



Nu Life takes great pride in the fact that we process, clean, inspect, package and ship only the highest quality products from our manufacturing plant located in Scott City, Kansas. We've taken extra precaution to ensure that the products we extend to you can be enjoyed without worry of gluten or other allergen contamination.

# **OUR CERTIFICATIONS**



Nu Life Market is proud to have all of our products certified by the Gluten-Free Certification Organization (GFCO).



Our products are verified by the Non-GMO Project Standard. Their logo of approval allows our customers to make an informed choice about what they eat.



Our line of White Sorghum products that are Certified Organic by the USDA.



We are also proud to offer a line of White Sorghum products that are Certified Organic by CCOF.



Our equipment and processing

facilities are 100% dairy free.



Our equipment and processing facilities are 100% peanut free.



**Food Safety System** 

**Certification 22000** 

Our systems are

are FSSC compliant.

Our equipment and processing

facilities are 100% soy free.



All products are certified kosher Pareve by the Kashruth Division of the Orthodox Union.

Sorghum, an ancient grain, originated in Africa and is now grown in many other countries, including the United States. This ancient grain is naturally gluten free and Non-GMO! Sorghum is adapted for drought conditions, requiring less water, while reducing erosion and sequestering carbon.

"It is a naturally drought-tolerant grain that is gluten-free, nutrient-rich and incredibly versatile. Not only can you use it in salads and pilafs, you can also pop the whole grain the same way you pop corn! Sorghum flour also makes a good gluten-free flour substitute in many recipes. So make room on your shelf next to the quinoa for this up-and-comer."

~ Ellie Krieger for The Washington Post

With the growth of the gluten free food industry, sorghum has taken the spotlight. When sorghum is used as an ingredient in baking, cooking, or other applications it is able to mimic gluten containing items.



# WHAT IS SORGHUM?



With a fine, tender texture and delicate mouth feel sorghum is sure to delight any gluten free diet. Sorghum is also high in dietary fiber, giving an added nutritional benefit, as well.

The genes in the sorghum are what determine the color of the grain. Nu Life Market features white, burgundy, sumac, and black varieties. Black and sumac sorghum grains are very high in antioxidants, tannins, and G.I. stable anthocyanin.

The most common sorghum used for baking and as an ingredient is the white sorghum. It is naturally white in color therefore requires no bleaching process for it to be white in color.

Nu Life Market is fighting the acceleration of climate change using the most carbon friendly farming practices and dryland farming. Our environmentally friendly practices can work for your brands by reducing the water usage and  $CO_2$ emissions for your products.

Sorghum is a naturally climate friendly grain. Nu Life Market sorghum has a carbon footprint of -0.21 CO<sub>2</sub>e per kg.

(Data from EcoPractices 2020 On-Farm Practices Report for Nu Life Market)

### **CARBON REDUCTION**

Exchanging other grains for our sorghum will greatly reduce the carbon footprint of your products, a meaningful step in the fight against climate change

### **CARBON LOVING CROP** Sorghum captures 25% more carbon during respiration than grass-based food crops

# NO-TILL H<sub>2</sub>0 CO<sub>2</sub>e

AV PAPER NO DE

# REGENERATIVE AGRICULTURE

- Roots stay in the ground, sequestering carbon in the soil
- Our farmers are making a positive impact on the soil health in their fields
- Utilizes moisture from natural rainfall reducing or eliminating the need for irrigation.
- Erosion on Nu Life's farms is 83% less then than the national average

e Market Sorghum Fields, Kans

# CO,e $H_20$

TILL

## TRADITIONAL TILLAGE

- Surface carbon is oxidized
- Damages the soil microbiome, reducing available nutrients to the plant
- Promotes water evaporation
- Increases soil erosion

# SUSTAINABILITY



LESS WATER USED Utilizing dry land farming preserves water for future generations

### LIFE AFTER HARVEST

Stalks left in the field after harvest reduce wind erosion and provide a habitat for wildlife

### **DEEP ROOTS** Sorghum's deep & fibrous

roots mine water and build the soil after harvest

## FARM TO FAMILY GUARANTEE

We take food allergies as seriously as you do. Our Farm to Family Food Safety Program ensures that all our products are free of gluten, dairy, peanuts, and soy. This guarantee is supported by internal and third party analysis before shipping.

## VERTICAL INTEGRATION

Nu Life Market is vertically integrated to achieve the highest quality of sustainable, allergen free, nutritional boosting ingredients. As one of the largest dedicated gluten free flour mills in the United States, we control all aspects of milling to produce a custom particle size, from whole grain, fine bakery flour, to functional ingredients.

### **IP PROGRAM**

Our quality is higher than our competitors due to the Food Safety and IP Programs we have in place. Sorghum has thousands of available varieties and many are not suited for human consumption. Nu Life Market has spent years researching and growing the varieties that best meet the specific needs of the food industry. Our IP program ensures that only select varieties are grown and harvested for our customers. We sell the safest and highest quality grain available.

# **FIELD SELECTION** Select farms follow strict practices to preserve and ensure that all of the sorghum grain is gluten free.

MILLING All grains are milled and packaged in our dedicated gluten free, dairy free, and peanut free facility.

### PACKAGING

We designed our gluten free flour and grain packaging to be convenient to use while extending shelf life.

**GRAIN PRODUCTION** Our dedicated gluten free equipment ensures a safe, gluten free harvest and transportation

Farm

Sorghum is high in phenolic compounds that can add health benefits not found in other fruits, vegetables, and grains. The darker sorghums, in particular, have high levels of antioxidants, comprised of 3d-anthocyanins, which are unique to sorghum. Several sorghum varieties are part of current NIH studies.



**Good Source** of Vitamins & Minerals



**Highest Food** Source of Antioxidants

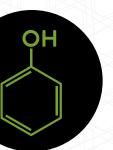
# **HEALTH BENEFITS**



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Prebiotic



Low Glycemic Index

### Functional **Phenolic Compounds**

"But unlike some good-for-you grains, it's actually good... It's rich in iron, zinc, B vitamins, and phytochemicals, and is drought-tolerant, growing well in drier regions of the U.S. making it an environmentally sound choice, too.'

~ Vogue

Add depth and dimension to your gluten free food products. Each of our sorghum varieties has its own nutrient, texture, and flavor profiles.

### WHITE SORGHUM

White sorghum is a sustainable ancient grain that is grown using fewer natural resources. Our non-GMO grain is high in dietary fiber making it ideal for use in numerous gluten free products.



### WAXY BURGUNDY SORGHUM

Waxy burgundy sorghum is a unique sorghum variety with a lower gelatinization temperature and higher amylopectin starch levels than traditional sorghum. This grain cooks faster and is more resistant to retrogradation. Waxy flour can be used to improve freeze-thaw stability and moisture retention in baked goods.

### **BURGUNDY SORGHUM**

Burgundy sorghum contains similar antioxidants to those found in red wine. This gluten free sorghum bran ingredient naturally has the potential health benefits of fiber plus enhanced volumes of antioxidants.

### PEARLED GRAIN SORGHUM

Our pearled sorghum grain is an excellent alternative to couscous, quinoa, and pasta. Removing the bran layer reveals the bright white sorghum grain and also reduces the cook time. Pearled sorghum can be infused with numerous flavors, transforming an ordinary entree.

Cut sorghum grain is an excellent gluten free alternative to wheat-based hot cereals. It is also the ideal granulation for use in multicomponent cereal flakes.

### SUMAC SORGHUM

Sumac sorghum has no rival when analyzed for its total volume of antioxidants. This concentrated high antioxidant, high fiber gluten free grain ingredient has exhibited excellent antiinflammatory characteristics.

### **BLACK SORGHUM**

Black sorghum provides fiber, protein, and antioxidants in a variety of sweet and savory baked goods. This high antioxidant, high fiber gluten free sorghum grain can be readily used to create artisan breads with a dark color.

# WHOLE GRAIN FLOUR

Our whole grain sorghum flour has a super fine granulation and can be used at high levels (65%-70%) in gluten free flour blends when blended with starches. It's neutral flavor makes it perfect for breads, rolls, cookies, and pizza crusts.

## **PEARLED GRAIN FLOUR**

# **MILLING OPTIONS**



Nu Life Market's milling capabilities can provide the texture you need for your project. Common options include:

### CUT SORGHUM GRAIN

### SORGHUM MEAL

Our sorghum meal is the ideal granulation for single screw extrusion. Pearled grain meal will provide the most expansion for a light, airy texture. Whole grain meal is a fantastic substitute to corn meal in bakery applications.

Our white pearled grain sorghum flour is milled from our pearled sorghum grain and has a neutral flavor and light color. This creates a fine texture and airy crumb structure ideal for pastries, cakes, and baked goods.

### SORGHUM BRAN

Our sorghum bran is naturally gluten free and is an excellent source of dietary fiber and can be used in baked goods, sauces, shakes, or blended into seasonings.

# SORGHUM PASTA



Sorghum pasta boasts an al dente bite, without the gummy texture of corn or the starchy tooth pack of typical gluten free pasta. Sorghum pasta has a neutral flavor profile - the perfect base for any sauce or recipe! Sorghum pasta is available dried, fresh, or frozen in many different shapes and forms.



IQF SORGHUM GNOCCHI



FROZEN WAXY BURGUNDY GRAIN



COOKED WAXY BURGUNDY GRAIN

Cooking whole grain sorghum can take time and slow down your manufacturing process. Firm on the outside and soft on the inside, our IQF sorghum has a texture unlike any other IQF grain that's perfect in frozen meals, salads, or food service. Can be made with any variety of sorghum for diverse color, texture, and nutrition. Individually quick frozen sorghum grain can be heated quickly in a sauté pan, perfect for restaurants and frozen meal applications.

IQF SORGHUM RAVIOLI

# **IQF SORGHUM**



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Using exclusive patented technology, whole grains and whole pulses are pre-cooked to create clean label ingredients with multiple functional uses.

- Improves flavor profile of pulse ingredients
- Forms stable gels in plant based meat allowing for moisture retention and binding
- Creates vegan milk alternatives without enzymes
- Increases processing efficiency and expansion in extruded products
- Thickens and emulsifies sauces

# Individual grains and pulses as well as custom blends available.

- Chickpea
- Green pea
- Yellow pea
- Red lentils
- Navy bean

• Pinto bean

- Oat
- Sorghum





# **UltraLIFT<sup>™</sup> FLOUR**

UltraLIFT™ is a clean label ingredient designed to improve the texture, volume, and processability of gluten-free bread formulations. UltraLIFT™ is labeled as whole grain sorghum flour and has many functional properties.

At a low usage rate UltraLIFT<sup>™</sup> is an easy addition to your bakery application that will yield big results.

- Improve product volume
- Increases dough elasticity
- Improve crumb structure
- Reduce or eliminate the need for gums
- Makes baked goods more moist and tender
- High oil and water retention capacity
- Stabilizes product volume after baking

Customers have see the following benefits Gluten-free yeast breads double in volume after resting Sweet baked goods have a more tender bite Vegan baked goods increase and maintain volume Improved dough extensibility for pizza and crackers

- Extra lift in pancakes and waffles
- Lighter density in high protein and high fiber formulas

SmartFRY<sup>™</sup> is a unique sorghum product that can naturally reduce oil absorption, increase crispiness, hold in moisture, enhance flavor and increase browning when included in a coating or breading formula. The proprietary milling process of the flour ensures a smooth, non-gritty texture to the finished product, and results in less flour falling to the bottom of the fryer during processing. SmartFRY<sup>TM</sup> can be added to any breading system for significant functional improvements while labeling as sorghum.

Customers have seen the following benefits:

- Reduced oil absorption
- Increased crispiness
- Increased moisture
- Increased browning

"Sorghum tempura yielded a lower fat content, higher moisture content, and darker color than the control samples after frying. With its more favorable composition after frying and its high acceptability by consumers participating in the sensory panel, the sorghum tempura batter yielded very promising results in terms of reducing oil absorption and increasing consumer preference."

> -Reducing Oil Absorption in Battered Products with SmartFRYTM Flour Kansas State University Food Science Institute, April 2018

# SmartFRY<sup>™</sup> FLOUR

# **CRISPS & FLAKES**

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Discover the limitless possibilities sorghum has to offer. Sorghum flakes, crisps and popped sorghum add unique texture in bars, cereals and granola. As a good source of iron, fiber, and protein it can boost nutrition while also adding intrigue to the food. With strategic partnerships with several flake and crisp companies, we can help make your idea a reality.

> SNACKS CRISPS CHIPS CEREALS BARS FLAKES PUFFS CO-EXTRUDES

PLICATIC

"The popularity of quinoa – and its ongoing status as an ancient supergrain – is demonstrated by its increased popularity across categories, from a side dish to a snack. Sorghum is poised to show a similar growth trajectory as a versatile, gluten free grain with a long history." ~ MINTEL





# **EXTRUSIONS**



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We offer a full line of bulk sorghum extrusions. With specific particle sizes tailored for specific textures, our sorghum functions efficiently in both single and twin screw extruders.

# POPPED SORGHUM

Popped to perfection, with the right amount of crunch, Nu Life Market's Popped Sorghum is sure to be the snack of choice. Our proprietary variety and process creates a tender kernel. Popped Sorghum is ideal for bars, snack mixes, and numerous other applications. Try this high fiber snack in your products today.



Sun Life Sunflower Paste is the perfect peanut free ingredient. This easy to use no sugar added product allows you to control the sweetness and flavor profile. With a robust roasted flavor, this ingredient will incorporate well into any peanut free product.





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# SUNFLOWER PASTE

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