
Seed			\$ 125.00	
Fertilizer			\$ 170.00	
Chemicals			\$ 100.00	
Fuel			\$ 25.00	
Repairs and maintenance			\$ 40.00	
Supplies			\$ -	
Utilities			\$ 5.00	
Crop drying and storage			\$ 30.00	
Hauling and marketing			\$ 20.00	
Crop insurance			\$ 20.00	
Labor - hired			\$ -	
Operating interest			15	
	Total variable expenses		\$ 550.00	\$ 550.00
Overhead Expenses				
Land charge (rent or opportunity cost)			\$ 250.00	
Economic depreciation of capital assets			\$ 50.00	
Insurance,building repairs, taxes			\$ 20.00	
interest on farm term loans				
Return on farmer's equity			\$ 100.00	
Return on unpaid labor/management			\$ 50.00	
	Total overhead expenses		\$ 470.00	\$ 470.00
	Return per acre			\$ (140.00)
	Breakeven price to cover variable costs		\$ 2.50	
	Breakeven price to cover ALL costs		\$ 4.64	

WI Brewer's perspectives:

First impressions of a “sustainable price” for inclusion of WI Kernza into Product Lines

Anonymous Field Day RSVP Survey, Nov 2024

Brewer 1	\$0.30-\$0.60/lb (whole grain or steam-flaked) <i>*depending on inclusion rates</i>
Brewer 2	\$0.65-\$0.95/lb (steam-flaked)
Brewer 3	\$1.00/lb or less (steam-flaked)
Brewer 4	\$1.00-\$3.00/lb (whole grain, cracked or flaked)

Anonymous Field Day RSVP Survey, Nov 2024

Brewer 1	\$0.30-\$0.60/lb (whole grain or steam-flaked) <i>*depending on inclusion rates</i>	USDA Farm-Gate Price Malting Barley	\$0.10-\$0.16/lb
Brewer 2	\$0.65-\$0.95/lb (steam-flaked)		+
Brewer 3	\$1.00/lb or less (steam-flaked)	Cleaning/Processing Costs	~ \$0.20/lb
Brewer 4	\$1.00-\$3.00/lb (whole grain, cracked or flaked)		=
		Malting Barley Wholesale Whole grain	\$0.30-\$0.36/lb

WI Brewer's perspectives:

First impressions of a “sustainable price” for inclusion of WI Kernza into Product Lines

Anonymous Field Day RSVP Survey, Nov 2024

Brewer 1	<p>\$0.30-\$0.60/lb (whole grain or steam-flaked)</p> <p><i>*depending on inclusion rates</i></p>
Brewer 2	<p>\$0.65-\$0.95/lb (steam-flaked)</p>
Brewer 3	<p>\$1.00/lb or less (steam-flaked)</p>
Brewer 4	<p>\$1.00-\$3.00/lb (whole grain, cracked or flaked)</p>

Historical Perspective:

Lessons learned from the Early Commercialization of Kernza®

Regional Aggregator per lb Pricing Models: *Whole grain Kernza®*

	2020 - 2023			2024	
	Farm Gate	Wholesale		Farm Gate	Wholesale
Transitional/ Conventional	\$2.00 ¹⁰	\$2.70 ¹⁰ - \$7.50 ³		\$1.50 - \$2.00 ¹⁰	\$2.00 ⁹ - \$4.00 ⁵
Certified organic-ROC	NA	\$6.00 ² - \$9.50 ¹²		NA	\$3.00 ¹¹ - \$4.50 ^{9 11}
Regional Recommendations	Forever Green Initiative	The Land Institute		Forever Green Initiative	The Land Institute
Conventional	\$1.00 - \$2.00 ¹	\$2.00 ⁴		\$1.00 - \$2.00 ¹	\$2.00 ⁴
Certified organic-ROC	\$1.50 - \$2.50 ¹	\$3.00 ⁴		\$1.50 - \$2.50 ¹	\$3.00 ⁴

Average Specialty 'Ancient' grains per lb (wholesale, whole grain)

How does Kernza® compare?

	2020 - 2024
Kamut® (wheat)	<i>Hull-less; certified organic by trademark</i>
Conventional	-
Certified organic	\$1.16 - \$1.26 ^{1 2}
Einkorn (wheat)	<i>Requires dehulling</i>
Conventional	NA
Certified organic	\$2.60 ³ - \$4.48 ⁴
Spelt (wheat)	<i>Requires dehulling</i>
Conventional	\$2.32 ⁵
Certified organic	\$2.97 ⁶
Quinoa	<i>Requires dehulling & washing saponins</i>
Conventional	\$1.45 - \$2.64 ⁷
Certified organic	\$3.05 ⁸

Average De-Hulled Specialty Grain,
per lb whole grain, wholesale

Conventional - **\$1.45 - \$2.64**

Certified Organic - **\$2.60 - \$4.48**

How does Kernza® compare?

Average De-Hulled Specialty Grains *per lb whole grain, wholesale*

Conventional - **\$1.45 - \$2.64**

Certified Organic - **\$2.60 - \$4.48**

2024 Avg Price De-hulled Kernza *per lb whole grain, wholesale*

Conventional - **\$2.00 - \$4.50**

Certified Organic - **\$3.00 - \$4.50**

Inclusion Rates & Multi-year supply chain contracts:

A missing key for “meeting in the middle”?

Regional Recommendations

KERNZA 2024

Cleaned

Whole Grain,
Wholesale

Conventional

\$1.00 - \$2.00¹

\$2.00⁴

Certified
organic-ROC

\$1.50 - \$2.50¹

\$3.00⁴

+

≠

Kernza Processing Costs

Cleaning

Dehulling

Cracked

Milled

Steam-flaked

< \$1.00/lb
(whole grain, cracked, flour or steam-flaked)

?



Let's Discuss...

