

# **Vitamin Industry Trend in China 2017–2018**

**The Second Edition**

**April 2019**

**Researched & Prepared by:**

**Kcomber Inc.**

**Copyright by Kcomber Inc.**

**Any publication, distribution or copying of the content in this report is prohibited.**

## Contents

<b>Executive summary</b> .....	<b>1</b>
<b>Methodology and introduction</b> .....	<b>2</b>
<b>1 Overview of vitamin industry in China</b> .....	<b>4</b>
<b>2 Key vitamins in China</b> .....	<b>5</b>
2.1 Vitamin A .....	5
2.1.1 Capacity and output in China, 2017–2018.....	5
2.1.2 Manufacturer.....	6
2.1.3 Export.....	6
2.1.4 Price.....	7
2.1.5 Raw materials .....	8
2.1.6 Production technology .....	9
2.2 Vitamin E .....	9
2.2.1 Capacity and output in China, 2017–2018.....	9
2.2.2 Manufacturer.....	11
2.2.3 Export.....	11
2.2.4 Price.....	13
2.2.5 Raw materials .....	14
2.2.6 Production technology .....	14
2.3 Vitamin C.....	15
2.3.1 Capacity and output in China, 2017–2018.....	15
2.3.2 Manufacturer.....	16
2.3.3 Export.....	16
2.3.4 Price.....	18
2.3.5 Raw materials .....	19
2.3.6 Production technology .....	20
2.4 Vitamin B1 .....	21
2.4.1 Capacity and output in China, 2017–2018.....	21
2.4.2 Manufacturer.....	22
2.4.3 Export.....	22

2.4.4 Price.....	24
2.4.5 Raw materials .....	25
2.4.6 Production technology .....	25
2.5 Vitamin B2 .....	26
2.5.1 Capacity and output in China, 2017–2018.....	26
2.5.2 Manufacturer.....	28
2.5.3 Export.....	28
2.5.4 Price.....	30
2.5.5 Raw materials .....	31
2.5.6 Production technology .....	32
2.6 Vitamin B5 .....	33
2.6.1 Capacity and output in China, 2017–2018.....	33
2.6.2 Manufacturer.....	34
2.6.3 Export.....	35
2.6.4 Price.....	36
2.6.5 Raw materials .....	38
2.6.6 Production technology .....	38
2.7 Vitamin B6 .....	39
2.7.1 Capacity and output in China, 2017–2018.....	39
2.7.2 Manufacturer.....	40
2.7.3 Export.....	41
2.7.4 Price.....	42
2.7.5 Raw materials .....	44
2.7.6 Production technology .....	44
2.8 Vitamin B12 .....	45
2.8.1 Capacity and output in China, 2017–2018.....	45
2.8.2 Manufacturer.....	46
2.8.3 Export.....	47
2.8.4 Price.....	48

2.8.5 Raw materials .....	50
2.8.6 Production technology .....	51
2.9 Brief introduction of other vitamins .....	52
<b>3 Opportunities and suggestions.....</b>	<b>61</b>
<b>4 Company profile of major vitamin producers in China .....</b>	<b>63</b>
4.1 Zhejiang Garden Biochemical High-tech Stock Co., Ltd. ....	63
4.2 Zhejiang NHU Co., Ltd.....	64
4.3 Zhejiang Shengda Bio-pharm Co., Ltd.....	65
4.4 Jiangxi Tianxin Pharmaceutical Co., Ltd. ....	66
4.5 Brother Enterprises Holding Co., Ltd. ....	67
4.6 Xiamen Kingdomway Group Co., Ltd.....	68
4.7 CSPC Weisheng Pharmaceutical (Shijiazhuang) Co., Ltd. ....	69
4.8 Xinfa Pharmaceutical Co., Ltd.....	70
4.9 Jilin Beisha Pharmaceutical Co., Ltd. ....	71
4.10 Zhejiang Medicine Co., Ltd. ....	72

#### LIST OF TABLES

Table 2.1.1-1 Capacity and output of vitamin A in China, 2017–2018
Table 2.1.2-1 Information of vitamin A manufacturers in China, 2017–2018
Table 2.1.3-1 Exports of vitamin A from China, 2017–2018
Table 2.1.4-1 Annual average ex-works price of vitamin A in China, 2017–2018
Table 2.1.6-1 Comparison between two production routes of VA
Table 2.2.1-1 Capacity and output of vitamin E in China, 2017–2018
Table 2.2.2-1 Information of vitamin E manufacturers in China, 2017–2018
Table 2.2.3-1 Exports of vitamin E in China, 2017–2018
Table 2.2.4-1 Annual average ex-works price of vitamin E in China, 2017–2018
Table 2.3.1-1 Capacity and output of vitamin C in China, 2017–2018
Table 2.3.2-1 Information of vitamin C manufacturers in China, 2017–2018
Table 2.3.3-1 Exports of vitamin C from China, 2017–2018
Table 2.3.4-1 Annual average ex-works price of vitamin C in China, 2017–2018
Table 2.4.1-1 Capacity and output of vitamin B1 in China, 2017–2018
Table 2.4.2-1 Information of vitamin B1 manufacturers in China, 2017–2018
Table 2.4.3-1 Exports of vitamin B1 from China, 2017–2018
Table 2.4.4-1 Annual average ex-works price of vitamin B1 in China, 2017–2018
Table 2.5.1-1 Capacity and output of vitamin B2 in China, 2017–2018
Table 2.5.2-1 Information of vitamin B2 manufacturers in China, 2017–2018
Table 2.5.3-1 Exports of vitamin B2 from China, 2017–2018
Table 2.5.4-1 Annual average ex-works price of vitamin B2 (Riboflavin) in China, 2017–2018

Table 2.6.1-1 Capacity and output of vitamin B5 in China, 2017–2018  
Table 2.6.2-1 Information of vitamin B5 manufacturers in China, 2017–2018  
Table 2.6.3-1 Exports of vitamin B5 from China, 2017–2018  
Table 2.6.4-1 Annual average ex-works price of vitamin B5 (Calcium pantothenate) in China, 2017–2018  
Table 2.7.1-1 Capacity and output of vitamin B6 in China, 2017–2018  
Table 2.7.2-1 Information of vitamin B6 manufacturers in China, 2017–2018  
Table 2.7.3-1 Exports of vitamin B6 from China, 2017–2018  
Table 2.7.4-1 Annual average ex-works price of vitamin B6 in China, 2017–2018  
Table 2.8.1-1 Capacity and output of vitamin B12 in China, 2017–2018  
Table 2.8.2-1 Information of vitamin B12 manufacturers in China, 2017–2018  
Table 2.8.3-1 Exports of vitamin B12 from China, 2017–2018  
Table 2.8.4-1 Annual average ex-works price of vitamin B12 in China, 2017–2018  
Table 4.1-1 Basic info of Zhejiang Garden Biochemical High-tech Stock Co., Ltd.  
Table 4.2-1 Basic info of Zhejiang NHU Co., Ltd.  
Table 4.3-1 Basic info of Zhejiang Shengda Bio-pharm Co., Ltd.  
Table 4.4-1 Basic info of Jiangxi Tianxin Pharmaceutical Co., Ltd.  
Table 4.5-1 Basic info of Brother Enterprises Holding Co., Ltd.  
Table 4.6-1 Basic info of Xiamen Kingdomway Group Co., Ltd.  
Table 4.7-1 Basic info of CSPC Weisheng Pharmaceutical (Shijiazhuang) Co., Ltd.  
Table 4.8-1 Basic info of Xinfu Pharmaceutical Co., Ltd.  
Table 4.9-1 Basic info of Jilin Beisha Pharmaceutical Co., Ltd.  
Table 4.10-1 Basic info of Zhejiang Medicine Co., Ltd.

## LIST OF FIGURES

Figure 2.1.1-1 Product structure of vitamin A output by grade in China, 2017–2018  
Figure 2.1.3-1 Monthly exports of vitamin A from China, 2017–2018  
Figure 2.1.3-2 Export destination of vitamin A from China, 2018  
Figure 2.1.4-1 Monthly ex-works price of vitamin A in China, 2017–2018  
Figure 2.1.6-1 Production route of VA by Isler synthesis method  
Figure 2.2.1-1 Product structure of vitamin E output by grade in China, 2017–2018  
Figure 2.2.3-1 Monthly exports of vitamin E from China, 2017–2018  
Figure 2.2.3-2 Export destinations of vitamin E from China, 2018  
Figure 2.2.4-1 Monthly ex-works prices of vitamin E in China, 2017–2018  
Figure 2.2.6-1 Production route of VE by chemical synthesis  
Figure 2.3.1-1 Product structure of vitamin C output by grade in China, 2017–2018  
Figure 2.3.3-1 Monthly exports of vitamin C from China, 2017–2018  
Figure 2.3.3-2 Export destination of vitamin C from China, 2018  
Figure 2.3.4-1 Monthly ex-works prices of vitamin C in China, 2017–2018  
Figure 2.3.5-1 Monthly ex-works prices of 70% syrup sorbitol in China, 2017–2018  
Figure 2.3.6-1 Production route of VC by two-step fermentation method  
Figure 2.4.1-1 Product structure of vitamin B1 output by grade in China, 2017–2018  
Figure 2.4.3-1 Monthly exports of vitamin B1 from China, 2017–2018

- Figure 2.4.3-2 Export destination of vitamin B1 from China, 2018
- Figure 2.4.4-1 Monthly ex-works prices of vitamin B1 in China, 2017–2018
- Figure 2.4.6-1 Production route of VB1 by acrylonitrile formylaminomethyl pyrimidine route
- Figure 2.5.1-1 Product structure of vitamin B2 output by grade in China, 2017–2018
- Figure 2.5.3-1 Monthly exports of vitamin B2 from China, 2017–2018
- Figure 2.5.3-2 Export destination of vitamin B2 from China, 2018
- Figure 2.5.4-1 Monthly ex-works prices of vitamin B2 (Riboflavin) in China, 2017–2018
- Figure 2.5.5-1 Monthly ex-works prices of corn starch in North China, 2017–2018
- Figure 2.5.6-1 Production route of VB2 production by liquid fermentation method
- Figure 2.6.1-1 Product structure of vitamin B5 output by grade in China, 2017–2018
- Figure 2.6.3-1 Monthly exports of vitamin B5 from China, 2017–2018
- Figure 2.6.3-2 Export destination of vitamin B5 from China, 2018
- Figure 2.6.4-1 Monthly ex-works prices of vitamin B5 (Calcium pantothenate) in China, 2017–2018
- Figure 2.6.6-1 Production route of VB5 by chemical synthesis method
- Figure 2.7.1-1 Product structure of vitamin B6 output by grade in China, 2017–2018
- Figure 2.7.3-1 Monthly exports of vitamin B6 from China, 2017–2018
- Figure 2.7.3-2 Export destination of vitamin B6 from China, 2018
- Figure 2.7.4-1 Monthly ex-works prices of vitamin B6 in China, 2017–2018
- Figure 2.7.6-1 Production route of VB6 by chemical synthesis method
- Figure 2.8.1-1 Product structure of vitamin B12 output by grade in China, 2017–2018
- Figure 2.8.3-1 Monthly exports of vitamin B12 from China, 2017–2018
- Figure 2.8.3-2 Export destination of vitamin B12 from China, 2018
- Figure 2.8.4-1 Monthly ex-works prices of vitamin B12 (1% feed grade, 1% food grade) in China, 2017–2018
- Figure 2.8.4-2 Monthly ex-works prices of vitamin B12 (98% pharmaceutical grade) in China, 2017–2018
- Figure 2.8.5-1 Monthly ex-works prices of cane sugar in China, 2017–2018
- Figure 2.8.5-2 Monthly ex-works prices of corn starch in North China, 2017–2018
- Figure 2.8.6-1 Production route of VB12 by aerobic fermentation method
- Figure 2.9-1 Monthly ex-works prices of vitamin B3 (99% feed grade) in China, 2017–2018
- Figure 2.9-2 Monthly ex-works prices of vitamin B3 (99% food grade) in China, 2017–2018
- Figure 2.9-3 Monthly ex-works prices of vitamin B3 (99% pharmaceutical grade) in China, 2017–2018
- Figure 2.9-4 Monthly ex-works prices of vitamin B7 (2% food grade) in China, 2017–2018
- Figure 2.9-5 Monthly ex-works prices of vitamin B7 (2% feed grade) in China, 2017–2018
- Figure 2.9-6 Monthly ex-works prices of vitamin B7 (99% pharmaceutical grade) in China, 2017–2018
- Figure 2.9-7 Monthly ex-works prices of vitamin B9 (98% food grade) in China, 2017–2018
- Figure 2.9-8 Monthly ex-works prices of vitamin B9 (98% feed grade) in China, 2017–2018
- Figure 2.9-9 Monthly ex-works prices of vitamin B9 (98% pharmaceutical grade) in China, 2017–2018
- Figure 2.9-10 Monthly ex-works prices of vitamin K3 in China, 2017–2018

Figure 2.9-11 Monthly ex-works prices of vitamin D3 (500,000IU/g feed grade) in China, 2017–2018

Figure 2.9-12 Monthly ex-works prices of vitamin D3 (100,000IU/g food grade) in China, 2017–2018

## 1. Introduction

Vitamin industry hot topics in 2017 and 2018:

- Environmental inspection has been playing a dominant role in the performance of China's vitamin industry since 2017.
- Under the environmental pressure, many vitamin manufacturers were forced to suspend or stop production in 2017 and 2018.
- A fire occurred at BASF's citral factory, which had a negative influence on the supply of vitamin A and vitamin C. Other vitamin raw materials were affected by domestic environmental inspection.
- Prices of vitamins changed significantly due to the unstable supply during 2017 and 2018.
- Many listed vitamin enterprises had good financial performances in 2017 and some even continued in 2018 because of high vitamin prices.

Purpose of report:

Production, export, raw material, production technology and price changes of China's key vitamins, dynamics of leading manufacturers, and environmental issues were analyzed in this report, in order to clearly describe and better understand the status and future trend of China's vitamin industry.

What to report:

- An overview of China's vitamin industry, 2017–2018;
- Production and export of China's key vitamins, 2017–2018;
- Price changes of China's vitamins, 2017–2018;
- Dynamics of leading vitamin manufacturers, including background information, financial performances and product structure, 2017 and 2018;
- Environmental issues and policies and their impacts on the vitamin market;

Forecasts:

- Environmental pressure will continue to be the key factor that influences vitamin industry in China.
- Chinese vitamin manufacturers' relocation and environmental upgrading projects is predicted to continue in 2019 and 2020.
- Raw materials are expected to be increasingly important in the production of vitamins in China.



## 2. Approach for this report

The report is drafted by diverse methods as follows:

- Desk research

The sources of desk research are various, including published magazines, journals, government websites and statistics, industrial statistics, association seminars as well as information from the Internet. A lot of work has gone into the compilation and analysis of the obtained information.

- Internet

CCM visited government websites and contacted with players in the domestic agrochemical industry through B2B websites and software.

- Data processing and presentation

The data collected and compiled are sourced from:

- CCM's database
- Published articles in periodicals, magazines, journals and third-party databases
- Statistics from governments and international institutes
- Telephone interviews with domestic producers, joint ventures, service suppliers and governments
- Third-party data providers
- Comments from industrial experts
- Professional databases from other sources
- Information from the internet

The data from various sources have been combined and cross-checked to make this report as precise and scientific as possible. Throughout the process, a series of internal discussions were held in order to analyse the data and draw the conclusions.

### 3. Executive summary

As the largest vitamin producer and exporter in the world, China witnessed fluctuations in domestic vitamin market during 2017 and 2018. The supply of vitamins in China was mainly affected by policies and raw materials. Due to short supply, prices of some vitamins showed a significant increasing trend in 2017.

Vitamin industry is a highly polluting industry that attracts strict environmental inspection efforts. Production of most vitamins was affected in 2017, though the time and intensity of environmental inspection and policies varied from province to province. Take vitamin C as an example, its largest producers are located in Hebei Province, where polluting manufacturers were ordered to halt production in late 2016. Vitamin manufacturers must invest more in environmental protection improvement and relocation.

Raw materials of vitamins are mainly chemicals and corn products. Most vitamins are produced through chemical synthesis and some use fermentation method. Chemical industry is the focus of environmental inspection, thus negative influence on raw materials of vitamins is unavoidable, which led to tight supply and price surge in some raw materials.

There are still some new capacities of different vitamin products under construction, though the demand from downstream is predicted to be stable. Raw material is considered to be an important part of vitamin manufacturers in the future.

Most vitamin products in China are exported to other countries. The US, the Netherlands, Germany and some Asian countries are the main countries import Chinese vitamins.

Because of high vitamin prices, most listed vitamin enterprises had good financial performances in 2017 and some even continued in 2018.

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

**Note: Key data/information in this sample page is hidden, while in the report it is not.**

#### 1 Overview of vitamin industry in China

...

#### 2 Key vitamins in China

##### 2.1 Vitamin A

##### 2.1.1 Capacity and output in China, 2017–2018

In 2018, China's total vitamin A (VA) capacity was XXX t/a (500,000 IU/g, powder), an increase of XXX t/a over the previous year. This is because the new VA production line of Zhejiang Medicine Co., Ltd. (Zhejiang Medicine) in the Changhai Industrial Park, Shaoxing City, Zhejiang Province, was completed and put into production at the end of 2018. The company's VA capacity rose from XXX t/a to XXX t/a and its old VA production line has therefore been stopped.

In 2018, China's total output of VA decreased to XXX tonnes from XXX tonnes in 2017. This is mainly due to the decline in transactions led by high price in 2018. The ex-works price of VA (500,000 IU/g, feed grade) in China in 2018 was USDXXX/t, up XXX YoY, and 325,000 IU/g food grade was USDXXX/t, up XXX% YoY.

...

Table 2.1.1-1 Capacity and output of vitamin A in China, 2017–2018

Product	Capacity, t/a		Output, tonne	
	2017	2018	2017	2018
Food grade	XXX	XXX	XXX	XXX
Feed grade	XXX	XXX	XXX	XXX
<b>Total</b>	<b>XXX</b>	<b>XXX</b>	<b>XXX</b>	<b>XXX</b>

Source: CCM

...

### 2.1.2 Manufacturer

...

Table 2.1.2-1 Capacity and output of vitamin A manufacturers in China, 2017–2018

No.	Manufacturer	Abbreviation	Location	Capacity, t/a		Output, tonne	
				2017	2018	2017	2018
1	Zhejiang NHU Co., Ltd.	Zhejiang NHU	Zhejiang Province	XXX	XXX	XXX	XXX
2	XXX	XXX	XXX	XXX	XXX	XXX	XXX
3	XXX	XXX	XXX	XXX	XXX	XXX	XXX
<b>Total</b>				<b>XXX</b>	<b>XXX</b>	<b>XXX</b>	<b>XX</b>

Source: CCM

...

### 2.1.3 Export

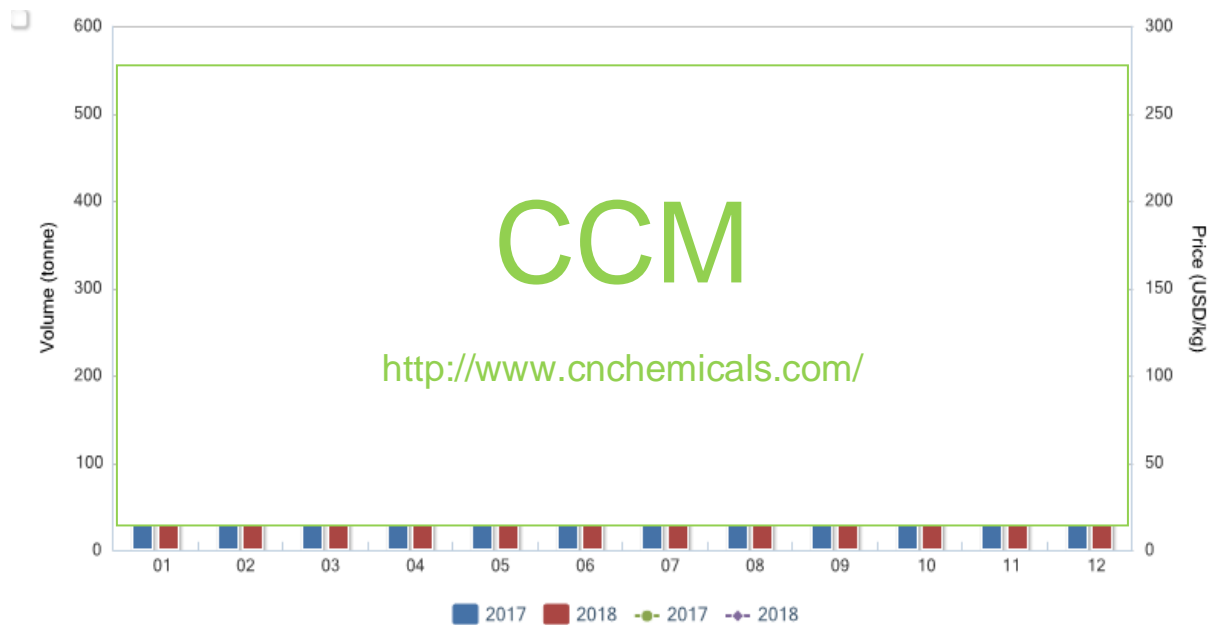
...

Table 2.1.3-1 Exports of vitamin A from China, 2017–2018

Year	Export volume, tonne	Export value, USD
2017	XXX	XXX
2018	XXX	XXX

Source: China Customs & CCM

Figure 2.1.3-1 Monthly exports of vitamin A from China, 2017–2018



Source: China Custom & CCM

...

### 3 Opportunities and suggestions

Vitamin industry is a subdivided industry of the biological industry, which is one of the key industries to improve human and animal health. Products are widely used in feed additives, food additives, health products and medicines. Benefiting from economic development and dietary structure upgrading, demand for vitamins is growing at a stable speed. It is expected that the annual growth rate will stay at around XXX–XXX in the next XXX–XXX years.

After decades' development, China has become a global center of vitamin production. At present, Chinese vitamin industry is comparatively concentrated, maintaining a stable supply.

There is a rigid demand for vitamins in the feed industry, given the fact that the minimum content of vitamins in feed is 200 to 300 grams per tonne. At present, XXX of vitamins are used as feed additives. In the following years, the demand for feed grade vitamins is predicted to gently rise for the following reasons. Thus, it is unwise for domestic vitamin producers rushing to expand capacity while the demand is just edging up.

.....

### 4 Company profiles of major vitamin producers in China

#### 4.1 Zhejiang Garden Biochemical High-tech Stock Co., Ltd.

...

Zhejiang Garden Biochemical High-tech Stock Co., Ltd. (Garden Biochemical) is a world famous manufacturer of vitamin D3, cholesterol and lanolin. Its products are ISO9001, ISO14001, FAMI-QS, and Halal certified. The company supplies vitamin D3 and other products to all over the world, with more than XXX of its sales from overseas.

...

**If you want more information, please feel free to contact us**

Tel: +86-20-37616606 Fax: +86-20-37616968

Email: [econtact@cnchemicals.com](mailto:econtact@cnchemicals.com)