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Market Research of Microalgae DHA in China

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Researched & Prepared by:

Kcomber Inc.

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1. Introduction

This report focuses on microalgae DHA. Microalgae DHA has been developing in China for more than 10 years. With a growing concern for health by Chinese people, microalgae DHA as a healthful food additive has become more and more popular in China these years. In order to deeply study the microalgae DHA market in China, CCM has done lots of researches and investigations and generated the second-edition market report concerning China's microalgae DHA market based on the previous report called *Production and Market of Docosahexaenoic Acid (DHA)* which was published in Jan. 2012 as well as the First Edition of this report.

2. Approach for this report

The report is drafted by diverse methods as follows:

✓ Desk research

Sources of desk research are various, including published magazines, journals, government statistics, industrial statistics, customs statistics, association seminars as well as information from the Internet. A lot of work has been done to compile and analyze the information obtained. When necessary, checks have been made with Chinese suppliers regarding the market information such as key producers, key end users, production, export, demand, and so on.

✓ Telephone interview

CCM has carried out extensive telephone interviews in order to survey the actual market situation of microalgae DHA industry in China.

The interviewees cover:

- Key producers
- Key end users
- Key traders
- Raw material suppliers
- Associations
- Experts

✓ Network search

CCM adopts network to contact players in the industry through B2B websites and softwares and CCM also obtains registration information via network.

Data processing and presentation

The data collected and compiled are sourced from:

- CCM's database

- Published articles from periodicals, magazines, journals, and third-party database
- Statistics from governments and academic institutes
- Telephone interviews with domestic producers, joint ventures, service suppliers, governments
- Third-party data providers
- Customs statistics
- Comments from industrial experts
- Professional database from other sources
- Information from the Internet

All 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 have been held in order to analyze the data and draw conclusions.

3. Executive summary

China's microalgae DHA industry can date back to as early as 2002. After more than ten years' development, there have been more than ten microalgae DHA producers in China at present, including Hubei Fuxing Biotechnology Co., Ltd. (Hubei Fuxing), Guangdong Runke Bioengineering Co., Ltd. (Guangdong Runke), Roquette Biotech Nutritionals (Wuhan) Co., Ltd. (Roquette Biotech) and Xiamen Huison Biology Co., Ltd. (Xiamen Huison). Among them, Hubei Fuxing is the largest microalgae DHA producer in China currently, with a capacity of XXX t/a in 2016.

In 2012-2016, the capacity of microalgae DHA in China increased from XXX t/a in 2012 to XXX t/a, with a CAGR of about XXX during this period. And the output of microalgae DHA increased from XXX tonnes in 2012 to about XXX tonnes in 2016, with a CAGR of about XXX.

At present, microalgae DHA producers in China basically produce microalgae DHA through fermentation with strains. Most of them adopt *Schizochytrium sp.* as strain in the production of microalgae DHA in China. Extraction and microencapsulation are two key parts during the production of microalgae DHA in China, especially to obtain high quantity and good quality of microalgae DHA. With the advancement of technology, the yield and quality of microalgae DHA have improved in China in recent years.

With the increasing supply of microalgae DHA, the market price of microalgae DHA powder in China decreased from USDXXX/t in 2012 to USDXXX/t in 2016, while that of microalgae DHA oil decreased from USDXXX/t in 2012 to USDXXX/t in 2016. In Feb. 2017, the market price of microalgae DHA powder and microalgae DHA oil was USDXXX/t and USDXXX/t, respectively. In 2017-2019, the price of microalgae DHA in China is expected to keep stable or has a slight increase compared with that before 2016.

Before 2014, China imported a large volume of microalgae DHA from the Netherlands, the US and other countries. But the import volume of microalgae DHA decreased in 2015 and 2016.

The product quality is gradually recognized by foreign markets, which reviews in the export situation of microalgae DHA recent years. China exported a small amount of microalgae DHA (oil only) in 2014, but the export volume of microalgae DHA (including oil and powder) increased a lot in 2015 and 2016. And, China exported microalgae DHA to many countries, like Australia, Indonesia, France, New Zealand, etc.

In China, the total consumption of microalgae DHA increased from XXX tonnes in 2012 to XXX tonnes in 2016, with a CAGR of XXX.

Infant formula, healthcare products and maternal formula are the main application fields of microalgae DHA. In 2016, the consumption volume of infant formula, healthcare products and maternal formula were XXX tonnes, XXX tonnes and XXX tonnes in China, accounting for XXX, XXX and XXX of the total respectively. In addition, microalgae DHA is also applied to producing other food products, and can work as nutrition supplement through being added into edible oil, infant cereal, milk beverage, cake, etc.

Driven by the *Universal Two-Child Policy*, more babies will be born in China in the next five years (2017–2021). Microalgae DHA, a popular ingredient in infants' and children's food, will be needed more. It's estimated that the domestic demand for microalgae DHA in China will increase with a growth rate of XXX% during 2017–2021. And it's believed that infant formula will continue to be the largest application field of microalgae DHA and to play a key role in the demand for microalgae DHA in China during this period. As people in China are forming a habit of consuming healthcare products, more microalgae DHA will also be applied to producing microalgae DHA soft capsules, gel candies, etc.

4. What's in this report?

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2 Supply of microalgae DHA in China

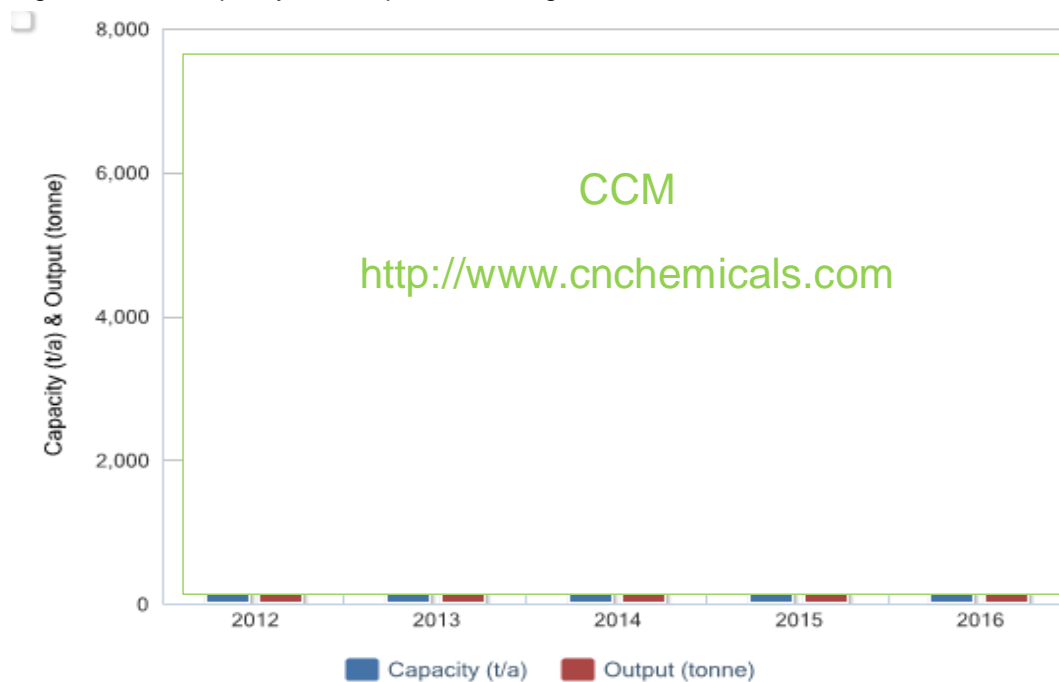
2.1.2 Summary of production, 2012–2016

In 2012-2016, microalgae DHA industry in China developed favorably and both of its capacity and output witnessed XXX:

- Microalgae DHA capacity: XXX t/a in 2012 to XXX t/a in 2016, with a CAGR of about XXX%.
- Microalgae DHA output: XXX tonnes in 2012 to XXX tonnes in 2016, with a CAGR of about XXX%.

For the domestic microalgae DHA industry, the capacity grows faster than the output, indicating that most producers are ...

Figure 2.1.2-1 Capacity and output of microalgae DHA in China, 2012-2016



Source: CCM

...

2.3 Export situation, 2014–2016

Before 2013, microalgae DHA producers in China focused on domestic sales. However, since 2014, more producers expanded their businesses overseas. The export volume of microalgae DHA in China increased from XXX tonne in 2014 to XXX tonnes in 2016. In 2014-2016, China exported XXX tonnes of microalgae DHA totally, including XXX tonnes of microalgae DHA oil and XXX tonnes of microalgae DHA powder.

...

Table 2.3-3 China's exports of microalgae DHA by exporter, 2016

Exporter	Oil			Powder			Total		
	Volume, tonne	Value, USD	Price, USD/kg	Volume, tonne	Value, USD	Price, USD/kg	Volume, tonne	Value, USD	Price, USD/kg
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	XXX
...

Source: China Customs & CCM

4 Consumption of microalgae DHA in China

4.1 Consumption situation, 2012–2016

In China, the total consumption of microalgae DHA increased from XXX tonnes in 2012 to XXX tonnes in 2016, with a CAGR of XXX%.

...

Figure 4.1-2 Consumption pattern of microalgae DHA in China, 2016



Source: CCM

Table 4.1-1 Consumption of microalgae DHA in China by downstream industry, 2016

Downstream industry		Consumption volume, tonne	Share, %
Formula food	Infant formula	XXX	XXX
	Maternal formula	XXX	XXX
Healthcare products		XXX	XXX
Others		XXX	XXX
Total		XXX	XXX

Source: CCM

...

6 Analysis of key producers in China

6.1 Guangdong Runke Bioengineering Co., Ltd.

...



Table 6.1-5 Income statement of microalgae DHA in Guangdong Runke Bioengineering Co., Ltd., 2015

Item	USD
Revenue	XXX
Cost of sales	XXX
...	...

Source: Guangdong Runke Bioengineering Co., Ltd.

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

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

Email: econtact@cnchemicals.com