

The Rosicrucian Fellowship



Occult Principles of Health and Healing

By Max Heindel

Self-Study Guide Book 6

General Anatomy

By G. E. Carlin and Jim Noel

The Rosicrucian Fellowship School of Spiritual Healing

Foreword

This course of study is structured around Max Heindel's book *Occult Principles of Health and Healing*, as described in the foreword of this book:

“This compilation of material concerning the health and healing of the human organism as considered from the occult viewpoint affords those interested in attaining and maintaining health a treasure chest of valuable information.”

For in this book, Max Heindel wanted to describe and explain *“the real causes of physical and mental disorders as revealed in the realm of cause, the higher or superphysical planes”* and to provide the *“origin, functions, and proper care of the vehicles of man”*.

Therefore, the goal of these Self-Study Guides is to prepare students with a firm foundation in principles of spiritual healing so they may aide others in healing as Visible and Invisible Helpers. In each Study Guides you will explore the concepts and ideas of health and healing as expressed in the 25 chapters of the *Occult Principles of Health and Healing*. These Study Guides will also be used in the classroom setting at The *Rosicrucian Fellowship of Spiritual Healing* in Oceanside, California.

Disclaimer

Please note, the views and opinions expressed about the different forms of healing and the related scientific understandings in the *Occult Principles of Health and Healing* are those of the author, Max Heindel, and do not necessarily reflect the current views or positions of the science and medical professions. The content in this Self-Study guide is not intended to diagnose, treat, or prevent any condition. Please consult your doctor for all medical issues or before making any changes to your health regimen.

Historical Context and Concerns

In reading a book such as *Occult Principles of Health and Healing* it is important to take into consideration the historical context of the time in which it was written. Statements about race hierarchy and how they related to levels of spiritual evolution was somewhat common in esoteric writing of the early 20th century. However, that being said it certainly does not minimize the concerns these statements raise. Yet, if we consider the underlying message of the writings of Max Heindel we find a spiritual leader that actively promoted the cause for ***Universal Brotherhood***.

As he states, “The Fellowship disregards national and racial differences, endeavoring to join all together in a bond of love,” While he also encouraged humanity to look beyond “sharply differentiated forms which they behold blind them to the inalienable unity of each soul with all others”. For Heindel then cautions us that we cannot become a Universal Brotherhood, “As long as you are tied to the family, the nation, the tribe, you are siding with the old blood, the old ways, and cannot amalgamate into a universal brotherhood. That can only come when you marry internationally because when you have so many nations the way to unite them is through marriage.

INTRODUCTION

The Rosicrucian School of Spiritual Healing

One of the main functions of the Rosicrucian School of Spiritual Healing will be to teach the Rosicrucian methods of maintaining health in accordance with the underlying principles of the *Ten-Fold Constitution of Man*.



DIAGRAM 5 SHOWS THE TENFOLD CONSTITUTION OF MAN

Man is a threefold Spirit, possessing a Mind by means of which he governs a threefold Body, which he emanated from himself to gather experience. This threefold Body he transmutes into a threefold Soul, upon which he nourishes himself from impotence to omnipotence.

The Divine Spirit	{ emanates	{ The Dense Body	} extracting	{ Conscious Soul				
The Life Spirit					{ from	{ The Vital Body	} as	{ Intellectual Soul
The Human Spirit					{ itself	{ The Desire Body	} pabulum	{ Emotional Soul

The mirror of mind also contributes increasingly to spiritual growth as the thoughts which it transmits to and from the Spirit polish it to greater brightness sharpening and intensifying its focus more and more to a single point, perfectly flexible and under the control of the Spirit.

In order to accomplish this function, the Rosicrucian School of Spiritual Healing will provide *Self-Study Guides* for students to familiarize themselves with the concepts such as; the vehicles man's body, basic anatomy and physiology, spiritual causes of disease, spiritual healing and its methods, and death. In addition, the Rosicrucian School of Spiritual Healing will offer in person and online lectures and classes for students who further wish to expand their learning as well as patients that wish to fully understand their role in their health and the healing process.

There are seven *Self-Study Guides for The Rosicrucian Fellowship School for Spiritual Healing* to help prepare you to volunteer in their Healing Center. The Study Guides were designed as a course of self-study in which you explore the concepts and ideas of health and healing as expressed in the 25 chapters of the book, *Occult Principles of Health and Healing* by Max Heindel.

The *Occult Principles of Health and Healing* consists of seven Self-Study Guides:

- 1. *Understanding the Vehicles of Man***
- 2. *Disease***
- 3. *Healing***
- 4. *Maintaining Health and Special Applications for Healing***
- 5. *“There is no Death”***
- 6. *General Anatomy***
- 7. *On Conducting a Healing Center***

This is **Book 6: *General Anatomy*** in the Self-Study Guides series. And it consists of five chapters from the *Occult Principles of Health and Healing* that are related to Disease.

Additional Chapter: *Structure and Function of Blood*

Ch 16: *Transfusion of Blood*

Additional Chapter: *Organs and Systems*

Ch 17: *Effects of Removal of Physical Organ*

For each chapter in the Self-Study Guide there will be:

- Pre-Reading Activity
- Reading Template
- Chapter Questions
- Summary Questions
- Class Discussion Questions
- Research on Your Own Activity
- Reflection and Connections
- Final Thoughts

Please Note: that you may use any edition of the *Occult Principles of Health and Healing* book in either hardcopy or downloaded as a .pdf file from the *Rosicrucian Fellowship* website at <www.rosicrucian.com>.

Instructions for Each Component of the Self-Study Guide

Pre-Reading Activity

This consists of four questions related to the topic of the chapter that you are to answer based upon your beliefs and understandings prior to reading the chapter. It is intended to provide a reference by which you can judge how your thoughts and beliefs prior to reading the chapter were confirmed, enriched, or challenged with new ideas and concepts.

Reading Template

During the course of your reading, you may want to record certain information or organize the information into a different format (i.e., Mind Map) therefore a large box (**NOTES**) is provided in the template for you to use as you see fit. In addition, as you read you may have:

- Questions that you can record in the **QUESTIONS** box.
- Ideas or concepts you want to further look into (**INVESTIGATE Box**)
- Things you are not sure you understand (**CLARITY Box**)
- Or ideas, concepts, or practices you understand or believe differently about (**CHALLENGE Box**)

As these the things that can be discussed with *Probationers* at your group meetings and online forums for the School of Spiritual Healing.

Chapter Questions:

As you read each chapter in the book you will be asked questions in which the answers come directly from the reading. Please note the questions are in sequential order with the reading to ensure that you will be able to locate the needed information to answer the question, ideas for your work in the Healing Center, and information you might share with patients when appropriate.

Summary Questions:

These are larger, overarching questions that cover the main ideas or concepts from the chapters. Information from your Chapter Questions will be helpful in answering these questions. Information to answer these questions can be in one section of the chapter or found throughout the chapter.

Class Discussion Questions:

This is a list of sample questions that might be discussed during your class discussions with other students and a Probationer of the Rosicrucian Fellowship.

Research on Your Own Activity:

You will be asked to research on your own certain ideas or concepts that are presented in the chapter. Generally, they are ideas and concepts used in supporting the content of the chapter so they are minimal in their description and explanation. Therefore, you can use any of Max Heindel's books such as *Rosicrucian Cosmo-Conception* to find additional information.

Reflection and Connections:

The reflection questions are asking you to identify what *you* consider to be the most important information from the chapter, ideas for your work in the Healing Center, and things you might share with patients when appropriate. Finally, the "Connection" will require you to explore something on your own that is related to the topic of the chapter.

Final Thoughts:

Some final ideas connected to the topic of the chapter are presented as well as a summary of some key ideas and concepts.



Prayers for Your Work

Prayer Before Your Spiritual Reading

My Short Prayer to Open Your Mind to God's Words

Lord, Give me understanding, and I shall keep thy law; and I shall observe it with my whole heart. Open my mind that I might understand your divine words from these spiritual books and apply them always to my life so I might glorify your name. Amen

- (GEC) Based on Psalms 119:34 and Luke 24:45

Pause to Pray at Heartfelt Times

There will be times when you are reading a spiritual book that something special or insightful touches you or “penetrates the heart”. So, stop reading and offer a heartfelt prayer of thanksgiving to God. Do not be concerned if you have only read a brief amount in your spiritual book before you stop to offer a pray to God.

My Short Prayer to Thank God for Touching You with His Words

Lord, what you have just given me in this reading has grown the seeds within my mind to yield a fruitful harvest. Your wisdom and knowledge brightly shine around me and I now feel them richly dwelling in my heart. I thank you, My God, for the joy in my heart and praise your glorious name. Amen

- (GEC) Based on Psalm 85:12, Colossians 3:16, and 1 Chronicles 29:13
Prayer

Prayer After Your Spiritual Reading

My Short Prayer to Thank God for His Words

Lord, in this reading you have taught me your ways so I now might walk in your truth. Even though your thoughts are very deep I now begin to understand how great are your works through these blessed words. In our reading together you have satisfied my longing soul and filled it with good things. Amen

- (GEC) Based on Psalm 86:11, Psalm 92:5, and Psalm 107:9

Prayer Before Studies

“Almighty God, our Heavenly Father, without Whose help labor is useless, without Whose light search is vain: Invigorate my studies and direct my inquiries, that I may, by due diligence and right discernment, establish myself and others in Thy holy faith;” ... then I can use the knowledge you have allowed me to acquire to best serve you and my fellow man. Amen”

A Student’s Prayer

By Thomas Aquinas

Come, Holy Spirit, Divine Creator, true source of light and fountain of wisdom! Pour forth your brilliance upon my dense intellect, dissipate the darkness which covers me, that of sin and of ignorance. Grant me a penetrating mind to understand, a retentive memory, method and ease in learning, the lucidity to comprehend, and abundant grace in expressing myself. Guide the beginning of my work, direct its progress, and bring it to successful completion. This I ask through Jesus Christ, true God and true man, living and reigning with You and the Father, forever and ever. Amen.

The Student’s Prayer

The Rosicrucian Fellowship

*Oh, God, increase my love for Thee
so that I may serve thee better from day to day.
Let the words of my mouth and the meditation of my heart
be acceptable in thy sight,
O LORD, my strength and my redeemer.*

- Max Heindel

Study to shew thyself approved unto God, a workman that needeth not to be ashamed, rightly dividing the word of truth.

- 2 Timothy 2:15

Additional Chapter: *Structure and Function of Blood*

Blood is a tissue as it consists of similar cells with the same general function. In many tissues, such as bone tissue, the cells are embedded in a solid matrix. However, the intercellular matrix for blood is a straw-colored liquid called plasma. It consists of mostly water, dissolved proteins, and inorganic ions. On average the human body has 5.5 liters of blood.

Plasma

Plasma is the liquid portion of the blood and 90% of the plasma is water. The function of plasma is to transport dissolved nutrient from digestion (i.e., amino acids, simple sugars, fats, vitamins, salts, and water), wastes (i.e., urea, carbon dioxide), hormones, antibodies, and to regulate the temperature of the body. Plasma makes up 55% of the blood's volume.

Red Blood Cells

Red blood cells also called erythrocytes are round with a biconcave shape with no nuclei that are produced in the bone marrow. Their red color is due to the presence of hemoglobin which contains iron that enable it to carry oxygen and carbon dioxide. Red blood cells have a life span of 120 days and then are removed by both the liver and the spleen. There are 5 million red blood cells per cubic millimeter of blood.

White Blood Cells

White blood cells also called leucocytes are also produced in the bone marrow as well as the lymph nodes and the spleen. As leucocyte have no hemoglobin, they are colorless and contain one or more nuclei. There are different types of white blood cells and their numbers increase when there is an infection so they can protect the body. Phagocytes are white blood cells that eat (or engulf) foreign microorganisms such as bacteria. They can pass through capillaries so as to get to the site of infection and engulf (phagocytosis) the microorganisms to destroy them. Lymphocytes, also white blood cells, produces antibodies that destroy foreign proteins (antigens) by neutralizing them. There are 6,000 – 9,000 white blood cells per cubic millimeter of blood, however in times of infection the number can increase to 30,000 per cubic millimeter. The pus at a site of infection consists mostly of white blood cells that have died after engulfing bacteria.

Platelets

Platelets also called thrombocytes are cell fragments of blood cells formed in the bone marrow which are smaller than red blood cells and also lack a nucleus. They only last about ten days and their function is to clot blood to prevent bleeding. There are 200,000 to 400,000 platelets per cubic millimeter of blood.

Blood Types

Humans were found to have one of four blood types (O, A, B and AB) which depends on the presence or absence of antigens (antigen A and Antigen B) on the surface of their red blood cells. Someone with type A blood has the A antigen on their red blood cells, type B blood has the B antigen, type AB blood has both antigen A and B, and type O blood doesn't have either antigen A or B. In addition, the blood also contains antibodies that will cause the blood to clump when the antigen on their red blood cells matches the antibodies (i.e., antigen A and antibody A). Below is a table of antigens and antibodies for the different blood types.

Antigens and Antibodies for the Different Blood Types		
Blood Type	Antigen on RBC	Antibodies in Plasma
A	A	B
B	B	A
AB	AB	-
O	-	A, B

Blood Typing

Blood typing is used to determine an individual's blood type (A, B, AB, or O) and only requires a bottle of Anti-A serum which contain anti-A antibodies and a bottle of Anti-B serum which contains anti-B antibodies. Using a glass slide, one drop of blood is placed on the left-hand side of the slide and a second drop of blood is placed on the right-hand side and then a drop of Anti-A serum is placed in the left-hand side drop of blood and a drop of Anti-B serum is placed in the blood drop on the right-hand side of the slide. Below is table of the results for the different blood types.

Antigens and Antibodies for the Different Blood Types		
Anti-A serum	Anti-B serum	Blood Type
clumping	-	A
-	clumping	B
clumping	clumping	AB
-	-	O

Blood Transfusions

In giving a blood transfusion it is critical that the blood does not clump. In order to prevent clumping the cells of the donor antigen must not match the antibodies in the plasma of the recipient. The opposite situation is not as serious as the donor's blood is diluted by the larger volume so the recipient's blood and the chances of the donor's antibodies producing clumping with recipients' cells is quite small. Below is a table of the possible blood transfusions.

Blood Types that Can Be Received		
Blood Type Recipient	Antibodies in Plasma	Possible Donor Can Receive
A	B	A, O
B	A	B, O
AB	-	A, B, AB, O
O	AB	O

Type AB is the Universal Recipient – can receive all blood types.

Blood types that Can be Donated to Other Blood Types		
Blood Type Donor	Antigen on RBC	Can be Donated to Blood Type
A	A	A, AB
B	B	B, AB
AB	A, B	AB
O	-	All

Type O is the Universal Donor as all four blood types can receive Type O blood.

Blood Plasma

Plasma is only the liquid portion of the blood without the cells (RBCs, WBCs, and Platelets) it is used in emergency situations such as severe burns, accidents, and traumatic wounds. It is used to restore the volume of the blood in the body and maintain blood pressure so that all the organs of the body receive adequate blood circulation.

Rh Factor

The Rh factor is another antigen found on red blood cells of about 85% people in the United States. Individuals that the antigen are RH⁺ and individual without the antigen are RH⁻. Being RH⁺ is a dominant genetic trait while RH⁻ is a recessive trait. Therefore, the two possible gene combinations for Rh⁺ are (+, + and +, -) while Rh⁻ can only be (-, -). Below is a table of a genetic cross of Rh (+ -) male and an Rh (+ -).

Rh⁺ (+ -) x Rh⁺ (+ -)		
	+	-
+	++ Rh⁺	+ - Rh⁺
-	+ - Rh⁺	-- Rh⁻

Problem can occur when the parents of a child are an Rh- mother and an Rh+ father have a child that is Rh+. As red blood cells from the Rh+ mother can cross the placenta into the blood of the Rh- mother which results in the production of anti-Rh antibodies that can then pass into the fetus's blood and then destroy the fetus' red blood cells. Therefore, the baby is then born with severe anemia called erythroblastosis fetalis. However, this will rarely affect the first Rh+ child from an Rh- mother and an RH+ father as the concentration of anti-Rh antibodies will not be sufficient to cause harm. The problem arises in future Rh+ children when the antibody concentration is sufficient to harm the fetus.

The Rh factor is also important in providing blood transfusions because is a person who is Rh- receives a transfusion of Rh+ blood they will build up a supply of anti-Rh antibodies. Then if this person receives another transfusion of Rh+ blood it will now destroy their red blood cells. Therefore, in cases like this doctors will frequently test the pregnant woman's blood to determine if the ant-Rh antibody concentration rises. As this will require that the new born immediately receive a compatible blood transfusion.

Blood Conditions

Anemia

Anemia is condition in which a person has a lowered number of red blood cells or insufficient hemoglobin. A common symptom is fatigue due to the lack of hemoglobin or red blood cells so that less oxygen is being transported to the body's cells. Other symptoms include intolerance to cold and paleness. Nutritional anemia is due to an inadequate diet that lacks iron, necessary amino acids, or vitamin B12.

Leukemia

Leukemia is condition in which the person has an elevated number of white blood cells. It is a cancer of the bone marrow in which "nonfunctional" white blood cells are produced. Leukemia can be acute or chronic. In acute anemia there is an uncontrolled production and accumulation of immature leukocytes. In chronic leukemia there is an accumulation of mature leukocytes in the blood as they live longer than their expected life span. Internal bleeding is one cause of death in leukemia especial in the brain. Also uncontrolled infections occur due to the lack of mature or normal white blood cells. X-rays and antileukemic drugs are used to reduce the number of white blood cells.

Occult Principles of Health and Healing



By Max Heindel

Self-Study Guide: Chapter 16

Transfusion of Blood

See now that I, even I, am he, and there is no god with me: I kill, and I make alive; I wound, and I heal: neither is there any that can deliver out of my hand.
- Deuteronomy 32:39

Pre-Reading Activity: *What Are Your Thoughts About Blood Transfusion?*

Before reading Chapter 16: *Transfusion of Blood to Use* it is important that you first consider your current thoughts on blood transfusions so upon completing the reading you can then see how your thoughts were confirmed, enriched, or challenged with new ideas and concepts.

<p><i>Why do people need blood transfusions?</i></p>	<p><i>Why do some people choose to refuse blood transfusions?</i></p>
<p><i>What does it mean to be “pure blooded”?</i></p>	<p><i>What determines our blood type?</i></p>

Reading Template for Chapter 16

CHAPTER 16 NOTES

Questions

Investigate

Clarity

Challenge

Chapter Questions for Chapter 16

1. What is haemolysis?

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2. In olden days how did people seek to maintain certain qualities?

--

3. What happened when man was brought down unto material conditions?

--

4. How did the old Vikings determine if a person was acceptable for marriage?

--

5. Why was blood testing so important in earlier times?

--

6. What has science found in the blood of different people?

--

7. What greater difference will be found in the blood one day?

--

8. What does it mean that "Nature geometrizes"?

--

9. Why are we starting to geometrize with our blood?

--

10. What happens as the blood moves through the body?

--

11. What will occur to mineral crystal in the Jupiter period?

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12. What will occur to mineral crystal in the Venus period?

--

13. What will occur to mineral crystal in the Vulcan period?

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14. Why are transfusions of blood currently possible?

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15. What will happen to the transfusion of blood in the future?

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16. How do children receive their supply of blood?

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17. Why will happen to the Ego's function in the blood in the future?

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Summary Questions for Chapter 16

1. How did *international marriages* free humanity?

2. How is our blood becoming *individualized*?

3. How has and will the blood evolve?

Class Discussion Questions for Chapter 16

- **What is haemolysis and why is it important?**
- **In the old days, how did families protect their “qualities”?**
- **Why did international marriages become commanded?**
- **What explains the Vikings ceremony of blood mixing?**
- **How can it be shown that no two people are alike?**
- **How will our blood demonstrate that “Nature geometrizes”?**
- **How does the blood change its state in the body?**
- **How will blood change through the different Periods?**
- **What happens when our blood individualizes?**
- **Why does the Ego need to create its own vehicle without the help of parents?**

***** Research on Your Own*****

What are the different *blood types* and how are they *identified*?

2. What blood groups can be *safely* transfused?

3. What are the *risks* of blood transfusions

Reflection & Connection

Four Most Important Things You Learned
1.
2.
3.
4.
Three Important Ideas for Your Work in a Healing Center
1.
2.
3.
Two Things You Can Share with Patients in a Healing Center
1.
2.
Why is <i>O negative</i> blood so special?

Final Word for Chapter 16

The Rosicrucian Fellowship Western Wisdom Class

Occult Principles of Health and Healing: *Transfusions*

As early as the 17th century, blood has been used as a therapy for a variety of ailments. Over the years, there have been many great advances and it is no wonder this precious resource is so valuable. Here is a look at some of the bigger milestones related to blood transfusion over the years.

1628 English physician William Harvey discovers the circulation of blood. Shortly afterward, the earliest known blood transfusion is attempted.

1665 The first recorded successful blood transfusion occurs in England: Physician Richard Lower keeps dogs alive by transfusion of blood from other dogs.

1818 James Blundell performs the first successful blood transfusion of human blood to treat postpartum hemorrhage.

1840 The first whole blood transfusion to treat hemophilia is successfully completed.

1900 Karl Landsteiner discovers the first three human blood groups, A, B and O. In 1902 Landsteiner's colleagues, Alfred Decastello and Adriano Sturli, add a fourth blood type, AB.

1907 Blood typing and cross matching between donors and patients is attempted to improve the safety of transfusions. The universality of the O blood group is identified.

Max Heindel, "Science has lately found that the blood of different people has different crystals, so that it is now possible to tell the blood of a Negro from the blood of a white man; but there will come a day when they will know a still greater difference, for just as there is a difference in the crystals formed by the different races, so there is also a difference in the crystals formed by each individual man. The thumb-marks of no two people are alike, and it will be found in time that the blood of each human being is different from the blood of every other individual.

This difference is already evident to the occult investigator and it is only a question of time when science will make the discovery, for the distinguishing features are becoming more marked as the human being grows less and less dependent, more and more self-sufficient.

At the present time we are at the very beginning of this individualization of our blood. Therefore, it is possible at present to transfuse blood from one human being to another, but the day is near at hand when that will be impossible." OPPH

Since Max Heindel's times, more discoveries have been made, further validating the individualizations of our blood.

1939-1940 The Rh blood group is discovered and recognized as the cause behind most transfusion reactions.

1961 Platelet concentrates are recognized to reduce mortality from hemorrhaging in cancer patients. In 1972 the process of apheresis is discovered, allowing the extraction of one component of blood, returning the rest to the donor.

1983 Stanford Blood Center is the first blood center to screen for AIDS contaminated blood, using a surrogate test (T-lymphocyte phenotyping) two years before the AIDS virus antibody test is developed.

1985 The first HIV blood-screening test is licensed and implemented by blood banks.

1987 Stanford Blood Center is the first in the country to screen donors for Human T-Lymphotropic Virus Type I (HTLV-I), a virus believed to cause a form of adult leukemia.

1990 A specific test to identify Hepatitis C is introduced.

2002 West Nile Virus is identified as transfusion-transmissible.

2003 Human Genome Project: Although there have been numerous genetic studies of sex and gender—and more recently race and ethnicity—over the past several decades, detailed information about the extent of our genetic similarities and differences did not reach the public's attention until the completion of the Human Genome Project in 2003. It identified approximately 20,500 genes in human DNA, and determined the sequences of the 3 billion chemical base pairs that make up human DNA.

As of 2021, a total of 43 human blood group systems are recognized by the International Society of Blood Transfusion. The two most important blood group systems are ABO and Rh; they determine someone's blood type (A, B, AB, and O, with + or - denoting RhD status) for suitability in blood transfusion.

Incompatible blood transfusion

An ABO incompatibility reaction can occur if you receive the wrong type of blood during a blood transfusion. It's a rare but serious and potentially fatal response to incompatible blood by your immune system. These reactions are extremely rare, because doctors are aware of the danger of using the wrong blood during a transfusion.

Rosicrucian Fellowship and the Blood

The blood is one of the highest expressions of the vital body. The Virgin Spirit guides and controls its dense instrument by means of the blood, therefore the blood is also the means used to act on the nervous system. It will also be seen that the blood is driven to wherever the Virgin Spirit unfolds the greatest activity at any time.

The brain and the nervous system are the highest expression of the desire body. They call up pictures of the outside world, but in mental image-making, i.e., imagination, the blood brings the material for the pictures; therefore, when the thought is active the blood flows to the head.

The slightest thought, feeling or emotion is transmitted to the lungs, where it is injected into the blood. The blood is one of the highest products of the vital body as it is the carrier of nourishment to every part of the body, and the direct vehicle of the Ego. The pictures it contains are impressed upon the negative atoms of the vital body, to serve as arbiters of the man's destiny in the post mortem state.

Blood is a connective tissue. Like all connective tissues, it is made up of cellular elements and an extracellular matrix. The cellular elements—referred to as the formed elements—include red blood cells (RBCs), white blood cells (WBCs), and cell fragments called platelets. The extracellular matrix, called plasma, makes blood unique among connective tissues because it is fluid. This fluid, which is mostly water, suspends the formed elements and enables them to circulate throughout the body within the cardiovascular system.

Functions of Blood

The primary function of blood is to deliver oxygen and nutrients to, and remove wastes from, the body cells. The specific functions of blood also include defense, distribution of heat, and maintenance of homeostasis.

By the activities of the chemical ether, he is able to assimilate food and to grow. This ether is both positive and negative in manifestation. The forces which cause assimilation and excretion work through it.

Transportation

Nutrients from the foods you eat are absorbed in the digestive tract. Most of these travel in the bloodstream directly to the liver, where they are processed and released back into the bloodstream for delivery to body cells.

Oxygen from the air you breathe diffuses into the blood, which moves from the lungs to the heart, which then pumps it to the rest of the body.

The lungs must inhale oxygen-rich air and exhale carbon dioxide effectively in order for you to receive enough oxygen. The circulatory system moves blood through the lungs where oxygen is absorbed and carried throughout the body.

Moreover, endocrine glands scattered throughout the body release hormones into the bloodstream, which carries them to distant target cells.

Blood picks up cellular wastes and byproducts, and transports them to various organs for removal.

For instance, blood moves carbon dioxide to the lungs for exhalation from the body, and various waste products are transported to the kidneys and liver for excretion from the body in the form of urine or bile.

Defense

Many types of WBCs protect the body from external threats, such as disease-causing bacteria that have entered the bloodstream in a wound. Other WBCs seek out and destroy internal threats, such as cells with mutated DNA that could multiply to become cancerous, or body cells infected with viruses.

When damage to the vessels results in bleeding, blood platelets and certain proteins dissolved in the plasma, interact to create clots which block the ruptured areas of the blood vessels involved. This protects the body from further blood loss.

Maintenance of Homeostasis

Body temperature is regulated via a negative-feedback loop. On a warm day, your rising core body temperature would trigger several homeostatic mechanisms, including increased transport of blood from your core to your body periphery, which is typically cooler. As blood passes through the vessels of the skin, heat would be dissipated to the environment, and the blood returning to your body core would be cooler. In contrast, on a cold day, blood is diverted away from the skin to maintain a warmer body core.

Blood also helps to maintain the chemical balance of the body. Proteins and other compounds in blood act as buffers, which help to regulate the pH of body tissues. Blood also helps to regulate the water content of body cells.

Composition of Blood

One such test examines hematocrit, which measures the percentage of RBCs (erythrocytes) in a blood sample. It is performed by spinning the blood sample in a specialized centrifuge, a process that causes the heavier elements suspended within the blood sample to separate from the lightweight, liquid plasma (Figure 18.1.1). Because the heaviest elements in blood are the erythrocytes, these settle at the bottom of the hematocrit tube. Located above the erythrocytes is a pale, thin layer composed of the remaining formed elements of blood. These are the WBCs (leukocytes) and the platelets (thrombocytes). This layer is referred to as the buffy coat, and it normally constitutes less than 1 percent of a blood sample. Above the buffy coat is the blood plasma, normally a pale, straw-colored fluid, which constitutes the remainder of the sample.

The volume of erythrocytes after centrifugation is also commonly referred to as packed cell volume. Typically, blood contains about 45 percent erythrocytes, however, samples can vary significantly from about 36–50 percent. Normal hematocrit values for females range from 37 to 47%, with a mean value of 41%;

for males, hematocrit ranges from 42 to 52%, with a mean of 47%. The percentage of other formed elements, the WBCs and platelets, is extremely small so it is not normally considered with the hematocrit.

Therefore, the mean plasma percentage is the percent of blood that is not erythrocytes: for females, approximately 59% (or 100 minus 41), and for males, approximately 53% (or 100 minus 47).

Characteristics of Blood

Blood that has just taken up oxygen in the lungs is bright red, and blood that has released oxygen in the tissues is a darker red. This is because hemoglobin is a pigment that changes color, depending upon the degree of oxygen saturation. Blood is viscous, with a viscosity approximately five times greater than water. Viscosity is a measure of a fluid's thickness or resistance to flow, and is influenced by the presence of the plasma proteins and formed elements within the blood. The viscosity of blood has a dramatic impact on blood pressure and flow.

The normal temperature of blood is slightly higher than normal body temperature—about 38 °C (or 100.4 °F), compared to 37 °C (or 98.6 °F) for an internal body temperature reading. Although, the surface of blood vessels is relatively smooth blood experiences friction and resistance as it flows. This produces heat, accounting for the slightly higher temperature of blood.

The pH of blood averages about 7.4; however, it can range from 7.35 to 7.45 in a healthy person. Blood is therefore somewhat more basic (alkaline) on a chemical scale than pure water, which has a pH of 7.0. Blood contains numerous buffers that help to regulate pH.

Blood constitutes approximately 8 percent of adult body weight. Adult males typically average about 5-6 liters of blood, and females average 4–5 liters.

Blood Plasma

Plasma is 92% water. Dissolved or suspended within this water is a mixture of substances, most of which are proteins. There are hundreds of substances dissolved in the plasma, although many of them are found only in very small quantities.

Approximately 7 percent of the plasma that is not water is made of proteins. These include several plasma proteins (proteins that are unique to the plasma), plus a much smaller number of regulatory proteins, including enzymes and hormones.

The three major groups of plasma proteins are as follows:

Albumin is the most abundant of the plasma proteins. Manufactured by the liver, albumin molecules serve as binding proteins—transport vehicles for fatty acids and steroid hormones. Albumin normally accounts for approximately 54 percent of the total plasma protein content, or 3.5–5.0 g/dL of blood.

The second most common plasma proteins are the globulins. A heterogeneous group, there are three main subgroups known as alpha, beta, and gamma globulins. The alpha and beta globulins transport iron, lipids, and the fat-soluble vitamins A, D, E, and K to the cells; like albumin, they also contribute to osmotic pressure. The gamma globulins are proteins involved in immunity and are better known as antibodies or immunoglobulins. Unlike alpha and beta globulins, which are produced in the liver, immunoglobulins are produced by specialized leukocytes known as plasma cells. Globulins make up approximately 38 percent of the total plasma protein volume, or 1.0–1.5 g/dL of blood.

The least abundant plasma protein is fibrinogen. Like albumin and the alpha and beta globulins, fibrinogen is produced by the liver. It is essential for blood clotting, a process described later in this chapter. Fibrinogen accounts for about 7 percent of the total plasma protein volume, or 0.2–0.45 g/dL of blood.

Other Plasma Solutes

In addition to proteins, plasma contains a wide variety of other substances. These include various electrolytes, such as sodium, potassium, and calcium ions; dissolved gases, such as oxygen, carbon dioxide, and nitrogen; various organic nutrients, such as vitamins, lipids, glucose, and amino acids; and metabolic wastes. All of these non-protein solutes combined contribute approximately 1 percent to the total volume of plasma.

Influence of Mars

Mars was differentiated and the beginning of the Lemurian Epoch

As iron is essential to the production of warm, red blood, all creatures were cold-blooded, or rather, the fluid parts of the body were no warmer than the surrounding atmosphere.

When the Earth was set free from the Central Sun, that event changed the orbits of the planets and thus the influence of Mars over the iron in the Earth was minimized.

The Planetary Spirit of Mars finally withdrew the remainder of that influence, and although the desire bodies of the Earth and Mars still penetrate, the dynamic power of Mars over the iron (which is a Mars metal) and iron has become available for use on our planet.

Iron is in reality the basis of separate existence. Without iron the red, heat-giving blood would be an impossibility, and the Ego could have no hold in the body. When red blood developed--in the latter part of the Lemurian Epoch--the body became upright and the time had come when the Ego could begin to dwell within the body and control it.

But to dwell within is not the end and aim of evolution. It is simply a means by which the Ego may better express itself through its instrument, that it may manifest in the Physical World. To that end the sense organs, the larynx, and above all, a brain, must be built and perfected.

During the early part of the Hyperborean Epoch, while the Earth was still united with the Sun, the solar forces supplied man with all the sustenance he needed and he unconsciously radiated the surplus for the purpose of propagation.

When the Ego entered into possession of its vehicles it became necessary to use part of this force for the building of the brain and larynx. The latter was originally a part of the creative organ. The larynx was built while the dense body was yet bent together in the bag-like shape already described, which is still the form of the human embryo.

As the dense body straightened and became upright, part of the creative organ remained with the upper part of the dense body and later became the larynx.

Thus, the dual creative force which had hitherto worked in only one direction, for the purpose of the creating another being, became divided.

One part was directed upward to build the brain and larynx, by means of which the Ego was to become capable of thinking and communicating thoughts to other beings.

As a result of this change only one part of the force essential in the creation of another being was available to one individual, hence it became necessary for each individual to seek the co-operation of another, who possessed that part of the procreative force which the seeker lacked.

Thus did the evolving entity obtain brain consciousness of the outside world at the cost of half its creative power.

Previous to that time, it used within itself both parts of that power to externalize another being. As a result of that modification, however, it has evolved the power to create and express thought.

Before then, it was a creator in the physical world only; since then it has become able to create in the three worlds.

The Rosicrucian School of Spiritual Healing

Occult Principles of Health and Healing: the blood

The study of the blood is very deep, far-reaching, and of supreme importance from whatever viewpoint we analyze it. It builds the physical body from the time the seed atom is deposited in the ovum till the rupture of the silver cord ends material existence.

It is one of the highest products of the vital body and the carrier of nourishment to every part of the body. It is the direct vehicle of the Virgin Spirit, having injected into it every thought, feeling or emotion transmitted to the lungs.

In infancy, and up to the fourteenth year, the red marrow-bones do not make all the blood corpuscles. Most of them are supplied by the thymus gland, which is largest in the fetus and gradually diminishes as the individual blood-making faculty develops in the growing child.

The thymus gland contains, as it were, a supply of blood corpuscles given by the parents, and consequently the child, which draws its blood from that source, does not realize its individuality. Not until the blood is made by the child does it think of itself as "I," and when the thymus gland disappears, at the age of fourteen, the "I" feeling reaches its full expression, for then the blood is made and dominated entirely by the Ego.

Note: The thymus is largest and most active during the neonatal and pre-adolescent periods. By the early teens, the thymus begins to decrease in size and activity and the tissue of the thymus is gradually replaced by fatty tissue.

It will be remembered that assimilation and growth depend upon the forces working along the positive pole of the vital body's chemical ether. At the fourteenth year the life ether of the vital body, which has to do with propagation, is fully developed. In the period from seven to fourteen years of age the excessive assimilation has stored an amount of force which goes to the sex organs and is ready at the time the desire body is set free.

This force of sex is stored in the blood during the third of the seven-year periods and in that time the light ether, which is the avenue for the blood heat, is developed and controls the heart, so that the body is neither too hot nor too cold.

The Ego cannot work in the body when the blood is either too hot or too cold. We will call attention to the well-known fact that excessive heat makes one sleepy, and, if carried beyond a certain point, it drives the Ego out, leaving the body unconscious. It is only when the blood is at or near the normal temperature that the Ego can use it as a vehicle of consciousness.

Note: A core body temperature of 104 degrees Fahrenheit (40 degrees Celsius) or higher is the main sign of heatstroke. Heatstroke needs emergency care. If it's not treated, heatstroke can quickly damage the brain, heart, kidneys and muscles. This damage gets worse the longer treatment is delayed, which increases the risk of serious complications or death.

At the present time the blood of each individual contains only the pictures of his own individual experiences and the subconscious mind has access to them. Up to the time that marriage outside of the family was commenced individuals were ruled by a Family Spirit (Angel) which entered the blood by means of the air inspired, and helped each Ego to control its vehicles. When marriage outside the family began, Egos had arrived at a point in the evolution of self-consciousness where they could depend on self, and where they were to ease being God-guided automatons and become self-governing individuals. The greater the mixture of blood the less the indwelling Ego can be influenced by the Race or Family Spirits. Unmixed blood gave us ancestral assistance when we needed it. Mixed blood makes for independence of outside help. A God (creator) must be independent.

The heat of the blood is the vantage ground of the Ego, and the Lucifer Spirits from Mars aid in maintaining this heat by dissolving iron, a Mars metal, in our blood to attract oxygen, a solar element.

The proper heat for the real expression of the Ego is not present until the mind is born from the macrocosmic Concrete Mind, when the individual is about twenty-one years old.

During the early part of the gestatory period the blood of the fetus is also nucleated by the life of the mother, and she regulates the process of body building, but as soon as the incoming Ego enters the mother's body, it commences to assert its individuality and resists formation of nucleated blood cells.

The old cells gradually disappear, so that when the silver cord is tied at the time of quickening and the Ego is drawn into its body, all nuclei have disappeared, and it is absolute autocrat of its new vehicle, a heritage more precious than any other earthly possession; and when properly used it is our means of generating soul power and laying up treasure in heaven. When we abandon this vehicle to Spirit controls, we seriously hinder our higher evolution and commit a great sin.

Thus, the blood is the particular vehicle of the Ego, and as in the past eons of development we have crystallized matter in order to form our dense body, so also it is destined that now we must etherealize our vehicles in order that we may lift ourselves and the world out of the realms of materiality and into the spiritual.

Additional Chapter: *System, Organs and Function*

Human Organ Systems

System	Organs	Function
Digestive	Mouth, esophagus, stomach, small intestines, liver, gall bladder, pancreas, large intestines, rectum	Breaks down food for use by cells
Circulatory	Heart, artery, vein, capillary	Transports materials to and from the body cells
Excretory	Kidney, ureter, bladder, urethra	Eliminates wastes produced by body cells
Nervous	Brain, spinal cord, nerves, sense organs	Transmits messages throughout the body
Respiratory	Nose, Mouth, Pharynx, Larynx, Trachea, Bronchi, Lungs	Brings air into the body and adds oxygen to the blood (and removes carbon dioxide from the blood)
Musculoskeletal	Muscles, Tendons and ligaments, Bones, Joints	Provides structure and allows motion of the body
Integumentary	Skin, Hair, Nails	Provides barrier protection between the inside of the body and the external environment and helps control body temperature
Endocrine	Thyroid gland, Parathyroid gland, Adrenal glands, Pituitary gland, Pancreas, Pineal gland, Ovaries, Testes	Produces chemical messengers carried in the blood (hormones), which direct the activities of different organ systems
Reproductive	Male: Penis, Prostate gland, Seminal vesicles, Vas deferens, Testes Female: Vagina, Cervix, Uterus, Fallopian tubes, Ovaries	Production and discharge of sperm and produces and secretes male hormones Production of ova (eggs) and providing the environment for the fertilized egg to develop
Lymphatic and Immune	Lymph nodes, spleen, tonsils, and lymph	Helps rid the body of toxins, waste, and other materials the body doesn't need; fights infection.

Organs

Each of your cells is like an individual worker doing a specific job. Tissues are groups of related cells teamed up in the same place. Organs consist of many tissues that work together cooperatively to accomplish a bigger job.

Organs are specialized structures in your body that handle specific jobs. Some of the best-known organs are your heart, brain or liver. Organs are part of bigger systems that handle interconnected jobs. And some organs can be part of more than one system. Organs can be single structures like your heart. But they can also be a group of the same type of structure. For example, your bones are technically an organ, but so is the bone marrow inside most of your bones. There are 78-80 organs in your body.

Vital organs are organs that you need to survive. Your body can't function without them. Some key examples of vital organs include your: brain, heart, kidney, lungs, and liver. You can survive without the following organs: appendix, gallbladder, ovaries, uterus, spleen, testicles, large sections of your bowel or the entire colon. You can also live without one of the following paired organs such as a lung or a kidney.

Accessory organs are organs that contribute to a body system, but they might not necessarily be a clear part of it. One example is your gallbladder, which contributes to your digestive system. Breasts are another example. They can contribute to your reproductive system during breastfeeding. But being an accessory organ doesn't mean that organ isn't important. Your liver is an accessory organ to your digestive system, but you also can't live without it.

The largest organ is the skin and smallest organ is the pineal gland.

The liver is capable of regenerating itself.

Vestigial organs (no longer has a function): 90 in the human body including: appendix, coccyx, nictating membrane, etc.

Basic Organs of the Body

Heart. Your heart is at the front of your chest on your left-hand side. It is between the two lungs. The heart muscles pump blood around your body. You know your heart is working because you can feel your heart beat and you can feel the blood at your pulse.

The heart pumps blood containing oxygen to every part of your body. At the same time, it pumps the blood without oxygen back through the lungs where it picks up new oxygen, this cycle is repeated every time your heart beats, 24 hours a day, every day.

Lungs. Your lungs are sponge-like organs. Every time you breathe, they filter oxygen from the air through tiny vessels into your blood. The blood is then

carried to the heart to be pumped round your body. When you breathe out, your lungs also filter carbon dioxide from your body.

Liver. Your liver is an organ below your lungs. It acts like a filter for the blood. Chemicals and impurities are filtered by the liver, including from drugs and medications. The liver does many other essential jobs. For example, it makes and processes many body fats. The liver is the only internal organ that can regrow.

Kidneys. Your kidneys are also filters. Some drugs are filtered more by the kidneys than by the liver. Waste products filtered by the kidneys leave the body as urine.

The kidneys are in your lower back. Any blockage to your kidneys is extremely painful and can cause permanent damage. Although you are born with two kidneys, many people live very well with just one.

Stomach and intestines. Your stomach is where food, drink and oral medications start to be broken down and processed in the body. Nutrients and drugs are absorbed through the stomach and small intestine walls. The small intestines are about five meters long. The large intestines are about 1.5 meters long.

Thymus. The thymus is a small gland high in the chest. This organ is where CD4 cells and other white blood cells develop. CD4 cells are sometimes called T cells (from 'thymus'). They are part of the cellular immune response. The thymus is very active in children and adolescents, and becomes much less active as you grow older.

Pancreas. Your pancreas is a pistol shaped gland below the liver. It releases digestive enzymes into the small intestine and hormones that control sugar levels in your blood. You can live without a pancreas but you need to take insulin to regulate blood sugar levels and take supplementary digestive enzymes.

Skin. Your skin is the largest organ in the body. The skin makes up 16% of an average body weight. It holds your body together, stops you from drying out and is the main barrier against infection.

Bone. Your bones are a living material. About 10% of bone cells die and are replaced each year. If bone cells are not replaced quickly enough, bones become brittle and break more easily. This means that over ten years you have grown and replaced your whole set of bones. A bit like a snake shedding its skin.

Bone marrow. Bone marrow is the soft tissue inside bones. Blood cells originally come from bone marrow. Some immune develop in bone marrow – and are called B-cells. They are part of the adaptive immune response.

Blood. Blood is the fluid pumped by your heart. It delivers oxygen and nutrients to every part of your body and carries waste products away. Blood contains cells (red cells, white cells, platelets etc.) and plasma.

Plasma. The liquid part of blood that contains nutrients, sugars, proteins, minerals, enzymes, and other substances – but with the blood cells taken out.

Lymph. Lymph is a clear fluid that contains white blood cells and antibodies. It is distributed round your body through a series of lymph vessels, nodes, and organs. The lymph system supports the blood in removing waste products from the body.

Although a lot of information about your health and HIV comes from blood tests, less than 2% of the HIV in your body is in your blood. Some researchers think this may be less than 1%. Most of the other 98% is in the lymph system, including the gut.

Lymph nodes. Lymph nodes are the little lumps that sometimes get enlarged in your neck, under your arms, and in the crease between your legs and your body. Most of the CD4 cells in your body rest and reproduce in your lymph nodes.

Organs and Disease

The human body is remarkably well designed. Most of its organs have a great deal of extra capacity or reserve: They can still function adequately even when damaged. For example, more than two thirds of the liver must be destroyed before serious consequences occur, and a person can usually live with only one lung or one kidney. However, other organs can tolerate little damage before they malfunction and symptoms occur. For example, if an artery in the brain becomes blocked or ruptures (stroke) and even a small amount of tissue in a vital part of the brain is destroyed, a person may be unable to speak, move a limb, or maintain balance. If a heart attack destroys a small amount of tissue in the part of the heart that creates or carries the signals to beat, the heart rate may become dangerously slow and the person may even die.

Disease often affects anatomy, and changes in anatomy can cause disease. If the blood supply to a tissue is blocked or cut off, the tissue dies (called infarction), as in a heart attack (myocardial infarction) or stroke (cerebral infarction). An abnormal heart valve can cause heart malfunction. Trauma to the skin may damage its ability to act as a barrier, which may lead to infection. Abnormal growths, such as cancer, can directly destroy normal tissue or produce pressure that ultimately destroys it.

Because of the relationship between disease and anatomy, methods of seeing into the body have become a mainstay in the diagnosis and treatment of disease. The first breakthrough came with x-rays, which enabled doctors to see into the body and examine internal structures without surgery. Another major advance was

computed tomography (CT), which combines x-rays and computers. A CT scan produces detailed cross-sectional (two-dimensional) images of the body's interior.

Other methods of producing images of internal structures include ultrasound, which uses sound waves; magnetic resonance imaging (MRI), which uses the movement of atoms in a magnetic field; and radionuclide imaging, which uses radioactive chemicals injected into the body. These are noninvasive ways to see into the body, in contrast to surgery, which is an invasive procedure.

Homeostasis

Homeostasis is the term used to describe how the body maintains its normal composition and functions. Because organ systems communicate with each other, the body is able to maintain stable amounts of internal fluids and substances. Also, the organs neither underwork nor overwork, and each organ facilitates the functions of every other organ.

Communications to maintain homeostasis occur by means of the autonomic nervous system and the endocrine system. Special chemicals called transmitters carry out the communications.

The autonomic nervous system largely controls the complex communication network that regulates body functions. This part of the nervous system functions without a person's thinking about it and without much noticeable indication that it is working. Transmitters called neurotransmitters conduct messages between parts of the nervous system and between the nervous system and other organs.

The endocrine system consists of various glands that produce chemical transmitters called hormones. Hormones travel to other organs through the bloodstream and regulate the function of those organs. For example, the thyroid gland produces thyroid hormone, which controls the metabolic rate (the speed at which the body's chemical functions proceed). The pancreas produces insulin, which controls the use of sugar by the body.

One of the best-known transmitters is the hormone epinephrine (adrenaline). When a person is suddenly stressed or frightened, the brain instantly sends a message to the adrenal glands, which quickly release epinephrine. Within moments, this chemical has the entire body on alert, a response sometimes called the fight-or-flight response. The heart beats more rapidly and powerfully, the eyes dilate to allow more light in, breathing quickens, and the activity of the digestive system decreases to allow more blood to go to the muscles. The effect is rapid and intense.

Other chemical communications are less dramatic but equally effective. For example, when the body becomes dehydrated and needs more water, the volume of blood circulating through the cardiovascular system decreases. This decreased blood volume is perceived by receptors in the arteries in the neck. They respond by sending impulses through nerves to the pituitary gland, at the base of the brain, which then produces antidiuretic hormone. This hormone signals the kidneys to concentrate urine and retain more water. Simultaneously, the brain senses thirst, stimulating a person to drink.

Occult Principles of Health and Healing



By Max Heindel

Self-Study Guide: Chapter 17

Effects of Removal of Physical Organ

The Lord openeth the eyes of the blind: the Lord raiseth them that are bowed down: the Lord loveth the righteous: - Psalm 146:8

Pre-Reading Activity: *What Are Your Thoughts About the Removal of Organs?*

Before reading Chapter 17: *Effects of Removal of Physical Organs* it is important that you first consider your current thoughts on the removal of organs so upon completing the reading you can then see how your thoughts were confirmed, enriched, or challenged with new ideas and concepts.

<p><i>Why do think people still feel pain when an appendage is lost?</i></p>	<p><i>What organs do you think you could live without?</i></p>
<p><i>Should children ever have their tonsils removed?</i></p>	<p><i>What home remedies could you use to treat throat infections?</i></p>

Reading Template for Chapter 17

CHAPTER 17 NOTES

Questions

Investigate

Clarity

Challenge

Chapter Questions for Chapter 17

1. What happens when a limb or organ has been removed from the body?

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2. When does the pain and suffering stop after losing a body part?

--

3. What is an exception to the rule of losing a body part?

--

4. How is removing the spleen different from amputating an arm?

--

5. What happens when disease manifests in the physical vehicle?

--

6. When health returns what occurs in the body?

--

7. What happens if the spleen is diseased?

--

8. What happens if the spleen is removed?

--

9. What happens when a person is injured and passes into the invisible realms?

--

10. What happened to soldiers that passed with wounds during a war?

--

11. How did the Elder Brothers help the soldiers in the previous question?

--

12. Why is the removal of tonsils discouraged?

--

13. What is the effect of the tonsils being ruled by Taurus if they are removed?

--

14. Why do the tonsils become enlarged?

--

15. In acute cases involving the throat what is recommended?

--

16. What addition measures for throat trouble can be done at night?

--

17. How long will the throat condition last when treated?

--

18. What sometimes is produced while a throat condition is being treated?

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Summary Questions for Chapter 17

1. How is the body affected by the *amputation* of a limb?

2. How is the body affected when the *spleen* is removed?

3. How is the body affected when a person dies due to *injury*?

4. How should complaints of *throat trouble* (i.e., the tonsils) be treated and Why?

Class Discussion Questions for Chapter 17

- **What occurs when a limb is removed from the body?**
- **What is the “etheric counterpart”?**
- **What exceptions are there to rule of the body’s reaction to the loss of a limb or organ?**
- **Where does disease manifest and why?**
- **What occurs when a person has a near death experience?**
- **What happens when a person is injured and then passes into the invisible realm, why?**
- **How do the Elder Brothers help those who have passed?**
- **What can be the effects of removing the tonsils?**
- **What natural treatments are there for the throat and the tonsils?**
- **Why do adolescents often have problems with their tonsils?**
- **Why should the removal of the tonsils be discouraged?**

***** Research on Your Own – Chapter 17 *****

1. What is an “*etheric counterpart*” and what occurs with organ loss?

2. How does the physical body *accommodate* with organ loss?

3. What are the health benefits of *Lemons*?

Reflection & Connection for Chapter 17

Four Most Important Things You Learned
1.
2.
3.
4.
Three Important Ideas for Your Work in a Healing Center
1.
2.
3.
Two Things You Can Share with Patients in a Healing Center
1.
2.
What are the medicinal properties of HONEY?

Final Word on Chapter 17

The vital force from the sun, which surrounds us as a colorless fluid, is absorbed by the vital body through the etheric counterpart of the spleen, wherein it undergoes a curious transformation of color. It becomes pale rose-hued and spreads along the nerves all over the dense body. It is to the nervous system what the force of electricity is to a telegraph system. Though there be wires, instruments, and telegraph operators all in order, if the electricity is lacking, no message can be sent. The Ego, the brain, and the nervous system may be in seemingly perfect order, but if the vital force be lacking to carry the message of the Ego through the nerves to the muscles, the dense body will remain inert. This is exactly what happens when part of the dense body becomes paralyzed. The vital body has become diseased and the vital force can no longer flow. In such cases, as in most sickness, the trouble is with the finer invisible vehicles. In conscious or unconscious recognition of this fact, the most successful physicians use suggestion--which works upon the higher vehicles--as aid to medicine. The more a physician can imbue his patient with faith and hope, the speedier disease will vanish and give place to perfect health.

During the health the vital body specializes a superabundance of vital force, which, after passing through a dense body, radiates in straight lines in every direction from the periphery thereof, as the radii of a circle do from the center; but during ill-health, when the vital body becomes attenuated, it is not able to draw to itself the same amount of force and in addition the dense body is feeding upon it. Then the lines of the vital fluid which pass out from the body are crumpled and bent, showing the lack of force behind them. In health the great force of these radiations carries with it germs and microbes which are inimical to the health of the dense body, but in sickness, when the vital force is weak, these emanations do not so readily eliminate disease germs. Therefore, the danger of contracting disease is much greater when the vital forces are low than when one is in robust health.

In cases where parts of the dense body are amputated, only the planetary ether accompanies the separated part. The separate vital body and the dense body disintegrate synchronously after death. So, with the etheric counterpart of the amputated limb. It will gradually disintegrate as the dense member decays, but in the meantime the fact that the man still possesses the etheric limb accounts for his assertion that he can feel his fingers or suffers pain in them. There is also a connection with a buried member, irrespective of distance. A case is on record where a man felt severe pain, as if a nail had been driven into the flesh of an amputated limb, and he persisted until the limb was exhumed, when it was found that a nail had been driven into it at the time it was boxed for burial. The nail was removed and the pain instantly stopped. It is also in accordance with these facts that people complain of pain in a limb for perhaps two or three years after the amputation. The pain will then cease. This is because the disease remains in the still undetached etheric limb, but as the amputated part disintegrates, the etheric limb follows suit and thus the pain ceases. - **RCC, pp. 62-64**