YOU CAN’T HELP GETTING OLDER, BUT YOU DON’T HAVE TO GET OLD.
-GEORGE BURNS
We all have elderly patients. Why do some behave & look like our grandfathers, others like our fathers and others like our peers? What is the mechanism or the magic responsible for this?
“Airplane Mode”

Janet Zand, O.M.D., L.Ac., Dipl. C.H., Dipl. Ac. 2017
Putting your phone in airplane mode
Will charge it twice as fast
“It’s taken all my life to figure out what not to play.”
Dizzy Gillespie
HEALTHY AGING
INTEGRATING
TCM, NATURAL
&
CONVENTIONAL MEDICINE
Aging

“The effect of time on a person”
TCM

Focus on balancing the body

not

finding and correcting ‘diseases’
Why Even Consider Conventional Medicine?

“The Effect of ShenQi FuZheng (Codonopsis & Astragalus) Injection in Combination with Chemotherapy Alone on the Improvement of Efficacy & Immune Function in Patients with Advanced Non Small Cell Lung Cancer:  Meta Analysis”

TCM aids in **Better Result**

* http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0152270
THE BODY IS A SELF HEALING ENTITY
GOAL AS TCM PRACTITIONERS

Provide a healthful internal environment and encourage our patients to live in harmony with Nature.

•?
HARMONY WITH NATURE

CONTROL NATURE

DOMINATE NATURE

HARMONY WITH NATURE
HARMONY WITH NATURE
2017
?
“My 2 year old can turn the TV off with the IPAD but can’t find his mouth while eating spaghetti.”

“I felt 95 years old when my 5 year old asked me why we say ‘hang up’ the phone.”
“Never memorize something that you can look up.”
2017 Nature Irrevocably Impacted

GOOGLE - The Brain
(WATER)

FACEBOOK - The Heart
(FIRE)

AMAZON - The Stomach
(EARTH)
What is AGING?
AGING

DECREASED YIN & YANG
DECREASED KIDNEY QI & ESSENCE
EXCESS HEAT
STAGNATION
Biological Aging?

Complex biological process

UNANSWERED QUESTIONS:

What causes aging?

Why do we age?

How can we stop aging?
Mortality Rates, Expressed in Deaths Per 100,000 People

Note: After our ‘sexual peak,’ age 30, our chances of dying doubles approximately every 8 years
Life Expectancy today for the Average American = 78.2 years

Today there are more than 70,000 Americans over the age of 100 years.
Rate of Aging

10,000 Americans turn 65 every day
“What a drag it is getting old.”
Mick Jagger
Mother’s Little Helper
What Causes Aging?

1) Purposeful programming

GENES

2) Random events

• LIFE
Danish Twin Study
Good News
Genes Do Not Drive The Aging Process
https://link.springer.com/article/10.1007%2FBF02185763

Established that only 25% of longevity is dependent on genes.

75% dependent on lifestyle and environment.
TWO KINDS OF GENES

THE TYRANT

Eyes

Ear Wax

FRIENDLY COMMITTEE
GENES ARE NOT OUR DESTINY
LIFESTYLE  Blue Zones
MICROBIOME  Dr. Metchnikoff
TELOMERES

SOME FACTORS IN AGING

Telomere Shortening
chromosomes lose telomeres over time

Chronological Age
risk factors increase over time

Oxidative Stress
oxidants damage DNA, proteins and lipids

Glycation
glucose sugar binds to and inhibits DNA, proteins and lipids

Genes
BLUE ZONES
The Longest Living People On Earth
“You can live to be 100 if you give up everything that makes you want to live to be 100.”

Woody Allan
BLUE ZONES
The Longest Living People On Earth

SARDINIA, ITALY - mountainous highlands; greatest number of male centenarians. (sheep herding livestock from the mountains to the plains, was most highly correlated with reaching 100).

IKARIA, GREECE - Aegean island with one of the world’s lowest rate of middle age mortality & lowest rate of dementia. (regular napping - yin)

OKINAWA, JAPAN - Females over 70 greatest world wide longevity

NICOYA, COSTA RICA - world’s lowest rate of middle age mortality & second highest number of male centenarians

LOMA LINDA, CALIFORNIA (Seventh Day Adventists) - live 10 years longer than average American
BLUE ZONE LIFE STYLE

NATURAL MOVEMENT - exercise is a part of life

Do you sit for more than 6 hrs.daily?
BLUE ZONE LIFESTYLE

Purpose - the Nicoyans call it “plan de vida” - “why I wake up in the morning”

Relax - stress leads to heat - chronic inflammation - Blue Zones have strategies to manage stress: Okinawans take a few minutes each day to remember their ancestors; Adventists pray; Ikarians take a nap and Sardinians have happy hour.
Blue Zone Strategies

80% Rule - consistently stop eating when they are 80% full. Don’t eat after dinner. (The Center)

Plant Centered Diet - beans & greens; animal protein 3-4 oz. up to 5x per month.

Alcohol? - In all Blue Zones - except Adventists - alcohol - 1 - 2 glasses per day.
SOCIALIZATION

“I get by with a little from my friends. Do you need anybody? I want somebody to love.”

The Beatles
Blue Zone Strategies

**Faith Based Community Services** - 4 times per month will add 4 - 14 years of life expectancy.

**Loved Ones First** - elderly grandparents live with their children and grandchildren - adding up to 3 years of life expectancy.

**Right Living, Right Group.** - Sense of family/neighbors

Note: Healthy behaviors create more healthy behaviors. Obesity, smoking and eating processed foods are all considered ‘contagious’.
Blue Zone Lifestyle

Whole unprocessed foods; especially plants

Animal foods - grass fed - local - small amounts

Spices & Teas

Healthy Weight/Exercise

Sufficient Sleep

Time in Nature & With Family
TCM, Natural Medicine, Conventional Medicine

Let's Disrupt Aging
Mechanisms Underlying Longevity

LIFESTYLE
ENVIRONMENTAL INFLUENCE
&
GENETICS

THE PARADIGM SHIFT

DISEASE MANAGEMENT

VS.

ROAD TO WELLNESS THRU LIFESTYLE INTERVENTION

BALANCE
Epigenetics

Biological mechanisms that will turn genes on and off
Inflammation

Stressful conversation can increase TNF-alpha (protein >s with acute inflammation) & Interleukin 6

Medical students - pre & post exam - TNF-alpha >s

Inflammation

Accelerated ageing
Oxidative stress
Telomere shortening
Cellular senescence
Inflammaging
↑ PI3K–AKT–mTOR
DNA damage
Mitochondrial dysfunction
↓ Autophagy
Stem cell exhaustion
Immunosenescence
↓ Histone methylation
↓ Anti-ageing molecules

Cardiovascular disease
Atherosclerosis
Hypertension
Cardiac failure

Metabolic disease
Type 2 diabetes
Metabolic syndrome
Obesity
Chronic renal disease

Musculoskeletal
Sarcopenia
Osteoporosis
Osteoarthritis

Cancers

Lung disease
COPD
ILD

http://erj.ersjournals.com/content/45/3/790
IF?

You have hypothyroid patients and they are only taking T4 (Synthroid)

You have patients diagnosed with hyperlipidemia

You have patients diagnosed with pre-diabetes or diabetes

You have patients told they have ominous genes

You have patients reporting horrible fatigue

You have patients telling you they have been ‘everywhere’
STRATEGIES

The Center

Improving garbage in and garbage out mechanisms (methylation) (T&T)

The Microbiome

Turning On & Off Genes (Jing Qi)

Fighting Infections (Heat Resolution)

Getting Rid of Environmental Toxins
Determine Patient’s Weak Link
Giving The Center A Rest
Intermittent Fasting (IF)
Impact of IF on Health & Disease Processes

Improves longevity

Reduces insulin resistance

Improves weight loss

Reduces risk of Diabetes 2

WHY?
IS THE CENTER THE SECRET?

FASTING (Dr. Roy Walford - Biosphere)

Giving the Center A Rest

Fasting has potential to delay aging & help prevent disease
Humans - reduce obesity, hypertension, asthma & rheumatoid arthritis
Rodents - intermittent or periodic fasting protects against
Diabetes, cancers, heart disease and neurodegeneration

* https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3946160/
Spleen Qi Xu Symptoms: pasty complexion; loose stools, decrease in endurance, lackluster, loose stool, loose & disorderly behavior, decreased weight of liver & spleen.

The restorative effect of BZYQT in rats w spleen deficiency confirmed. Four identified biomarkers correlated w sp. qi xu. These biomarkers are all identified as playing a role in energy, protein assimilation & glycolytic metabolisms.

Treatment with BZYQT restored compromised biomarkers.

BU ZHONG YI QI TANG
BZYQT

ENDURANCE

LEARNING & MEMORY

NEUROMUSCULAR CO-ORDINATION

CHANGES OF MONOAMINES IN THE BRAIN

REDUCES ASTHMATIC RESPONSE

Note: Monoamines include neurotransmitters: dopamine, noradrenaline, adrenaline and serotonin. The function of the monoamines is not clear but they are thought to have a crucial role in arousal, emotion and cognition.

How did BZYQT Perform?

At the higher dose Bu Zhong improved:

• Memory

• Motor Coordination

• Endurance
Increased Norepinephrine - Excitatory neurotransmitter. Low levels associated with poor energy & decreased focus.

Increased Dopamine - Joy neurotransmitter. If too low or high symptoms of poor memory & focus.
MODIFIED SCHEDULE

7 AM - Noon - drinking teas; coffee

Noon - 7 PM - eating

7 PM - 7 AM - fasting
- THE EARTH -
A KEY TO LONGEVITY?
Telomeres Lengthen 3-5 Years After Gastric Bypass Surgery


Note: Endorsement for the EARTH
Zu San Li 足三里
Tsu San Li
Stomach 36
Point of Longevity

Point of 100 Diseases
BASIC STRATEGY

DECREASING HEAT/INFLAMMATION

• Less Food - calorie restriction - Dr. Walford

• Less Sugar - less heat

• Strengthen the center
Wood/Earth Functionality
Harness Nervous System

Hsiao Yao Wan

Jia Wei Xiao Yao San
THE MICROBIOME
Basic Strategies

Why would an autistic child improve with better digestion?

Gut microbes talk to the brain

Metal Feeding Water?

https://www.sciencedaily.com/releases/2017/08/170821122736.htm
“Aging is a disease that should be treated like any other.”
Dr. Metchnikoff
“Aging can be delayed by keeping the gut healthy.”

Russian Nobel Prize Winner and father of modern immunology (discovered phagocytes), hypothesized that drinking fermented milk, laden with ‘probiotics’, ‘friendly immune enhancing bacteria,’ could enhance health, delay senility and extend life. He also anticipated associating chronic inflammation with the pathogenesis of atherosclerosis and other diseases linked to aging.

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3859987
Alzheimer’s & Microbiome

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3775450/
The Microbiota & Microbiome Aging: Potential Implications in Health & Age Related Diseases

HIGH Processed Fat + Low Fiber

Intestinal Microbiota    Colon Cancer    Alzheimers

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4406803/
What is a Telomere?
The Telomere Effect
Living Younger, Healthier, Longer

Elizabeth Blackburn - received Nobel Prize for discovering the molecular nature of telomeres (the ends of chromosomes that serve as protective DNA caps)

And Telomerase (the enzyme that maintains telomeres)
As we age - cells divide. Telomeres become shorter & finally dysfunctional. Cells enter a non-dividing state (yin deficiency). Cells that don’t respond to short telomeres & continue to divide result in chromosomal damage and ultimately malignancy.

TELOMERES MEDIATE THE DELICATE BALANCE BETWEEN CANCER & LONGEVITY
What We Lose With Age

As we grow older, telomeres at the end of our chromosomes shrink. New research suggests major depression also is linked to shorter telomeres, a sign of ‘accelerated aging.’

As cells divide over time...

telomeres shorten, and eventually cell division stops.

Source: WSJ research

The Wall Street Journal
Do our telomeres shorten and make us more susceptible to chronic disease?

OR

Do we develop illness, our telomeres shorten, and thus we are more susceptible to chronic disease?
Young Adult Survivors of Childhood Acute Lymphoblastic Leukemia Show Evidence of Chronic Inflammation & Cellular Aging W Shorter Telomeres

Biologic profile of chronic inflammation & telomere attrition.

This may explain the early onset of chronic metabolic illnesses in young adults with cancer hx.?

Telomere Lengthening Strategies

**EXERCISE**

**FOODS** (antioxidant dense) - high in Vitamins C (lemon; dark greens) & E (spinach, sweet potatoes)

**ANTIOXIDANTS**

**DESTRESS** - meditation; yoga
“Once you are over the hill you begin to pick up speed.”
Arthur Schopenhauer