

# Nutrition for Educators

“Stay out of the faculty lounge!”



Keep an eye out for a “Digital Goodie Bag”  
coming to your email inbox

1. The presentation to reference
2. A Free PDF- **5 Tips to Make Nutrition Work for YOU**
3. Two weeks FREE of Small Group Personal Training sessions

Success with nutrition isn't just WHAT you eat...

It's also WHO, WHEN, WHY, HOW



# Optimal nutrition and body fat is HARD to obtain



"I would not have been able to do this if I didn't have a full year with the best trainers and nutritionists paid for by the biggest studio in the world."

"I'm glad I look like this, but I also understand why I never did before," he explained. "It would have been impossible without these resources and time."

He then thanked not one but five (five!) different personal trainers he had to work with to gain all that muscle, as well as a catering company that had made all his nutritious meals for the year.

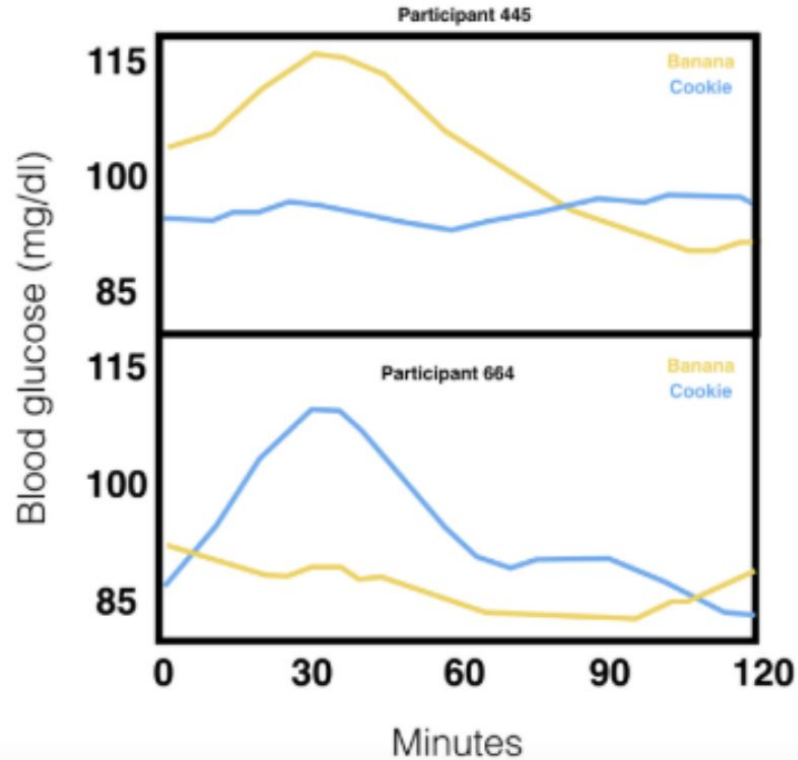
# Hunger is our baseline state



We're still wired to eat food when it's in front of us

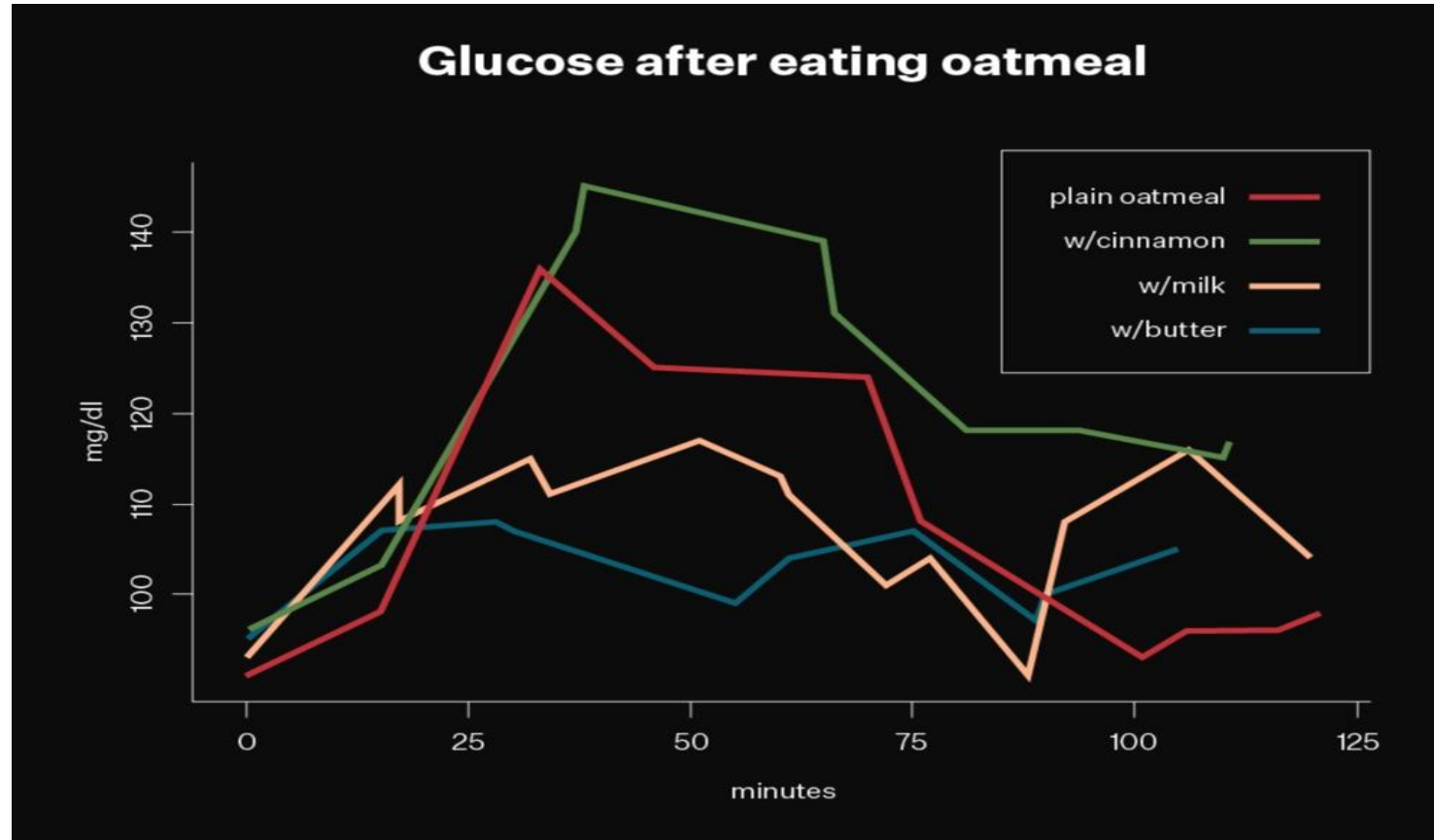
Our frontal lobes are tired!

# Individuality Matters. A LOT



Artist's rendering of figure by Zeevi and Korem et al./Cell 2015

# Individuality Matters. A LOT



# Small differences over a long period of time add up

55 year old, 30 lbs overweight (from age 20 on) eats an excess of:

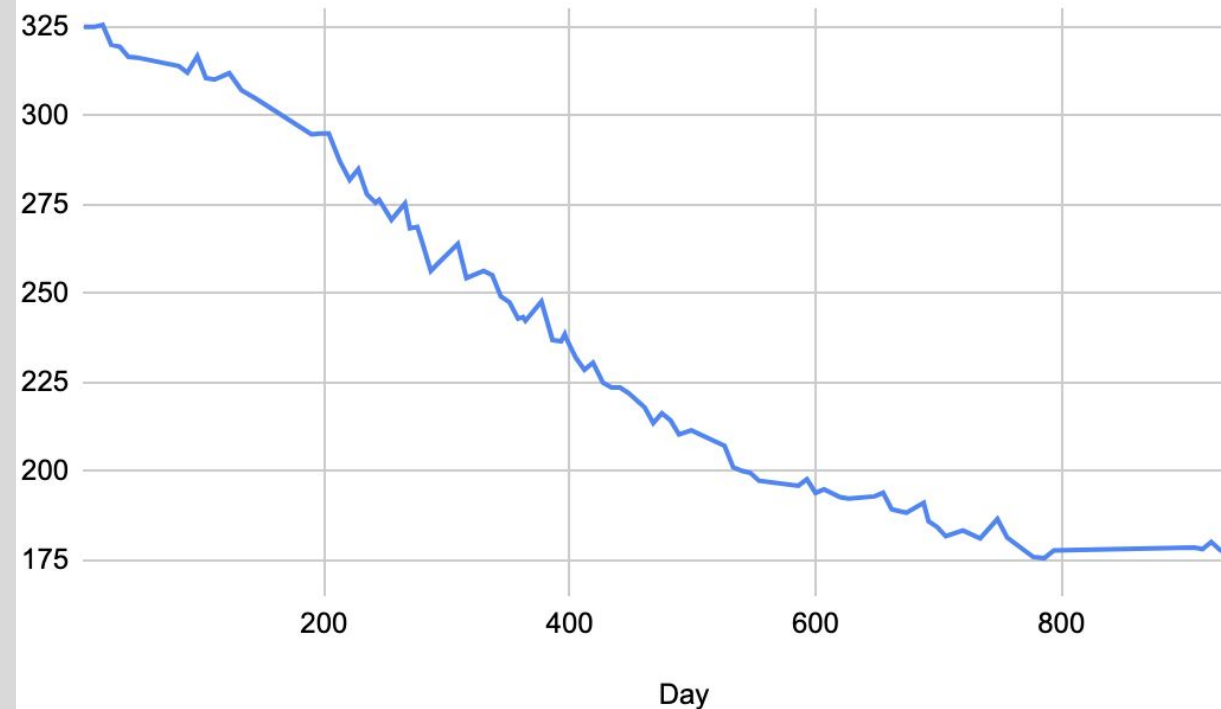
**8.3 calories a day**

$30 \text{ lbs} \times 3500 \text{ cal/pound} = 105,000 \text{ excess Kcal}$

$105,000 / (30 \text{ years} \times 365 \text{ days/year}) = 8.3 \text{ excess Kcal a day}$

# Patience is paramount

Weight vs. Day

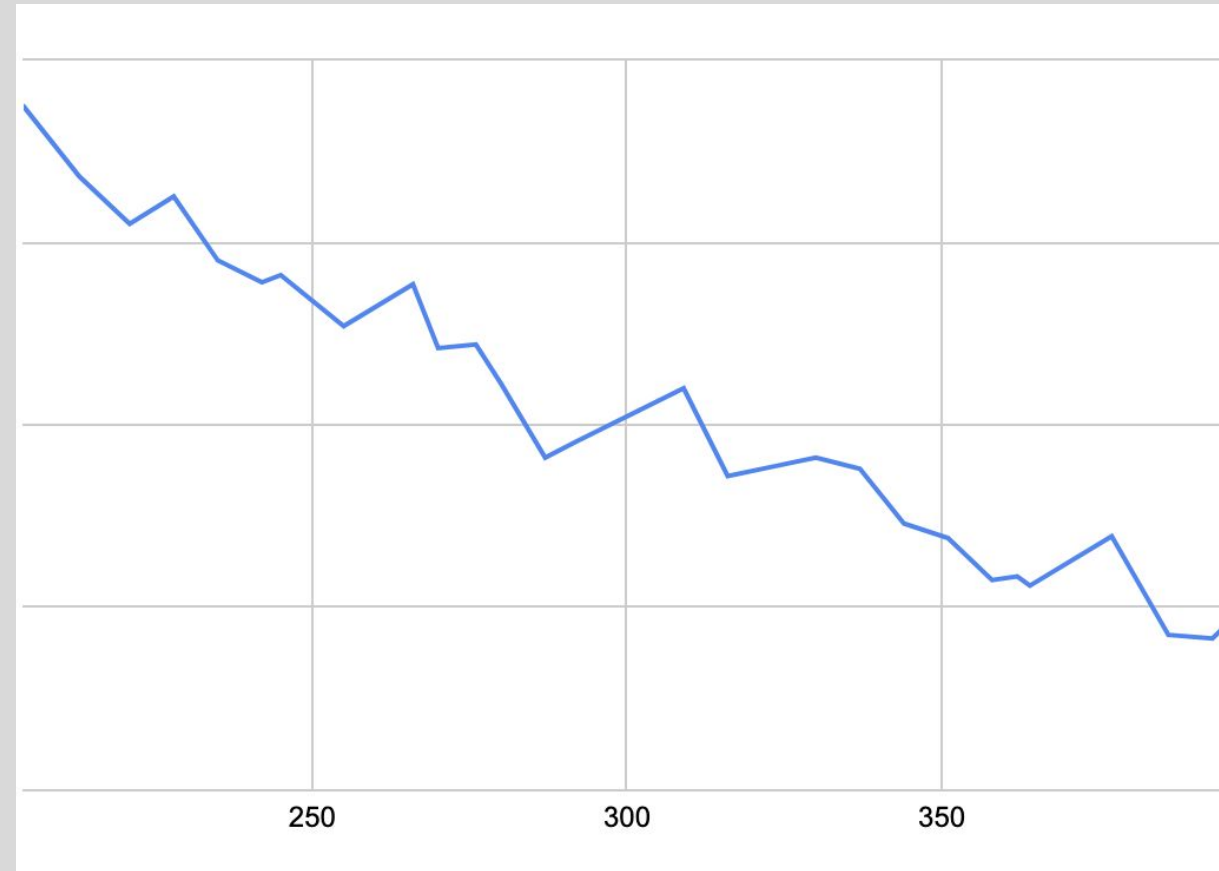


370 to 175 lbs (25%+ body fat lost) in 3 years

Strength training 3-4x/week

Aerobic training 1-2x/week

# Patience is paramount



Sometimes you're on the right track and just need to be more patient!

# What should I eat?

Avoid Dogma- be a food scientist, not a food cultist

Eat foods that improve digestion, increase metabolic rate, and keep blood sugar steady

Are certain “diets” better than others? Or are they good heuristics?

Some “heuristics” to consider:

- Whole foods over processed

- Fruits and roots for carbs

- Minimize polyunsaturated oils

- Protein is king (especially in am)

- Less ingredients the better, especially for digestion (next slide)

# Check Labels!

## Good Culture Cottage Cheese

### Ingredients:

Skim Milk, Whole Milk, Cream, Sea Salt, Live And Active Cultures (Lactococcus Ssp., Lactobacillus Ssp.)

## Wegmans Cottage Cheese

CULTURED PASTEURIZED GRADE A NONFAT MILK, CREAM, WHEY, SALT, MALTODEXTRIN, CITRIC ACID, LACTIC ACID, PHOSPHORIC ACID, GUAR GUM, CARRAGEENAN, MODIFIED CORN STARCH, CAROB BEAN GUM, ENZYME.

## Daisy Cottage Cheese

**INGREDIENTS: CULTURED SKIM MILK, CREAM, SALT.**

Grade A | Pasteurized

# Measuring is worth the effort

- One TBSP of oil is 120 calories
- Is that glass of wine really 5 oz?
- Doesn't have to be done forever
- A starting point is necessary
- It will be EYE-OPENING



# 1. Avoid distracted (and on-the-go) eating

- Being distracted during a meal tended to make people eat more at that meal
- Distracted eating was also linked to eating more later on
- Slow down and chew!

**Q1: What meal do I tend to be most distracted by? How could I adjust my environment to focus more on that meal?**

## 2. Fail to plan, plan to fail

### The Better Future Fallacy

- Research has shown that we consistently overestimate our chances of making difficult decisions in the future. Our present selves are supremely confident that our future selves will behave like model citizens.
- Future you isn't going to do you any favors. Make it easy on future you.
- If it's Monday, you should have a plan for Wednesday's dinner
- Grocery shopping and meal prep need a time and place to live on the calendar

**Q2: How can I better plan my week of eating?**

# 3. Turn your environment into an advantage

Hershey Kiss Study:

Clear container on desk: 8 Kisses each day

Clear container 6 ft away: 6 Kisses each day

Opaque containers on desk: 5 Kisses each day

Opaque containers 6 ft away: 3 Kisses each day

**The women consistently thought they ate more when they had to get up to get them**

# 3. Turn your environment into an advantage

**Q3: How can I turn my environment into an advantage?**

Audit your kitchen at home and your work environment:

What foods can I move to make them more difficult to see/eat, what foods can I make more accessible?

OR

Can I remove myself or get further from the food source when I crave it most?

## 4. Shrink (or eliminate) your danger window

Most people imagine their problem being an all day, everyday issue or bad habit

Many times, there's a small window in the day where bad habits happen

Changing the focus from “I need to have willpower all day” to “I need to avoid overeating when I get home from school at 4:15” can make all the difference

**Q4: What time of day is my danger window? How big of a “window” is it?**

**What can I do 1-4 hours ahead of time to better handle my “danger window”?**

## 5. Start small and take imperfect action

Your nutrition plan should survive your worst day AND work with your current capacity

A good starting point? Changing one meal a day and working up from there

Success with nutrition is less about willpower, and more about skill. As with anything, skill takes practice

Creating better nutrition habits could take months or even years. But isn't it still worth it?

# 5. Start small and take imperfect action

## Take imperfect action!

"The imperfect project (food) you actually complete (eat) is worth more than the perfect project(food) you never finish(eat)." -James Clear

The perfect eating plan is the one you can do consistently

**Q5: What's one small, imperfect action I can take with my nutrition?**

**What's one change you could  
commit to starting tomorrow?**

**THINK BIG.  
START SMALL.  
BEGIN NOW.**

# The Benefits of Exercise: More than just weight loss

“All parts of the body, if used in moderation and exercised in labors to which each is accustomed, become thereby healthy and well developed and age slowly; but if they are unused and left idle, they become liable to disease, defective in growth and age quickly.”

-Hippocrates ~400 BC



**Why should I  
exercise?**

**How can I exercise  
more?**

# Why should I exercise?

What we'll cover today:

Heart

Sleep

Brain/memory/cognition

Stress

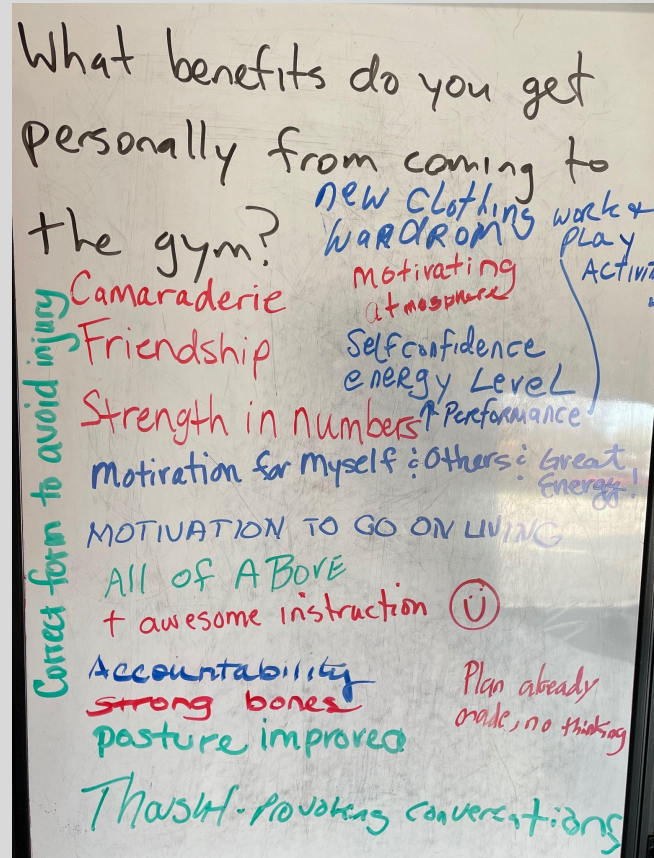
Energy/Depression

Muscle/Bone

Immunity

Longevity

+ A million more we won't have time for



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# Exercise for Improved Energy

Exercise produces more mitochondria inside your muscle cells which increases your body's energy supply. Exercising boosts oxygen circulation and increases hormone levels to help you feel more energized.

2-5 minute walk improves post-meal glucose response by 17%

16 studies involving 678 participants, averaging 21–40 minutes of moderate-intensity aerobic-type exercise “enhances feelings of energy”.

Compared to sedentary control, exercise resulted in significant, large improvements in feelings of energy. Thus, short bouts of exercise may improve feelings of energy among depressed individuals.

# Exercise for Improving Depressive Symptoms

Physical activity is 1.5 times more effective at reducing mild-to-moderate symptoms of depression, psychological stress, and anxiety than medication or cognitive behavior therapy

Higher intensity activity was associated with greater improvements in symptoms

One major study found that sedentary people are 44% more likely to be depressed. Another found that those with mild to moderate depression could get similar results to those obtained through antidepressants just by exercising for 90 minutes each week.

# Exercise for Improved Sleep

Acute exercise and regular exercise improve:

- Total sleep time

- Sleep onset latency

- Sleep efficiency

- Slow wave sleep

- Rapid eye movement sleep

- Sleep quality

- Higher levels of physical activity also counteract the negative impact of poor sleep

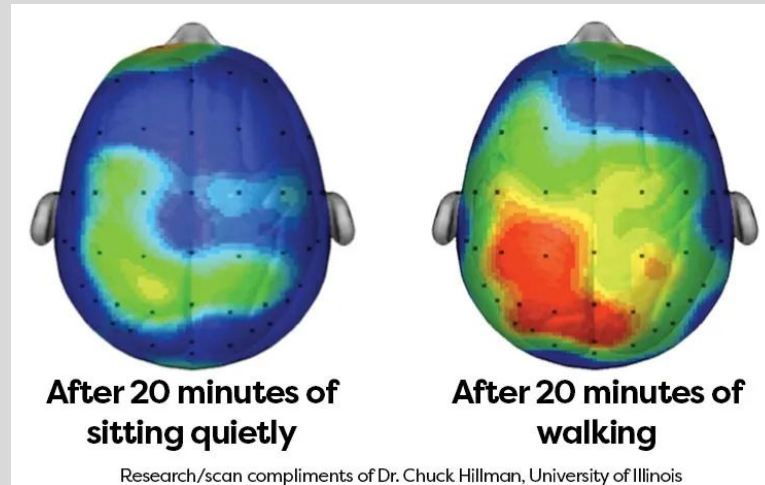
- Regular exercise significantly reduces obstructive sleep apnea (even without a reduction in bodyweight)

# Exercise for Heart Health

- Reduce blood pressure
- Maintain the health of the inner walls of the arteries
- Release enzymes that break down blood clots
- Promote the growth of new arteries feeding the heart.
- Reduce type 2 diabetes likelihood which can affect the blood vessels and nerves of the heart
- “The studies above demonstrate that most overweight and obese individuals can improve their SBP levels by approximately 3 to 5 mm Hg from baseline by engaging in 30 minutes of moderate-intensity exercise most days of the week, while a greater amount of exercise may lead to even greater improvements to blood pressure.”
- Strength/resistance training may cause similar benefits to the heart that cardiovascular exercise does (2 birds, 1 stone?)

# Exercise for Improved Cognition/Memory/Brain function

“One of the best ways to maximize the brain is through exercise and movement,” -Dr. John Ratey, renowned brain researcher



# Exercise for Improved Cognition/Memory/Brain function

-Texas school triples recess time, sees improvements in test scores and ADHD

Study of 475,397 participants showed that stronger people performed better across all tests including reaction speed, logical problem solving, and tests of memory people of all ages.

"When taking multiple factors into account such as age, gender, bodyweight and education, our study confirms that people who are stronger do indeed tend to have better functioning brains. We can see there is a clear connection between muscular strength and brain health."

# Exercise for Stress

Regular exercisers are more resistant to the emotional effects of acute stress, which in turn, may protect them against diseases related to chronic stress burden.

Exercise reduces levels of the body's stress hormones, such as adrenaline and cortisol. It also stimulates the production of endorphins, chemicals in the brain that are the body's natural painkillers and mood elevators.

# Exercise for Bone and Muscle Health

Based on the available information, resistance exercise, either alone or in combination with other interventions, may be the most optimal strategy to improve the muscle and bone mass in postmenopausal women, middle-aged men, or even the older population.

Over the past 10 years, nearly two dozen cross-sectional and longitudinal studies have shown a direct and positive relationship between the effects of resistance training and bone density.

Muscle mass relative to body height has independent predictive ability for all-cause mortality in older adults.

# Exercise for Longevity

The two metrics that are most significantly associated with longevity are cardiorespiratory fitness and strength

Increase in mortality rates:

Smoking 50%

Diabetes 30%

High Blood Pressure 20%

Being weak vs being strong **250%**

Low cardio health vs. elite **400%**

“I think exercise is the single most important longevity drug we have, bar none. A super well crafted exercise program that’s geared toward strength, muscle mass, and cardiorespiratory fitness.” -Peter Attia

# Exercise for Immunity

The study showed conclusively that compared to the people who were inactive, those who were sufficiently active were 10% less likely to develop COVID and 27% less likely to be hospitalized for COVID.

Researchers examined exercise data collected from 577,909 adults from 1998 to 2018 who were followed for an average of nine years. They found that people who met the recommendation of 150 minutes of exercise per week were 36% less likely to die from pneumonia or influenza than those who did not exercise. For people who exercised 301 to 600 minutes per week, the risk was cut in half.

One of my teachers, back when I was a resident, often said, "**Exercise is the answer; what's your question?**" It was her way of saying that no matter what, exercise is good for you. -Lisa Sanders, MD

# How can I exercise more?

## Option 1: Come to our gym!

- Strength training
- Muscle and bone density development
- High intensity conditioning
- Balance/stability work
- Mobility/Flexibility of feet, hips, shoulders, pelvis, spine, scapula, and other joints
- Targeted breathing drills

How can I exercise more?

## Option 2: Instant Ability Exercise

What's a health related goal you are hoping to accomplish?

# Increased Simplicity = Increased Ability

## The Instant Ability Exercise:

1. Write down an exercise related goal you're hoping to accomplish.
2. Cut down your goal until it takes 2 minutes to accomplish.
3. Find a spot on the calendar where the 2 minutes can live. Can you attach this to an existing habit?
4. Celebrate your wins!
5. Train your "2 minute exercise" until it's routine, then add 2 minutes to it!

**Think big.**

**Start small.**

**Begin now.**

**What's one change you could commit to starting tomorrow?**

# Thank You!

