



1:55 – 2:55 PM

A Perfect Ten: 5 Ways to Live Longer and 5 Keys to Lasting Happiness

SPEAKER

Sanjiv Chopra, MD, MACP

Are you ready for a quiz?



Do you drink coffee?

How many cups of coffee do you drink a day?

Is coffee good or bad for you?



1. Who is this person and how old was he when he died?

Voltaire (1694 – 1778) 83 years

2. How many cups of coffee did he drink every day?

50-72 !



More than 1 Billion People in the World Have Chronic Liver Disease

Consuming two cups of coffee per day reduces hospitalization rate and mortality from chronic liver disease by more than 50%

Ruhl CE, et al. Gastroenterology 2005;129:1928

Naci et al. BMJ. 2013; 5577

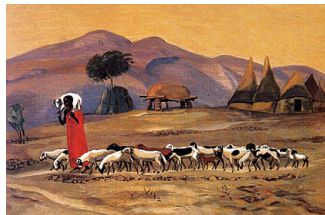
Coffee Consumption Decreases Risk of Alcoholic Cirrhosis

- Consuming one cup of coffee per day decreases the chance of developing alcoholic cirrhosis by 20%.
- Consuming two cups of coffee per day decreases the chance of developing alcoholic cirrhosis by 40%.
- Consuming four cups of coffee per day decreases the chance of developing alcoholic cirrhosis by 80%

Klatsky AL, et al. Arch Intern Med 2006;166:1190

DOSE DEPENDENT EFFECT!

Naci et al. BMJ. 2013; 5577



Kaldi the shepherd from Kaffa

Naci et al. BMJ. 2013; 5577

“Coffee is so good, the infidels should not have exclusive use of it.”

Pope Vincent III

Naci et al. BMJ. 2013; 5577

Putative Mechanisms of Coffee's Protection

- Caffeine, cafestol and kahweol protective in experimental studies, of liver injury
- Chlorogenic acid in Coffee, one of the richest antioxidants
- Insulin sensitizing effect
- Coffee drinkers have lower levels of CRP, TNF α and high levels of Plasma Adiponectin
- Coffee drinkers have longer telomeres.

Other Benefits of Coffee Coffee Drinkers Have Lower Risk of

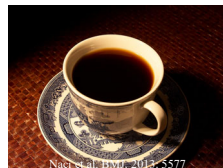
Primary Liver cancer
Metastatic prostate cancer
Skin cancer
Colon cancer
Endometrial cancer

Type 2 Diabetes
Parkinson's
Cognitive decline
Gout
Gallstones



Large prospective study; Coffee consumption inversely associated with total and cause-specific mortality.

- Freedman, ND Ph.D., Park, Y Sc.D., Abnet, CC Ph.D., et al. Association of Coffee Drinking with Total and Cause-Specific Mortality N Engl J Med 2012; 366:1891-1904



Two additional studies published in the Annals of Internal Medicine July 2017 addressing coffee drinking and mortality.



Coffee Drinking Associated with Reduced Risk for Death from various causes. This relationship was seen in 10 European Countries

- Large cohort- more than 520,000 men and women from 10 European countries average follow-up 16 years.
- Inverse relationship between coffee intake and all cause mortality in men and women.
- Note that the populations in different countries use different coffee preparation methods and had different drinking patterns.

Gunter, M.J. et al. Coffee Drinking and Mortality in 10 European Countries: A Multinational Cohort Study
Ann Intern Med. July 2017



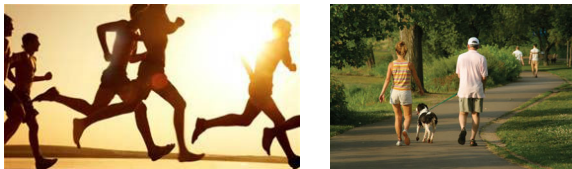
Higher Consumption of Coffee Associate with Lower Risk of Death in African-Americans, Japanese Americans, Latinos, and Whites

- 185,855 individuals ages 45-75 years at recruitment
- Coffee consumption associated with lower total mortality after adjustment for smoking, other potential confounders.
- Inverse associations observed for deaths due to heart disease, cancer, diabetes, stroke, etc.

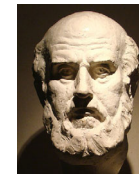
Park, S-Y et al. Association of Coffee Consumption With Total and Cause-Specific Mortality Among Nonwhite Populations
Ann Intern Med. July 2017



Exercise



“If we could give every individual the right amount of nourishment and exercise, not too little and not too much, we would have found the safest way to health.”



Hippocrates, Greek Physician
“Father of Western Medicine”



Exercise has a multitude of health benefits

Regular physical activity has been shown to:

- Assist in weight control
- Lower the risk of heart disease and stroke
- Lower the risk of Type 2 diabetes
- Lower the risk of many cancers
- Lower the risk of osteoporosis and bone fractures
- Lower the risk of depression and cognitive decline
- *Reduce all cause mortality*



Traditional Pills Versus Exercise

Condition	Exercise	Pills
Coronary artery disease	Exercise Better than...	Statins, beta blockers, ACE inhibitors, antiplatelets
Stroke	Exercise Better than...	Anticoagulants, antiplatelets
Pre-Diabetes	Exercise Equal to...	Alpha glucosidase inhibitors, thiazolidinediones, biguanides, ACE inhibitors

Naci et al. BMJ 2013:5577



WHO Mortality Risks (% of Deaths) 2009

1. Hypertension **(13%)**
2. Smoking **(9%)**
3. High Blood Glucose **(6%)**
4. Physical Inactivity **(6%)**
5. Overweight and Obesity **(5%)**



Prolonged Sitting Increases Mortality Risk

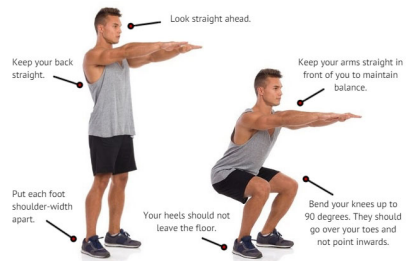
- 200,000 adults who had more than 7 hours of sitting time
- **Greater than 40% all-cause mortality risk** over 2.8-8.5 years!
- This risk independent of BMI and physical activity levels

Matthews CE et al. Am J Clin Nutr. 2012;
Van der Ploeg HP et al. Arch Intern Med. 2012



So Lets...

- Everyone Please Get Up and Squat for 30 Seconds...



Pretty Much Everyone Can Walk

- Brainchild of the former Kaiser Chairman and CEO, George Halvorson
- Campaign that celebrates the power of walking to improve health
- www.Everybodywalk.org



Are Vitamins Good For You?



Vitamin D, The Sunshine Vitamin is actually a Hormone

Benefits:

- Lowers risk of Hypertension, Multiple Sclerosis.
- Breast Cancer, Colon Cancer and Prostate Cancer
- Lower risk of falls
- **Lower all cause mortality!**



Health Benefits of Eating Nuts

- Reduces risk of heart attack between 25% - 50%
- Shown to decrease the risk of Type 2 Diabetes in women
- Reduces the risk of Colon Cancer

Walnuts, almonds, pistachios, cashews, and peanuts!



People who consume nuts live longer

- Bao, Y. et al. Association of Nut Consumption with Total and Cause-Specific Mortality. N Engl J Med, 2013; 369.
- Hung N. Luu et al. Prospective Evaluation of the Association of Nut/Peanut Consumption With Total and Cause-Specific Mortality. JAMA Internal Medicine, 2015.



Meditation



Buddha was asked: "What have you gained from Meditation?"

He replied: "Nothing."

"However", Buddha said, "let me tell you what I lost :
Anger, Anxiety, Depression, Insecurity, Fear of Old, Age and Death."



Telomeres.. Quick Primer

- A region of repetitive nucleotide sequences at each end of a chromosome.
- Prevents chromosome from deterioration or from fusion with a neighboring chromosome.
- In humans average telomere length declines from 11 Kilobases at birth to 4 Kilobases in old age. Rate of decline greater in men compared to women.
- Telomeres replenished by enzyme Telomerase Reverse Transcriptase.
- Elizabeth Blackburn, Carol Greider, and Jack Szostak were awarded the 2009 Nobel Prize in Physiology or Medicine for the **discovery** of how chromosomes are protected by **telomeres** and the enzyme telomerase.



The Nobel Prize in Physiology or Medicine 2009



Photo: U. Montan
Elizabeth H. Blackburn
Prize share: 1/3



Photo: U. Montan
Carol W. Greider
Prize share: 1/3



Photo: U. Montan
Jack W. Szostak
Prize share: 1/3



Shortened Telomeres

- Mothers of chronically severely disabled children
- caregivers of patients with Alzheimer's
- Increased caffeine intake

Lengthened Telomeres

- Individuals who meditate
- Individuals who drink coffee
- Individuals on Mediterranean diet
- Individuals who exercise



To Sum Up... Five Keys to Living Longer

Coffee
Exercise
Vitamin D3
Nuts
Meditation



Easy to remember!

On a good, **sunny day**, go for a **long walk** to your favorite **java shop**. Don't put on sunblock...

Now, you've gotten the benefits of vitamin D, exercise, and coffee.

Don't go **nuts** remembering this!

Before you go, **Meditate**.



Ancient Wisdom

**You should meditate once a day.
And if you don't have time to do that,
you should meditate twice a day!**



Five Keys to Lasting Happiness



Let's talk about Happiness



Happiness: The sensation of feeling good, being pleased, an internal experience in which the good will is expressed outwardly, extending the positive feeling towards others.

Joy: Experience of extreme happiness, euphoria, a temporary but intense and exuberant sensation.

Bliss: The experience of intense joy, anchored by a sense of connectedness with others and with nature.



Traits of Happy People

Happy people have a cadre of good **Friends** (chosen family).

Happy people have the ability to **Forgive**.



“A friend is a gift you give yourself.”



Robert Louis Stevenson



Friendship is always a sweet responsibility, never an opportunity.



Khalil Gibran



The Happiness Grant Study

75 years in the making and still ongoing...

- Social connectedness brings forth joy
- Close relationships equate with health, longevity, and happiness
- **Satisfaction with relationship at age 50 are correlated with health and happiness at age 80**

George Valiant
Triumph of Experience 2012



Traits of Happy People

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You Can't Be Happy if You Harbor Resentment

- When asked if he harbored resentment against his captors, Nelson Mandela, who had been imprisoned for 27 years, **answered:**

"Resentment is like drinking poison and then hoping it will kill your enemies."



"As I walked out the door toward the gate that would lead to my freedom, I knew if I didn't leave my bitterness and hatred behind, I'd still be in prison."



A Third Trait

I don't know what your destiny will be, but one thing I am certain of. The ones amongst you who will be truly happy are those who have sought and found how to serve.

Albert Schweitzer



The **Three F's** for Being Happy

Friends

Forgiveness

For others



Three F's But **G**, There is a Fourth

Gratitude

The word gratitude is derived from the Latin root *gratia* meaning grace, graciousness, or gratefulness.

Gratitude is a highly prized tenet in Christian, Jewish, Muslim, Hindu and Buddhist teachings.

I am defining gratitude as the experience of something positive gained, coupled with the realization that someone else was responsible for that gain.

I strongly believe that gratitude and compassion can be cultivated.



Sister 1 (low positive emotion)

With God's grace, I intend to do my best for our order, for the spread of religion and for my personal satisfaction.

Sister 2 (high positive emotion)

The past year has been a very happy one. Now I look forward with eager joy to receiving the Holy Habit of Our Lady and to a life of union with Love Divine.



Positive Emotions in Early Life and Longevity: Findings from the Nun Study

Handwritten autobiographies from 180 Catholic nuns (at mean age of 22 years) was scored for emotional content and related to survival during ages 75-95.

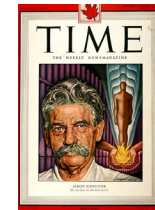
Positive emotional content in early-life autobiographies was strongly associated with longevity 6 decades later.

Danner DD, et al.

Journal of Personality and Social Psychology;
Volume 80:5;2001



Success is not the key to happiness.
Happiness is the key to success.



There is no way to happiness. Happiness is the way.



Thich Nhat Hanh



When I was 5 years old, my mother always told me that happiness was the key to life. When I went to school, they asked me what I wanted to be when I grew up. I wrote down, "happy."

They told me I didn't understand the assignment, and I told them, they didn't understand life.



John Lennon



2.9013

Losada Ratio

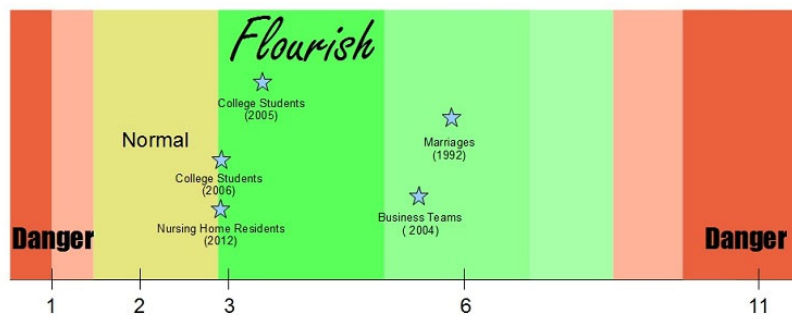


The Power of Positivity: The Losada Ratio

The Losada Ratio refers to the ratio of positive expressions to negative expressions.

This ratio has been found to be highly predictive of success as judged by metrics such as profitability.

A ratio between 3 to 6 has been shown to be beneficial.

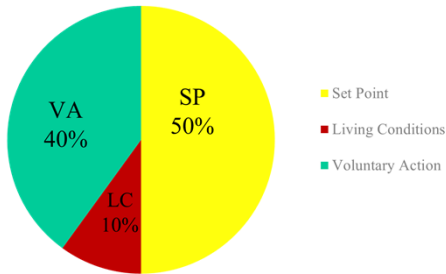


Ancient Reflections and Emerging Science About Gratitude and Happiness

- I would maintain that thanks are the highest form of thought, and that gratitude is happiness doubled by wonder. **G.K. Chesterton**
- To speak gratitude is courteous and pleasant, to enact gratitude is generous and noble, but to live gratitude is to touch heaven. **Johannes A. Gaertner**



The Happiness Formula



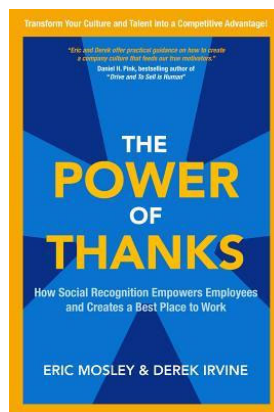
This formula is dynamic and fluid



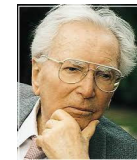
People Who Regularly Practice Grateful Thinking Can Increase Their “Set-Point” for Happiness by 25%



Robert A. Emmons, Ph.D.



Happiness cannot be pursued; it must ensue ...
as the unintended side-effect
of one's personal dedication to a cause
greater than one's self.



Victor Frankl





Question to Siri: What is the secret of happiness?

Siri: It is unequivocally chocolate !

Sign in a Chocolate Shop in Rochester, MN



Money can't buy happiness but it can buy chocolate,
which is kinda like happiness

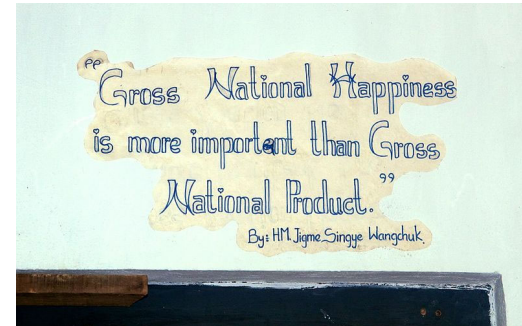
What Some of My Friends and Colleagues Said Happiness is ...

- Being in the moment and being grateful.
- Breaking bread with friends.
- Knowing you have been good to others.
- When my nest is full. When my kids return home and are asleep in their own beds.
- No clinging, no grasping, no regrets, no anticipation, just being in this moment as it is.
- Being content with what you have.
- Putting a smile on a stranger's face every day.
- Happiness is when the heart feels bigger (5 year old girl).
- I am most happy when sharing toys with my friends (3 year old boy).

In Which Country Do These Kids Live ?



Bhutan

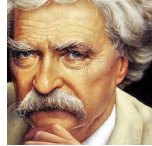


Amongst the Happiest Countries (2013)

Denmark	Singapore
Norway	Switzerland
Australia	Sweden
Bhutan	Canada
Austria	Iceland
Costa Rica	New Zealand

Defining Your Purpose

The two most important days in your life are the day you are born and the day you find out why.



Mark Twain



**Defining Your Purpose Can Come by Reflecting on it or
By Virtue of a Key Moment in your Life**

Great leaders often reflect on key events in their life or a single transformative or 'magical' moment. The moment can be jolting and starkly negative, yet it is momentous.

From it emerges a burning desire to have a laser-like focus and passion to make that dream a reality.



**"Every life has a measure of sorrow.
Sometimes it is this that awakens us."**



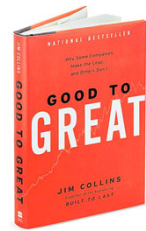
Buddha



Papa Jaime



“The good-to-great leaders never wanted to become larger-than-life heroes. They never aspired to be put on a pedestal or become unreachable icons. They were seemingly ordinary people quietly producing extraordinary results.”



Jim Collins



“Follow your bliss and doors will open where there were no doors before.”



Joseph Campbell



Some of you have undoubtedly heard of this remarkable individual.



Jose Antonio Abreu



El Sistema

<https://www.youtube.com/watch?v=-43tqQhOTCgQ>

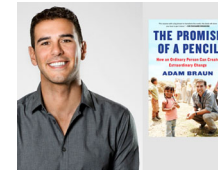


**If You Could Have One Wish
What Would You Wish For ?
(Adam Braun does a semester at sea while studying at Brown)**

- To dance (8 year old girl)
- For my mother to get better, hold my hand and take me to school (8 year old girl)
- A pencil



PoP Founded With \$25.



- **200 schools** built across Africa, Asia and Latin America



**Great leaders possess a
Sense of Purpose**

**Young People can find
their Purpose and Lead
in Inspiring Ways**



**This Young Lady is 16 Years Old.
Do you know her name and what she stands for?**



Greta Thunberg



- Political Activist seeking to stop Global Warming and Climate Change
- She has spoken at TED x Stockholm
- She has addressed the UN Climate Change Conference
- She was invited to talk to the World Economic Forum at Davos
- Youth Climate Strikes held in 100 Countries on Friday March 15, 2019



Greta Thunberg



What is My Purpose?

My purpose in life is to fulfill my Dharma to teach Medicine, Happiness, Well-Being and Leadership.

To do it grounded in humility, and with an ardent desire to learn every single day.

To celebrate with gratitude my family, friends, colleagues, patients and students who inspire me in countless ways.

And in some small measure, inspire everyone that I encounter.



I invite you to reflect on what gives you the greatest joy and resonates for you. Take a few minutes now, or later, and reflect on **Your Purpose** and write it down. You may wish to share it with your closest family members and your friends.

It is my ardent wish that each one of you has found or will find your Life's Purpose and that living it will bring you happiness and joy and light up every day of your life.

