



Nano Silver

Nano Technology
was first developed
by Herbert Gleiter,
a German, in 1984.



Herbert Gleiter

Germany Leopoldina academicians of Sciences
American Institute of Science foreign academicians
American College of Engineering foreign academicians

Nano



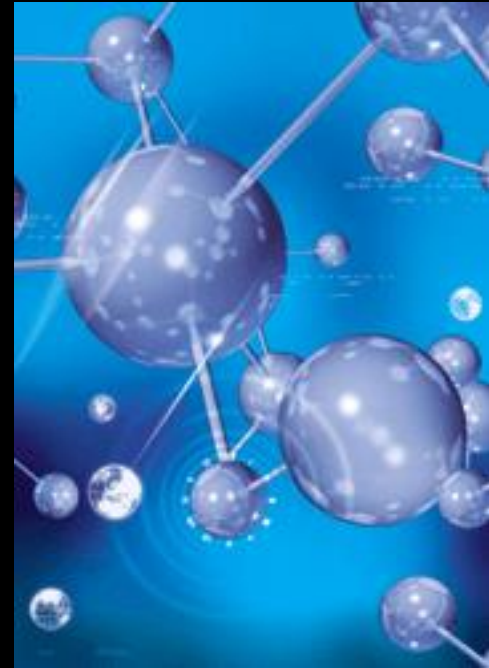
Nano is 50 years ahead of negative icon technology
Scientists the world over believes that Nano material
and its technology is the most vital development in the
21st century,
an area with the most potential
in science-technology research.





What is **Nano**

Nano is a measurement in length;
it is one over 1 billion meters,
one over thousand micrometers
4 times the size of the atom,
100,000 minute than our hair.





Nano and Nano Technology



Nano is a unit used to measure the length.

Nano is the technique used to turn specific material into the size of nano.



The unique features

of

Nano Technology



Main features of nano technology

the magnetic in iron utensils become stronger

A non-insular object becomes insular;

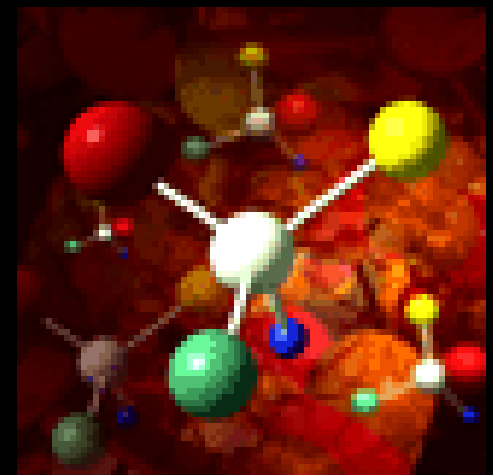
Making far infrared radiation extraordinary;

Stronger ultra violet reflection;

Strong adhesive

Powerful bacteria killer

Powerful Catalyst



Ag+



Silver

The Merits of Silver is as **expensive** as **Gold**

It is regarded as **expensive metal**.

It has been used as a currency and accessories since ancient time.

Symbol for silver is “Ag”





The Use ^{of} Silver and its effects



Pure silver ear ring

Ear ring made of pure silver
can prevent swollen, Skin allergic
and inflammation during piercing of ear
because silver has an effect on bacteria.





The use of Silver and its effects:

The use of silver as a natural germ killer has been in existence for centuries.

In Medieval Mediterranean and ancient Asia, Silver wares were used to prevent drinks from turning sour, however, nobody knew that.





The use of Silver and its effects:

The pioneers in American Wild West used Silver coins in the bucket to keep the milk fresh when refrigerator was still a remote thing;





The use of Silver and its effects:

The nomadic people in Inner Mongolia use silver bowl to prevent mare's milk from turning bad.



The mystic prescription in Chinese Mandarin Court shows that silver necklace was used in the preparation of medicines to treat patients;

華
佗 The use of Silver and its effects:

》

Hua Tou used silver needle to cure the migraine of Chao Cao;

Silver needles is the best to use for acupuncture...

Mr. Li Shi Zeng in his 《 Ben Zao Kang Mu 》

it sums up the medical value of Silver as:



It maintains the well being of the body,
Pacify the internal organs,
Curb virus,
Keep you fit
Extend your life span.



Silver wares were used by Royals in Europe as it can keep one healthy, help in detoxification and a sign of status.



In 388 B.C.,

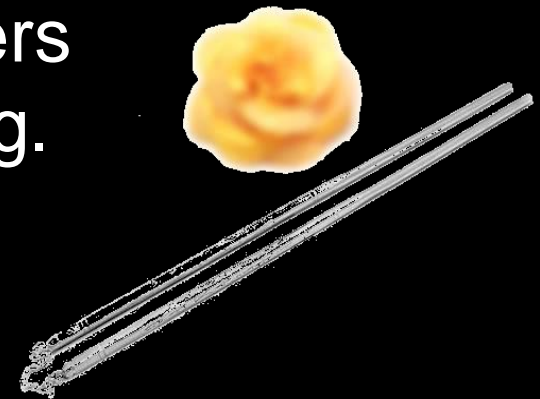
when the ancient Macedonians
invaded Greece,

they used silver flakes on wounds
to speed up healing;



Silver thread was used on wounds
during World War One as it can deter bacteria infection;

Emperors in China and their ministers
used silver chop sticks when dining.





Nano Silver



Nano Solver

the use of nano technology to reduce silver into the size of nano;

this is what we call

Silver ion (Ag^+) or

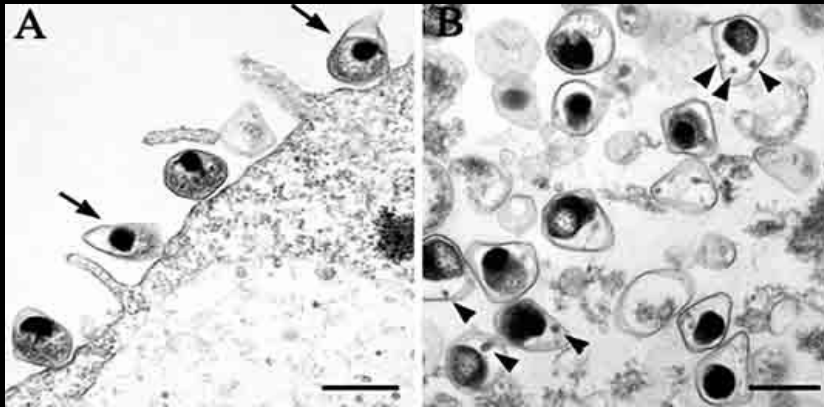
Colloidal Silver.

When silver is in the state of nano,

its bacterial killing power would be greatly maximized;



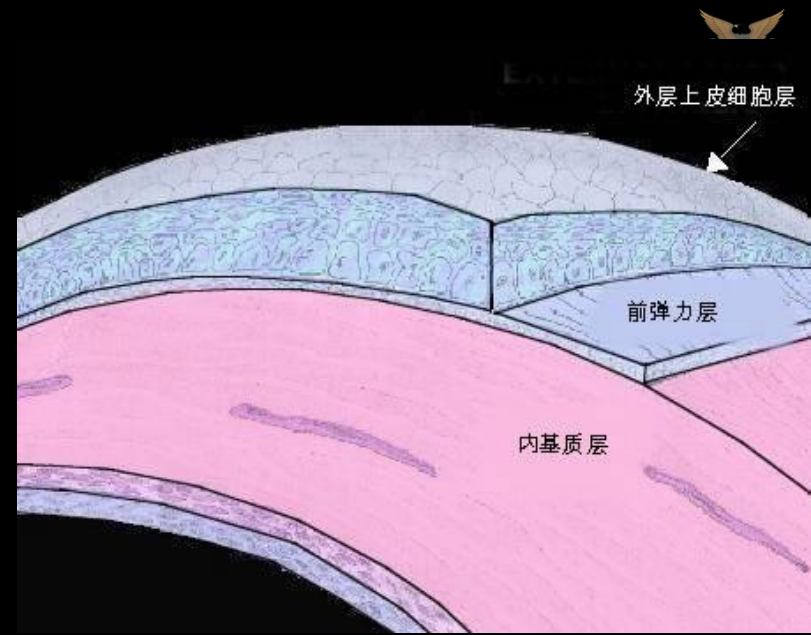
Nano Silver Can deter or kill the following infectious diseases such as



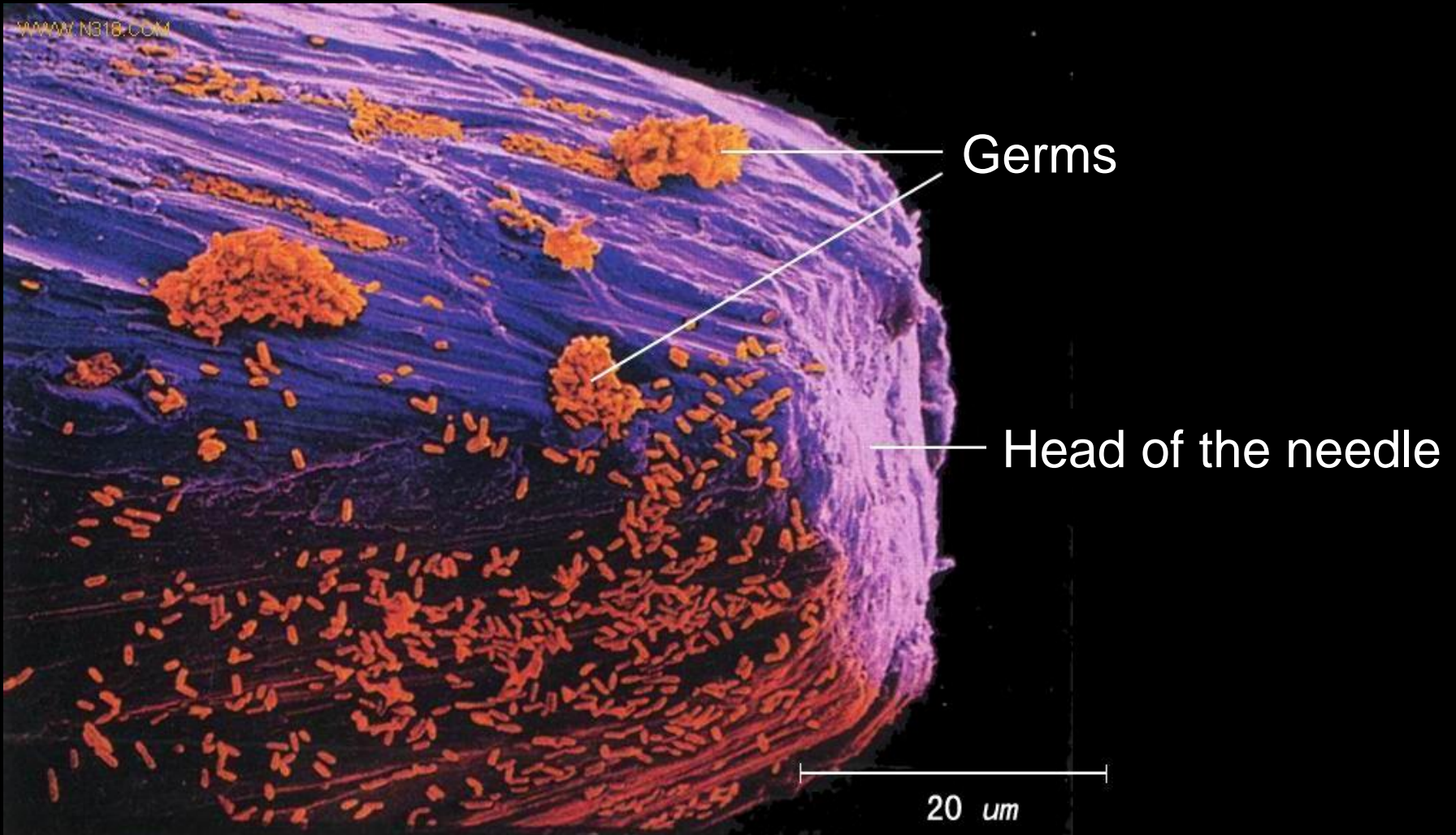
Colon bacillus,
lymphocytes
and trachoma Chlamydia,

and it would have a strong effect on them.

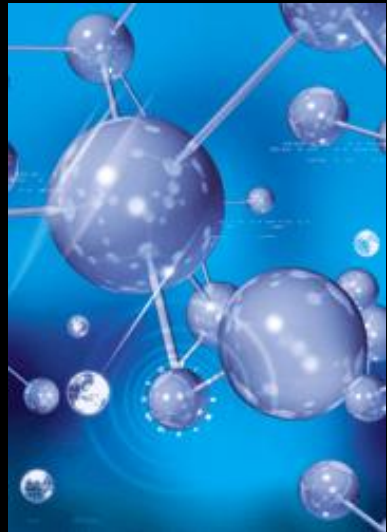
At the same time,
it can also repair damaged
epithelium;
Its power to kill bacteria will be
greatly increased when
dissolved in water,
hence it is in a better position
to treat diseases.



Bacteria all over the places Germs



Modern clinical research has proven that antibiotics can kill only 6 contagious bacteria,



but colloidal silver can kill over 650;
Moreover, it can also curb stubborn bacteria,

but it does no harm to the normal cells in the body.



In laboratory, scientists have yet to see any bacteria on earth that cannot be destroyed by silver in 6 minutes;

Silver is the most ideal effective germ-killing tool and this is concurred by Scientists the world over.

However due to certain reason, the use of Silver in medicines have been very restrictive.

Therefore, its natural uniqueness in fighting germs has not been fully utilized.

Scientists have found the uses of Silver



which include the following:

Extraordinary germ killing power which can kill as many as 650 germs on earth;

Maintain the balance of the endocrine system in the body;

Deter the electro wave;

Send out far infrared ray;

Fight germs,

Release negative ion,

and fungus....



Scientists have found the uses of Silver which include the following:

The author of “Human Body and Electricity” Dr. Robert Baker has found in his research:

The immune system in our body depends largely on Silver;

If the silver content in our body is below standard level (0.0001%),

the risk people fall sick will be greater;

The use **Of** Colloidal Silver



Now more and more airlines using silver ion in their cabin;

Today, silver is being used in many sectors of the economy,

for example home appliances, furniture, medicines and cosmetics etc.



- [About](#)
- [Contact](#)

SILVER NANO HEALTH SYSTEM

Washing Machine



Aircon



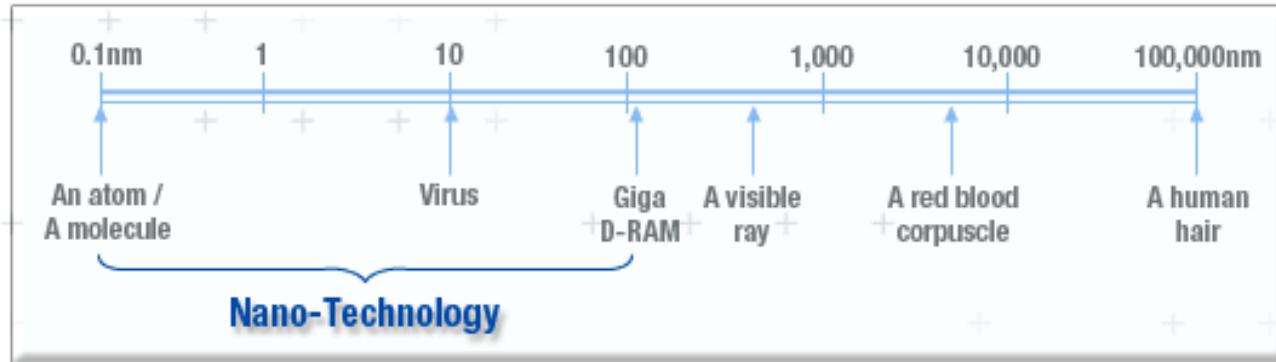
Refrigerator



Samsung Silver Nano



Samsung Silver Nano



Silver:

Silver Nano ions have proven their ability to sterilize **over 650 types of bacteria** and serve a better world up to you in style. Recent advancements in technology and increased consumer demand for health-promoting products are giving rise to many new items that use silver for highly effective sanitization so Samsung has developed a silver spoon for your appliances

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Over 650 types of bacteria

发现~生活之蓝

Discover the Blue of Life

松下光动银离子家电组合

Panasonic

Silver ion

Over 650 types of bacteria



开启全方位家居洁净时代

- 松下银离子滚筒洗衣机阿尔法系列
- 松下银离子系列冰箱
- 松下银离子变频空调



松下光动银离子，在蓝光的照射下，银离子的抑菌效果大幅度强化，广泛深入地抑制细菌生长。并率先运用到松下冰箱、空调、洗衣机上，三者构筑成全方位家居健康保护防线，有效净化食物、空气、衣服上黏附的细菌，环环相扣，连锁保护。

松下电器（中国）有限公司
松下电器全国服务热线电话：800-810-0781 手机用户可拨打：400-810-0781 网址：<http://panasonic.cn>

松下电器

GETHÁ

Nano Silver Natural latex

Over 650 types of bacteria

Nano Silver X3

TRANSFORMÉ
Breakthrough in sleep

SLEEP PHILOSOPHY
The world is no longer the same

Our ability to sleep increasingly affected by modern life being a battle. As science and technology advances and so more and more bacteria and viral surfaces, GETHÁ incorporated a natural and healthy solution. Transformé is designed with your natural health & well being as the prime consideration. Transformé, combining the latest NanoSilver Technology with GETHÁ's superior state-of-art latex foaming technology, has achieved the ultimate sleep protection for all.

GETHÁ
Only The Best From Mother Nature

www.getha.com

Golden Excellence Award 2004
Brand Excellence Award 2006
The Best Innovation Award 2006 / 2007



How does Nano Silver kill germs

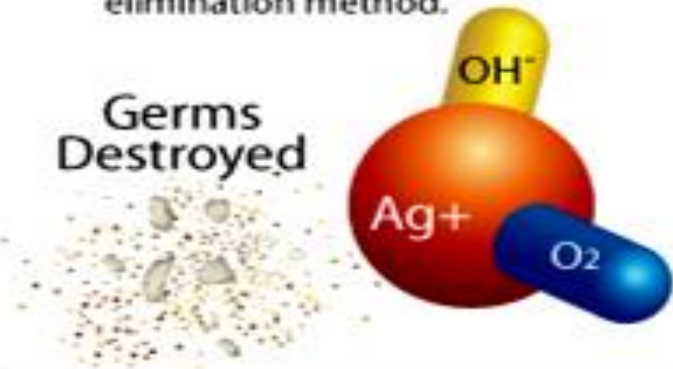
How NANO SILVER Eliminate Germs Effectively



Nano Silver is highly toxic to germs while relatively non-toxic to human cells. It allows Ag^+ ions to easily penetrate cells of microorganisms and eliminating them. It's ability to affect more molecules prove to be more effective than the conventional germs elimination method.



Germs Destroyed



Nano Silver sterilizes and sanitizes the surface, re-assemble after killing the germs; and continuously eliminating more germs. This makes the surface free from bacteria and thus providing healthy sleep always.



Nano Silver

a natural green product;

Silver is not an synthetic drugs,
it is a natural element in its simplest form.



How safe is Nano Silver

How safe is Nano Silver:



Antibiotics will damage our internal organs along with germs;

it is a product you need to be cautious when using it.

Clinical research on animals has proven that silver even used in larger than standard dose, it does not show any sign of poisoning on the animals.

As to the irritating test on rabbit, it also shows no negative reaction.



How safe is Nano Silver:

“Ben Cao Kang Mu”

附藥名索引 萬方鍼線	重訂本草綱目 	中醫考試必備
文化圖書公司印行	上冊	明·李時珍撰

生銀，無毒；

says silver in its natural form is harmless;



How safe is Nano Silver:

US Public Health Department 1990 Report,
“Report on Silver Poisonous”:



Silver does not pose an obvious
negative reaction in our body;
it is safe to use silver in drugs.



How safe is Nano Silver:

Medical sector world wide concur that Nano Silver is safe to use,

this is because Silver is one of the necessary important elements in our body;

In US, Nano Silver is placed on same level with food products in terms of its safeness



Nano Silver is environmental friendly

The manufacture of Nano Silver and its uses do not bring any harm to the environment we live.



Nano Silver

Women

health

Extract from New York Times:

U.S. women to pay attention to personal hygiene

More and more American women have led a life of their choice.

Besides cosmetics,

they use Nano Silver in their daily life, spraying it on the outer and inner vagina.



Extract from New York Times:

Nano Silver users say “It is great!”

Accordingly, the Nano Silver

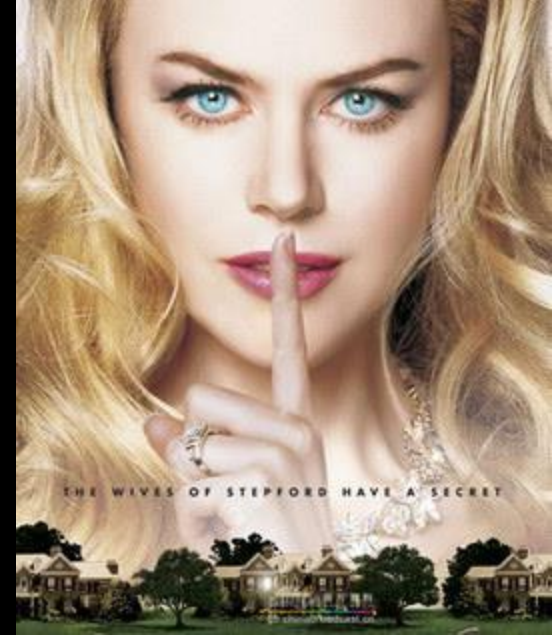
has a strong effect on germs,
and most importantly,

it does not bring any harm to the vaginal



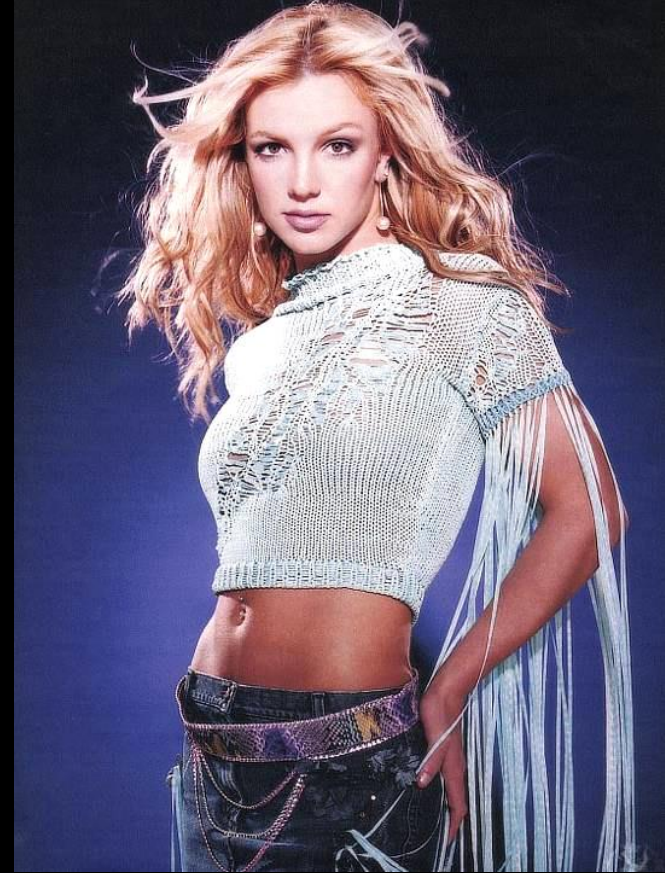
Extract from New York Times:

When the women use Nano Silver,
it can effectively prevent various
sicknesses peculiar to women
and also inflammation and infectious.



Extract from New York Times:

According to data,
more than half of the mature
women use it which has brought
changes to their life;
the use of Nano Silver
become a self styled protection.



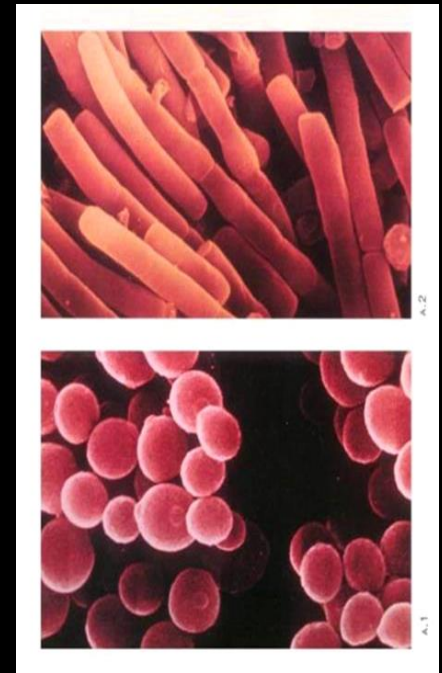
Extract from New York Times:



The germ fighting power of Nano Silver

It can eliminate germs and bacteria with minimum use;

it can kill more than 650 types of germs and won't produce any drug resistance.





Nano Silver **repair and rejuvenate**

Colloidal Silver can promote the healing of wounds,

Repair the damaged cells at the same time
rejuvenate them,

Promote the growth of flesh;

fight germs and inflammation at the same time repair
the damaged tissues around the wounds.

Effectively activate and promote growth of the tissues
Speed up the healing of wounds and does not leave
scars behind.



The penetrating power of Nano Silver

Colloidal Silver has an extraordinary
penetrating power,

it can speedily penetrate
2mm into skin to kill germs



Nano Silver **won't cause drug resistance**

The uniqueness of Nano Silver is that it can kill the germs directly, making it impossible to mutate, thus cannot produce the next generations which are drug resistance.

Because it does not cause drug resistance, you won't see the repeat of the same sickness.



Nano Silver **VS** Antibiotics

Title	Antibiotics	Nano Silver
Bacteria	Effective only to certain bacteria.	Does not limit to certain types of bacteria .
Drug Resistance	It can produce vaccines that resist bacteria	It won't produce vaccines that resist bacteria
Drug Resistance Bacteria	Not Effective	It produce the same results
Dosage	In mg	In μg

$$1\text{mg}=1000\mu\text{g}$$



Nano Silver

Can increase the strength of the immune system.

Research show that men often experience a short supply of silver deficiency;

The silver content in a cancer patient is found 1/10 and 1/20 less than the normal persons;

A constant supply of enough silver in the body will strengthen our immune system.



Nano Silver **taken orally**

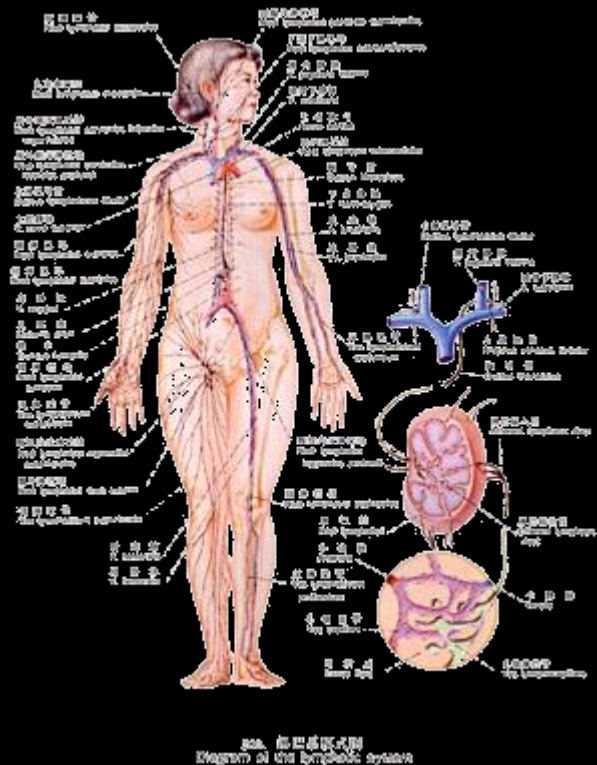
If Colloidal Silver taken orally, keep it in the mouth for 3-5 minutes to allow Colloidal Silver to be absorbed directly into our blood through our tongue, thereby to be utilized by the cells.

as mouth cavity is the breeding ground of bacteria;
The purpose to treat mouth ulcer is twofold:

To kill the bacteria that infects the mouth cavity,
and to protect the wounds.

Nano Silver **taken orally**

After 3 to 4 days, silver will stay in the tissue of our body, thereafter it will then broken down by kidneys, lymph system, small intestines and eventually expelled from our body in weeks;



Things you should know when using Colloidal Silver



The quantity consumed must be moderate.

For the first three days, consume as recommended (three times a day, each time 60ml), and increase the amount gradually after that.

Some would encounter uneasiness if overdose at first few days,

for example nausea, giddiness, muscles pain, diarrhea.

The frequency of urine may increase and with stronger smell, and some may see their urine turn darker.

Things you should know when using Colloidal Silver



External use, such as to ensure sustained moist skin surface more than five minutes better.

Some people who have toxins in their blood or skin, after taking Colloidal Silver for 7 – 20 days, rashes may appear on the skin accompanying with itchiness. However the rashes will disappear after a week.

Things you should know when using Colloidal Silver



High Blood Pressure: Some patients with high blood pressure may experience their blood pressure rise 10 – 15mm in 2 – 7 days.

However, it will go down after 10 – 15 days.

Note: It is for this reason, cardiovascular suffers are advised to take the dose as recommended.



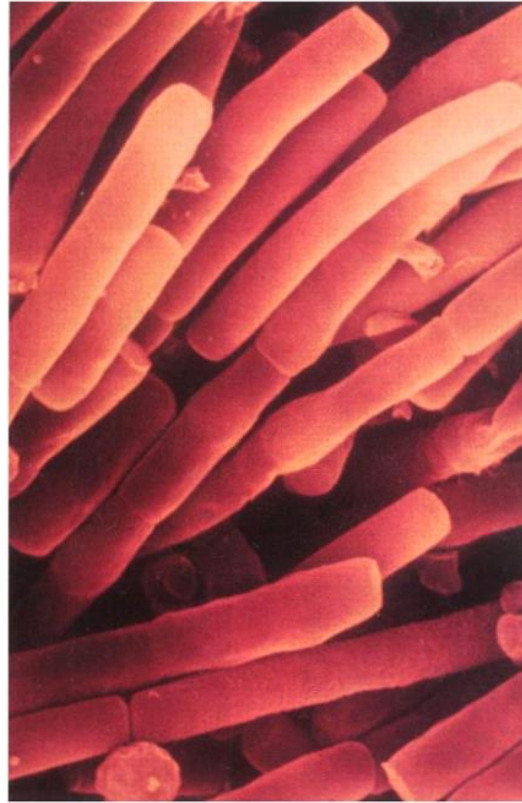
On the market Colloidal Silver



100ml



A.1



A.2



A.3

It is awesomely beautiful but very frightening

eliminate germs



Lab Report



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Chairman & Managing Director:

Date/ Dr. F.W. Kam C. Chem, FRSC, FRACI, FMC, FIST, FIM, FRSH, FBIM, FInst. Pat, FMOSTA

Directors: Datin P.K. Wong MRSH, MBIM, FInst.Pat., Dip NIOA

Marcus K.F. Kam B.E.(Hons), M.Sc., C. Chem, MRACI, MBA

CERTIFICATE OF ANALYSIS

Company : M/s. Acume Sdn Bhd
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47300 Petaling Jaya
Selangor Darul Ehsan.

Lab No: PJ-L/MS/3603/07

Page : 1 of 2

Sample Description : One (1) sample of Liquid
Sample Marking : Nano Silver 10 ppm
Date Sample Received : 2nd January 2008
Date Analyzed : 2nd January 2008 – 7th January 2008
Date Reported : 7th January 2008

BACTERIOLOGICAL ANALYSIS :

Challenge Test

Procedure :

- Prepare inoculum of organism below at 10^7 cfu/ml.
 - Staphylococcus aureus* ATCC 6538
 - Escherichia coli* ATCC 8739
 - Pseudomonas aeruginosa* ATCC 9027
- Prepare the sample/product to three (3) portions (9 ml each) and inoculate 1 ml of each inoculum above into product (this is 1:10 dilution) respectively and allow it to contact for 1 minute and 24 hours.
- Dilute the sample and proceed with serial dilution by transferring 1 ml from 1:10 dilution into 9 ml sterile saline up to necessary dilution.
- Pipette 1 ml of each dilution into duplicate plates.
- Pour approximately 15-20 ml of Tryptic Soy Agar into all plates and allow it to solidify.
- Incubate all plates at 35°C for 48 hours and count the colonies observed after completion of incubation.
- Initial count for each inoculum was also recovered.
- Calculate the percentage of kill for all organisms as follows :

$$\frac{\text{Initial Count} - \text{Count of organism survive}}{\text{Initial Count}} \times 100\%$$

Salma Binti Arifin
B.Sc.(Hons) Microbiologist

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BACTERIOLOGICAL ANALYSIS :

Challenge Test

RESULTS :

Organism Tested	Contact Time	Initial Count, cfu/ml (A)	Count of survive organism, cfu/ml (B)	Percentage of kill, (A) - (B) x 100% (A)
<i>Staphylococcus aureus</i> ATCC 6538	1 minute	1.0×10^5	1.7×10^4	83.82%
	24 hours	1.0×10^5	1.0×10^1	99.99%
<i>Escherichia coli</i> ATCC 8739	1 minute	6.0×10^5	1.9×10^4	96.87%
	24 hours	6.0×10^5	0	100.00%
<i>Pseudomonas aeruginosa</i> ATCC 9027	1 minute	2.4×10^5	1.5×10^4	93.70%
	24 hours	2.4×10^5	0	100.00%

Test Method : In-House Method based on United States Pharmacopoeia 28

Salma Binti Arifin
B.Sc.(Hons) Microbiologist

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Lab Report

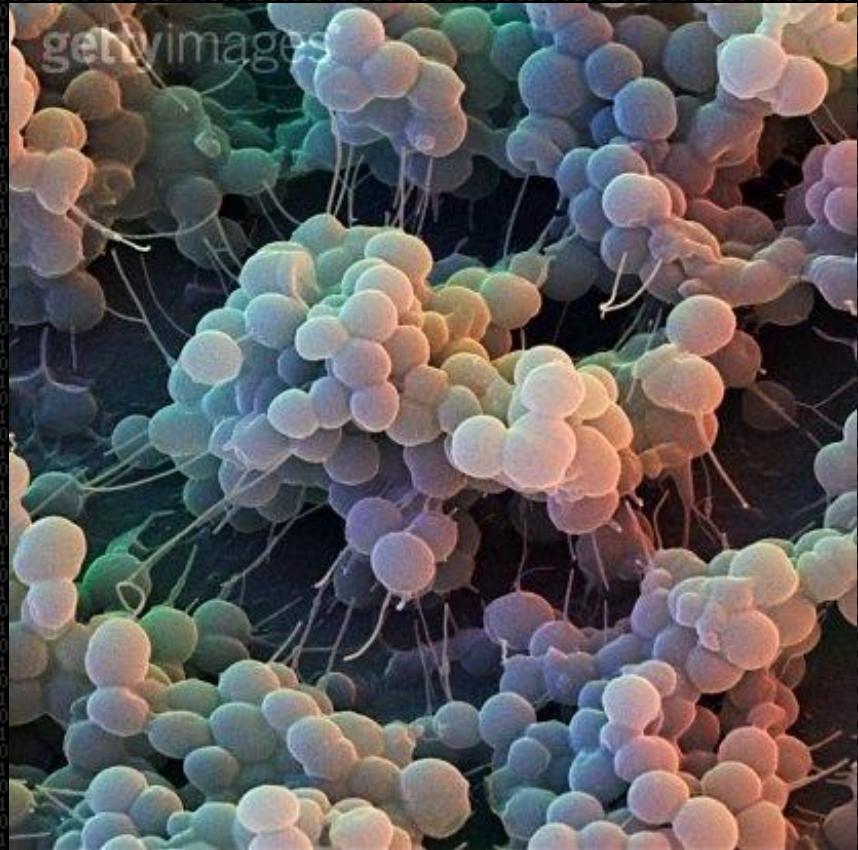
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Lab Report

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Staphylococcus



Stubborn and scary



Staphylococcus stubborn and scary



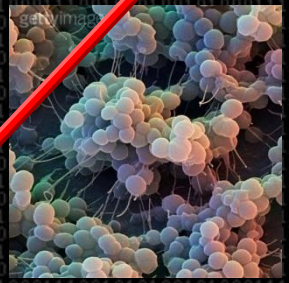
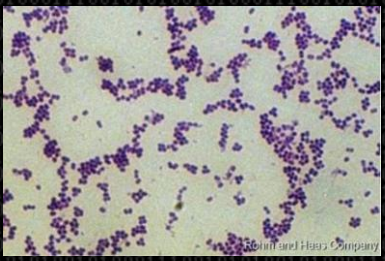


Staphylococcus stubborn and scary





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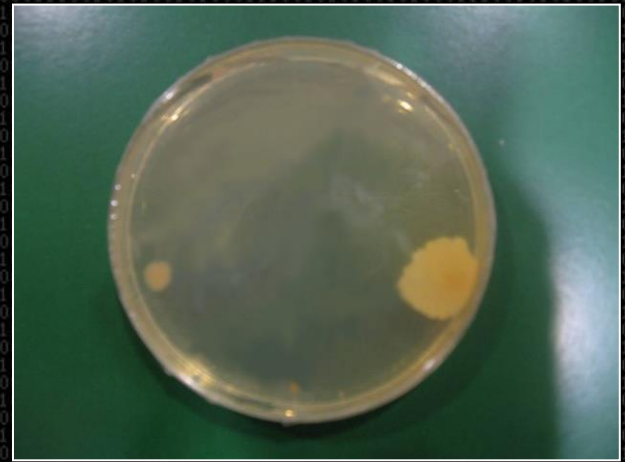
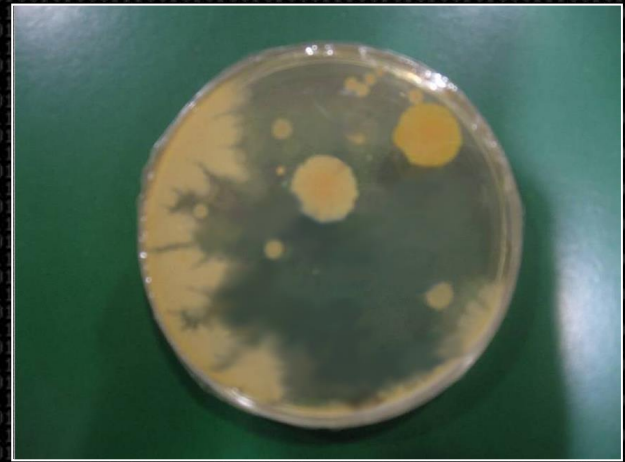


Staphylococcus

One minute before



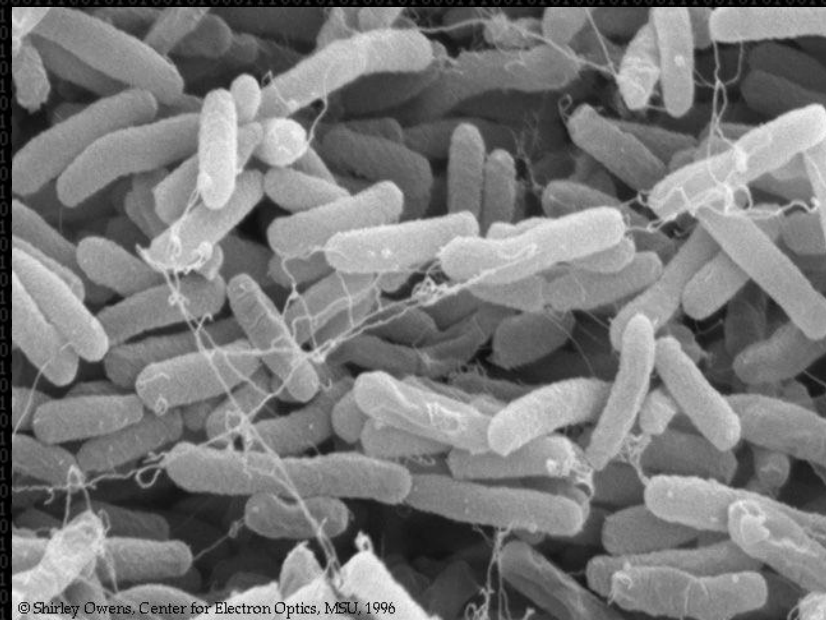
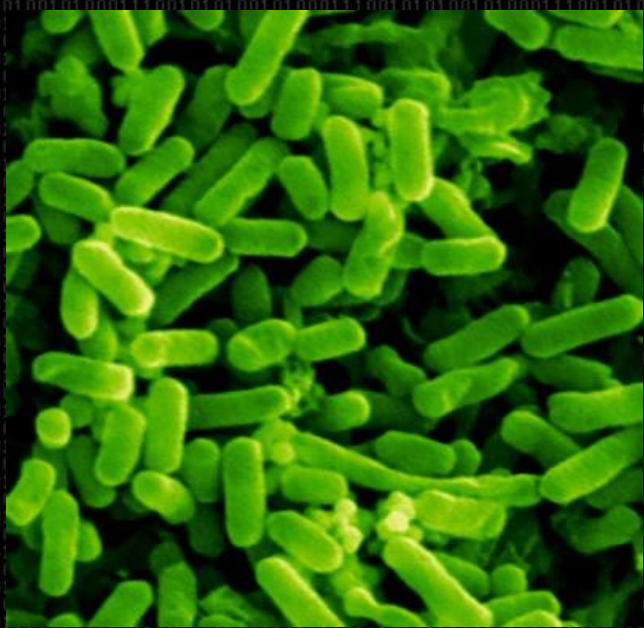
One minute after



83.82%



Escherichia Coli

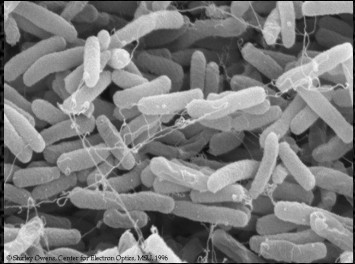


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It can cause food poisoning and diarrhea



<i>Escherichia coli</i> ATCC 8739	1 minute	6.0×10^5	1.9×10^4	96.87%
	24 hours	6.0×10^5	0	100.00%



Escherichia Coli



One minute before



One minute after

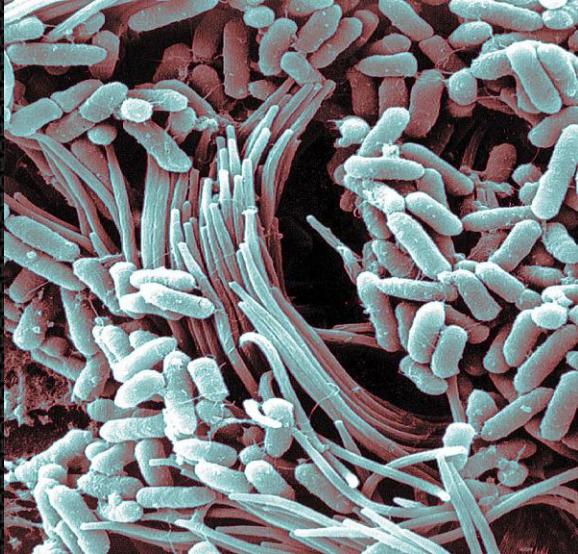


96.87%





Pseudomonas aeruginosa



people are easy to be inflicted by *Pseudomonas aeruginosa*, it can cause serious damages to our tissues, commonly found are:
joint erythema;

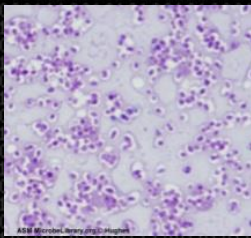
Symptoms: cold and fever, it can lead to neuritis, arthritis, inflammation of lymph node, rhinitis, inflammation of testicle



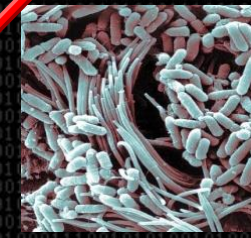
Pseudomonas aeruginosa



<i>Pseudomonas aeruginosa</i> ATCC 9027	1 minute	2.4×10^5	1.5×10^4	93.70%
	24 hours	2.4×10^5	0	100.00%



Pseudomonas aeruginosa



One minute before \longrightarrow One minute after



93.70%





end