

# **Supply and Demand of Modified Food Starch in China**

**The Fourth Edition**

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## 1. Introduction

***Supply and Demand for Modified Food Starch in China***, finished in Jan. 2020, is CCM's fourth edition report on China's modified food starch industry. This intelligent report has attached importance to the following parts:

- Overview of China's corn processing industry chain in 2018 and its development trend, covering volume flow from corn to corn starch, sweeteners and eventually modified starch; corn starch by-products' supply and demand and their pricing mode;
- Supply (capacity, output and key producers) of modified food starch in China, 2011–2018;
- Consumption by application and by product, 2018;
- Import and export of modified food starch, 2014–2018;
- Forecast on China's modified food starch supply & demand and key influencing factors.

### **Approach for the report**

This report has been drafted by diverse methods which are as follows,

#### ✓ **Desk research**

Desk research includes access to published magazines, journals, government statistics, industry statistics, customs statistics, association seminars as well as information on the Internet. Lots of work has gone into the compilation and analysis of the information obtained. Where necessary, information has been checked and discussed internally related to market structure and performance characteristics as key producers, key end users, production levels, end user demand and so on.

#### ✓ **Telephone interviews**

CCM has conducted extensive telephone interviews and site visits in order to survey the market for modified food starch in China.

The interviewees include the following groups:

- Key producers
- Key traders
- Raw material suppliers
- Associations involved

✓ **Data processing and presentation**

The data collected and compiled was variously sourced from:

- CCM's database
- Published articles from periodicals, magazines, journals and third party databases
- Statistics from governments and international institutes, e.g. China Customs
- Telephone interviews with domestic producers, service suppliers and government agencies
- Third-party data providers
- Comments from industrial experts
- Information from the Internet

The data has been combined and cross-checked to ensure that this report is as accurate and methodologically sound as possible. Throughout the process, a series of discussions were held within CCM to systematically analyse the data and draw appropriate conclusions.

## **2. Executive summary**

China's MFS has witnessed faster growth in both output and consumption than modified starch during 2011–2018, with consumption CAGR of XXX% and output CAGR of XXX% in this period. Accordingly, the share of MFS in modified starch in both output and consumption has been expanding to about XXX and about XXX in 2018 respectively.

China's MFS output showed positive growth in 2013–2016, but witnessed negative growth in 2017–2018 though China's demand for MFS kept increasing. The share of domestic output in total consumption decreased to about XXX% in 2017 and further down to XXX% in 2018.

China's MFS operating rate was relatively stable at over XXX% in 2015–2018. The rate is expected to improve with more and more small producers being phased out. Though it is not high, some producers are still expanding their modified starch capacity, like Ingredion China, Cargill Bio-Chemical, Roquette China and etc.

China's MFS production, distributed geographically in about XXX regions, has been increasingly concentrated to two types of regions: firstly, regions with abundant supply of raw materials for MFS production, and secondly, regions where target clients of MFS are located.

Cassava-based MFS and corn-based MFS are the two main types in China, with the respective output accounting for XXX and XXX of the total, while that of potato-based MFS, mainly used in high-end market, accounted for less than XXX in 2018. The trends for MFS produced with different raw materials varied largely. The output of cassava-based MFS kept decreasing in 2016–2018; the output of potato-based MFS kept increasing in the same period; the output of corn-based MFS first increased but then went down.

China has witnessed a fast growth in the import of MFS in recent years, with the import volume

increasing from around XXX tonnes in 2014–2016 to over XXX tonnes in 2018. The imported products have posed a great challenge to domestic products, accounting for over XXX% of China's total consumption in 2018. China's MFS export only accounted for a small proportion of China's MFS output, XXX% during 2014–2017 by volume and about XXX% in 2018. The majority of China's local products were consumed in domestic market, which implies that though some progresses have been witnessed, the competitiveness of China's local supply has remained weak in the global market by far.

With XXX tonnes consumed in 2018, China's modified food starch consumption slowed down; the CAGR for 2016–2018 was XXX%, slipping from XXX% for 2014–2016. Among all application fields of modified food starch, noodles remained the largest one in China in 2018. Meat products, seasoning products and frozen food have their shares expanded on 2016-level, yet noodles and candies experienced the opposite.

There are 13 kinds of modified food starches approved in the National Food Safety Standard GB 2760-2014 for Uses of Food Additives in China. Among them, there are XXX main kinds of modified food starch in China. Starch acetate, acetylated distarch adipate and hydroxypropyl distarch phosphate are the top three modified food starches used in China by consumption volume.

Boosted by the robust domestic demand and considering strong competitiveness of imported products especially cassava-based MFS, China's MFS output and import is forecasted to grow stably in 2019–2024, with CAGRs of about XXX% and XXX% respectively, reaching XXX tonnes and XXX tonnes by 2024.



### 3. What's in this report?

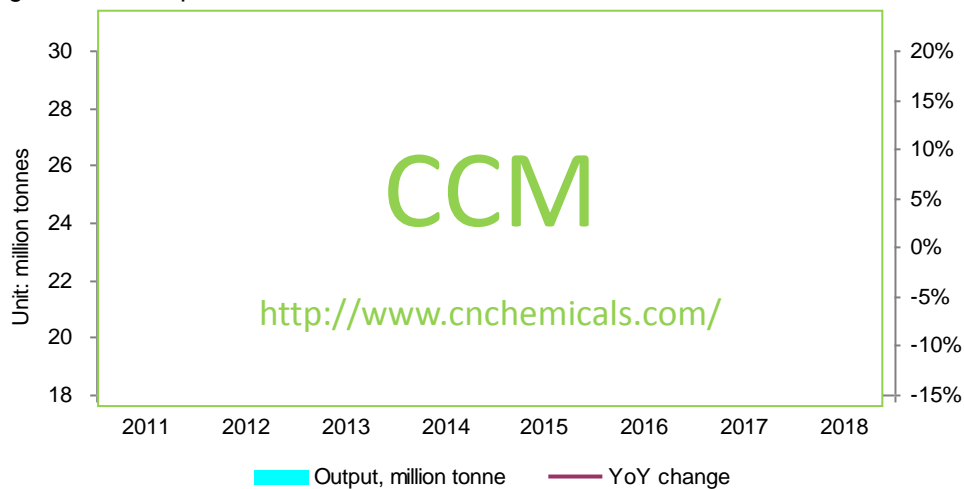
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## 1 Overview of value chain of corn processing industry in China 2018

### 1.1 China's corn processing industry chain overview by volume

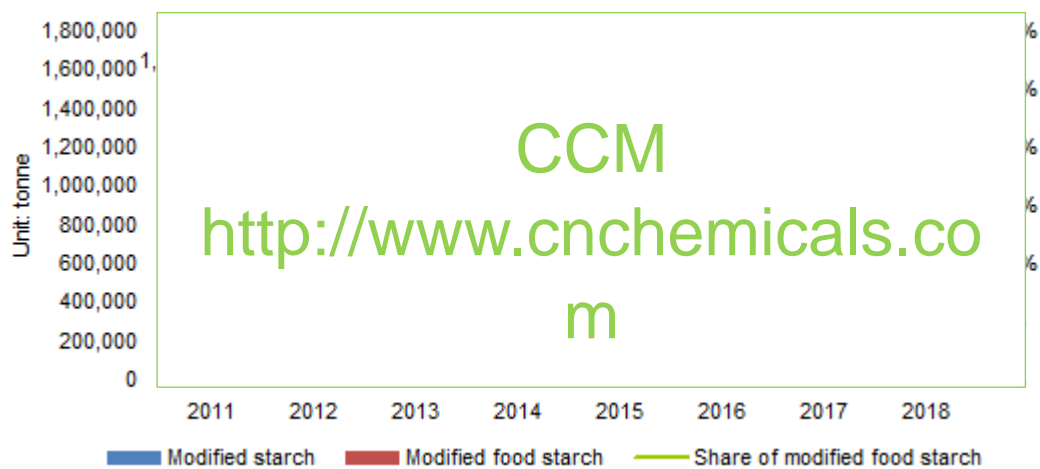
Figure 1.1-8 Output of corn starch in China, 2011–2018



Source: The China Starch Industry Association (CSIA)

### 2.1 Overview of modified food starch supply and demand in China in 2017–2018

Figure 2.1-2 Output of modified starch and modified food starch in China, 2011–2018



Source: China Starch Industry Association, CCM



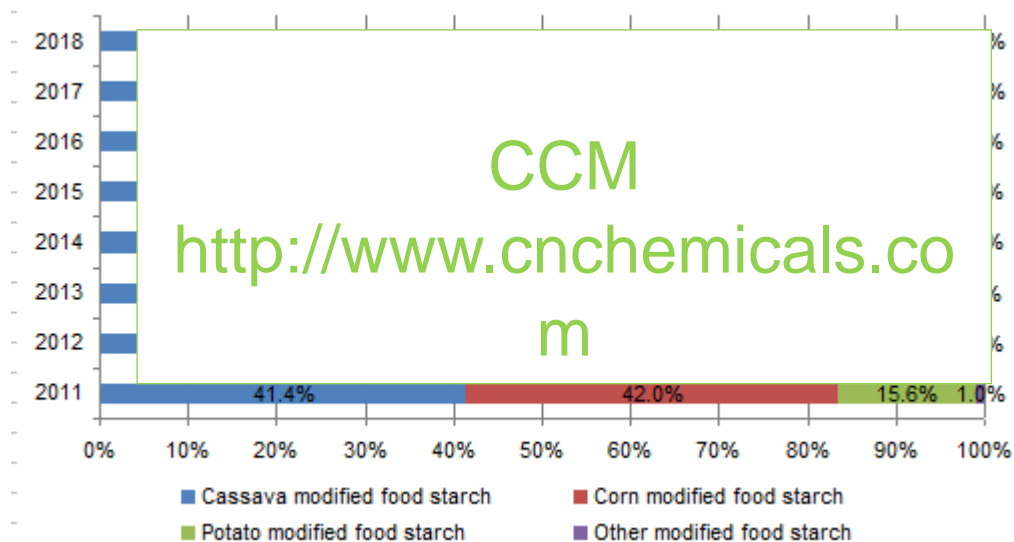
### 2.3 Production of modified food starch based on different raw materials in China

Table 2.3-1 Output of modified food starch by raw material in China, 2011–2018, tonne

Year	Cassava MFS	Corn MFS			Potato MFS	Other MFS	Total MFS
		Total	Dent corn- based	Waxy corn- based			
2011	XXX	XXX	XXX	XXX	XXX	XXX	XXX
2012	XXX	XXX	XXX	XXX	XXX	XXX	XXX
2013	XXX	XXX	XXX	XXX	XXX	XXX	XXX
2014	XXX	XXX	XXX	XXX	XXX	XXX	XXX
2015	XXX	XXX	XXX	XXX	XXX	XXX	XXX
2016	XXX	XXX	XXX	XXX	XXX	XXX	XXX
2017	XXX	XXX	XXX	XXX	XXX	XXX	XXX
2018	XXX	XXX	XXX	XXX	XXX	XXX	XXX

Source: CCM

Figure 2.3-1 Output share of modified food starch by different raw materials in China, 2011–2018



Source: CCM

### 2.5 Import of modified food starch in China in 2014–2018

Table 2.5-4 China's import volume, value and price of modified food starch by different raw materials in 2018

Raw material	Volume, tonne	Value, USD	Price, USD/t
Cassava-based	XXX	XXX	XXX
Potato-based	XXX	XXX	XXX
Corn-based	XXX	XXX	XXX
Not sure	XXX	XXX	XXX
<b>Total</b>	XXX	XXX	XXX

Source: China Customs & CCM

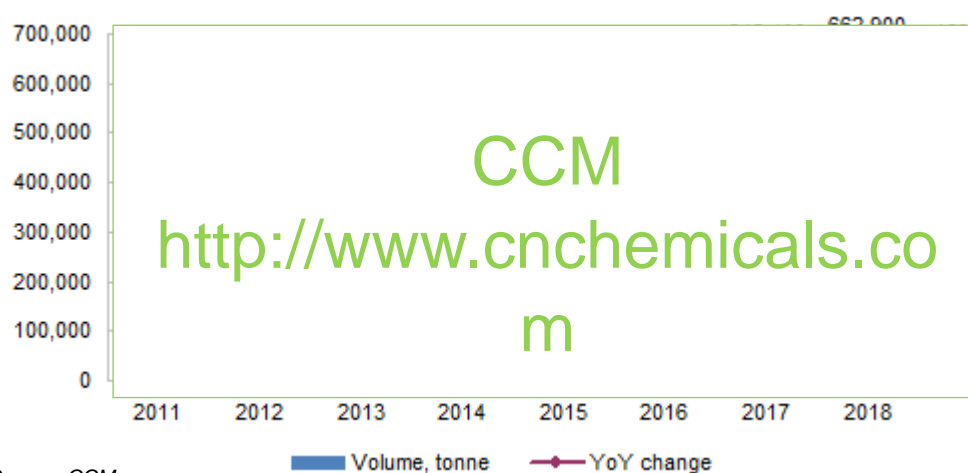
Table 2.5-7 China's import volume, value and price of modified food starch by import origin in 2018

Import origin	Volume, tonne	Value, USD	Price, USD/t	Share by volume	Share by value
Thailand	XXX	XXX	XXX	XXX	XXX
XXX	XXX	XXX	XXX	XXX	XXX
XXX	XXX	XXX	XXX	XXX	XXX
XXX	XXX	XXX	XXX	XXX	XXX
XXX	XXX	XXX	XXX	XXX	XXX
Others	XXX	XXX	XXX	XXX	XXX
<b>Total</b>	XXX	XXX	XXX	XXX	XXX

Source: China Customs & CCM

### 2.7.1 Modified food starch consumption in China by application

Figure 2.7.1 Consumption of modified food starch in China, 2011–2018



Source: CCM

Table 2.7.1-1 Main application fields of modified food starch used in and their consumption volume in China, 2018

No.	Application	Main modified food starch used	Main raw material	Consumption, tonne	Share
1	Noodles	XXXXXXXXXX	XXX	XXX	XXX
2	XXX	XXXXXXXXXX	XXX	XXX	XXX
...	XXX	XXXXXXXXXX	XXX	XXX	XXX
...	XXX	XXXXXXXXXX	XXX	XXX	XXX
...	XXX	XXXXXXXXXX	XXX	XXX	XXX
	Others	/	/	XXX	XXX
	<b>Total</b>	/	/	XXX	XXX

Source: CCM

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