

1963 - NOW

No.1 pollen extract Global brand

"Research is the key to unlocking new knowledge and advancing our understanding of the world."





### STEM CELL SUPPLEMENTS

Pollitin is a high quality natural extract. extracted from rye pollen under the production and research with technology The same standard as the production of drugs according to the requirements of the World Health Organization. therefore has been registered as "NUTRACEUTICAL" or "nutritional therapeutic nutrition" receiving the ORAC standard or the antioxidant concentration and the CAP-e Test or the ability to be absorbed into red blood cells at a very high level

The body receives almost 100% of the nutrients that are extracted from rye grass pollen. Sold to more than 50 countries on 6 continents around the world for more than 50 years, Swedish researchers have found that research studies. extracted from rye pollen contains Substances that are essential for the creation of new life in the plant family and are fundamental in the food chain. It is a natural anabolic steroid.

It has been proven by scientific laboratories that Contains a variety of nutrients including vitamins, minerals, phytosterols, carotenoids, flavonoids, nucleic acids, amino acids, substances necessary for the synthesis of RNA and DNA, antioxidant activity, enzymes, saturated fatty acids, precursors in the synthesis of prostaglandins.

So extracted from rye pollen Therefore, it is the ideal food for use in helping to make the body healthy and perfect holistic. Because there are nutrients that help to relieve fatigue, have antioxidants. The main culprit that causes many serious diseases to humans, contains important substances such as phytosterols that help boost immunity. keep the body healthy until able to cope with various illnesses caused by facing pollution and germs on a daily basis more effectively

### IN SCIENCE WE TRUST



### **CELL REPAIRING**

Research has confirmed that there are more than 300 types of nutrients, vitamins, minerals that are essential for the care of the body and cells.



### **NUTRASCEUTICAL**

Contains important substances that have antioxidant properties. Thus helping to slow down aging and help your skin look better.



### **BODY IMMUNE DEFENCE**

Research reports on efficacy that helps to inhibit prostatitis caused by hormones



### PHARMACEUTICAL FOOD

Contains nucleic acids and other important substances that stimulates the body to create interferon to stimulate white blood cells to work more efficiently better deal with germs

### GUARANTEED WORLD-CLASS PRODUCTION STANDARDS













































# POLLITIN - EXCLUSIVE STEM CELL SUPPLEMENTS

Our premium natural extracts originate from meticulously selected flower pollen found in "Rye." These extracts undergo a unique proprietary production process crafted by Graminex L.L.C. in Ohio, United States. This exclusive process encompasses every stage, from cultivation and harvesting to the creation of high-quality natural extracts, specifically G60 and G63, derived from GBX flower pollen particles. Graminex holds the sole rights to this process and maintains adherence to strict pharmaceutical production standards in alignment with the World Health Organization's requirements.

Our extracts are renowned for their world-class production standards, boasting ORAC certification for exceptionally high antioxidant concentration and CAP-e Test accreditation, which signifies outstanding absorption into red blood cells. Over more than five decades, we have consistently refined and improved our product's efficacy.

Registered as a "NUTRACEUTICAL" or "nutritional therapy," Pollitin addresses issues at the cellular level, offering antibacterial properties and reinforcing immunity. By delivering essential nutrients tailored to various bodily systems, it equips the body to effectively combat abnormal cells. Our dedication to research is exemplified by over 150 certifications from medical and pharmaceutical institutions.

Moreover, Pollitin is not only a national achievement but a global triumph, available in over 50 countries. Our exclusive patented production process sets us apart as the sole producer of this unique formulation globally, rendering it impossible for anyone else to replicate our success in extracting and utilizing these flower pollen particles.

Pollitin - สารอาหารบำบัดเซลล์อ

สารสกัดธรรมชาติคุณภาพสูง สกัดจากเกสรดอกไม้ จาก "ข้าวไรย์" ที่มีสูตรลับเฉพาะของ บริษัท (Graminex L.L.C.) ที่รัฐโอไฮโอ้ ประเทศ สหรัฐอเมริกา ในการปลูก เก็บ และผลิตสกัด ธรรมชาติคุณภาพสูง G60, G63 จากอณูละอองเกสร ดอกไม้ GBX, Graminex® เอกสิทธิ์เฉพาะของบริษัท Graminex เท่านั่นที่ผลิตได้เพียงเจ้าเดียวในโลก อยู่ ภายใต้การควบคุมมาตรฐานการผลิตยา ตามข้อ กำหนดขององค์การอนามัยโลก

จนเราได้รับการรับรองมาตรฐานการผลิตระดับโลก ระดับเดียวกับการผลิตยาเพราะ Pollitin ได้รับรอง การทดสอบค่า ORAC หรือ ค่าระดับความเข้มข้นของ สารต้านอนุมูลอิสระที่สูงมาก และ CAP-e Test หรือ ค่าความสามารถในการดูดซึมเข้าสู่เม็ดเลือดแแดงใน ระดับที่สูงจนได้รับ

การขึ้นทะเบียนเป็น "NUTRACEUTICAL" หรือ "โภชนเภสัช สารอาหารบำบัดระดับเซลล์" ที่สามารถ แก้ไขปัญหาฟื้นฟูได้ลึกถึงระดับเซลล์ มีฤทธิ์ฆ่าเชื้อ แบคทีเรีย และมีผลเสริมสร้างภูมิต้านทานเมื่อเซลล์ ต่างๆ ได้รับสารอาหารที่เหมาะสมตามระบบต่างๆ ใน ร่างกาย ส่งผลให้ร่างกายสามารถต่อสู้กับ เซลล์ที่ผิด ปกติภายในร่างกายได้ถึง 95% และยังได้รับรอง มาตรฐานการผลิตและประสิทธิภาพจากองค์กรต่างๆ มากมายระดับโลก รวมไปถึงยังได้รับรางวัลการันตีอีก มากมายจาก เอกสิทธิ์สูตรลับพิเศษเฉพาะของ Graminex ทำให้สินค้ามีคุณภาพและเกิดผลลัพธ์ที่ดี และน่าเชื่อถือ จนได้รับการยอมรับระดับสากลอีกด้วย

ตลอดระยะเวลากว่า 50 ปี เราได้มีการวิจัยพัฒนา ประสิทธิภาพอย่างต่อเนื่อง มีการวิจัยจากสถาบัน ทางการแพทย์และเภสัชกรรมรับรองมากกว่า 150 การวิจัย เรามีความภูมิใจอย่างมากในการเป็นผู้ผลิต หนึ่งเดียวของโลกที่ได้ครอบครอง ถือลิขสิทธิ์ เอกสิทธิ์กระบวนการผลิตและสูตรเฉพาะ G60 และ G63 จากละอองเกสรดอกไม้ชนิด GBX ที่ไม่มีใคร สามารถทำได้ ส่งผลให้ Pollitin เป็นที่ยอมรับจากคน จำนวนมากใน 6 ทวีป 50 ประเทศทั่วโลก และได้รับผล ตอบรับที่ดีจากผู้บริโภคในการซื้อซ้ำสินค้าอย่างต่อ เนื่องมากกว่า 50 ปี

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เกี่ยวกับการต้านอนุมูลอิสระ

WWW

www.pollitin.com



GRAMINEX Flower Pollen Extract

# The Use of Cernitin, an Extract of Organic Pollen, to Increase Body Weight and to Increase Resistance Toward Infections

### **BRIEF DESCRIPTION OF THE PRODUCT**

For centuries the nutritional value of naturally occurring pollen has been recognized by scientists throughout the world. For the first time a commercial source of natural pollen has been made available by AB Cernelle of Vegeholm, Sweden, marketed under the trade name POLLITABS\*. These tablets contain Cernitin, a microbiological extract of pollen, which is organic, unadulterated. and free contamination. Prior to the extraction of Cernitin, the pollen is collected by a patented process (not insect-gathered) from unsprayed plants on a large plantation far removed from industrial wastes or other air-borne contamination. During the preparation of Pollitabs, no synthetic active ingredients are added. These food tablets are completely free from side effects and even pollen-allergic persons have taken large doses without any unforward effects.

### THE BACKGROUND OF THE STUDY

During the past two years, we have used Pollitabs in our practice for many diversified complaints and syndromes. Certain results have occurred predominately regardless of the purpose for which the tablet was prescribed. Foremost among these have been increased appetite, weight gain, increased vigor and sense of well being, and decreased susceptibility toward infections. Therefore, it was thought that a football team would make a good preliminary control study to more accurately determine two of these factors in an objective manner: i.e. weight gain and resistance to infection.

### **DESCRIPTION OF THE STUDY**

A local high school football team, consisting of thirty active players were selected for this study. The team was divided into two groups; those receiving pollitabs and those receiveing a standard multiple vitamin preparation. The study covers a period of 15 weeks, the first three of which neither Pollitabs nor multiple vitamins were used. It was during this initial 3 week period that each player lost excessive weight, in most cases, representing excess adipose tissue. Beginning at the end of the 3<sup>rd</sup> week, 15 players were started on two Pollitabs daily and the control group on the multiple vitamins daily. All medication was administered individually by the coach. A record was kept of the players' weights at weekly intervals and the average weight for the group has been plotted on Graph 1. It can be noted that the group receiving the pollitabs regained their pre-season weight after taking the tablets for  $7^{-1}/_2$  weeks and 4 <sup>1</sup>/<sub>2</sub> weeks later, at the end of the season, actually showed the Pollitabs group with a 5 <sup>1</sup>/<sub>2</sub> pound average increase in weight over their preseason level. The group taking the multivitamins remained generally constant from the third to fifteenth week, showing no further loss or gain. The opinion has been expressed by impartial former professional players, who have seen this report, that it is almost unheard of for a football player to weigh more at the end of the season than he did before practice started.

### **CONTRAST OF STUDY**

Graph 2 shows a striking contrast between the two groups regarding the number of days lost from the common cold or influenza. Since the two groups were in close contact physically during the study period and since the selection of the players to take Pollitabs was made at random without regard to socio-economic or

other factors, it is felt that the results are quite significant.

### **SUMMARY**

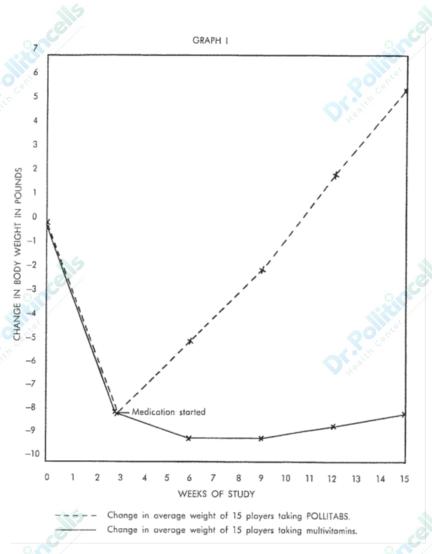
A preliminary control study was performed to determine the comparative weight-building properties and infection-resisting properties of a newly available product, Pollitabs, as compared to a standard multi-vitamin.

The results show a marked ability of the Cernitin Pollitabs to produce better weight gain and increased resistance toward infections. It is felt that further studies are definitely indicated and these are being planned.

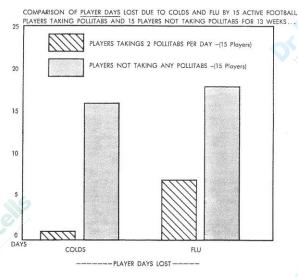
This study was performed at the Winter Park High School and under the strict personal supervision of Coach Mosher, and under the direction of Charles E. Noyes, M.D.

### Charles E. Noyes, Jr. M.D.

\* The Pollitabs used in this study were furnished by POLL-N-CO., INC., Maitland, Florida.







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Bob Mosher, Asst Football Coach Winter Park High School, Winter Park, Florida Tel: Midway 7—3078

\* Bruised Shoulder
\*\* Sprained Ankle
\*\*\* Bruised Shoulder
\*\*\*\* Twisted Knee

(A) Sprained Back
(B) Broken Neck
(C) Broken Collarbone

# POLLEN SUPPORT:

GRAMINEX Flower Pollen Extract

### Study on the antioxidant properties of pollen extracts

# By JERZY WÓJCICKI, LEIONIDAS SAMOCHOWIEC, DANUTA KADLUBOWSKA and ANNA KOWNACKA

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The study on the antioxidant and hyolipidemic effect of pollen extracts (Cernitins) was conducted in male mongrel rabbits and Wistar rats. The animals were fed a high-fat diet (HFD) composed of cholesterol, coconut oil and cholic acid, and received pollen extracts (Cernitins) orally (the rabbits over a period of 12 weeks and the rats over a period of 2 weeks). The levels of malondialdehyde (MDA) as an indication of the degree of peroxidation and lipids (cholesterol, triglyceride, separation of lipoproteins into fractions) were measured.

The study demonstrated the reduction of MDA concentrations under the influence of Cernitins, suggesting their antioxidant properties. Total cholesterol and triglyceride content was also decreased.

During the last ten years there have been reports on the toxicity of oxygen and oxygenated free radicals. The enzyme prostacyclin synthese is very sensitive to inhibition by lipid peroxides<sup>10</sup>, which also stimulate arachidonic acid release from phospholipids<sup>6</sup> and thereby possibly enhance platelet thromboxane A<sub>2</sub> (TXA<sub>2</sub>) formation. Lipid peroxides are present in many tissues, especially in atherosclerotic plaques<sup>5</sup> and possibly in hyperlipidemia. Moreover, it has been established that excessive lipid peroxidation occurs during the aging proceess<sup>12</sup>.

The present study included an examination of lipid peroxidation in hyperlipidemic animals under the influence of pollen extracts. Malondialdehyde (MDA), a product of reduction during the oxidative process, was measured as an indicator of the degree of peroxidation.

The pollen extracts (Cernitins), supplied by AB Cernelle, Vegeholm (Sweden) contained mainly water soluble substances (Cernitin T60) and fat soluble components (Cernitin GBX). It has earlier been demonstrated that Cernitins have a remarkable lipid lowering effect, both in animals<sup>1</sup> and in humans<sup>4</sup>. In

addition to this, it was established that they have a beneficial effect against the development of atherosclerosis<sup>15</sup>.

### **Materials and Methods**

The study was carried out on 30 male mongrel rabbits, with an initial body weight of 3.0-3.8 kg, and 30 male Wistar rats, with an initial body weight of 220-260 g. The animals were fed a standard basic diet, and were divided into three equal random groups: group 1 – control; group 2 – fed HFD; group 3 – fed HFD + pollen extracts (Cernitin T60 50 mg per 24 hrs + Cernitin GBX 10 mg per kg per 24 hrs) orally.

The HFD consisted of the following doses in grams per kg per 24 hrs: cholesterol – rabbits 0.5, rats – 4.0; hydrogenated coconut oil – rabbits 1.0, rats 10.0; cholic acid – rabbits 0.1, rats 0.2.

The experiment was conducted over a period of 12 weeks for rabbits and 2 weeks for rats. On the last day of the experiment the animals were fasted for 18 hrs, and blood samples were taken for biochemical analysis.

MDA (standard: 1-1-3-3-tetramethoxy-propane, supplied by Fluka AG) was measured using the technique described by Stuart and others<sup>13</sup>. The total cholesterol was assayed using a method based on the LIBERMANN-BURCHARDT reaction<sup>1</sup>, and triglyceride level was determined by the technique described by Eggstein and Kreutz<sup>3</sup>. Lipoproteins were separated into fractions by agarose electrophoresis<sup>4</sup>.

The results were analyzed statistically using Duncan's test.

### Results

The MDA concentration in the plasma of the rabbits in group 2 (fed HFD) was markedly higher (Table 1), showing an increase from 2.89 nmol/ml (control group) to 8.04 nmol/ml (i.e. by 372%). The addition of Cernitins to the diet produced a significant drop in the MDA concentration compared with that in the plasma of rabbits in group 2.

In the blood serum of rabbits fed with the HFD, the total cholesterol level was increased by 579%, while the level of triglyceride remained practically unchanged (Table 2). Only two fractions were separated

by lipoproteins electrophoresis: practically pre- $\beta$  and  $\beta$ -fractions remained unseparable. The percentage content of  $\alpha$ -lipoproteins in the rabbits in group 2 was considerably reduced. In group 3, the increase in serum cholesterol was markedly and significantly suppressed, while the  $\alpha$ -lipoprotein content was increased.

The MDA concentration was distinctly higher in rats in group 2 fed HFD as compared with those in group 1 (Table 3). The MDA concentration in rats in group 3 was significantly lower than that in rats in group 2.

An equally significant increase in the cholesterol level (428%) and in the triglyceride level (116%) was noted in the serum of rats in group 2 fed HFD (Table 4). Electrophoretic separation of lipoproteins revealed a suppression of the percentage content of the z-fraction. The addition of Cernitins to the HFD resulted in a significant reduction in the levels of cholesterol and triglycerides in the serum, and a marked increase in the percentage content of z-lipoproteins.

Table 1. Concentration of malondialdehyde (MDA) in the blood plasma of rabbits (mean ± SE)

		MDA			
Group	nmol/ml	nmol/10° platelets			
1	2.60 ± 0.1	5 3.92 ± 0.13			
2	12.27 ± 0.8	2 23.93 ± 2.90			
3	$9.30 \pm 0.3$	7 $15.26 \pm 1.59$			
p 1,	2 < 0.001	< 0.001			
2,	/3 < 0.01	< 0.05			

Table 2. Cholesterol (CH) and triglyceride (TG) levels in blood serum of rabbits, and electrophoretic separation of lipoproteins into fractions (mean ± SE)

		<u> </u>					
Group	СН	TG	Lipoproteins (%)				
	(Nomn)	(nmol/l)	7	pre-β + β			
1 2 3 1/2 2 3	2.60 ± 0.23 32.60 ± 4.48 10.63 ± 3.79 < 0.001 < 0.01	0.98 ± 0.09 1.06 ± 0.06 0.79 ± 0.08 > 0.7 > 0.05	57.33 + 3.10 7.73 ± 1.26 21.73 ± 6.22 < 0.001 < 0.05	42.67 ± 3.10 92.27 ± 1.26 78.27 ± 6.22 < 0.001 < 0.05			

Table 3. Concentration of malondialdehyde (MDA) in blood plasma of rats (mean ± SE)

		MDA				
	Group	nmol/ml	nmol/10° plutelets			
	1	2.89 ± 0.20	5.94 + 0.32			
	2	$8.04 \pm 0.30$	$17.36 \pm 0.38$			
	3	$5.29 \pm 0.40$	$11.73 \pm 0.69$			
Р	1/2	< 0.001	< 0.001			
	2/3	< 0.001	< 0.001			

Table 4. Cholesterol (CH) and triglyceride (TG) levels in blood serum of rats, and electrophoretic separation of lipoproteins into fractions (mean ± SE)

Group	СН	TG	Lipoproteins (%)			
•	(nmol/l)	(nmol/l)	α	pre-\beta+\beta		
1 2 3 1/2 2/3	1.28 ± 0.16 6.76 ± 0.62 3.73 ± 0.29 < 0.001	1.25 ± 0.16 2.70 ± 0.35 0.75 ± 0.10 < 0.01 < 0.001	51.42 ± 3.92 21.68 ± 2.45 34.20 ± 3.40 < 0.001 < 0.01	48.58 ± 3.92 78.32 ± 2.45 65.80 ± 3.40 < 0.001 < 0.01		

### Discussion

The antioxidant hypothesis assumes that health and recovery involves protection against the free radical injury which may be caused by endogenous oxygen radicals, by exogenous radicals or by secondary radicals propagated as a result of the chain reaction of polyunsaturated fatty acid peroxidation.

The MDA concentrations detected in our experiment show that an increase in lipid peroxidation occurs in animals suffering from hyperlipidemia when compared with controls. The reduction of the MDA concentrations under the influence of pollen extracts suggests that Cernitins are an effective means of reducing lipid peroxidation, i.e., that they have antioxidant properties.

MDA concentrations seem to be produced by the action of the cyclooxygenase. Since MDA is also one of the principal products of the breakdown of the endoperoxides, its measurement offers a simple method of assessing the function of this enzyme. TXA<sub>2</sub> formation occurs in equimolar amounts with that of MDA. TXA<sub>2</sub> is an active vaso-

constrictor and platelet aggregating agent. It aggregates platelets via a direct process<sup>9</sup>, and causes them to release adenosine diphosphate, which is also a potent aggregating agent<sup>2</sup>. Furthermore, the MDA concentration in plasma is probably relative to the MDA concentration in arterial walls, and lipid peroxidation plays a role in the production of atheromatous plaques and arterial tissue injuries<sup>8</sup>.

Although platelet aggregation and lipid peroxidation are not synonymous, the events which lead to the release reaction appear to be accompanied by the generation of free radicals and the peroxidation of lipids. Pollen extracts may block this phenomenon, either by direct enzymatic inhibition of the conversion of arachidonic acid to labile aggregation stimulating substances or intermediary endoperoxides, or by restructuring the fatty acid so that it is rendered impervious to peroxidation.

A number of recent publications have dealt with the possible role of lipid peroxidation in the process of atherosclerosis<sup>8</sup>. Peroxidation involves reduction of molecular oxygen to H<sub>2</sub>O with intermediate free radicals, particularly toxic ones. Free radicals may

react with nucleic acids, proteins, polysaccharides and lipids. In lipid peroxidation, these radicals react with fatty acid unsaturated produce to endoperoxides, which are very active substances with cytotoxic properties. Peroxidation can occur as the result of inflammatory or degenerative processes. Atherosclerosis leads to hypoxia of the arterial walls, which is accompanied by inflammation.

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extracts in the treatment of lipid metabolism disturbances<sup>11,14,15</sup> and our clinical studies on the inhibition of platelet aggregation by Cernitins<sup>7</sup>. They explain, and to some extent clarify, the mechanism of beneficial action in the management and prophylaxis of atherosclerosis.

The results of this study support our earlier

experiments on the significance of pollen

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## LIPID SUPPORT:

### GRAMINEX Flower Pollen Extract

# Investigation on the Antioxidant Effect of Cernitin Pollen Extract

From the Institut of Pharmacology and Toxicology in Szezecin a report is informing of the antioxidant properties of Cernitin Pollen extract. The head of Clinical Pharmacology, professor Wojcicki, have studied rabbits and rats in this test. He divided the animals in 3 groups. One control group, one with a special high fat diet, and one with a combination of high fat diet and Cernitin pollen extract.

The study included an examination of lipid peroxidation in hyperlipidemic animals under the influence of pollenextracts. Malondialdehyde (MDA), a product of reduction during the oxidative process, was measured as an indicator of the degree of peroxidation. Also other parameters were measured as an indicator of the degree of peroxidation. Also other parameters was measured; cholesterol, triglycerides and lipoproteins.

The experiment was conducted over a period of 12 weeks for rabbits and 2 weeks for rats.

The study demonstrated the reduction of MDA concentrations under the influence of Cernitin pollen extracts, suggesting anti oxidant properties. Total cholesterol and triglyceride content was also decreased.

In the groups of animals receiving high fat diet, the level of cholesterol and MDA was heavily increased. In the blood plasma of rabbits MDA increased 372% and in rats cholesterol increased with 428% compared with the control group. When Cernitin extracts was added the level of MDA as well as cholesterol was significantly decreased. At the same time the alfa lipoprotein content was increased.

It has been demonstrated earlier that the Cernitin pollen extracts have a remarkable lipid lowering effect both in animals and humans. In

addition to this it was established that they have a beneficial effect against the development of atherosclerosis.

The anti-oxidant hypothesis stipulates that healthiness involves protection against the free radical injury to cells by peroxidation of lipids. This experiment shows that an increase in lipid peroxidation occurs in animals suffering from hyperlipidemia when compared with controls. The reduction of MDA concentrations under the influence of pollen extracts suggest that Cernitins are effective in reducing lipid peroxidation, i.e. that they protect the destruction of cells, caused by free radicals.

Furthermore the MDA concentration in plasma is probably relative to the MDA concentration in arterial walls, and lipid peroxidation plays a role in the production of atheromatous plaques and arterial tissue injuries. Although platelet aggregation and lipid peroxidation are not synonymous, still the events which leads to aggregation appear to be accompanied by the generation of free radicals and peroxidation of lipids.

In lipid peroxidation, this free radicals react with unsaturated fatty acid to produce endoperoxides, which are very active substances with macrophagic and cytotoxic properties. Peroxidation can occur as the result of inflammatory or degenerative processes. Atherosclerosis leads to wounds in the arterial walls, which is accompanied by inflammation.

The result of this study support those of ealier experiment to ascertain the significance of Cernitin pollen extracts on the treatment of lipid metabolism disturbances, and the clinical studies on the inhibition of platelet aggregation by Cernitins.



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