



# SK 713

Customized & Proprietary  
Patent-Pending

Unique Delivery Technology  
For Nutraceutical, Cosmeceutical &  
Pharmaceutical Preparations



# What Is It?

- ▶ SK 713 is a unique, proprietary and patent-pending delivery technology shown to enhance nutrient uptake and bio-availability
- ▶ Produced using a highly specific electrolyte complex at precise levels, which is impregnated into and permeates the transport spheres themselves. This complex, derived from solar evaporated naturally occurring water, increases the electrical potential of the SK 713. This not only helps amplify the absorption and bio-availability of enveloped nutrients, but also provides a direct benefit to cellular physiology.
- ▶ Mineral ions are infused into each layer of the multi-lamellar SK713 Sphere and therefore are released in a sequential and extended period of time as the food based sphere naturally disintegrates layer by layer in the mouth and small intestine environment releasing its nutritional payload. The constant supply of the mineral ions accomplish several things including the enhancement of a electrical gradient, needed for nutrient transport, a buffering of pH which naturally improves blood flow and quality, and the minerals themselves, through specific processes, help improve stability of the SK713 Sphere.

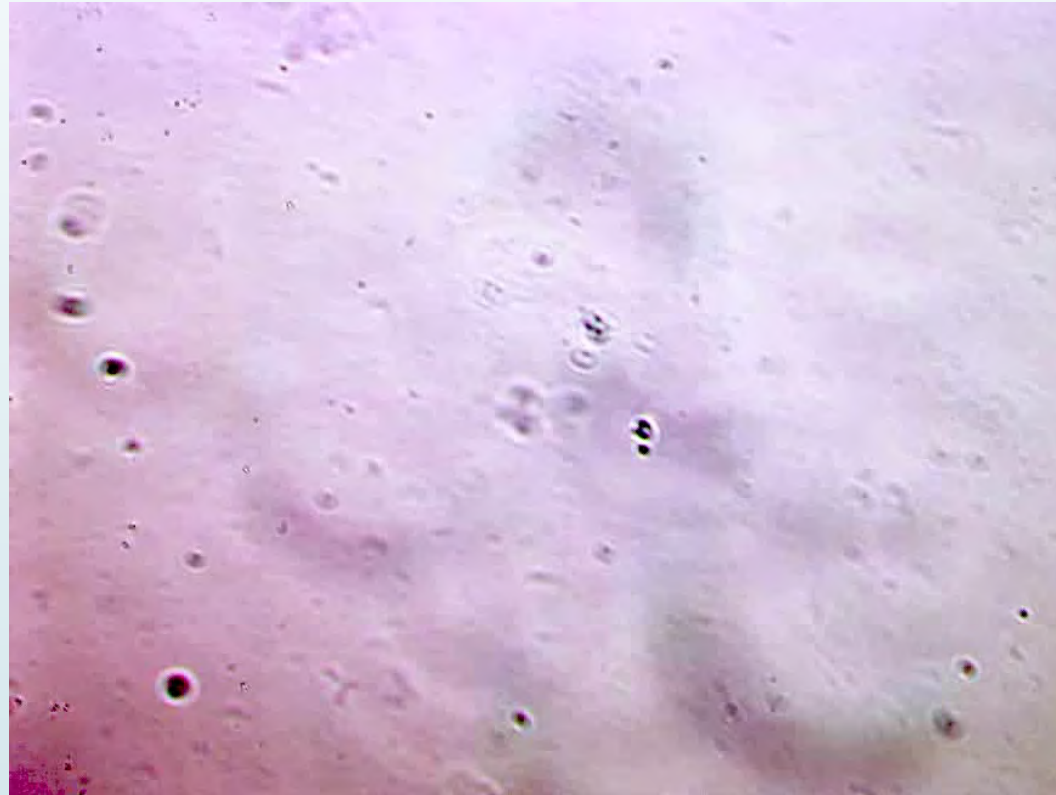


# What is it?

- Capable of use in both ingestible and topical preparations
- Effective with both water and fat soluble compounds, simultaneously
- Able to envelope multiple nutrients within each transport sphere creating maximum synergy
- Benefits provided are both direct and indirect. SK 713 enhances nutrient uptake and also delivers a direct cholinergic and homeostatic benefit to cellular physiology

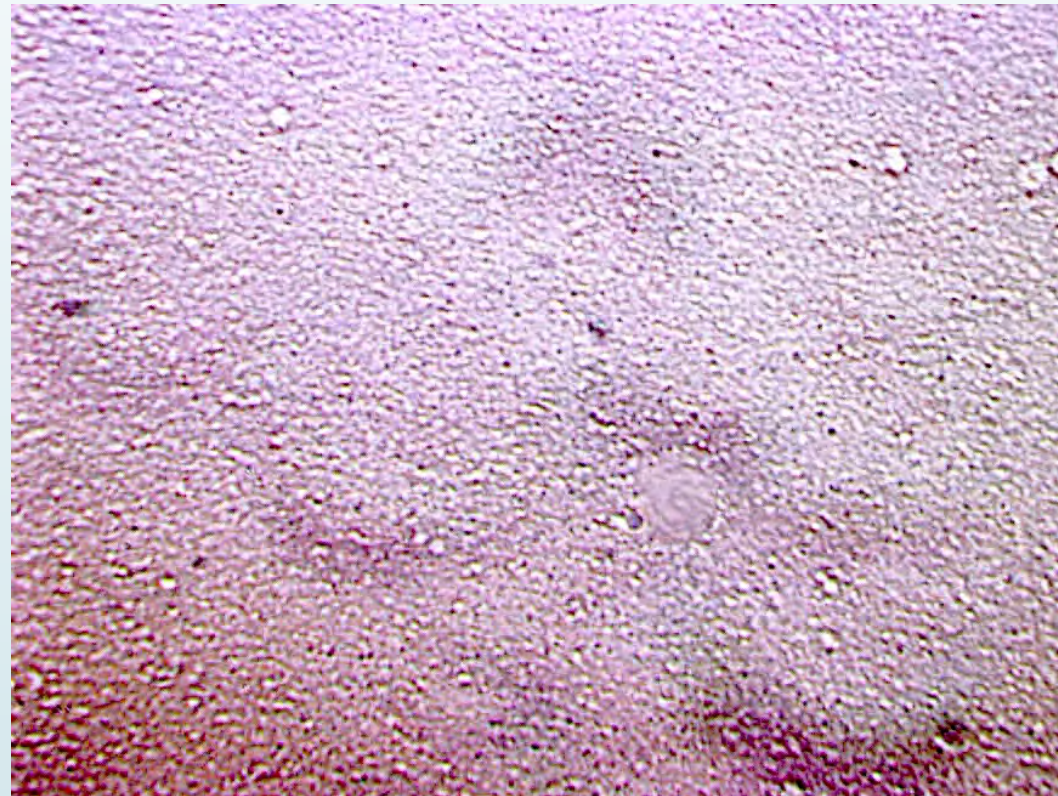
# Standard Liposome at 400X Mag.

Pass Cursor Over Image and Click on Arrow to Play Video  
Video shows virtually no movement due to lack of electrical charge



# SK 713 Sphere at 400X Mag.

Pass Cursor Over Image and Click on Arrow to Play Video  
Video Shows Dynamic Movement Due to Electrical Nature





# Absorption



- ▶ "Whatever the nutritional potential of a food, its contribution is nonexistent if it does not pass the test of absorption. Those nutrients that have not been transferred through the intestinal mucosal cell to enter the circulation have, for all nutritional intent and purpose, have never been eaten. The variety of nutrients from the organism's environment that have been made available by absorption must be transported through the circulatory system to the aqueous microenvironment of the cells. There, they serve their ultimate purpose: participation in the metabolic activities in the cells on which the life of the total organism depends."

Ruth L. Pike and Myrtle L. Brown  
Nutrition: An Integrated Approach  
John Wiley & Sons, 1984 I, p. 283



# SK 713 is customizable depending on desired effect of specific formulation

- ▶ Technology can be augmented to match desired outcome of formula
- ▶ May be applied to targeted portions of formula, or total compound
- ▶ May be used on virtually any formula of an aqueous nature
- ▶ May also be applied as a coating to powders, or added in dry form to other powders for reconstituting with liquids.
- ▶ Coating of SK 713 acts to increase solubility and uptake of dry powders
- ▶ Direct benefits of SK 713 also pass on to cells from dry powders (this technology is not available through any other known source)
- ▶ SK 713 is very stable and possesses extensive shelf life
- ▶ Ingredients treated with SK 713 acquire better stability as well

A dark grey arrow points to the right at the top left. Below it, several thin, curved lines in shades of blue and grey sweep across the left side of the slide.

# Surface Tension of SK 713 Sphere vs. standard liposomal sphere

In independent clinical testing, both an SK 713 Sphere and a standard liposomal sphere were measured for contact angle reflection of light, with the drop of compound on glass, a non-reactive surface. A higher contact angle signifies a higher surface tension.

The standard liposomal sphere demonstrated a contact angle of 39, while the SK 713 Sphere contact angle was measure at 47.7.

The SK 713 Sphere was shown to have a 22.3% greater degree of contact angle, thereby demonstrating a significantly greater degree of surface tension, all due to the unique production methods of SK 713.



# Surface Tension of Standard Liposome

**NSL Analytical – Report # 283340**

Materials Test Report for Contact Angle measurement

Submission #: 283340 Sample # 1506638

Date: April 20, 2015

Technician: TG Coating: N/A

Sample #1, #021215 LS (Pure Liposome)

Sample Drop #	1 <sup>st</sup> Measurement	2 <sup>nd</sup> Measurement	3 <sup>rd</sup> Measurement	4 <sup>th</sup> Measurement	5 <sup>th</sup> Measurement	Avg. Measurement	Contact Angle
6638-1	41.7	41.6	41.5	41.5	41.2	41.5	<b>39</b>
6638-2	40.9	40.8	40.6	40.6	40.3	40.6	
6638-3	37.4	37.4	37.2	37.0	36.8	37.2	
6638-4	38.9	38.3	38.2	37.9	37.5	38.2	
6638-5	39.8	37.5	37.2	36.9	36.6	37.6	

# Surface Tension of SK 713 Sphere

**NSL Analytical – Report # 283340**

Materials Test Report for Contact Angle measurement

Submission #: 283340 Sample # 1506639

Date: April 20, 2015

Technician: TG Coating: N/A

Sample #2, #021215 (SK713 Sphere)

Sample Drop #	1 <sup>st</sup> Measurement	2 <sup>nd</sup> Measurement	3 <sup>rd</sup> Measurement	4 <sup>th</sup> Measurement	5 <sup>th</sup> Measurement	Avg. Measurement	Contact Angle
6639-1	49.0	48.8	48.7	48.5	48.4	48.7	<b>47.7</b>
6639-2	46.9	46.8	46.8	46.6	46.5	46.7	
6639-3	45.6	45.4	45.3	45.1	44.9	45.3	
6639-4	47.8	45.6	45.8	45.6	45.5	46.1	
6639-5	51.5	51.7	51.6	51.6	51.3	51.5	



# Additional Highlights of SK 713

- Patent-Pending
- Inexpensive to produce-costs pennies per serving
- Ingredients in SK 713 are readily available, meaning no supply shortages
- All ingredients in SK 713 are GRAS (generally recognized as safe)
- GRAS ingredients may be used in nutraceuticals, cosmetics, as well as beverages and foods.
- SK 713 has several opportunities for pharmaceutical application
- Additional vital components of SK 713 (customizable portion) are known only to us and cannot be reverse engineered
- SK 713 is electrically active and dynamic and passes this potential onto the delivery target
- SK 713 spheres have an increased surface tension which confers higher stability and integrity to the compound, and can increase duration of activity



# SK 713 Advantages for Ingestion

1. SK 713 spheres, at a small micron size, create absorption sublingually for a quick lift of nutritional energy.
2. The transport spheres help protect many of the delicate nutrients from the harsh environment of the stomach. This allows more nutrients to reach to small intestine where absorption occurs.
3. SK 713 spheres help increase surface area of nutritional concentrate helping it to cover a larger area of the small intestine wall where absorption takes place. More surface area means more opportunity for comprehensive absorption.
4. Spheres are able to hold both fat and water soluble nutrients which greatly enhances overall synergy. Typically, other transport spheres created in the body hold either fat or water soluble nutrients, not both.
5. There is a great increase in smaller particle size uniformity as the vitamins, minerals and hundreds of compounds in the botanicals travel into the bloodstream simultaneously within the spheres. This creates tremendous synergy.



# SK 713 Advantages for Topical Use

- ▶ 1. SK 713 spheres envelope a multitude of active and synergistic compounds allowing them to be delivered simultaneously upon application. This helps to ensure the greatest efficacy.
- ▶ 2. SK 713 can be used with peptides, amino acids, botanicals, vitamins, minerals, etc., and may be with any or all actives in the combination and effect desired.
- ▶ 3. The SK 713 spheres create a sustained release effect thereby allowing active materials to more thoroughly penetrate and act for longer periods of time. This also helps to ensure optimum benefits.
- ▶ 4. The unique aspect of SK 713 technology helps to create an electrostatic repulsion. This effect dramatically improves the absorption and utilization of active compounds at the epidermal and dermal layers because the repulsion effect is akin to creating a direct non-occlusive action. *Non-occlusive application is the key to create a transepidermal osmotic gradient, which is believed to be the driving force for the transport of vesicles into the skin* (Cevc and Blume, 1992).
- ▶ 5. The unique and proprietary processing of SK 713 allows the ionic minerals to be stabilized within the phospholipid matrix while also creating a sustained release of ions in unison with release of active compounds.



# Electrical Conductivity Testing of SK 713 Spheres vs. standard liposomes

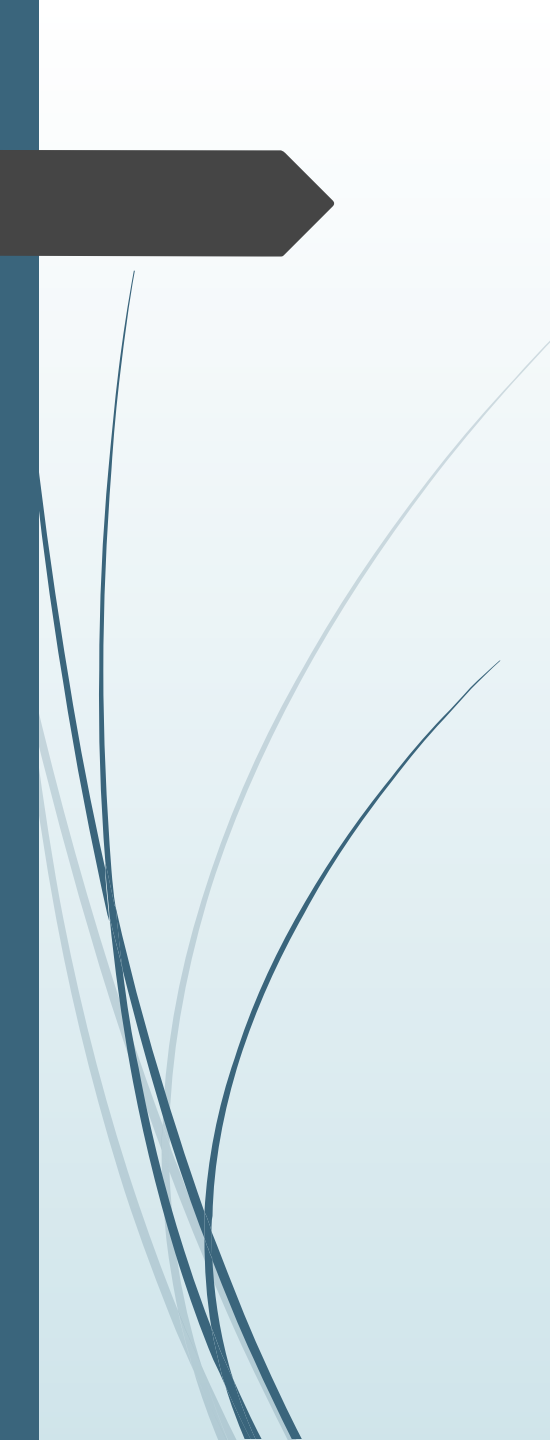
- ▶ Using a multi-meter at a 1000x setting, both SK 713 Spheres and standard liposomes were tested for Ohms, a measure of resistance to electrical conductivity. Higher Ohms readings signify a greater resistance to electrical conductivity.
- ▶ In separate tests, one drop at a time of both the SK 713 and the standard liposome was placed in 50 mL of distilled water, and measured for Ohms. The SK 713 water sample showed a far greater reduction in Ohms, demonstrating a much higher ability of the water to conduct electricity as compared to the control.
- ▶ As an example, at drop 10 the standard liposome Ohms reading was 280, while the Ohms reading for the SK 713 water averaged out to 85. This is a 330% reduction in resistance to electrical conductivity.



<b>Sample #1 Pure Liposome</b>		1000X Setting
18-Mar-15	Ohms reading	
Distilled Water = 50 ML.		600
Drops	1	400
Drops	2	380
Drops	3	380
Drops	4	360
Drops	5	350
Drops	6	300
Drops	7	300
Drops	8	300
Drops	9	300
Drops	10	280
Drops	11	280
Drops	12	280
Drops	13	280
Drops	14	280
Drops	15	280
Drops	16	280
Drops	17	280
Drops	18	280
Drops	19	260
Drops	20	260
Drops	21	260
Drops	22	260
Drops	23	260
Drops	24	240
Drops	25	240
Drops	26	220
Drops	27	220
Drops	28	220
Drops	29	220
Drops	30	200
Drops	40	160
Drops	50	150
Drops	60	150
Drops	70	140
Drops	80	135

Sample #2 Prodosome	Test #1	Test #2	Setting
18-Mar-15	1000X Setting in Ohms	100X Setting in Ohms	
Distilled Water = 50 MI.	600	600	
Drops 1	350		
2	220		
3	160		
4	140		
5	140		
6	120		
7	120		
8	120		
9	100		
10	90		
11	80		
12	80		
13	70		
14	70		
15	65		
16	65		
17	60		
18	60		
19	56		
20	54		
21	54		
22	52		
23	50		
24	50		
25	50		
26	48		
27	48		
28	46		
29	46		
30	45		
40	38		280
50	28		200
60	28		160
70	28		150
80	26		140
90	24		130
100	23		120
100	22		120





# Clinical Research with SK 713 Enhanced Multi-Nutrient Supplement

Using Phase Contrast Microscopy to examine live blood cells, our group evaluated whether an SK713 SLP encapsulated liquid multinutrient complex could enhance morphological, hematological and rheological changes in the blood after supplementation, indicative of enhanced speed of absorption, bioavailability, and utilization of nutraceutical ingredients.

Subjects then consumed either one ounce of bottled water (control) or one ounce of the VMP35 liquid multinutrient (active). At 5 minutes from intake, a second blood sample was taken and differences from the first sample were evaluated. Subjects in the control group (post-control) then consumed one ounce of the VMP35 multinutrient complex (MNC) and had a third blood sample drawn 5 minutes after intake. Results: No changes were observed between the before and after samples in the water control. Significant differences were observed between the before and after samples in the active group, the post-control active group as well and the 30 minute post-active groups. Conclusion: The SK713 SLP technology effectively delivered nutrients into the blood in less than 5 minutes from intake and exerted a sustainable effect for at least 30 minutes post intake sufficient to cause significant improvement in morphological, hematological and rheological properties.

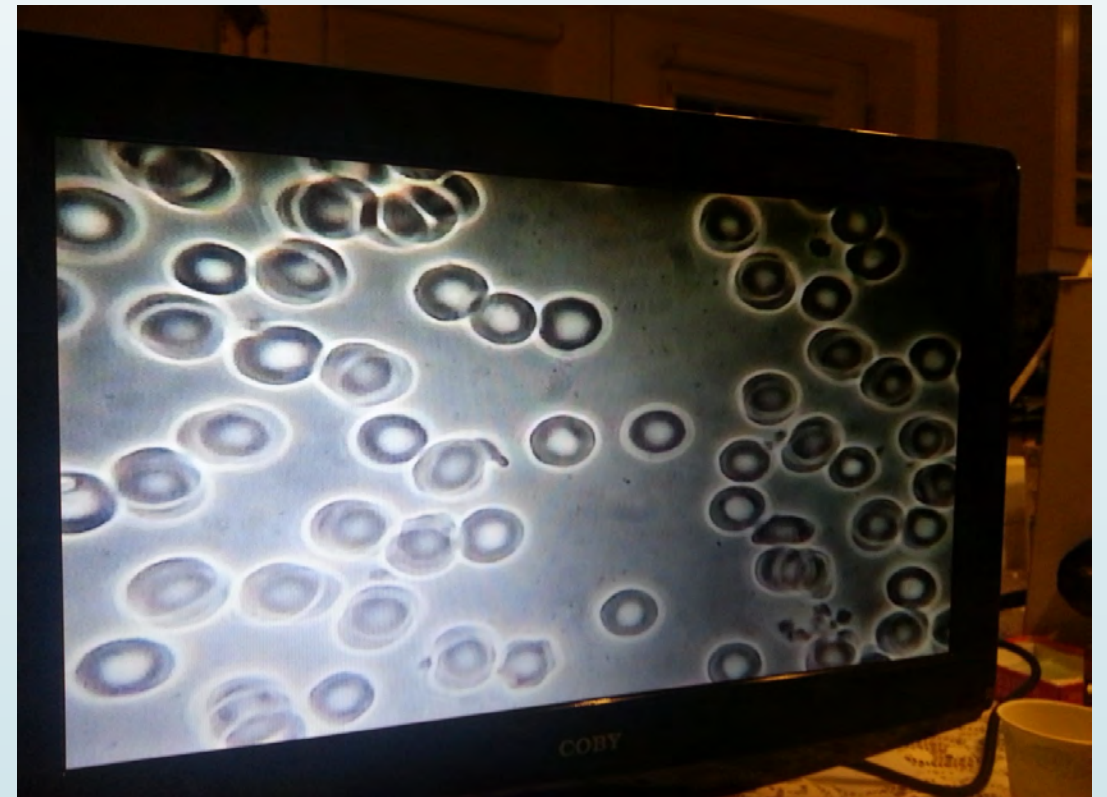
# Visual Evidence of Benefits from SK 713 Enhanced Multi-Nutrient Supplement

Group 2 - Subject #40

A. Baseline blood test before VMP35 MNC

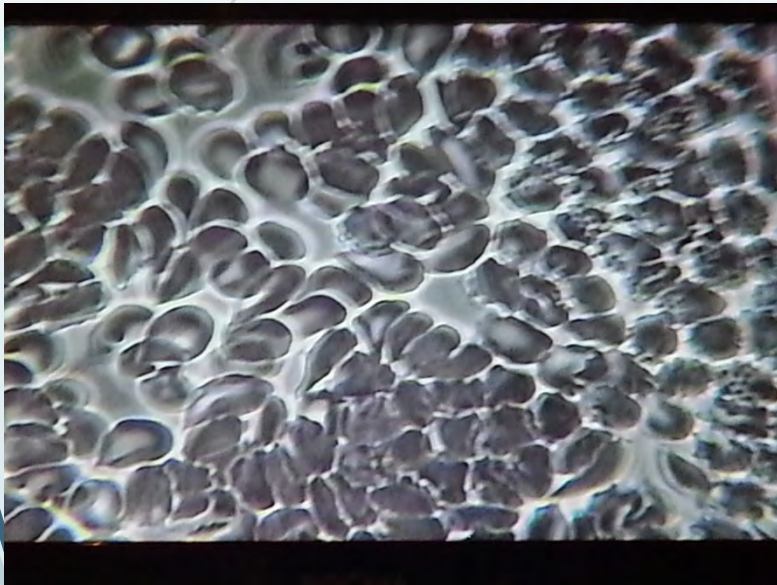


B. 5 Minutes after taking 1 oz VMP35 MNC



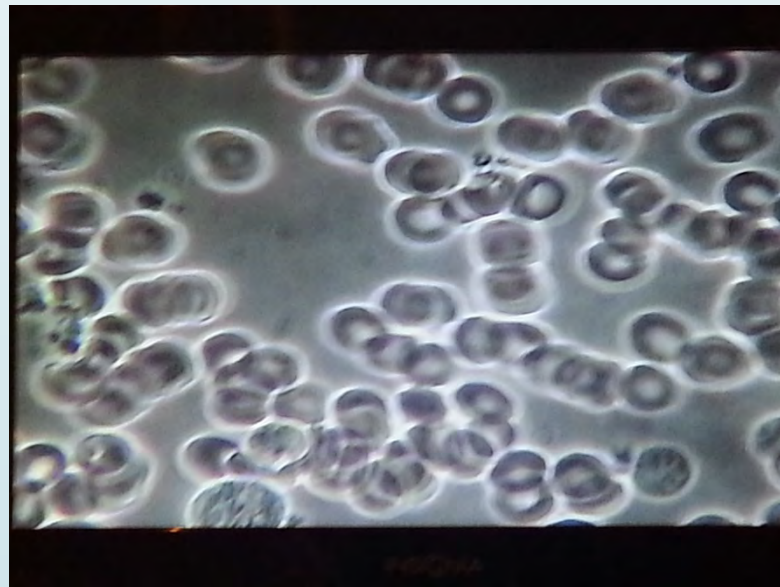
# Clinical Research with SK 713 Enhanced Multi-Nutrient Supplement

A. Baseline blood test  
before VMP35 MNC

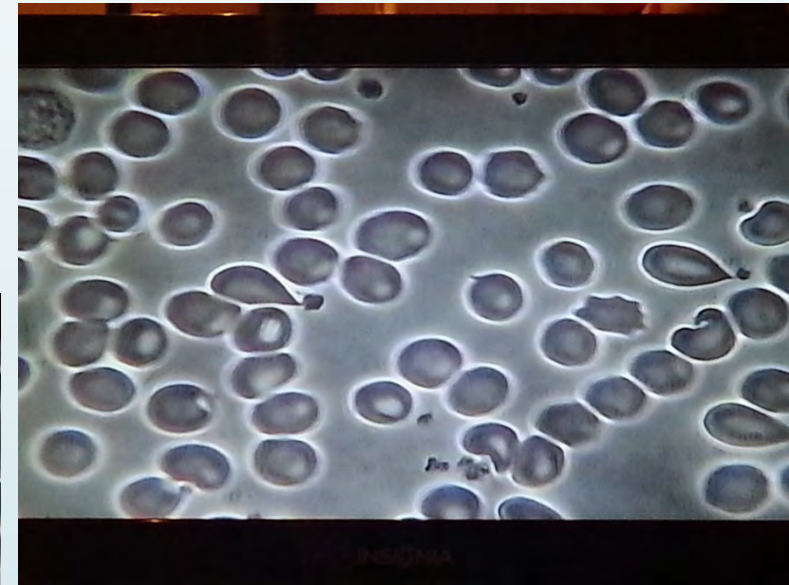


Group 2 – Subject #49

B. 5 Minutes after taking  
1 oz. VMP35 MNC

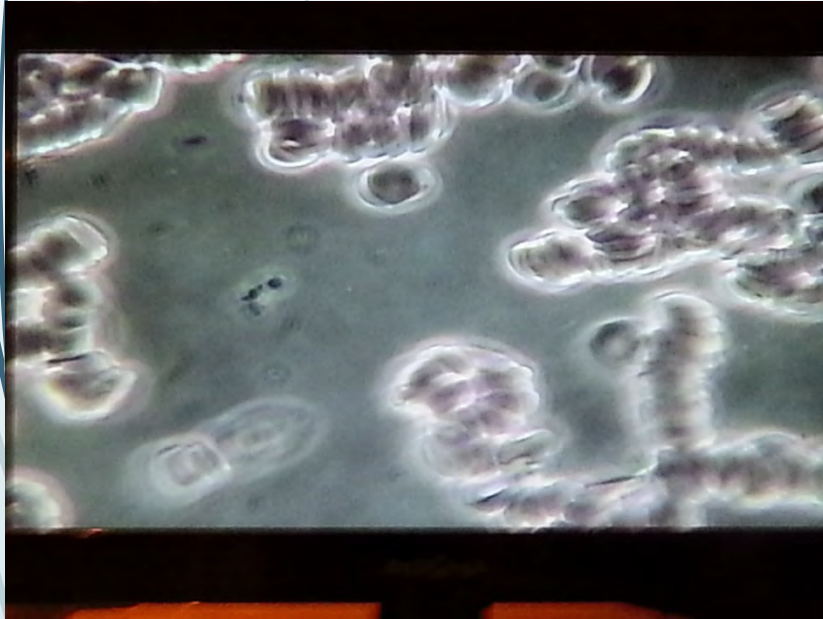


C. 30 Minutes after taking 1  
oz. VMP35 MNC



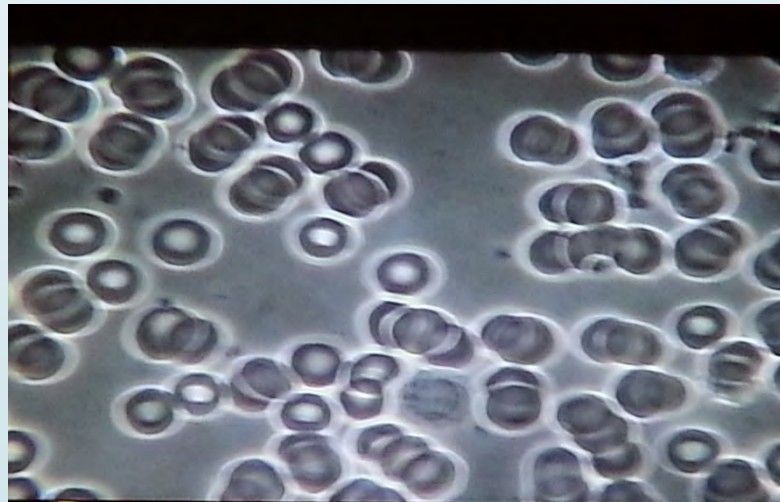
# Clinical Research with SK 713 Enhanced Multi-Nutrient Supplement

A. Baseline blood test  
before VMP35 MNC



Group 2 – Subject #50

B. 5 Minutes after taking 1  
oz. VMP35 MNC



C. 30 Minutes after  
taking 1 oz. VMP35 MNC



# Case Report on Topical Application Using SK 713

A male volunteer had blood drawn in preparation to create a single 4 cc dose of platelet rich plasma (PRP). The PRP was produced using the Selphyl® system. The 4 cc's were divided in half with 2 cc's each added to Selphyl® provided test tubes with Calcium Chloride. Each tube was mixed according to directions, and then an appropriate amount of SK 713 was added to one of the tubes. Next, the untreated Selphyl® mixture was swabbed onto the left inner forearm, while the Selphyl®/SK 713 mixture was swabbed onto the same area of the right arm.

Within 5 minutes, the liquid mixture of Selphyl®/SK 713 had completely absorbed into the right arm. However the straight Selphyl® liquid on the left arm was still wet and with some areas of tackiness, and forearm hair was matted. This demonstrated a significant difference in absorption. In addition, within 1 hour, there was a demonstrable difference in physiological effect as well. The following slides show the arm treated with the Selphyl®/SK 713 mixture had transdermal absorption with concurrent vasodilation, as compared to the left arm treated with the straight Selphyl® mixture that showed no visible effect whatsoever.

Left arm swabbed with Selphyl® shows normal vasodilation. Right arm swabbed with Selphyl®/SK 713 shows significant vasodilation within 1 hour of application which persisted for 4 days at which time the vein returned to it previous state.

Picture #1



Picture #2





# Clinical Research on Transdermal Effect

- ▶ Studies were conducted at an independent research facility in New England that specialized in topical and transdermal application. They have a proprietary 3D human skin tissue model that has been used for major entities including P & G, NASA, and the Mayo Clinic.
- ▶ Both a platelet rich fibrin matrix (PRFM), and 1% lidocaine HCL solution were tested to determine the ability of SK 713 to transport these materials through the stratum corneum (SC) to deeper layers of the skin. Under normal circumstances, none of these materials can pass through the SC. After being combined with SK 713, each of these compounds were measured for dermal permeation.



# Clinical Results on Dermal Permeation with SK 713 added to PRFM

At the 4 hour mark, platelets had successfully passed through the SC. At the 24 hour mark platelets had reached the basal cell membrane.

In addition, there was a 4 fold increase of fibrin at the basal cell membrane at hour 24.

Also at hour 24, there was a significant increase in interleukin-6, a pro-inflammatory cytokine. This demonstrated that the PRFM that had reached the basal cell membrane was active.

No morphological changes in skin tissue were observed meaning there was no tissue damage, and the PRFM did in fact pass through intact skin tissue.



A dark grey arrow points to the right at the top left. Below it, several thin, curved lines in shades of blue and grey sweep across the left side of the slide.

# Clinical Results on Dermal Permeation with SK 713 added to 1% Lidocaine HCL

- ▶ 1% Lidocaine HCl mixed with SK 713 was applied to skin tissue at a level of 405 mcg.
- ▶ Analysis revealed a four fold increase in permeation at 24 hr. compared to the 2 and 4 hr. exposure time points, even though typical lidocaine has very poor ability to pass intact skin.
- ▶ Measurements taken at hour 24 demonstrated a level of lidocaine at just over 300 mcg at the basal cell membrane.
- ▶ Topical lidocaine, even with occlusive dressing in place for 24 hours, has shown a permeation of roughly 16%.
- ▶ In contrast, the lidocaine mixed with SK 713 with a single application and no dressing, at the 24 hour mark, showed a permeation level of 75%.

A dark grey arrow points to the right from the left edge of the slide. Below it, several thin, light blue lines curve downwards and to the left, creating a decorative graphic element.

# SK 713 Summary

- ▶ Patent Pending Technology
- ▶ Unique and proprietary Delivery system to enhance nutrient uptake
- ▶ All-Natural utilizing GRAS ingredients
- ▶ Customizable for both liquid and dry formulations
- ▶ Cannot be reverse engineered
- ▶ Does not require special equipment in manufacturing and may be utilized on-site at most manufacturing facilities
- ▶ Creates better product efficacy and product “exclusivity”
- ▶ Has demonstrated incredible ability to effect healing using topical/transdermal applications.