

# The Korean Perspective

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**U.S. GRAINS**  
COUNCIL

In South Korea, there are four corn processing companies:

1. Samyang
2. Daesang
3. CJ
4. Ingredion Korea.

They have equal market share in South Korea sugar (HFCS, corn syrup, glucose etc) and starch market.



## Overview of Korean Corn Processing Industry

Recently, the South Korea Government announced the sugar reduction policy for the health of the people.

It has had a negative influence on sugar consumption. Sugar (it means sucrose) sales have experienced a 10% year-on-year decline.

The sugar industry has been hit hard by this policy change.



On the other hand, the Corn Processing companies are manufacturing a variety of functional sugars from corn.

They correspond to the sugar reduction policy as functional sugars such as oligosaccharides, sugar alcohol, allulose.

Allulose is one kind of rare sugars. It exists small quantities in nature. It's zero calorie sweetener. Currently, it has been developed and made from corn in South Korea.



# Samyang

In 2015, Samyang has been processed 600,000 tons (2.4 million bushels) of corn.

The four corn processing companies in South Korea consume about 2.4 million tons of corn annually.

However, the origin of the corn varies year-to-year.



Before 2011, U.S. Corn accounted for 60% of total imports in South Korea.

As a result of the drought in the United States in 2012, U.S. market share declined as a result of a rise in U.S. Corn prices.

Instead, South America (Brazil), Europe (Ukraine, Romania) corn has risen to more than 80% market share at present.



Two factors are important to South Korea corn users.

## 1. Price.

To pursue profits in a very competitive and stagnant sugar market in South Korea, companies have no choice but to prefer lower price of corn. Companies prefer price over quality.

## 2. GMO

The other point is whether corn is GMO or not. South Korean consumers prefer non-GMO. There is no legal issues and even though there are good scientific safety record, the consumer prefers the Non-GMO corn. Our company has two corn processing plants to separate GMO corn and Non-GMO.



Generally, we feel that US corn is good quality compared to most other origin corn.

It is suitable for our corn processing facility. It is easy to separate starch, gluten, husk and germ from corn.

However, in 2015 according to our analysis results, U.S corn has too much broken corn (6%), damaged corn (8%), foreign material and dust (1.3%) compared to other origins.



		Moisture (%)	Volume Weight	Damaged Corn	Broken Corn	Protein (%)	Lipid (%)	Ash (%)	Foreign Material (%)	Dust (%)
Spec.		15 ↓	695 ↑ 685 ↑	5 ↓	3 ↓					1 ↓
US	Avg.	<b>14.38</b>	726.26	<b>8.16</b>	<b>6.13</b>	8.10	3.73	1.77	<b>0.57</b>	<b>0.76</b>
	Std. Dev.	0.27	9.42	5.31	3.20	0.30	0.93	0.76	0.51	0.42
Brazil	Avg.	12.76	770.24	4.30	2.88	7.55	3.78	2.18	0.61	0.42
	Std. Dev.	0.34	11.54	1.55	2.03	0.52	0.44	0.90	0.31	0.25
Ukraine	Avg.	13.60	720.12	3.93	5.67	8.13	3.27	1.70	0.56	0.55
	Std. Dev.	0.24	14.75	1.89	3.21	0.59	0.21	1.04	0.34	0.26

Brazil corn is relatively lower quality than U.S. corn. It was difficult to separate starch and gluten. We process Brazil corn by adjusting corn steep condition and gluten separation condition.

Ukraine corn has a lot of dust, foreign material. We process it by mixing with other origin corn and screening the corn.

Consequently, U.S. corn generally has very good quality and workability.



Thank you!

