"Happiness is not a matter of intensity but of balance and order and rhythm and harmony."

Thomas Merton



Importance of Balance

Linda Paumer

#### **Balance Defined**

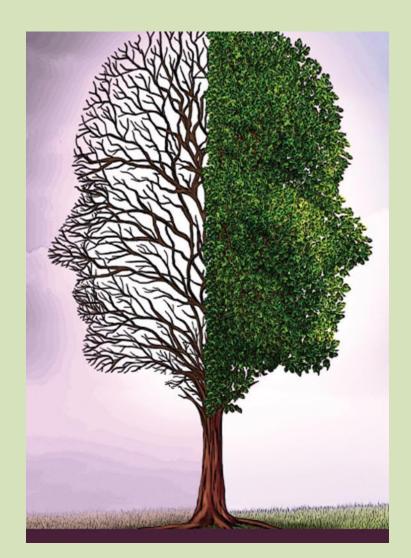
Definition: a state of equilibrium or equipoise

Life Balance
Balanced Diet
Bank Balance
Physical Balance



The key to life is balance, especially if you are on a ledge.

- Know yourself and how much rest, food and exercise you need to function at your best
  - Decide what works best for you and implement it into your routine.



- Keep your mind alert and in shape
  - try to learn a new piece of information each day, even if it's in conversation with others at the dinner table.



- Stay connected with family and friends.
  - We lead busy lives but we should never be too busy to connect with, maybe at least a phone call to a parent, sibling or friend during the day.



- Do something spontaneous.
  - Our lives can be so regimented it's a good idea to do something out of the ordinary every now and then



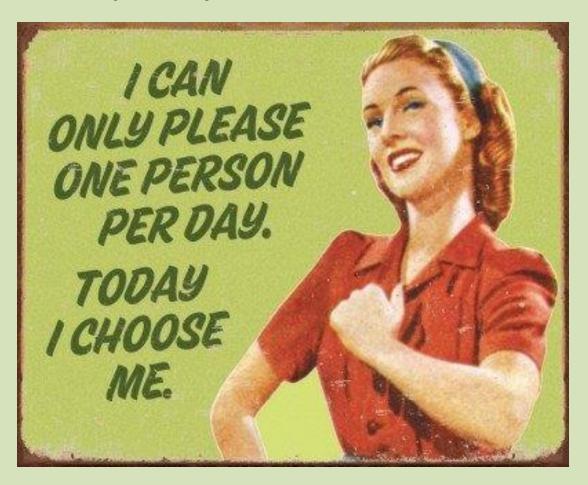
#### Make time for yourself

At the end of each day take time to unwind. If that means leaving the dishes overnight, so be it.



### Take care of and nurture yourself.

 You cannot accomplish anything without good health. Get plenty of rest, exercise and eat right.



### Know what your priorities are

Balance doesn't mean do everything you can.
 Examine your values and decide what's important to you, then set your boundaries.



#### Create an efficient mindset

 Be organized and plan ahead. Take time to assess what needs to be done.



#### **Expect the unexpected**



 Rather than get stressed and upset, allow yourself to roll with the punches when something you have no control over happens.
 Stuff happens. Adjust your game plan.

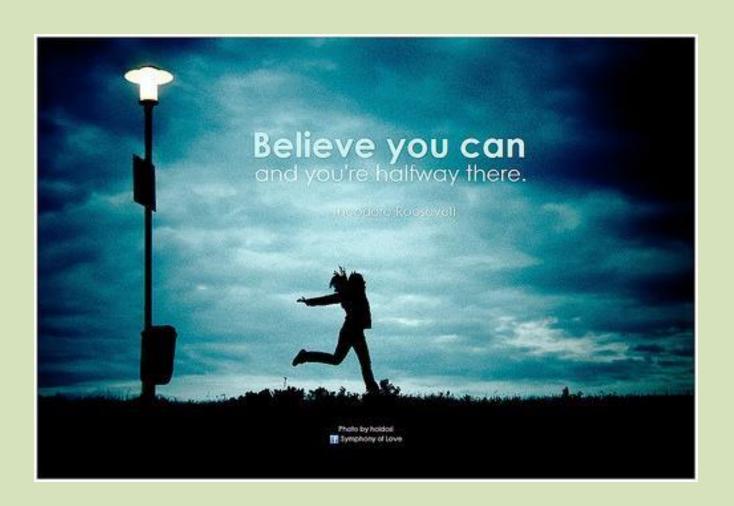
#### **Roll with the Punches**

- Note that there are times when achieving balance may not be possible. For instance, you may have a family or career crisis that needs immediate/undivided attention. It may require an exceptional amount of time and resources.
- When that happens, do whatever it takes. When things go back to normal take time to refresh and rejuvenate yourself.

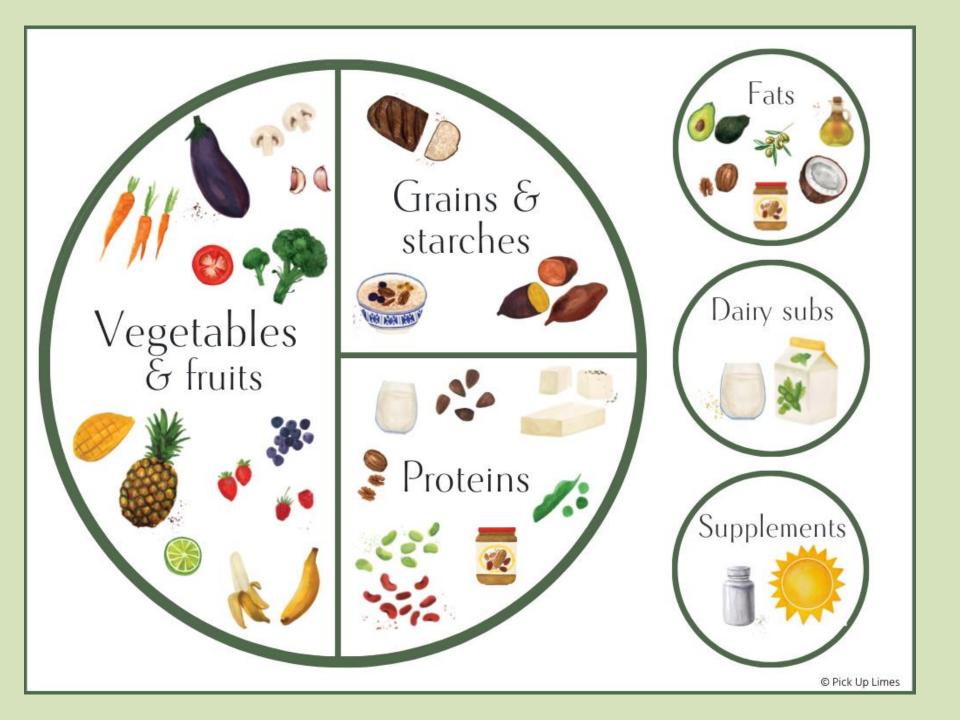


#### Maintain a positive mental attitude

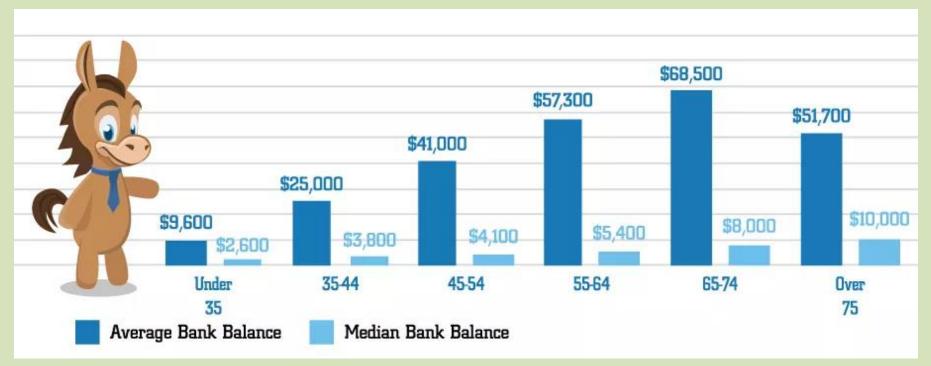
Begin each day with the intention of making the best and most of it.







#### **Bank Balance**



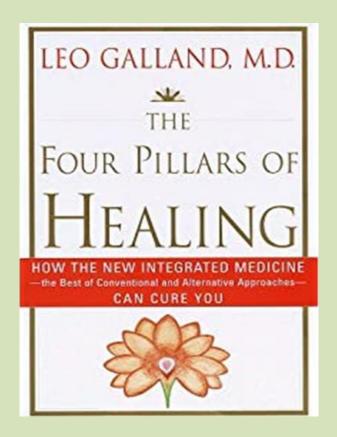
- Recommended to have enough in your savings account to cover 3 - 6 months of expenses.
- A general rule- have 8-10 times your salary saved by the time you hit 65 years old. The younger you start saving for retirement, the closer you'll be to this benchmark.

(Source: <a href="https://www.creditdonkey.com/average-bank-account-balance.html">https://www.creditdonkey.com/average-bank-account-balance.html</a>)





#### 4 pillars of healing



- Relationships
- Dieata maintaining health with diet & exercise
- Environment
- Detoxification

#### 4 Pillars of Health







#### PILLARS OF WELLNESS



https://www.martinandpleasance.com/the-4-pillars-of-health-and-wellness-by-susangianevsky/



MOVE MORE STRESS LESS CONNECT DEEPLY

**Bartholomew County Public** Library 536 5th Street, Columbus, IN,

https://www.eventslogbo ok.com/events/fourpillars-to-healthmovement-andcommunity/

**Pillar One: Healthy Food** 

Pillar Two: Movement

**Pillar Three: Sleep** 

**Pillar Four: Connection** 

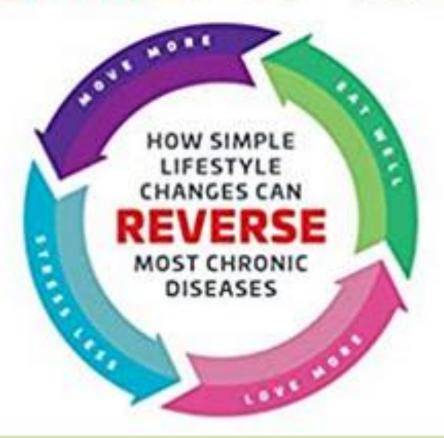


https://www.nbihealth.com/73-the-four-pillars-of-health/

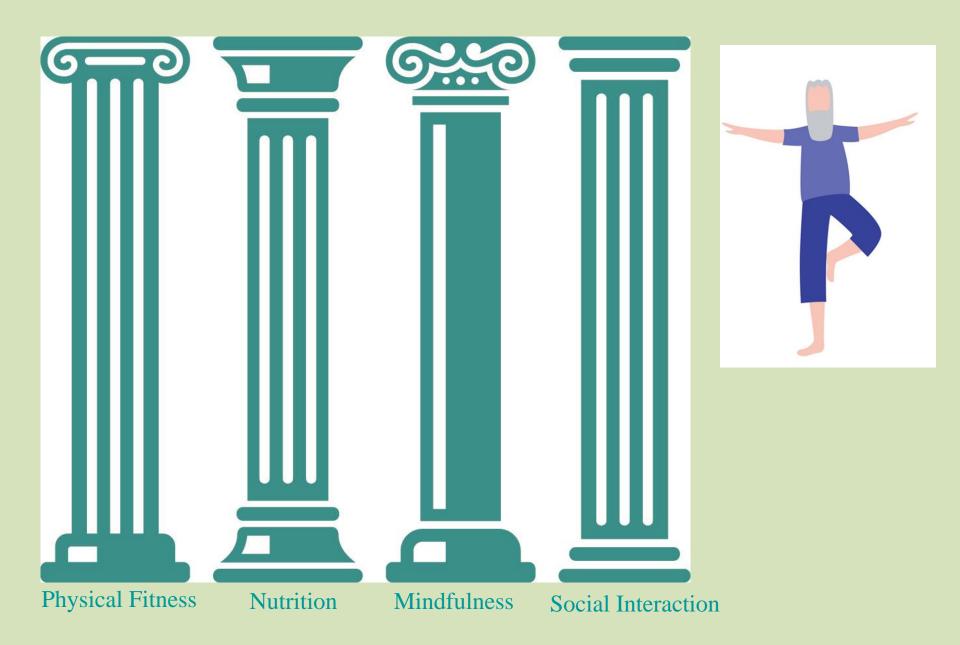
**NEW YORK TIMES BESTSELLING AUTHOR** 

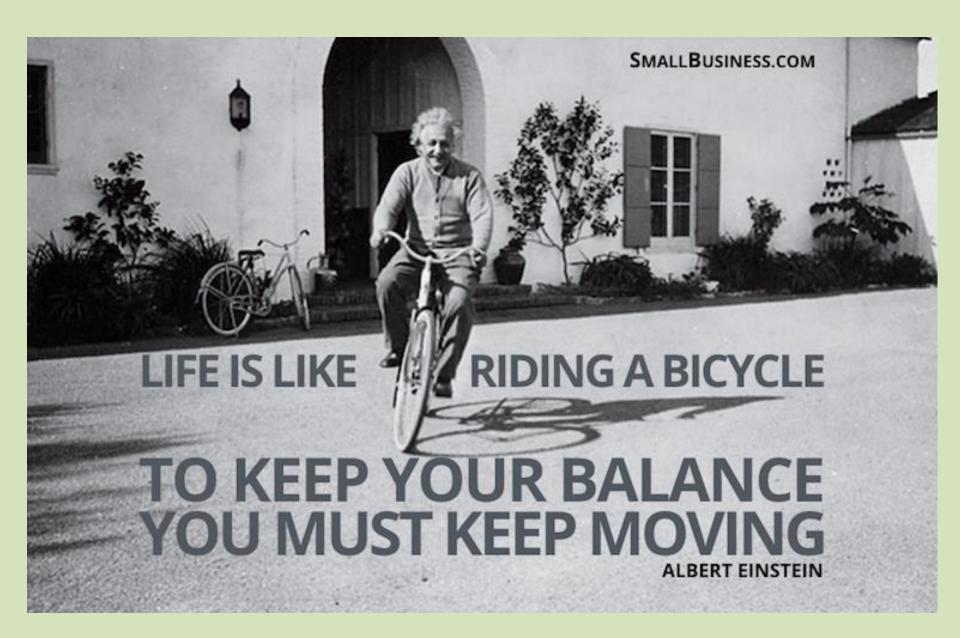
Dean Ornish, M.D., and Anne Ornish

# UnDo It!



#### Four Pillars of Health followed by CWP





## **Physical Balance**



As children we develop good balance by practicing balancing activities - walking along walls, jumping, spinning and climbing

#### **Adult Balance**



As adults we tend not to give our balance system the practice it needs. Health problems can also weaken the balance system. The result is that our balance becomes less good.

### **Balance Training**

Top athletes in the world recognize that balance training helps them to perform better in their sports and fitness experts know that good balance and a strong core go hand in hand.



#### **How We Balance**

- Visual inputs
- Vestibular Inputs
- Muscle & joint reactions

Equilibrioception or sense of balance helps prevent humans and animals from falling over when walking or standing still. Balance is the result of a number of body systems working together: the eyes (visual system), ears (vestibular system) and the body's sense of where it is in space (proprioception) ideally need to be intact.

### Input from the Eyes

- Sensory receptors in the retina are called rods and cones. When light strikes the rods and cones, they send impulses to the brain that provide visual cues identifying how a person is oriented relative to other objects.
- For example, as a pedestrian walks along a city street, the surrounding buildings appear vertically aligned, and each storefront passed first moves into and then beyond the range of peripheral vision.

## Input from the vestibular system

- Sensory information about motion, equilibrium, and spatial orientation is provided by the vestibular apparatus, which in each ear includes the utricle, saccule, and three semicircular canals.
- The utricle and saccule detect gravity (vertical orientation) and linear movement.
- The semicircular canals detect rotational movement,
- When the vestibular organs on both sides of the head are functioning properly, they send symmetrical impulses to the brain. (Impulses originating from the right side are consistent with impulses originating from the left side.)

# Input from the muscles and joints

• Proprioceptive information from the skin, muscles, and joints involves sensory receptors that are sensitive to stretch or pressure in the surrounding tissues. For example, increased pressure is felt in the front part of the soles of the feet when a standing person leans forward. With any movement of the

With any movement of the legs, arms, and other body parts, sensory receptors respond by sending impulses to the brain.

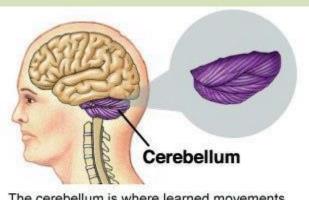
# Proprioception



The sensory impulses originating in the neck and ankles are especially important. Proprioceptive cues from the neck indicate the direction in which the head is turned. Cues from the ankles indicate the body's movement or sway relative to both the standing surface (floor or ground) and the quality of that surface (for example, hard, soft, slippery, or uneven).

## **Integration of Sensory Input**

Balance information provided by the peripheral sensory organs—eyes, muscles and joints, and the two sides of the vestibular system—is sent to the brain stem. There, it is sorted out and integrated with learned information.



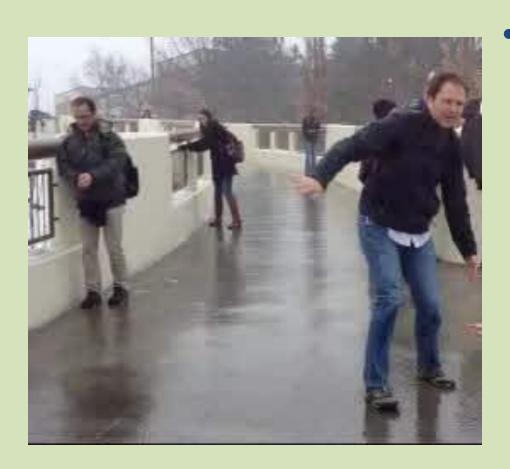
The cerebellum is where learned movements are stored. The cerebellum provides information about automatic movements that have been learned through repeated exposure to certain motions.

### **Integration of Sensory Input**

 For example, by repeatedly practicing serving a ball, a tennis player learns to optimize balance control during that movement.



### **Integration of Sensory Input**

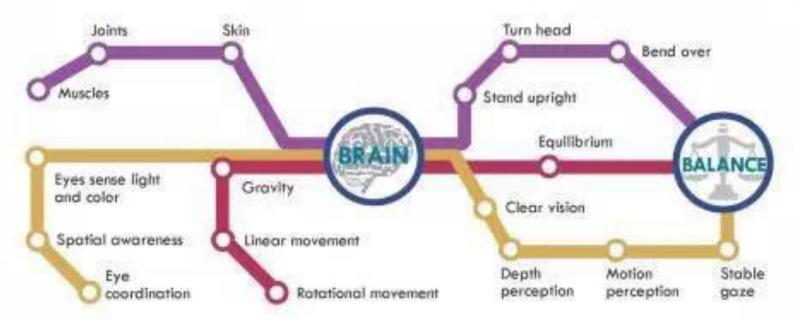


Contributions from the cerebral cortex include previously learned information; for example, because icy sidewalks are slippery, one is required to use a different pattern of movement in order to safely navigate them.

# THE ROAD TO BALANCE

The brain combines inputs from the vestibular system, eyes and muscles (proprioception) to give us good balance.





Having trouble finding balance?

Visit vestibular.org



#### **Loss of Balance**

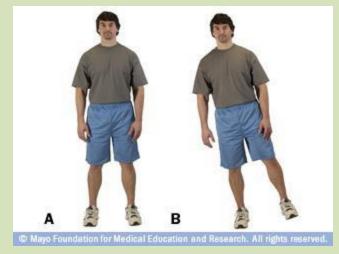


When the information received is too complex to translate, the system gets overwhelmed and you lose your balance.

## **Exercises to improve your balance**

#### **Single Leg Stance**





**Weight Shifts** 





**Yoga and Tai Chi** 

#### **Products for Balance Training**



There are balance pads, pillows, and balls on the market to help you incorporate balance work into your fitness routine. Advanced ways to increase balance is doing single leg jumps on a wooden box or elevated step. You might also consider a Wobble board to experiment with balance exercises prescribed specifically for using these products.

# FEELING DIZZY?

More than 1/3

of adults in the U.S. 40 and older have experienced some sort of vestibular dysfunction.\*

#### **BALANCE**

Balance is controlled by:

- the inner ear (vestibular system)
- the eyes (vision)
- sense of touch (proprioception)

#### **SYMPTOMS**

You may experience one or several symptoms.

#### BALANCE PROBLEMS

- VERTIGO (sensation of movement)
- · DIZZINESS
- IMBALANCE

HEARING

CHANGES

# PROBLEMS CONCENTRATING (or cognitive challenges) VISION DISTURBANCE

#### **DIAGNOSIS**

Vestibular disorders are not easy to diagnose.

On average, patients consult 4 or 5 doctors before receiving a diagnosis.\*\*

Your doctor will take a medical history and may order several types of testing, including:







HEARING

BALANCE

VISION

Getting a diagnosis may mean ruling out other conditions. Your condition may be short-term (acute) or long-term (chronic).

#### **TREATMENT**

Your treatment will depend on your diagnosis.



- PHYSICAL THERAPY
- POSITIONING MANEUVERS
   DIET & LIFESTYLE CHANGES
- · MEDICATION
- SURGERY
- COUNSELING

#### WHAT SHOULD I DO?

To learn more and find a specialist:

vestibular.org



Agrowd 1, Carey IP, Della Santina CC, Schubert MC, Minor LB. Disorders of balance and vestbular function is US addits data from the National Health and Haration Examination Survey, 2001-2004. Arch Intern Med. 2009, 69(10) 938-944.

# CAUSES OF DIZZINESS AND VERTIGO



#### The body maintains balance with sensory information from three systems:



VISION

SOMATOSENSORY/ PROPRIOCEPTION (MUSCLES AND JOINTS VESTIBULAR (INNER EAR)

Input from these three systems is integrated and processed by the brain. Feedback is sent to the eyes to help maintain steady vision and to the muscles to help maintain posture and balance.



If there is damage or impairment of any of these systems, dizziness, vertigo, and imbalance may occur.



VERTIGO is the perception of movement/spinning, either of the self or of the environment.

DIZZINESS is a general term that describes light headedness, a floating sensation, or faintness.

IMBALANCE or disequilibrium is a feeling of being off-balance or a loss of equilibrium.

#### Vestibular Causes of Dizziness/Vertigo

- Head Injury
- Aging
- Lack of blood flow to the inner ear
- Displacement of "crystals" within the inner ear
- Viral infection
- Migraines can create dizziness/vertigo with or without a headache
- Genetic or environmental factors (exposure to certain drugs or chemicals)
- Structural deformities in the bone that overlies the inner ear
- Benign tumors

#### Non-Vestibular Causes of Dizziness/Vertigo

- Muscle strain or arthritis
- Aneurysm, stroke, atherosclerosis, and embolism
- Medications
- Damage to nerves that supply sensation to the feet
- Orthostatic hypotension or faintness when sitting or standing
- Cataracts and macular degeneration
- Adjusting to new bifocals/glasses prescriptions
- Psychological disorders like anxiety

#### Additional Links

- https://www.helpguide.org/
- https://nutritiondata.self.com/

