

PHARMACOGNOSY IN VARIOUS SYSTEM OF MEDICINE

[DEPTH OF BIOLOGY]

★ROLE OF PHARMACOGNOSY IN ALLOPATHY


[DEPTH OF BIOLOGY]

IF PATIENT SUFFERING FROM
HIGH B.P (ALLOS)
THEN OPPOSITE ↑ MEAN
LOW B.P DRUG PREFER 😬

★ALLOPATHY

“ALLOS” + “PATHOS”

(Means opposite) (Means suffering)



Allopathy is a system of medicine , that combats disease by using remedies that are different from the effects produced by disease to be treated.

[DEPTH OF BIOLOGY]

E.G. Anti – bacterial , anti- viral , for acidity
(antacids are used)

[DEPTH OF BIOLOGY]




It is also called as “western medicine” or “modern medicine”



The term “allopathy” was coined in 1810 by Samuel Hahnemann

[DEPTH OF BIOLOGY]




Pharmacognosy plays an important role in the treatment of many diseases in allopathy



It places a crucial role in the discovery ,
characterization , production of drugs .

[PHARMACOGNOSY]



In this system , the drugs / medicines (tablets ,
capsules , infection , tonics , etc.) are
manufactured using synthetic chemicals or
chemicals derived from natural products like
plants , animals , minerals , etc. (ALLOPATHY)



This system also uses modern equipment for
diagnosis , analysis , surgery , etc.

[DEPTH OF BIOLOGY]

[DEPTH OF BIOLOGY]

☆ ADVANCES OF ALLOPATHY :-

- ➡ Immediate response [DEPTH OF BIOLOGY]
- ➡ Various kinds of dosage form are available
- ➡ Modern technology
- ➡ Efficient management in emergency conditions

☆ DISADVANCES OF ALLOPATHY

- ➡ Long term medication causes severe side effects
- ➡ Drug – drug interaction .

-ADDICTION



Suppress immunity



High cost

[DEPTH OF BIOLOGY]

★ TRADITIONAL SYSTEM OF MEDICINE :- [DEPTH OF BIOLOGY]

- ❑ The traditional system of medicine is also known as indigenous medicine / Folk medicine / alternative medicine , comprises of medical aspects of knowledge, skills and practices based on different cultures and are used to treat diseases .

□ TYPES :-

[DEPTH OF BIOLOGY]

The types of traditional system of medicine are as follows :-

Ayurveda

Yoga (Naturopathy)



[Drugless Therapy]

Unani

Siddha

Homeopathy

AYUSH

[DEPTH OF BIOLOGY]

[DEPTH OF BIOLOGY]

★ AYURVEDA :-

[DEPTH OF BIOLOGY]

➡ It is an Indian system of medicine .

➡ Ayurveda is the combination of two Sanskrit words :-

'Ayu' - life

'Veda' — knowledge OR science of life

[DEPTH OF BIOLOGY]

Thus , Ayurveda means science of life .

➡ It is an oldest medical system , that came into existence in about 900 B.C.

[DEPTH OF BIOLOGY]



The 4 “vedas” written by Aryans , they are :-

Rig Veda , sama Veda , Yajur Veda , Atharva Veda

Into that Ayurveda is the Upaveda (part) of Atharvaveda .

[DEPTH OF BIOLOGY]



Charaka and Sushruta made significant contributions to Ayurveda .



The book “charak samhita” was written by charaka and he was know as the “father of Ayurveda” .

[DEPTH OF BIOLOGY]

[DEPTH OF BIOLOGY]

BASIC PRINCIPLES OF AYURVEDA

PRINCIPLES OF AYURVEDA

[DEPTH OF BIOLOGY]

[DEPTH OF BIOLOGY]

PANCAMAHA BHUTAS

Prithvi
Jala

Vayu

Agni / Teja

Aakash

TRIDOSHA

Vata

Pitta

Kapha

SAPTADHATUS

Rasa

Rakta

Meda

Mamsa

Majja

Sukhra

Asthi

[DEPTH OF BIOLOGY]

Vatta Vata controls the nervous system, 📌 📌
respiration and elimination

[DEPTH OF BIOLOGY]

Pitta Pitta governs 📌 📌
digestion, catabolism, metabolism and perception
Kapha Kapha 📌 📌
is responsible for biological strength and body's .

[DEPTH OF BIOLOGY]

☆ PANCAMAHA BHUTAS

SIDDHARTHA:-



According to ancient Indian philosophy , the universe is composed of 5 basic elements :-

- ☐ Prithvi (earth)
- ☐ Jal (water)
- ☐ Teja (Fire)
- ☐ Vayu (air)
- ☐ Aakash (space)

[DEPTH OF BIOLOGY]

[DEPTH OF BIOLOGY]



Everything in the universe , including food and the bodies were derived from the Bhutas .

☆ TRIDOSHA THEORY :-



There are 3 doshas in the body . They are :-

- ☐ Vata (space + air)
- ☐ Pitta (Fire + liquid)
- ☐ Kapha (liquid + solid)


[DEPTH OF BIOLOGY]

[DEPTH OF BIOLOGY]



According to this theory , the 5 basic elements (Pancamahabhutas) exist in human body in 3 different forms . Together known as “Tridosha”


[DEPTH OF BIOLOGY]




When these tridosha present in balanced form in the body is considered as healthy condition and any imbalance in tridosha is considered as diseased condition . [DEPTH OF BIOLOGY]



Ayurveda tries to maintain the balance in these elements . [DEPTH OF BIOLOGY]



Vata - It regulates the nervous system .
- Responsible for the movement and sensation of cell / whole body .



Pitta - It regulates energy production , digestion , metabolism , tissue building in the body .



Kapha - It regulates heat , formation of fluids , mucous , strengthening of stomach and joints .

[DEPTH OF BIOLOGY]

☆ S A P T A D H A T U S T H E O R Y :-



The combination of “Panchbhutas” forms 7 basic tissues of the body referred as “Sapta dhatu” .

[DEPTH OF BIOLOGY]

<input type="checkbox"/>	Rasa	-	Lymph / Plasma
<input type="checkbox"/>	Rakta	-	Blood
<input type="checkbox"/>	Meda	-	Fat tissue
<input type="checkbox"/>	Mausa	-	Muscle tissue
<input type="checkbox"/>	Majja	-	Bone marrow
<input type="checkbox"/>	Sukhra	-	Seven / Reproductive tissue

[DEPTH OF BIOLOGY]

□ Asthi = Bones

[DEPTH OF BIOLOGY]



Mala

- They are the byproducts of the dhatus .
- Partly used by the body and other than that excreted as waste water after digestion .

[DEPTH OF BIOLOGY]

– They are as follows :-

□ Prasad = Useful elements absorbed by the body .

– Useful matter

□ Mutra = Urine

[DEPTH OF BIOLOGY]

□ Shakrit = Faeces / Stool

[DEPTH OF BIOLOGY]

☆ DIAGNOSIS :-

[DEPTH OF BIOLOGY]

➡ The diseases are diagnosed by observation of doshas (vata , pitta and kapha)

➡ Under this , skin , eyes , nails and tongue is observed . [DEPTH OF BIOLOGY]

➡ Recording the pulse

➡ Investigation of Mala (urine , stools and sweat)

[DEPTH OF BIOLOGY]

☆ UNANI SYSTEM OF MEDICINE :-

This system of medicine is originated in Greece by Greek philosopher “Hippocrates”

[DEPTH OF BIOLOGY]

Unani system was later developed by Arabs and became popular as Arab System of medicine . [DEPTH OF BIOLOGY]

Unani medicine got its importance in Egypt , Syria , Iraq , Persia , India , China and other countries .

[DEPTH OF BIOLOGY]



In Indian , Arabs introduced Unani System by
Mughals . [DEPTH OF BIOLOGY]



Unani considered the human body to be made
up of 7 components . They are:-

- ☐ Arkan = elements
- ☐ Mizaj = temperaments
- ☐ Akhlat = humors (body fluids)
- ☐ Aaza = Organs
- ☐ Arwah = spirits
- ☐ Q_Uwa = Facilities
- ☐ Afaal = Functions

[DEPTH OF BIOLOGY]

A Physicians
take into
account all
these factors
during
diagnosis and
prescribes
medicine .

[DEPTH OF BIOLOGY]



Unani medicine is based in 4 basic elements:-

Earth , Air , water and fire

Which have different temperaments

Cold , hot , wet and dry . [DEPTH OF BIOLOGY]



The body has simple and compound organs which got nourishment through 4 Humors

Blood , Phlegm , Yellow bile , black bile

- ☐ Blood = hot and wet
- ☐ Phlegm = cold and Moist
- ☐ Yellow bile = hot and dry
- ☐ Black bile = cold and Dry

[DEPTH OF BIOLOGY]

[DEPTH OF BIOLOGY]



According to the system , health is a state of body in which there is equilibrium in humors in temperaments .



When the equilibrium of the Humors is distributed , disease produces .

☆ DIAGNOSIS :-



The diseases are mainly diagnosed with the help of Pulse (Nabz) , physical examination of Urine and Stool .

☆ TREATMENT :-

The temperament of an individual is broadly classified into four types as Phlegmatic (Balghami), Sanguine (Damvi), Bilious (Safravi), and Melancholic (Saudavi). These four types of temperaments of individuals are very important for treating various diseases

[DEPTH OF BIOLOGY]

[DEPTH OF BIOLOGY]

- **Regimental therapy** :- Some drugless regimens are advice for treatment of disease :-
a set of rules about food and exercise or medical treatment that you follow in order to stay healthy or to improve your health
E.G. :- **Exercise** , **Massage** , **Hamam** (Turkish **Both**) .

[DEPTH OF BIOLOGY]

- **Dietotherapy** :- Different diets are recommended for the patients of different diseases .

[DEPTH OF BIOLOGY]

- **Herbs and drugs are used** . [DEPTH OF BIOLOGY]

Plants

Animals

☆ SIDDHA SYSTEM OF URINE :-



It is an ancient South Indian medicinal system , started before 2000 B.C. [DEPTH OF BIOLOGY]



It is exclusively linked with Tamil culture and civilization. [DEPTH OF BIOLOGY]



It is prevalent in the southern states of India , Sri Lanka , Malaysia and Singapore . [DEPTH OF BIOLOGY]



“Agastya” was believed to be the father of siddha medicine .

☆ BASIC PRINCIPLES:-

[DEPTH OF BIOLOGY]



The 5 principles of Panchamahabhuta theory are :-

- Prithvi :- Earth (gives fine shape to body including bones , tissues , etc) .
- Apas :- water (representing blood , Secretion of glands , etc.
- Theyu :- Fire (gives emotion , helps in digestion , etc).

[DEPTH OF BIOLOGY]

[DEPTH OF BIOLOGY]

□ Vayu :- air (helps in respiration) .

□ Aakashha :- space / sky .

[DEPTH OF BIOLOGY]



Triguna :- Vata , pitta and kapha

[DEPTH OF BIOLOGY]

— Imbalance in the equilibrium of vata , pitta and kapha (Triguna) cause disease .

☆ **DIAGNOSIS** :-

[DEPTH OF BIOLOGY]



The diagnosis of diseases involves identifying its causes




The physician generally involve checking of :-
Nadi (pulse) , Dhwani (voice / speech) , Twak
(skin along with tongue) , Dehah (body) ,
Malam (Feces / Stool) , mutram (urine) , Vizhi
(eye colour) .

[DEPTH OF BIOLOGY]

★ TREATMENT :-



Treatment is based on all diagnostic
character of patient . [DEPTH OF BIOLOGY]



Siddha system extensively use of drugs of
vegetable source as well as mineral origin . Use
of metals like gold , silver, Sulphur , zinc , mica ,
etc. Are only seen in siddha system of medicine .

☆ HOMEOPATHY SYSTEM OF MEDICINE :-

[DEPTH OF BIOLOGY]

HOMEOPATHY

“Homois”

+

“Pathos”

Means

like

(similar)

Means

treatment

[DEPTH OF BIOLOGY]



It means the substances capable of causing disorder in healthy subjects are used as medicines in diluted form to treat similar pattern of disorder . [DEPTH OF BIOLOGY]



[DEPTH OF BIOLOGY]

This system of medicine was introduced by a Dr. Samuel Hahnemann in (1755-1843) .

He was a German physician , chemist and a pharmacist , based on the natural law of healing

“similia similibus curentur” [DEPTH OF BIOLOGY]

Which means “likes are cured by likes”

☆FUNDAMENTAL PRINCIPLES OF HOMEOPATHY :- [DEPTH OF BIOLOGY]



The basic fundamental principles were discussed by Hahnemann in different sections:-

★ LAW OF SIMILLIA :-

Homeopathy based on the natural law of healing

“similia similibus curentur”

[DEPTH OF BIOLOGY]

Which means “likes are cured by likes”

In a simple way we can say that , the medicine administered to a diseased individual is such that if given to a healthy person it produces some diseases .

[DEPTH OF BIOLOGY]

[DEPTH OF BIOLOGY]

☆ LAW OF SIMPLEX :-



Simple and single drugs should be prescribed at a time .

[DEPTH OF BIOLOGY]

☆ LAW OF MINIMUM :-



Drugs are administered in minimum quantity to prevent unwanted side effects

☆ DRUG PROVING :-

[DEPTH OF BIOLOGY]



To apply drugs for Therapeutic purpose their curative power should be known .

☆ INDIVIDUALIZATION :-

[DEPTH OF BIOLOGY]



Medicines can never be prescribed on the basis of name of disease without individualizing each case of disease .

☆ TREATMENT :-

[DEPTH OF BIOLOGY]



Patients will be asked about their medical history , diet , lifestyle , physical and emotional state .

[DEPTH OF BIOLOGY]



Suitable remedy will be prescribed on the basis of patient's individual symptoms .

☆ CHINESE SYSTEM OF MEDICINE :-



Traditional forms of medicine have been used in China since the 3rd century . [DEPTH OF BIOLOGY]



The 1st herbal classic written in China was published in Qin Dynasty (221-206A.D.) called the Agriculture Emperors Materia Medica

[DEPTH OF BIOLOGY]

[DEPTH OF BIOLOGY]



Traditional Chinese Medicine is a holistic medicine that considers the “whole” person – body , mind , diet , environment , emotions , lifestyle and exercise .

☆Traditional Chinese Medicine system
 consists of 3 parts . They are :- [DEPTH OF BIOLOGY]


[DEPTH OF BIOLOGY]

Theory	Treatment	Prevention
a) Ying and Yang Theory	(a) Herbalism	a) Qi gong
	(b) Acupuncture	b) Tai - ji
b) Five elements theory	(c) Moxibustion	c) Meditation
	(d) Cupping	[DEPTH OF BIOLOGY]
	(e) Massage therapy	

A) YIN AND YANG THEORY :-



It is concept of dualism . Yang predominates during the day and turns into Yin after dark

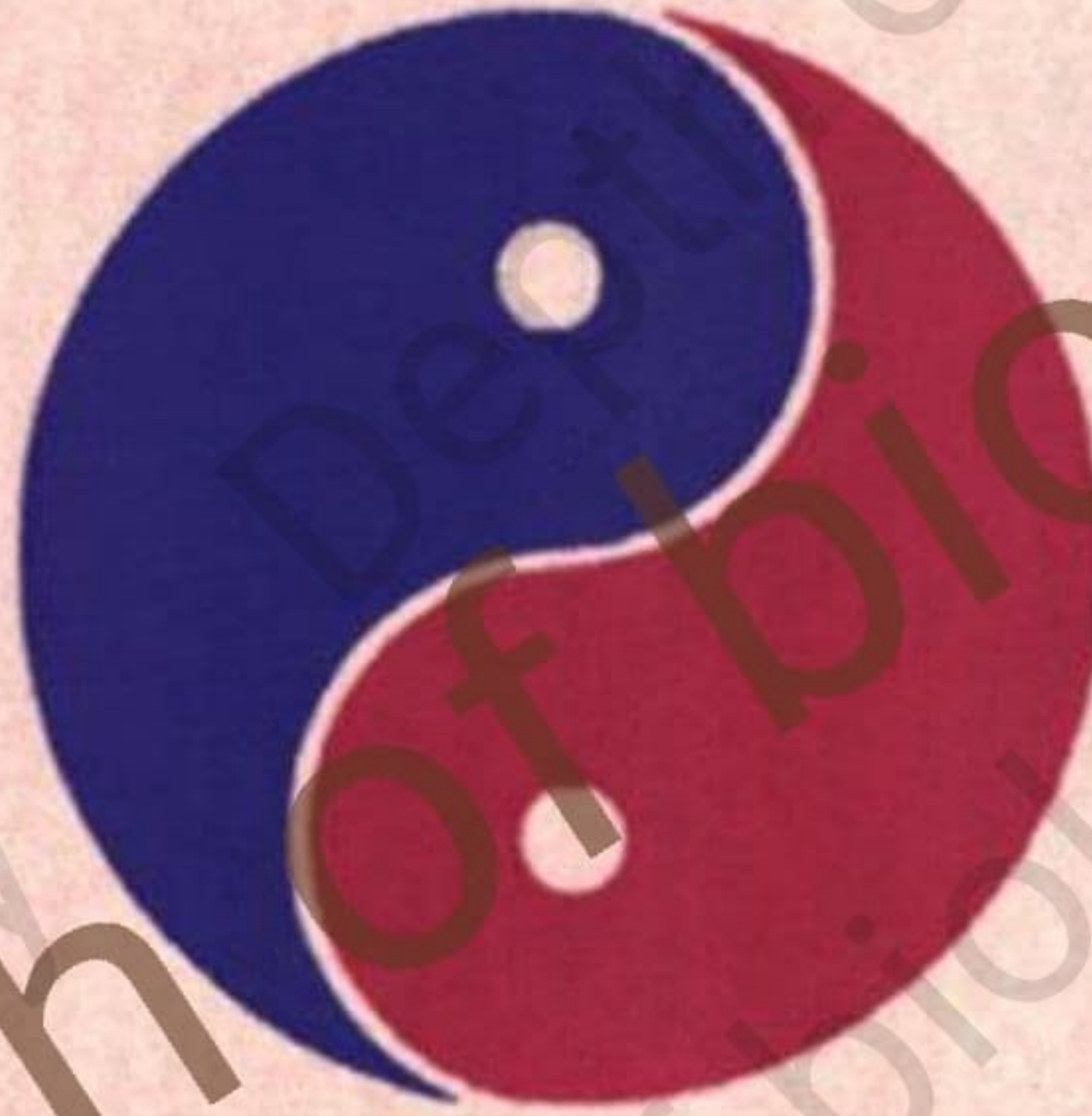


In human body when the Yin and Yang elements are well balanced , the person is in good health . A person falls sick when the balance is disturbed .

[DEPTH OF BIOLOGY]

Yin

night
dark
cold
negative
passive
female
solid
liver
heart
spleen
lungs
kidney



Yang

day
light
warm
positive
active
male
hollow
gall bladder
small intestine
stomach
large intestine
urinary bladder

[DEPTH OF BIOLOGY]

☆ YIN AND YANG IN BODY :-

YING	YANG
Lower body	Upper body
Chest and abdomen	Shoulders and back
Interior	Exterior
Internal organs	Bowels
Fluids	Gas
Nourish	Cleanse

[DEPTH OF BIOLOGY]

[DEPTH OF BIOLOGY]

B) 5 ELEMENT THEORY :-

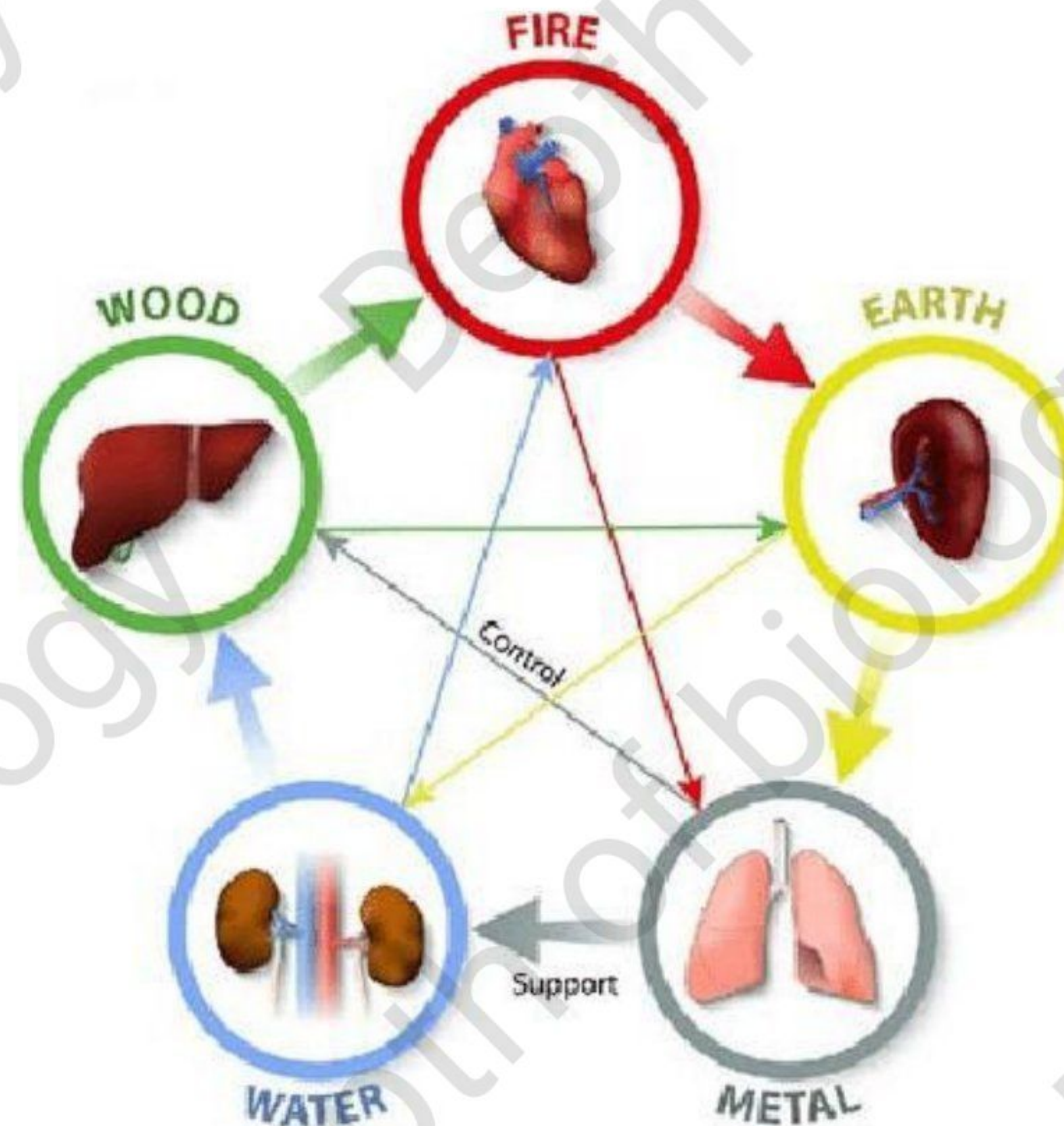


The 5 vital organs (Heart , Liver , kidney , Spleen and Lung) are corresponding to one of the 5 elements of universe [DEPTH OF BIOLOGY]
(Earth , Wood , Metal , Fire and water)

[DEPTH OF BIOLOGY]

→ The 5 organs function in an interlocked and interconnected relationship .

[DEPTH OF BIOLOGY]



[DEPTH OF BIOLOGY]

→ In the human body , if any change occurs in vital organ will affect the other organ and cause disease .

★ TREATMENT :-

A) HERBALISM :-



Herbs consists mainly of natural medicinal materials such as plants , animal parts and minerals of medicinal value . [DEPTH OF BIOLOGY]



Different parts of plants , such as the leaves , roots , stems , flowers and seeds are used .

[DEPTH OF BIOLOGY]



Each ingredient has unique characteristics and are used to treat diseases .

[DEPTH OF BIOLOGY]

B) ACUPUNCTURE :-

[DEPTH OF BIOLOGY]



Acupuncture involves the stimulation of anatomical points on the body with thin needles .



Acupuncture patients usually feel little to no pain because the needles are hair . [DEPTH OF BIOLOGY]

[DEPTH OF BIOLOGY]



C) MOXIBUSTION :-

[DEPTH OF BIOLOGY]



Moxibustion is a traditional Chinese medicine technique that involves the burning of spongy herb to facilitate healing . [DEPTH OF BIOLOGY]



[DEPTH OF BIOLOGY]

[DEPTH OF BIOLOGY]

D) CUPPING :-

[DEPTH OF BIOLOGY]

→ In this therapy , cups are placed on the skin to create suction . The suction of the cups mobilizes blood flow to promote the healing of disease .

→ The cups can be made of variety of materials including :- Glass , Bamboo , Earthenware .



[DEPTH OF BIOLOGY]

[DEPTH OF BIOLOGY]

E) MASSAGE THEORY :-

[DEPTH OF BIOLOGY]



Also known as Chinese massage (Tui Na) .



Uses wave like motions to loosen joints and nourish muscles .

[DEPTH OF BIOLOGY]



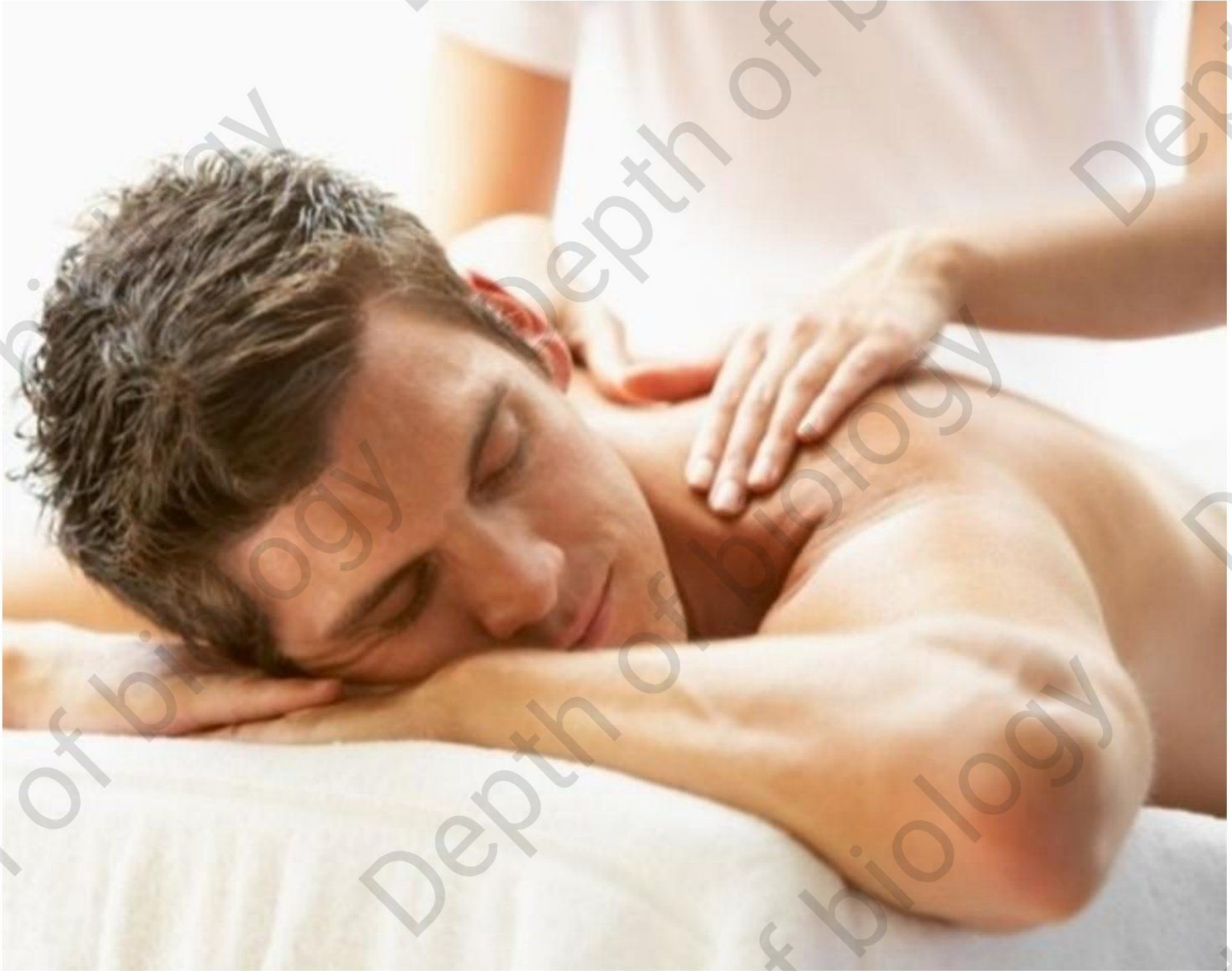
Stimulates the flow of Qi (means energy) , blood and body fluids .



Can be used to treat pain , stress or digestion problems .

[DEPTH OF BIOLOGY]

[DEPTH OF BIOLOGY]



[DEPTH OF BIOLOGY]

☆ PREVENTION :-

A) QI GONG :-

[DEPTH OF BIOLOGY]

Qigong is a Chinese form of exercise .

It regulates the mind and breathing to promote the flow of energy .



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[DEPTH OF BIOLOGY]

[DEPTH OF BIOLOGY]