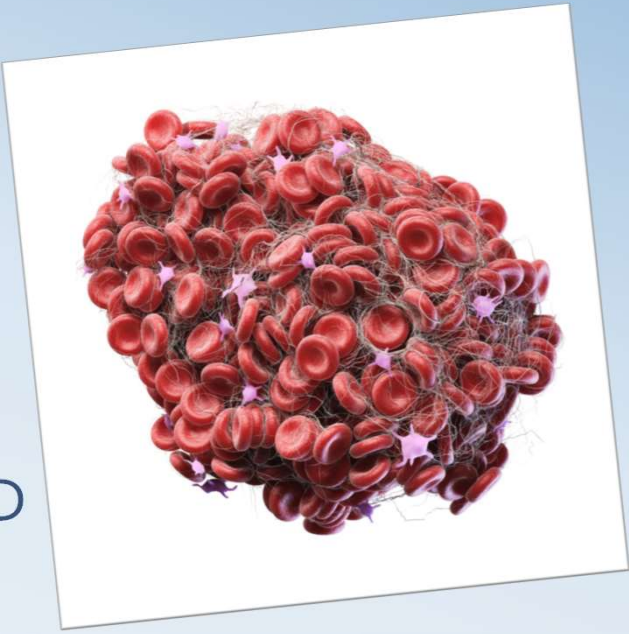


Nattokinase NSK-SD

Breaking Down Fibrin & Biofilm



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Webinar Outline

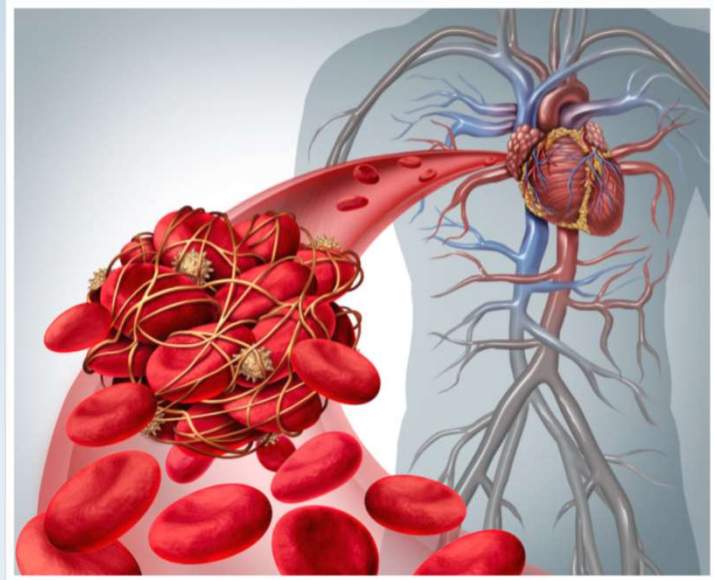
1. Filum, fila threads or fibrin
2. Biofilm
3. Polymorphic relationship to biofilm & fibrin
4. Fibrinolytic enzymes
5. Darkfield live & dry blood photos
6. Nattokinase
7. Clinical applications
8. Nattokinase or Serrapeptase
9. Q & A

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2

2

1. Fibrin



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3

3

Fibrin

Definition

- Colloids have arranged themselves linearly: primordial protein substances that organize because they can
- Appears as needle-like or hair-like developments in the plasma
- Considered to be a congestive hinderance that primarily affects the circulatory system
- Deep & dense webbing forms in compromised individuals
- The thicker the presentation the more the condition is related to pathology
- Growth pattern can accelerate in quantum leaps
- Behavior establishes how assertive or aggressive the situation is
- Blood clots are essential for healing wounds therefore can be a sign of healing
- Ideally, clots dissolve once the job is done
- Also, an indication of inflammation & liver stress

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4

4



Causal factors

- pH imbalance
- Toxins: Antibiotics, medications, alcohol, tobacco, coffee, bacterial overgrowth
- Congestive patterns: Stagnation, dampness, infection (including fungal/candidiasis, bacterial or viral)
- Diet: Sugar, wheat, dairy, alcohol, tobacco, allergens (nuts, etc.)
- Malabsorption: congestion, enzymatic insufficiency
- Liver & biliary tract congestion
- Bowel & Urinary tract issues: Consider Indican test (measures for putrefaction of protein in digestive tract)
- Emotional distress: irritation, anger, frustration, misunderstandings

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5

5

Inflammation

Dr. Privitera's book, *Silent Clots*, talks about two types of inflammation that affect cardiovascular health in particular:

- Acute
- Silent

The subtle beginnings of platelet aggregation lean the individual toward heart disease.

Everything is in relationship to each other therefore does not occur in a vacuum. Fibrin has the propensity to proliferate if not addressed.

Implications

Congestion

- Contributes to inflammation and presentation of symptoms
- Passageways of elimination must be opened in order for drainage to occur.



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6

6



2. Biofilm

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7

- Biofilm development, stability & performance is enhanced by similar causal factors found in the development of fibrin.
- It is the key mechanism for persistence or recurrence of infection.
- When insufficient digestion persists, microbial colonies are more able to adhere to the matrix of the cell.
- When biofilm exists, so does subclinical infection. It persists as long as it is able to within the host environment. This contributes to the congestive pattern.
- The more biofilm, the more potential for disease & conditions. It is essentially an immobilized biomass.

7

- Biofilm encapsulates clots to protect them from microbial invasion/infection.
- It acts as a barrier to avert microbial upregulation until white blood cells arrive at the site of the injury.
- Fibrin or fibrinogen & biofilms are cooperative systems that exist within our biology to initiate repair.
- The primary ingredient for the formation of biofilm networks is fibrin fiber.
- Biofilms are "tethering fibers" that act as bacterial filters.
- Biofilm is a fibrin film.

Fibrin can produce both biofilms and fibers making an integrated clot structure that includes a fibrin film covering the clot, which is also a network of fibers.

Biofilm develops in 100% of cases where thrombin accumulates.

- Biofilms grow when thrombin is less concentrated, leading to longer clotting times.
- This allows for an increase in the accumulated surface fibrin while the underlying network (clot) catches up.
- Biofilm is in service of preventing bacterial infiltration to the site of injury for up to 27 hours, which gives the WBCs time to show up and the underlying clot to fully form.

Biofilm & fibrin connection

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8

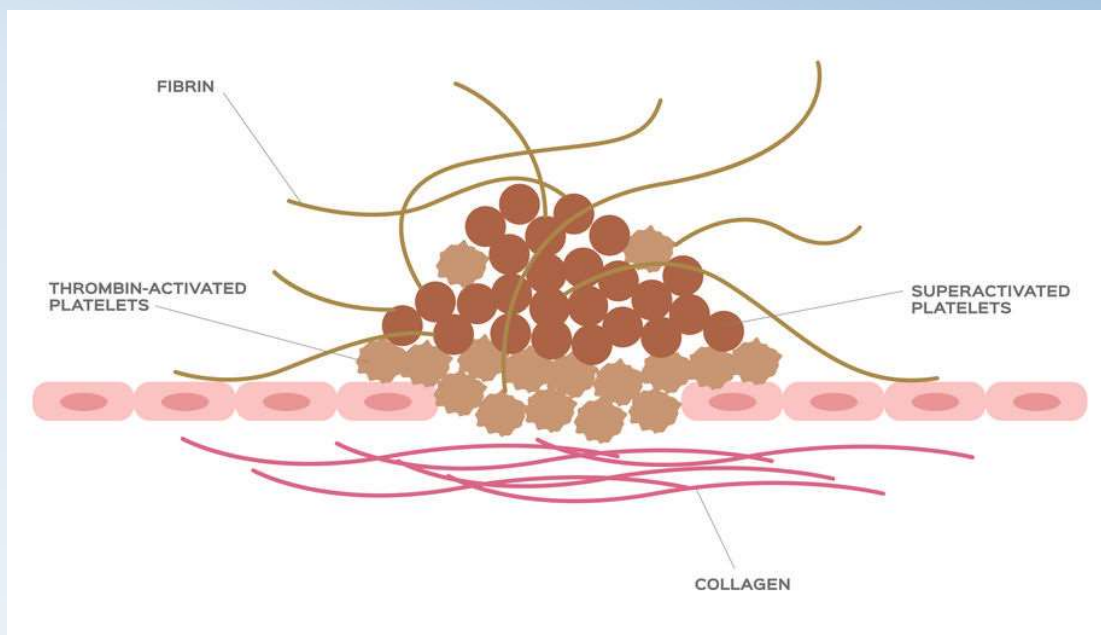
- Biofilms are essentially microbial homes. They are sticky films that impede cellular respiration & affect functional vitality systemically.
- Dental plaque is an example of biofilm or a mass of bacteria that grows in the mouth. Its acidic nature contributes to demineralization. Biological Medicine is keenly focused on dental health as the origin of dysbiosis in the body.
- Microenvironmental changes accelerate the potential for biofilm development.
- Bacteria love a cooperative environment & form biofilms that are self-serving.
- This is an assertive process of embedding & interfacing with the host surface.
- Biofilms are acidic therefore contributing to inflammation. This initiates the development of fibrin in response to the predictable infection and congestion.



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9

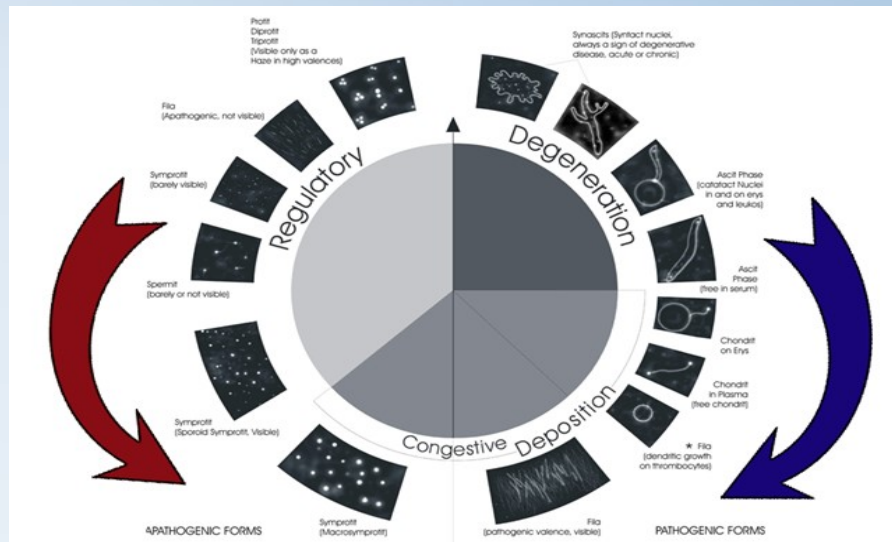
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10

10



3. Polymorphic or Pleomorphic Life Cycle

11

11

- When fatty plaques build up and block the flow of blood to the heart, brain & venous system, the result is Atherosclerosis.
 - If the plaque mobilizes, a clot forms. This further deprives delicate tissue of oxygen increasing the potential for heart attack & stroke.
 - Fibrin clots & the culminate biofilm can be eradicated using food derived fibrinolytic enzymes such as those found in Natto.
 - They dissolve clots and protein polymers known as fibrin.
 - These enzymes are frequently an integral aspect of nutraceutical application for both the treatment & prevention of cardiovascular disease.
- Fibrinolytic Enzymes are primary agents of change in Cardiovascular disease & in thrombolytic therapy.*

4. Fibrinolytic Enzymes

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12

12



The advantage of this Darkfield Microscopy as an observational science is to recognize susceptibility to conditions & diseases before they become a diagnosis. It observes the between spaces & is both predictive & preventative.

Live & Dry Blood Analysis provides a "true precautionary measure" by recognizing the potential for disease & applies pre-emptive treatment prior to the manifestation of disease.

As the live blood appears on the screen, a relationship with your health is immediate. Observation of the behavior of the red & white blood cells powerfully evidences the disruptions in the milieu that contribute to imbalance.

The definitive results of Darkfield investigation are remediated with dietary adjustments, herbs, homeopathy & lifestyle change.

Each and every cell is intrinsically programmed

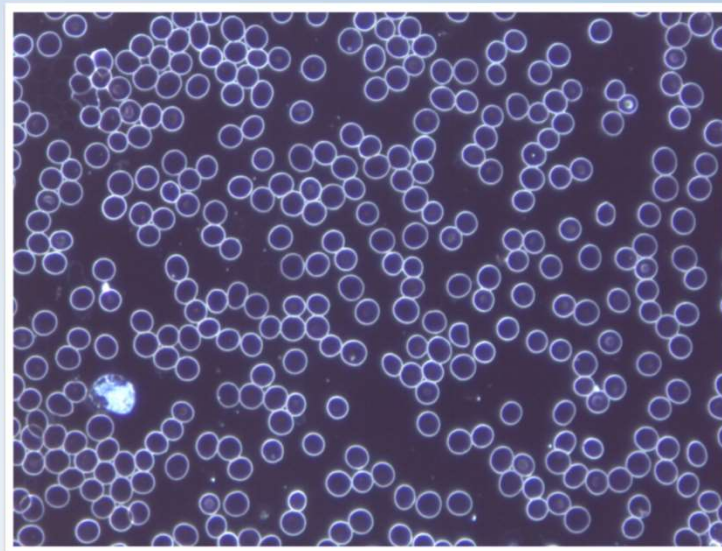
& biologically brilliant.

5. Darkfield Microscopy

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13

13



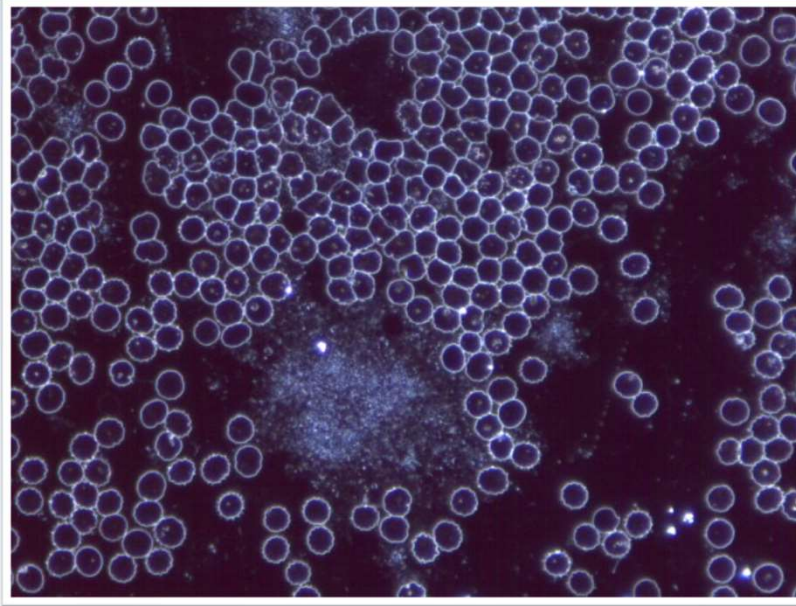
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Healthy Blood

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14



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Fibrin

Spikey, sticky and assertive

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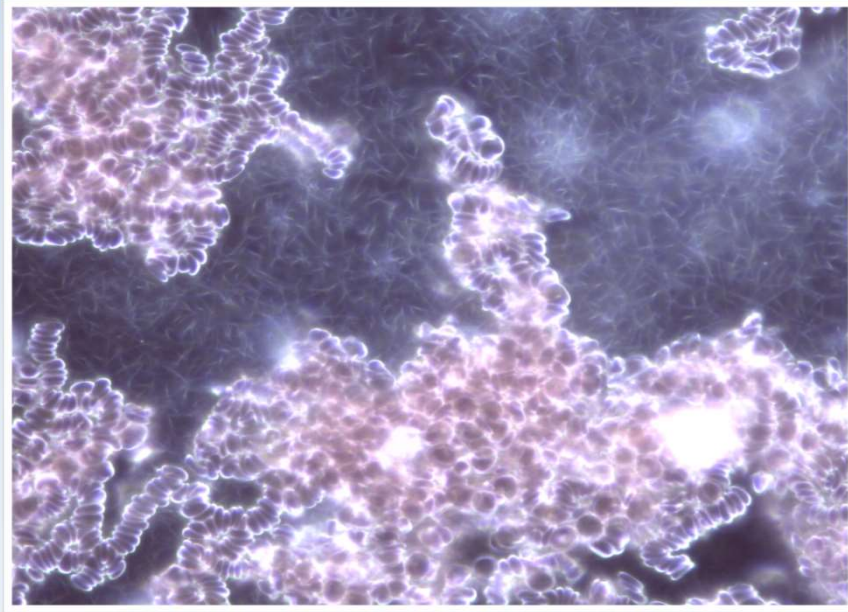
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Fibrin & Rouleau

Extreme discord in the pH or milieu.

When fibrin & rouleau appear together, drainage is required.

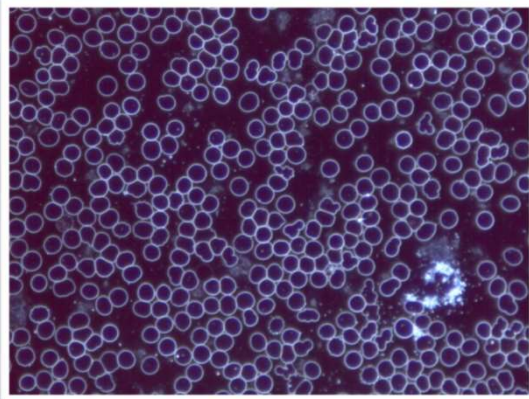
- 1. pH balance
- 2. Drainage
- 3. Inflammation
- 4. Immunity



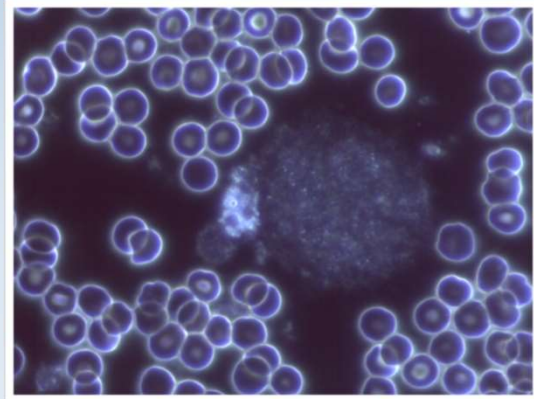
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17



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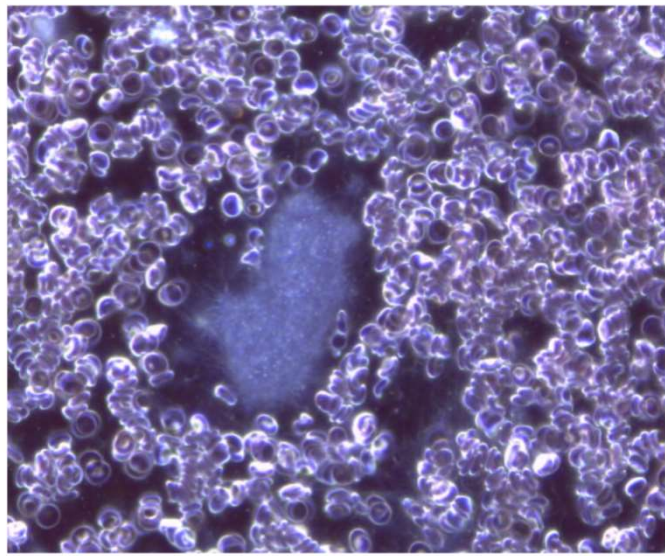
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Clot Formation

Nationalization or the urge to merge

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Platelet Aggregation

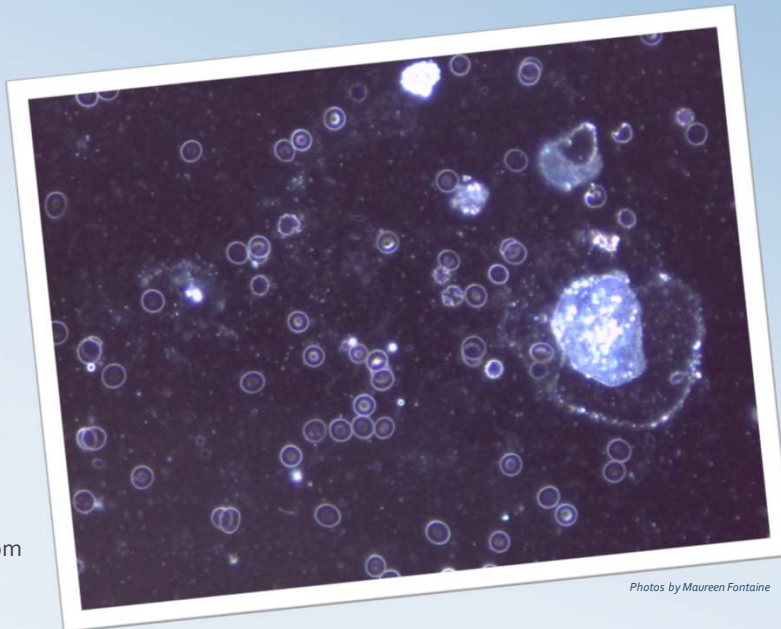
Clot Formation is necessary to repair damage to blood vessels, skin & mucous membranes.

This inherent process ensures that we don't bleed out in the event of injury. Fibrin polymers enter the scene to arrest the bleeding & when the job is done, they are literally reabsorbed.

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19

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Protoplast

This is another way that the body collects debris. The crystallization from incomplete digestion is an inflammatory indicator.

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Protoplast with Bacterial Phases

Congestion, biofilm & pH imbalance lend themselves to the proliferation of bacteria.

This is demonstration of self-preservation & bioremediation.

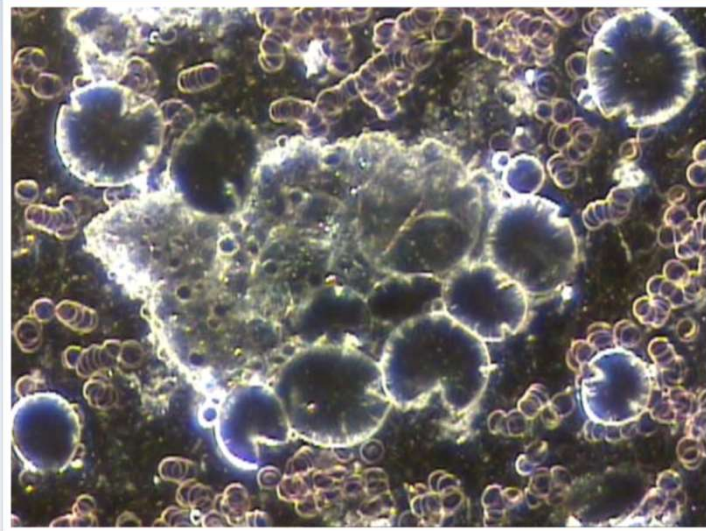


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21

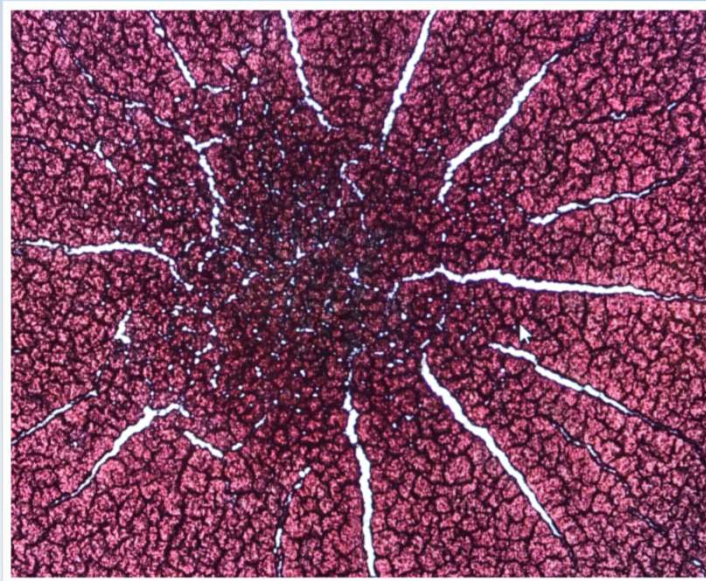
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Dry Blood

Oxidative Stress Test or OST,
Coagulation Morphology

Dry blood is a holographic view of the blood crystallization process. It indicates blood benchmarks used for tracking progress over time. The fibrin web system resembles plant roots.

Dry blood is a cross reference for the live blood & indicates the areas of most concern.

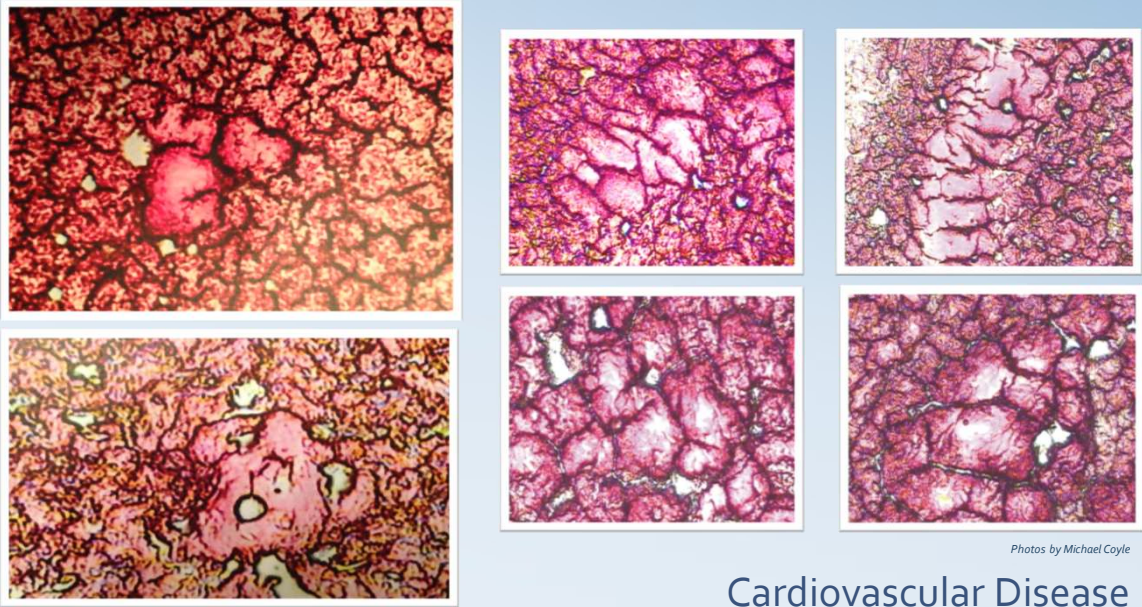


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22



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Cardiovascular Disease

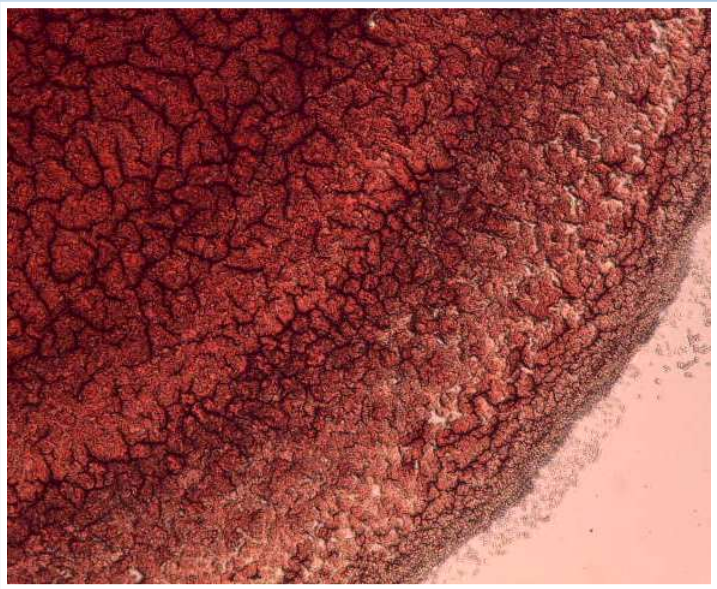
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23

Chemicals

Toxins appear in waves within the sample. Lymphatic congestion is evident & the outer splayed cells indicate skin issues & the need for vitamin C, amino acid & sulfur.

Chemicals contribute to inflammation & the development of fibrin. They inform the tissue & contribute to platelet aggregation or clot formation. Once chemicals/toxins are liberated, further injury may occur.

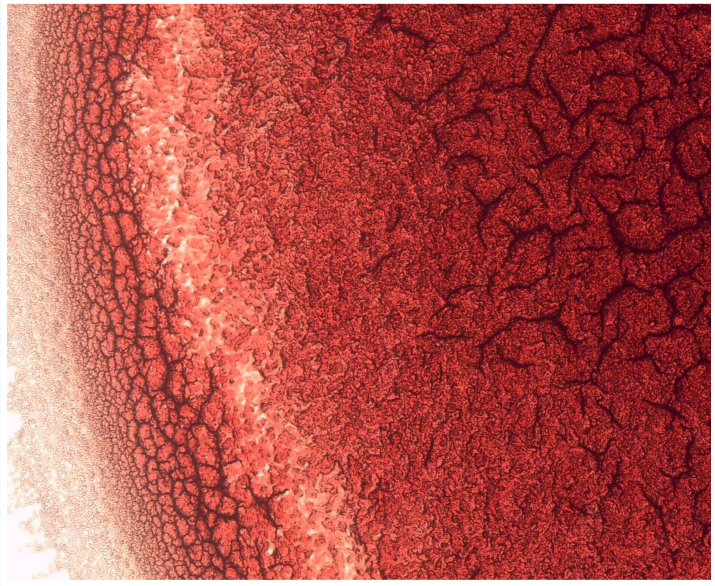


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24

Acid
Diminished connective tissue formation & lymphatic congestion. How strong is your tissue?

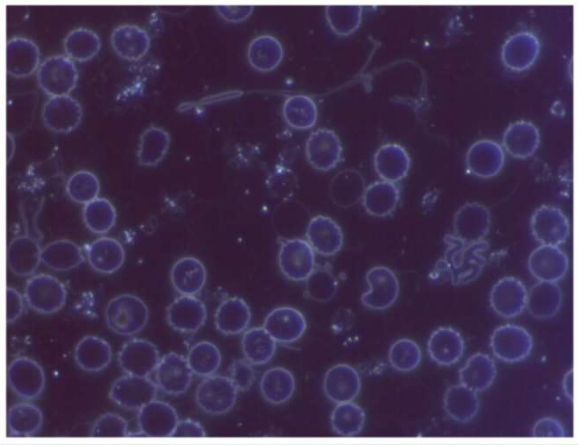
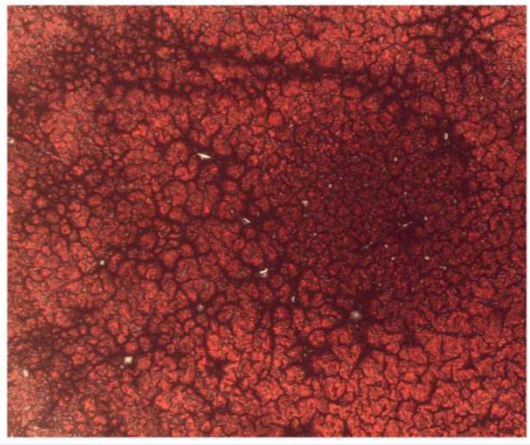


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25

25



Extreme dysbiosis

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26

26



6. Nattokinase NSK-SD

Fibrinolytic Enzymes

- A traditional Japanese food made from fermented soybeans.
- A therapeutic folk remedy for cardiovascular disease for over 1,000 years.
- Known as vegetable cheese or stinky tofu. Smells like dirty feet, blue cheese, or rotten meat.
- Taste is mild, as in fried tofu. The curds contain vitamin K₁, which prevents blood from becoming overly thin.
- 1980 - University of Chicago researcher Dr. Hiroyuk Sumi, M.D., Ph.D., tested foods for answers to blood clot dissolution in stroke and heart attack. Natto was the superstar.
- **NSK-SD** or **Natural Super Kinase – Sprayed Dry**.
- **Natto** is the name of the food derivative. **Kinase** is the an enzyme that catalyzes the transfer of a phosphate group from ATP to a specified molecule.

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27

27

Process

- Natto is a result of fermenting cooked soybeans with *Bacillus subtilis*.
- *Bacillus subtilis* is a rod-shaped bacteria found naturally in soil & located in the digestive tract. It is a natural fungicide with endospores that allow it to survive in extreme conditions.
- The fermentation process occurs over 14-18 hours at 40 degrees until the white sticky, stringy & very stinky substance is formed.
- NSK-SD is an odorless white powder. All the vitamin K₂ is removed.



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28

28

- Dissolves & degrades blood clots
- Breaks down thrombus (thrombolytic activity)
- Breaks down fibrin & fibrinogen (inflammatory markers)
- Prevents platelet aggregation or blood clot formation.
- Natural blood thinner
- Improves cardiovascular & arterial health
- Decrease blood viscosity, improves blood & lymph circulation, & reduces rouleau
- Dissolve the matrix of bacterial biofilms & diminishes the potential for infection
- Effective agent with significant disease, tumors & cancer



Health Benefits of NSK-SD

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29

29

- Produced by the Japan Nattokinase Association (JNKA)
- Non-GMO, non-irradiated soybeans in combination with their patented strain of *Bacillus subtilis natto*
- Authentic Japanese NSK-SD
- Finest quality available – certified
- Highest potency – guaranteed 2000 FU/cap (*fibrinolytic units*)
- Vitamin K2 free

Biomedicine Canada is dedicated to providing the highest quality professional products & continues to be a leader in the industry.



Biomed NSK-SD

Quality. Excellence. Beyond Medicine.

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30

30

This product has been tested in combination with heparin in acute stroke victims. It has also been tested with warfarin (when used as a prophylactic).

The bacteria was tested with mice and demonstrated no evidence of infection, pathology or toxicity.

All vitamin K2 has been removed, as K2 increases clotting ability.

Caution:

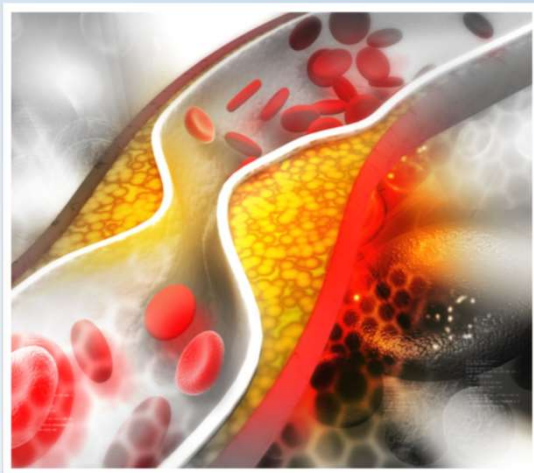
- ❖ *Do not use in the case of an allergy to soybeans.*
- ❖ *Do not use if you are pregnant or breastfeeding, if you are taking health products that affect blood coagulation, or if you have a bleeding disorder.*
- ❖ *Consult a health care practitioner if you have a cardiovascular, kidney, or liver disorder, or if you are taking any medications.*
- ❖ *If taking blood thinners or being treated for a bleeding disorder, consult with a physician prior to taking Nattokinase.*
- ❖ *Stop using product 7 days before any scheduled surgery, or immediately if you have unscheduled surgery. Inform your medical team.*

Safety

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31

31



1. Biofilm reduction
2. Cardiovascular health
Reduction of elevated blood pressure, fibrinolytic activity, platelet aggregation, rouleau, blood viscosity
3. Diabetes
4. Fibroids & cysts
5. Tumors
6. Inflammation
7. Immunomodulation, disease

7. Clinical Applications for Fibrinolytic Enzyme Therapy

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32

32

Nattokinase

- A derivative of Natto (fermented soybeans)
- A profibrinolytic enzyme called kinase
- Powerful support for:
 - Blood pressure, cardiovascular conditions
 - Arterial plaque buildup
 - Clotting, platelet aggregation
 - Natural blood thinner: improves blood & lymph flow & blood volume
 - Fibrin, fibrosis, scar tissue
 - Chronic inflammation – supports healthy inflammatory response
 - Biofilm remediator

Serrapeptase

- A derivative from the intestines of the silkworm
- A proteolytic enzyme called serratia peptidase
- Excellent for:
 - Pain & swelling relief
 - Muscle, joint & tissue
 - Gastrointestinal conditions
 - Mucus reduction, respiratory conditions
 - Fibrin, fibrosis, scar tissue
 - Chronic inflammation – supports healthy inflammatory response
 - Biofilm remediator

8. Nattokinase or Serrapeptase

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33

33



9.

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34

34

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