

2014.07.01



Naturally Plus has obtained ISO9001 certification.

**NATURALLY PLUS INTERNATIONAL (THAILAND) LIMITED**

Company Registration No.: 0105549108355

Fico Place Building, 7F, No. 18/8 Sukhumvit 21 Road, Klongtoey Nua, Wattana, Bangkok 10110 Thailand

TEL: 02-665-2933 FAX: 02-665-2934 TOLL-FREE: 1800-777-119 <http://www.naturally-plus.com>

# S. LUTEIN GUIDEBOOK

Product Guidebook



# S. LUTEIN

เอส. ลูทีน

# S. LUTEIN satisfies everyone who wants to enjoy a healthy life.

For a healthy lifestyle, moderate exercise, adequate sleep and nutritionally balanced meals are essential. Proper food intake is especially important in maintaining a healthy and active body. However, with our busy modern lifestyles, consuming nutritionally balanced meals regularly is not an easy task.

In recent years, the lack of vegetable intake has become a growing public health concern. As even our everyday meals might not provide sufficient nutrition, taking nutritional supplements can easily overcome this problem.

S. LUTEIN is a well-balanced **nutritional supplement** containing carotenoids, which are essential nutrients found in brightly coloured red, yellow and green vegetables. Naturally Plus always insists on the highest quality and with great confidence, will safely and securely deliver the product right into your hands. Our greatest wish is for everyone to live a healthy and happy life.



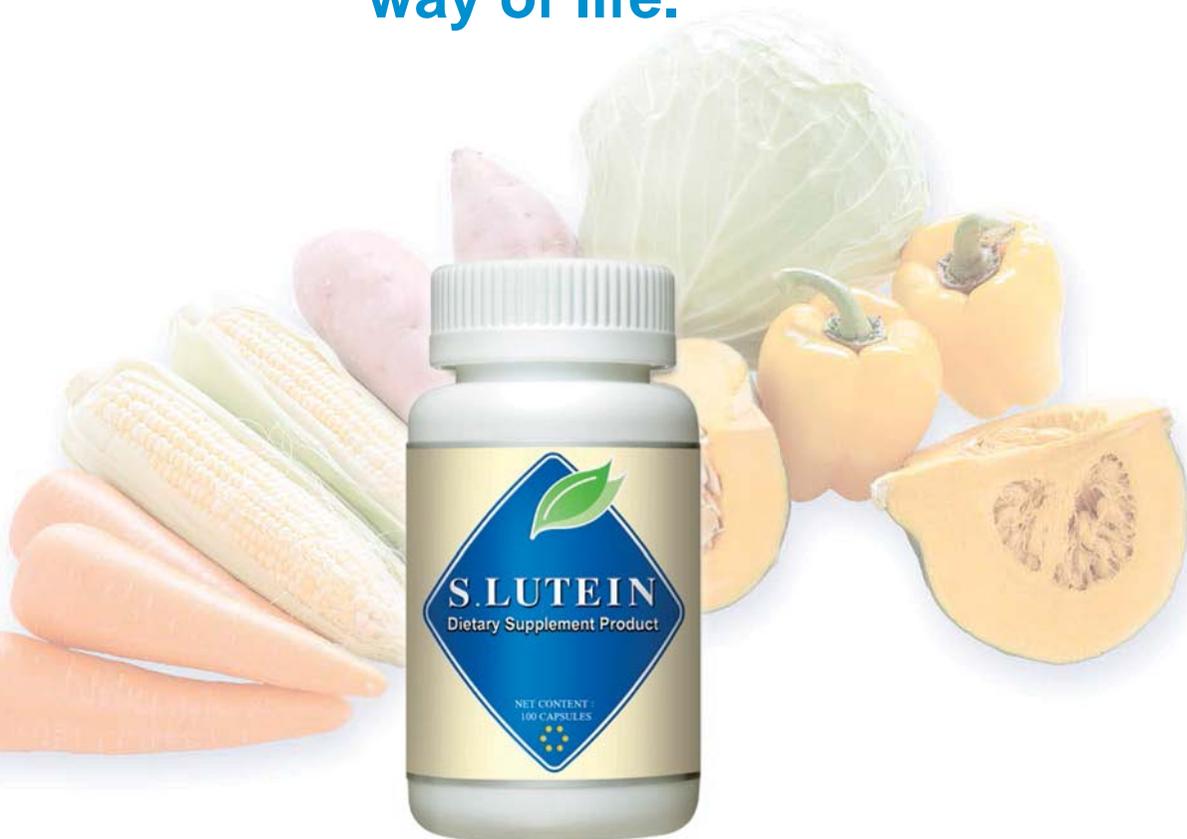
## Nutritional Supplement

When for some reason or another, sufficient nutrition cannot be consumed from our food intake, food supplements can be used to supplement the shortage of nutrients. For our well-being and health, we should maintain a nutritionally balanced diet every day.

## Contents

● S. LUTEIN: Nutritional Supplement	04
● What are Carotenoids?	06
● Ingredient Guide	10
● Commitment of Naturally Plus	16
● Frequently Asked Questions	25

**A balanced blend of nutrients supports a healthy and fruitful way of life.**



**S. LUTEIN**

เอส.ลูทีน

**Nutritional Claim (β-carotene)**

β-carotene, a precursor molecule of vitamin A, is a nutrient which helps to maintain good night vision, healthy skin and mucous membranes.

**Nutritional Value** per 3 capsules (1.62g)

Fish oil	277.92mg	Thiamine hydrochloride (Vitamin B1)	0.90mg
Blackcurrant extracts	72.00mg	Riboflavin (Vitamin B2)	0.90mg
Bilberry extracts	39.00mg	Pyridoxine hydrochloride (Vitamin B6)	0.90mg
Lutein 20%	18.60mg	Cyanocobalamin (Vitamin B12)	0.90mg
Tomato extracts	36.00mg		
β-carotene 30%	3.15mg		

**Product name** S. LUTEIN dietary supplement product

**Raw materials** Fish oil, Blackcurrant extracts, Bilberry extracts, Lutein 20%, Tomato extracts, β-carotene 30%, Thiamine hydrochloride (Vitamin B1), Riboflavin (Vitamin B2), Pyridoxine hydrochloride (Vitamin B6), Cyanocobalamin (Vitamin B12)

**Contents** 54g (540mg x 100 capsules)

**Attention** Take approximately 3 capsules per day with cold or warm water.

- ⊙ This supplement is not for curing a disease or improving the state of health even if it is taken in large quantities.
- ⊙ Follow the daily intake instructions.
- ⊙ Keep out of reach of children.
- ⊙ Keep lid tightly closed after opening.

If adverse reactions occur, please stop taking this product and consult with your doctor.

## S. LUTEIN contains a balanced combination of carotenoids.

### Carotenoids are pigment compounds found in some vegetables and fruits

Carotenoids are pigments, available in a variety of bright colours such as yellow, red, purple, and orange, and are necessary for photosynthesis in plants. Studies have shown that carotenoids are closely linked to relieving oxidative stress induced by ultraviolet rays.

Several hundred kinds of carotenoids have been found in plants, of which, at least 50 types are present in fruits and vegetables. Carotenoids are excellent antioxidants, perform many different functions and come in a variety of colours.

### Eat a variety of colourful vegetables every day to benefit from the many functions of carotenoids

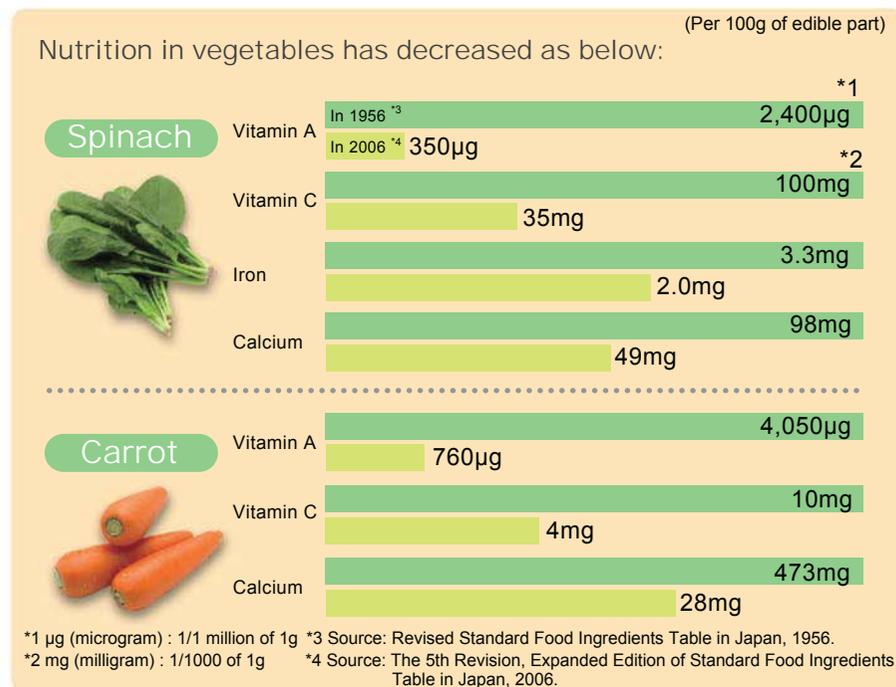
The Ministry of Health, Labour and Welfare of Japan recommends a daily intake of 350g of vegetables. This should ideally contain 150g of brightly coloured vegetables, which provides a large amount of carotenoids. However, the average daily intake by Japanese adults is 295.3g, which does not meet the recommended intake.

In Thailand as well, the Thai Health Promotion Foundation has reported in 2013 that fewer than 20% of Thai people eat enough fruit and vegetables to ensure good health and reduce their risk of disease. We need to include many different brightly coloured vegetables such as carrots, tomatoes, spinach and pumpkins in our daily diet. The pigments they contain have attracted much public interest for their role in helping to keep us healthy. There are many types of carotenoids, each with unique characteristics. For a well-balanced diet, it is important to consume various kinds of brightly coloured vegetables. However, with our modern hectic lifestyles, it may be hard to maintain a well-balanced diet, so taking health supplements can be considered as a viable alternative.



## Recent concerns over decreasing nutritional value of vegetables

The nutritional value of vegetables has decreased drastically in the last half century. This is a result of changes in the soil where the vegetables are grown, mainly due to the use of chemical fertilisers and agricultural chemicals in order to increase production efficiency. For example, vitamin A in spinach has decreased to approximately 15% from 2,400µg in 1956 to 350µg in 2006. There is much cause for concern that even if we consume as many vegetables as before, we are unable to absorb the same amount of nutrients.



## Carotenoids: a “phytochemical” —the popular 7th nutrient

The five major nutrients are protein, carbohydrates, fats, vitamins and minerals. Fibre has been recognised as the 6th essential nutrient. With the progress of research in recent years, phytochemicals have been gaining more and more attention as the 7th nutrient, with carotenoids being a typical example. It is important for us to obtain these nutrients from fruits and vegetables as they are not produced in our own bodies.



### Basic knowledge on phytochemicals

“Phyto” means plant, and “chemical” refers to chemical compounds. Through its function, a phytochemical is described as a “plant-derived nutrient”. Thousands of phytochemicals have been discovered to date, such as carotenoids in carrots and spinach, polyphenols in tea and wine, anthocyanins in blueberries, lycopene in tomatoes, and isoflavone in soybeans.

# S. LUTEIN Ingredient Guide

S. LUTEIN contains as many as 4 kinds of carotenoids. In addition, nutrient ingredients such as anthocyanin, DHA, vitamin B, vitamin E are included in balanced portions. If vegetable deficiency and nutritional imbalance are your major concerns, then S. LUTEIN is the best daily nutritional supplement for you.



## Carotenoid Ingredients

# 01

### Lutein

Amount of Lutein  
in spinach  
(Per 100g edible part)  
**10.20mg** <sup>Note 1</sup>

A nutrient found in the  
macular area of the eyes and skin

Lutein is a pigment ranging from yellow to orange; this carotenoid is present in the eyes and skin and cannot be produced by our body. It is found in dark green leafy vegetables such as kale and spinach. Due to its strong antioxidant capacity, excessive oxidation of lipids which is harmful to the retina can be prevented. Also, it is thought that lutein has the effect of absorbing blue light which can also cause retinal damage.

Note 1) Data source: A. R. Mangels, J. M. Holden, G. R. Beecher, E. Lanza. 1993. Journal of American Dietetic Assoc. Vol. 93: 284-296.



# 02

### Zeaxanthin

Amount of Zeaxanthin  
in Fuyu persimmons  
(Per 100g edible part)  
**0.24mg** <sup>Note 2</sup>

Similar to lutein and found  
mainly in the central macula in the eye

Zeaxanthin is an orange-yellow pigment which is similar in nature to lutein. It can be found in papaya, corn and Japanese Fuyu persimmon, and it is also abundant in green tea, egg yolk, and animal fat and liver. Metabolised lutein converts to zeaxanthin. It has been confirmed that zeaxanthin exists in the central yellow spot (macula lutea) of our eyes as lutein does. However, recent studies have found that their concentration in the retina is different: the central macula has a higher proportion of zeaxanthin, and the ratio of lutein is higher in the peripheral area.

Note 2) Data source: Masamichi Yano et al. Quantitation of carotenoids in raw and processed fruits in Japan, Food Sci. Technol. Res 11(1)13-18, 2005.



03

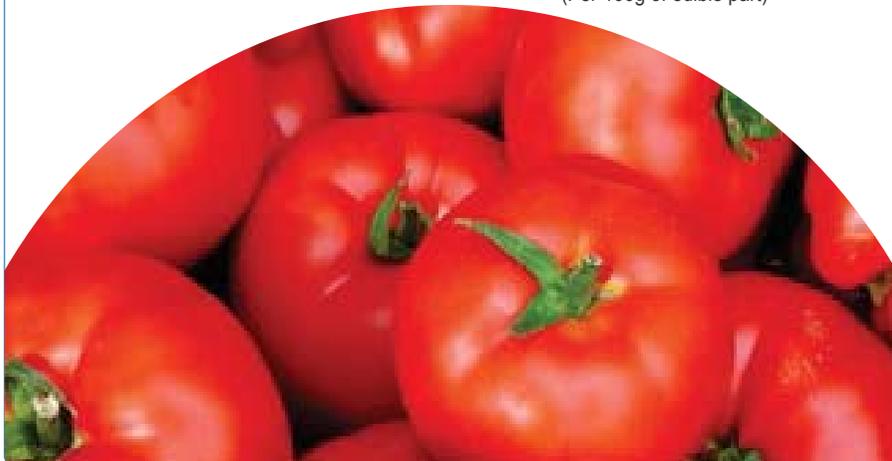
Lycopene

The red pigment with strong antioxidant effect found in tomatoes

It is said that lycopene is needed to protect tomatoes from sunlight while it ripens by absorbing the sun's rays. In Europe, the saying goes, "When the tomato is red, the doctor's face is green."

Tomatoes have long been thought to aid our physical health. Nowadays, it is known that lycopene has a strong antioxidant effect similar to lutein. Lycopene can be more easily absorbed by the body from processed food than from fresh vegetables and fruits. Lycopene's absorption rate is higher if it is cooked with oil, as it is fat-soluble.

**3.10mg**<sup>Note 1</sup>  
Amount of Lycopene  
in tomatoes  
(Per 100g of edible part)



04

β-carotene

Provitamin A which converts to vitamin A in the body

β-carotene is an orange-yellow pigment found in carrots and pumpkins. Due to its high safety factor it has been used as colouring for foods, beverages and cosmetics. β-carotene converts into vitamin A which is needed by the body, and are therefore widely studied. Prior to conversion, β-carotene has a strong antioxidant effect. As a nutritional supplement, β-carotene has been proven to have the following functions:

- β-carotene helps maintain night vision.
- β-carotene helps maintain healthy skin and mucosa.

**0.82mg**<sup>Note 1</sup>  
Amount of β-carotene  
found in winter pumpkins  
(Per 100g of edible part)

**7.9mg**<sup>Note 1</sup>  
Amount of β-carotene  
found in carrots  
(Per 100g of edible part)



Note 1) Data source: A. R. Mangels, J. M. Holden, G. R. Beecher, E. Lanza. 1993. Journal of American Dietetic Assoc. Vol. 93. 284-296.

05

Anthocyanin



A kind of polyphenol which helps our eyes function normally

Anthocyanins are blue-violet pigments and are one kind of polyphenols found in blackcurrants and blueberries. They have excellent antioxidant properties, and are the nutrients which attract the most attention among phytochemicals. Research on its properties was inspired by an anecdote from World War II, where reportedly a British pilot attributed his excellent vision, even in the dark, to his love of blueberry jam. Anthocyanins are linked to the re-composition of a plastid called rhodopsin\* in the retina.

\* Rhodopsin exists in cells that function in the dark amongst light-responsive cells. When rhodopsin is stimulated by light, it is decomposed and resynthesised again. By this repeated decomposing and resynthesising, the light stimulus is transmitted to the brain as visual information.

06

Vitamins B<sub>1</sub>, B<sub>2</sub>, B<sub>6</sub> and B<sub>12</sub>

Water-soluble vitamins necessary for generating energy

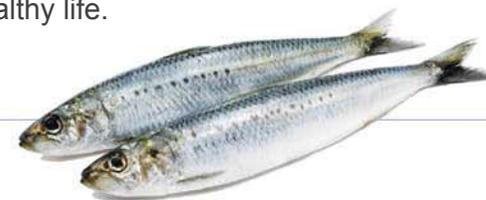
We generate the energy necessary for our lives from the 3 major nutrients, i.e., protein, carbohydrates and fats contained in our food. In the process, water-soluble vitamin B acts as the coenzyme. Vitamin B1 helps generate energy from carbohydrates, and vitamin B6 helps generate energy from protein. Vitamins B1, B2 and B6 maintain the health of the skin and mucosa. Also, vitamin B12 is a nutrient which assists in the creation of red blood cells.

07

DHA

Found mainly in fish and necessary for the growth of brain and nerve tissue

DHA (docosahexaenoic acid) is an unsaturated fatty acid mainly found in fish oil and is known for its nutritional value for growing children. It is also found in breast milk and in every cell, especially in the brain, and it plays a significant role in cerebral formation. It is said that the traditional fish-based Japanese diet is the main contributing factor for their longevity. There seems to be a close relationship between DHA and a healthy life.



08

Vitamin E

A popular anti-aging vitamin that prevents oxidation in the body

Like vitamin C and many others, vitamin E has an anti-aging effect and can act as an antioxidant. As it is oil-soluble, it can be better absorbed when taken with meals.



# Our Commitment

Naturally Plus  
lets you enjoy nature's goodness  
with a peace of mind

From the procurement of raw ingredients to the manufacture of S. LUTEIN, all the way to the delivery of the product into the hands of our customers, Naturally Plus implements strict quality control throughout to give you a peace of mind.

While we do not own the fields in which the raw ingredients are grown, or the manufacturing plants where the ingredients are extracted and combined, we work hand in hand with our partners, who are world-class experts in their respective fields. We can therefore assure you that our products are absolutely safe and of the highest quality.

## Naturally Plus Joins the AIFN

The AIFN (The General Incorporated Association of International Foods & Nutrition) is a Japan-based trade organisation of Japanese and foreign dietary supplement suppliers whose mission is to develop and provide a market of safe, quality-assured dietary supplements for Japanese consumers.

## 1 Selection of Raw Ingredients

Our Commitment

### High-purity and high-quality FloraGLO® Lutein sourced from African marigold

The main ingredient of S. LUTEIN, FloraGLO® Lutein, is sourced from marigold flowers cultivated by farmers contracted with Kemin Industries, Inc. (USA). The flowers are individually handpicked and dried, and their petals transformed into pellets in an affiliated factory in India. Marigold oleoresin, the raw material for the production of FloraGLO Lutein, is extracted from the petals and sent for processing in Iowa, USA.



Dried marigold petals in pellet form



FloraGLO® Lutein is the main ingredient of S. LUTEIN. It is obtained from the African marigold cultivated in India using best growing and harvesting practices. The use of pesticides and solvents is tightly controlled, and the marigold oleoresin used in FloraGLO is consistently of quality food grade material.

### Naturally Plus Star Product S. LUTEIN: No. 1\* in Japan Sales Amount No. 1 for 2010-2012



S. LUTEIN's No. 1\* ranking is due to immense consumer loyalty and support since its launch. It is also proof of consumers' trust in S. LUTEIN as a leading brand in the market. Naturally Plus will continue in our efforts to improve the value of all our products, including S. LUTEIN. We remain firm in our commitment to supporting everyone in their quest for healthy living and an active lifestyle.



\*Lutein supplement market in Japan: No. 1 Brand By Sales Amount, 2010-2012.  
Market share estimated from available public data and fieldwork plus interviews by Ipsos Japan, July 2013.



## FloraGLO® Lutein is obtained through a proprietary manufacturing process

The raw material for FloraGLO® Lutein is marigold oleoresin, which is derived from dried marigold petals. Through Kemin's proprietary manufacturing process, marigold oleoresin is purified, crystallised, dried, and screened to obtain high-purity and high-quality FloraGLO Lutein. FloraGLO, the original lutein brand, is the most clinically researched lutein brand worldwide. It is trusted by researchers and supplement brands for its documented absorption, established safety profile, and proven eye benefits. FloraGLO Lutein provides the same form of lutein as that naturally found in vegetables and other foods to keep eyes healthy and functioning at their best.

®FloraGLO is a trademark of Kemin Industries, Inc. (USA).

### Kemin Industries, Inc. (USA)

Kemin provides "inspired molecular solutions" specifically developed to provide nutrition and health benefits for humans and animals. Committed to feed and food safety, Kemin maintains top-of-the-line manufacturing facilities where approximately 500 specialty ingredients are made for the global feed and food industries as well as the health, nutrition and beauty markets.



#### Naturally Plus awarded FloraGLO® Lutein PREMIUM PARTNER mark

In recognition for having the World's No. 1\* Transaction Volume of FloraGLO® Lutein in the MLM Industry, Naturally Plus has been awarded the "FloraGLO® Lutein PREMIUM PARTNER" mark from FloraGLO® Lutein supplier and manufacturer Kemin Industries, Inc. (USA).

\*World's No. 1 Transaction Volume of FloraGLO® Lutein in the MLM Industry (Report by Kemin Industries, Inc., as of September 2012)



## Processed into a form suitable for softgel capsules and delivered to Japan

FloraGLO® Lutein supplied by Kemin Industries, Inc. (USA) is transported to DSM Nutritional Products in Switzerland, where it is processed into the "lutein 20% FS" form suitable for softgel encapsulation. 20% is the ideal concentration for maintaining the stability and high quality of lutein. Finally, after further quality and safety checks by Kemin, it is delivered to Japan.

### DSM Nutritional Products

Formerly the vitamins and fine chemicals division of Roche, the world's largest manufacturer of pharmaceutical raw materials, DSM Nutritional Products now applies the same stringent pharmaceutical standards to the production of vitamin and carotenoid products for food applications.



## Anthocyanin from high-purity blackcurrant extracts

Four kinds of anthocyanin present in blackcurrant extracts are essential to the S. LUTEIN formula. The liquid extract is highly condensed and dried in accordance with pharmaceutical GMP standards.\*1

\*1 Pharmaceutical GMP (Good Manufacturing Practice) refers to standards governing production processes and quality control in the manufacture of pharmaceutical products.



## Lycopene from fully-ripened tomatoes

Lycopene is a red pigment found in fruits and vegetables and is also referred to as a carotenoid. The lycopene used in S. LUTEIN is supplied by the world's largest producer of natural tomato lycopene, LycoRed. Located in Israel, LycoRed extracts high-quality lycopene with state-of-the-art technology from specially cultivated, fully-ripened tomatoes.



### LycoRed

Established in 1995, the LycoRed group is a diversified company specialising in the research and development of natural botanical chemicals and high-quality formulations. LycoRed scientists at the cutting-edge laboratory in Israel collaborate with local farmers with advanced agricultural facilities and know-how to develop innovative products.





Delivered with health supplement GMP\*2 and ISO quality assurance standards



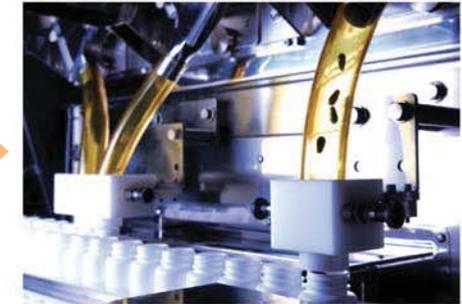
Upon receiving the raw ingredients, they are subject to strict microbial, chemical, and other tests.



Factory workers are required to comply strictly with cleanroom regulations such as those concerning special clothing, and the removal of dust in the air shower room before entering the production room.



Visual inspection of individual capsules is conducted to ensure that even hard-to-detect irregular capsules will be filtered from the production line.



Empty bottles are air-cleaned and filled with 100 capsules of S. LUTEIN.

\*2 Health supplement GMP

GMP (Good Manufacturing Practice) refers to a standard that can be implemented on work processes and appropriate quality checks for the manufacture of quality products.

\*3 ISO9001

An international standard for quality management systems established by the ISO (International Organization for Standardization) for quality management and quality assurance.

\*4 ISO22000

An international standard of the food safety management system. A standard that comprises a mix of technological methods from the ISO management standards and HACCP (Hazard Analysis and Critical Control Point: a system used in the identification, assessment and management of important risk factors related to food safety) to ensure food safety in the manufacture, distribution and sale of food.

Aliment Industry

Raw materials supplied from each manufacturer are processed into commercial products by Naturally Plus' appointed vendor, Aliment Industry Co., Ltd., an ISO9001\*3, ISO22000\*4 and health supplement GMP\*2-compliant manufacturer.

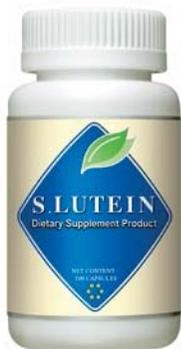


## 7 Purchase Method

Our Commitment

### Please register as a member before you place an order

Naturally Plus advocates the sale of S. LUTEIN through a unique, membership-based direct selling system to you and others. After understanding our company and products, you may register as a member and make a purchase. Ordered products will be couriered by Naturally Plus responsibly into your hands. Naturally Plus adheres to our goal of excellent service, and is a certified ISO9001 company.



S. LUTEIN  
Bottle type  
(contains 100 capsules)

## 8 Delivery

Our Commitment

### Safe and Quick Delivery

For the safe and prompt delivery of Naturally Plus products to your hands, Naturally Plus works with a professional logistics company dedicated to the delivery of Naturally Plus products.

## Frequently Asked Questions

**Q01** Is it OK to consume S. LUTEIN together with tea or coffee?  
**A** There have been no reports of any chemical interaction between carotenoids, the major ingredient of S. LUTEIN, and caffeine. It can be consumed together with tea or coffee. However, you are recommended to consume S. LUTEIN with cool or warm water.

**Q02** When should S. LUTEIN be consumed during the day?  
**A** It can be consumed at any time together with water without chewing, since the major ingredients of S. LUTEIN are basically food ingredients. You may also divide the daily indicated intake amount to be consumed at various times of the day such as in the morning, noon and in the evening.

**Q03** Will I get fat by consuming S. LUTEIN?  
**A** The calorie count in 3 capsules—the daily recommended intake of S. LUTEIN—is 10.1kcal. As such, you do not have to worry about this quantity causing any obesity problems.

**Q04** I have allergies. Is it safe for me to consume S. LUTEIN?  
**A** Please do not consume S. LUTEIN if you are allergic to wheat, fish, or gelatine, as the product contains all of these ingredients (wheat, fish oil, and gelatine). As the wheat germ is crushed before the oil is extracted and refined, the wheat germ oil may still contain a small amount of protein. Please be especially careful if you have an allergy to wheat.

If you are worried about developing allergic reactions, you are advised to start with one third of the daily recommended intake, and increase your intake gradually in 1-2 weeks if no negative reactions occur. However, should you experience any allergy symptoms, please stop using the product immediately and consult your regular doctor.

**Q 05** Where should I store S. LUTEIN?

**A** As S. LUTEIN comes in softgel capsules, please avoid leaving it in cars or near electrical appliances that emit heat. Please also refrain from storing S. LUTEIN in the fridge, where it would become dehydrated. You are advised to store it in a cool place away from direct sunlight. The following conditions may cause the quality of the product to change:  
 High temperature→Capsules may become misshapen, possibly causing the contents to leak.  
 Dryness→Capsules may harden and become brittle.  
 Humidity→Capsules may stick together.

**Q 06** I am taking Warfarin (an oral anticoagulant). Can I consume S. LUTEIN? Does it contain vitamin K?

**A** S. LUTEIN does not contain added vitamin K. However, 3 capsules of S. LUTEIN contain vitamin K in trace amounts of around 0.08µg, which are transferred entirely from the raw ingredients. Should you have concerns, please consult your regular doctor for more clarification. There have been no reports of drug interaction (such as to result in decreased or increased effect) between carotenoids and Warfarin.

**Q 07** Can pregnant or lactating women consume S. LUTEIN?

**A** Yes, provided the recommended daily amount of 3 capsules is not exceeded. There have been no reports of any effect on pregnancy due to the main ingredients of S. LUTEIN, or carotenoids. Also, β-carotene is found in breast milk. However, should you have concerns, please consult your regular doctor.

**Q 08** I am receiving dialysis treatment, and am on doctor's orders to limit my intake of phosphor, potassium and sodium. Can I consume S. LUTEIN? How much phosphor, potassium and sodium does it contain?

**A** Phosphor and potassium are found in S. LUTEIN in trace amounts and come from the raw ingredients. There is no added phosphor or potassium. As the amount is extremely small, the recommended daily intake of S. LUTEIN should not cause any problems. The sodium content per 3 capsules is 2.22mg. This quantity is also not expected to be problematic. Should you have concerns, please consult your regular doctor.

**Q 09** Will my hands or feet turn yellow when I consume S. LUTEIN?

**A** Oranges, like many other fruits and vegetables, contain carotenoids (especially β-carotene). Excessive consumption of oranges causes the palms of our hands or the soles of our feet to turn yellowish particularly due to its β-carotene content. The same reaction occurs with S. LUTEIN. This is a naturally reaction and will not affect our health. Should you be concerned, you could reduce your daily intake of S. LUTEIN. The symptoms will disappear when you reduce or cease consumption.

**Q 10** Why is the colour of each capsule slightly different?

**A** Carotenoids, the main raw components of S. LUTEIN, are naturally derived ingredients. As such, the colour of the capsules may vary depending on their place of origin or time of harvest. This does not affect the quality of the product.

