Cornerstone Health

SECTION 1: FOUNDATIONS OF HEALTH

Health4Mation

Empowering the mind to transform the body

Principle #1

Oxygen Intake & Air quality

Discussion points

- What is the difference between oxygen and air?
- Why is oxygen intake and air quality important to our well-being?
- How do we obtain more oxygen and a greater air quality?

oxygen & air?

&

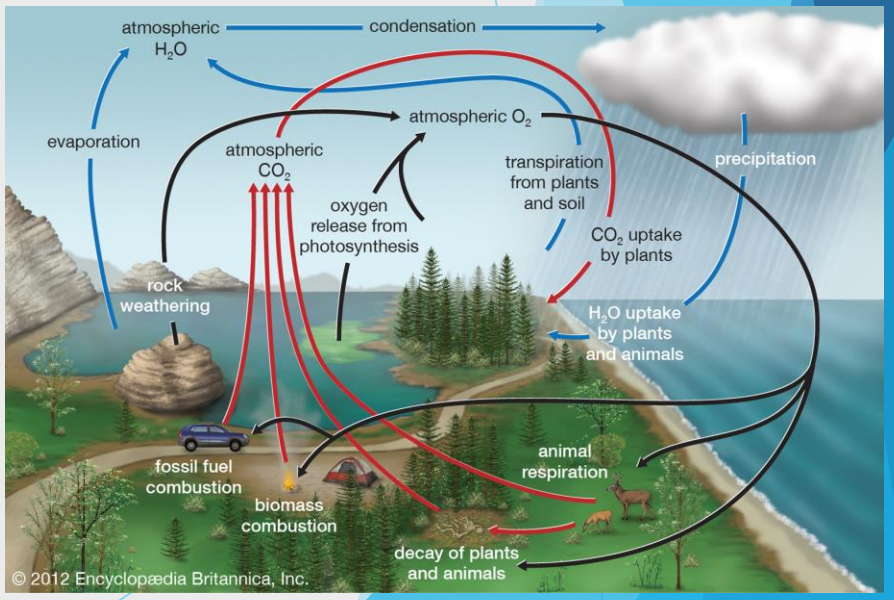
WHAT IS THE DIFFERENCE BETWEEN OXYGEN AND AIR?

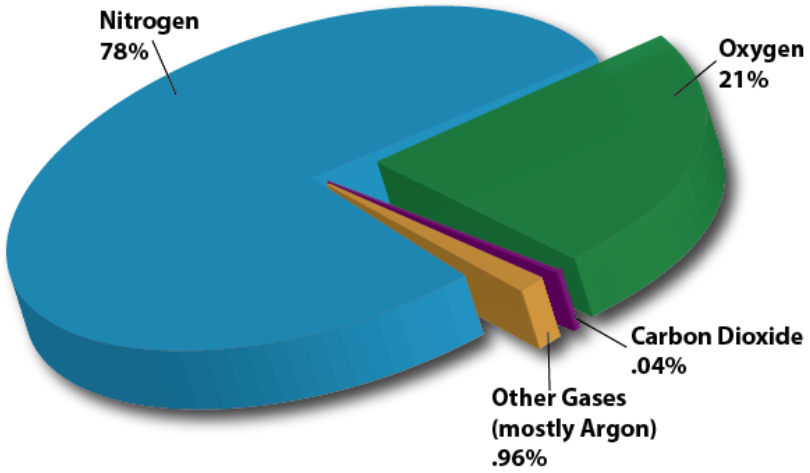
Oxygen facts

- We can only survive for about 3 minutes without it.
- Oxygen makes up around 21% of the Earth's atmosphere. It makes up around 50% of the Earth's crust, making it the most common element in the Earth. Oxygen is also the third most abundant element in the universe and the most abundant element in the human body, making up 65% of the body's mass. 1% of the Sun's mass is oxygen
- Oxygen is essential to human life and is needed by most lifeforms on Earth to survive. Animals and plants require it for respiration. It is found in the air we breathe and the water we drink (as H2O).
- Oxygen found in the air is produced by photosynthesis - without plants there would be little oxygen in the air. Most oxygen on earth comes from tiny ocean plants called phytoplankton.

Oxygen is.....

- A pure and unmixed gas
- Colorless
- Odorless
- Tasteless
- A nonmetallic chemical element



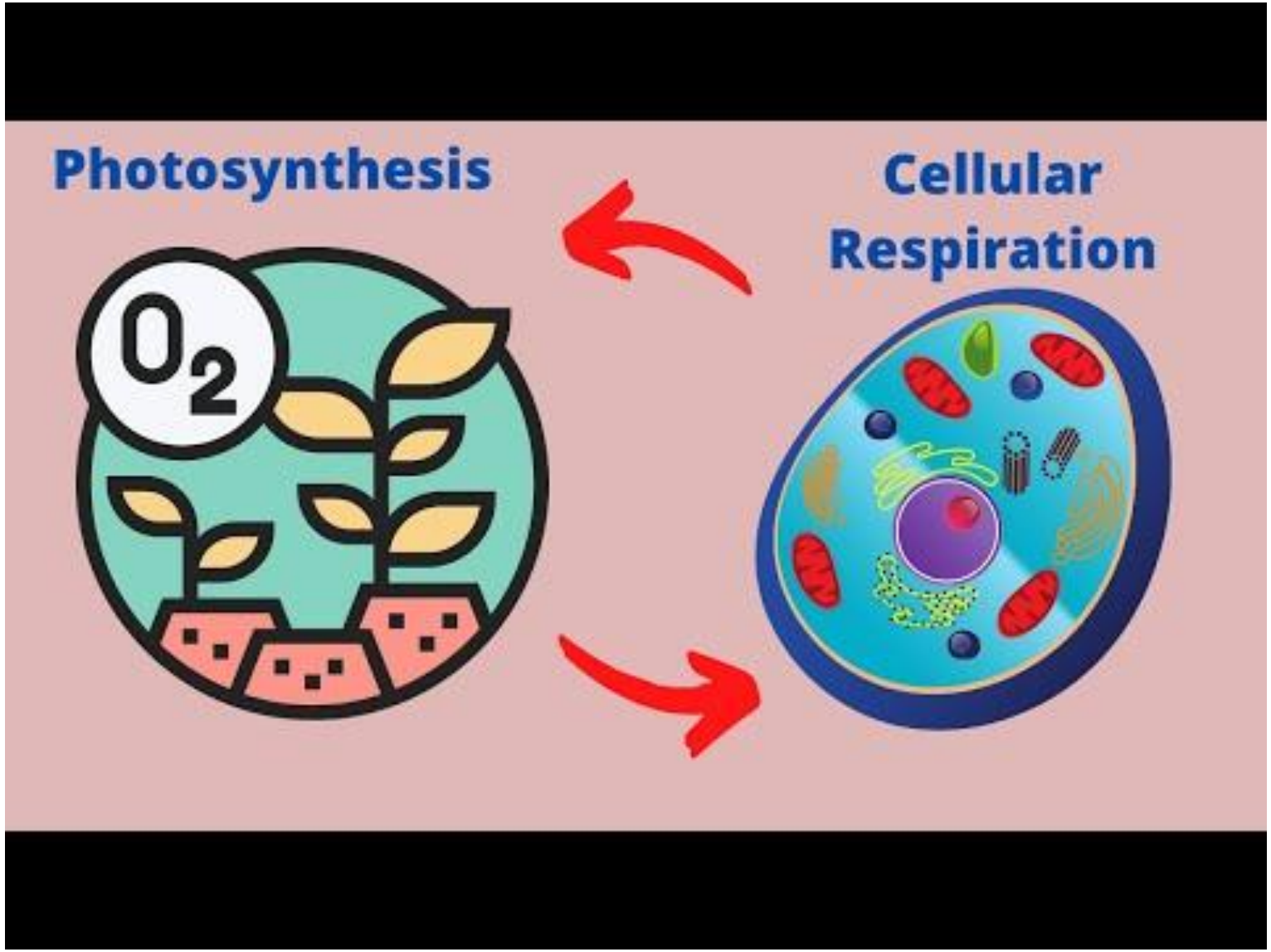


What is air Exactly!

Collection of layers of gases, which consist of 78.08% Nitrogen, 20.98 % Oxygen, 0.93% Argon , 0.04% Carbon Dioxide etc.

Air is a mixture of gases and aerosols (tiny solid particles). Air can also contain water (we know it as humidity).

The air makes up the earth's atmosphere.



Conclusion of the matt

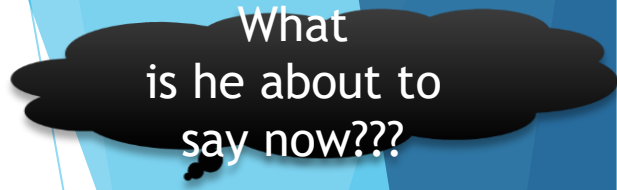
Air and oxygen are very different, but BOTH OF THESE ARE ESSENTIAL FOR THE EXISTENCE OF LIFE. The air is a collection of gases, and oxygen is a pure unmixed gas. Air makes the atmoshphere that surrounds the earth, in which oxygen is found. This is important because both air and oxygen can be taken into our body and be detrimental or beneficial depending on the quality and quantity.

Task 1: Define together: Cellular respiration and photosynthesis

Inhale...exhale...

Why is oxygen intake and air quality important to our well-being?

Know ye not.....



THE ADULT HUMAN BODY IS COMPOSED OF NEARLY 156 TRILLION CELLS, EACH WITH UNIQUE CHARACTERISTICS ACCORDING TO (THE NATIONAL CENTER FOR BIOTECHNOLOGY INFORMATION)

MOST OF THE ORGANS OF THE BODY ARE COMPRISED OF THESE CELLS.

MOST OF THESE CELLS NEED OXYGEN TO FUNCTION EFFECTIVELY AND EFFICIENTLY.

IF THESE CELLS ARE DEPRIVED OF OXYGEN, THEY DIRECTLY AFFECT THE SYSTEMS OF THE BODY.

THIS IS THE REASON WHY OXYGEN INTAKE IS IMPORTANT. OUR CELLS NEED IT TO MAKE ENERGY IN ORDER FOR THE SYSTEMS AND ORGANS OF THE BODY TO WORK EFFICIENTLY AND EFFECTIVELY.

(3 types) 86-100 billion cells in the brain.

(40 types) over 950million.

(+ 4 types) 2-3 billion cardiac muscle cells

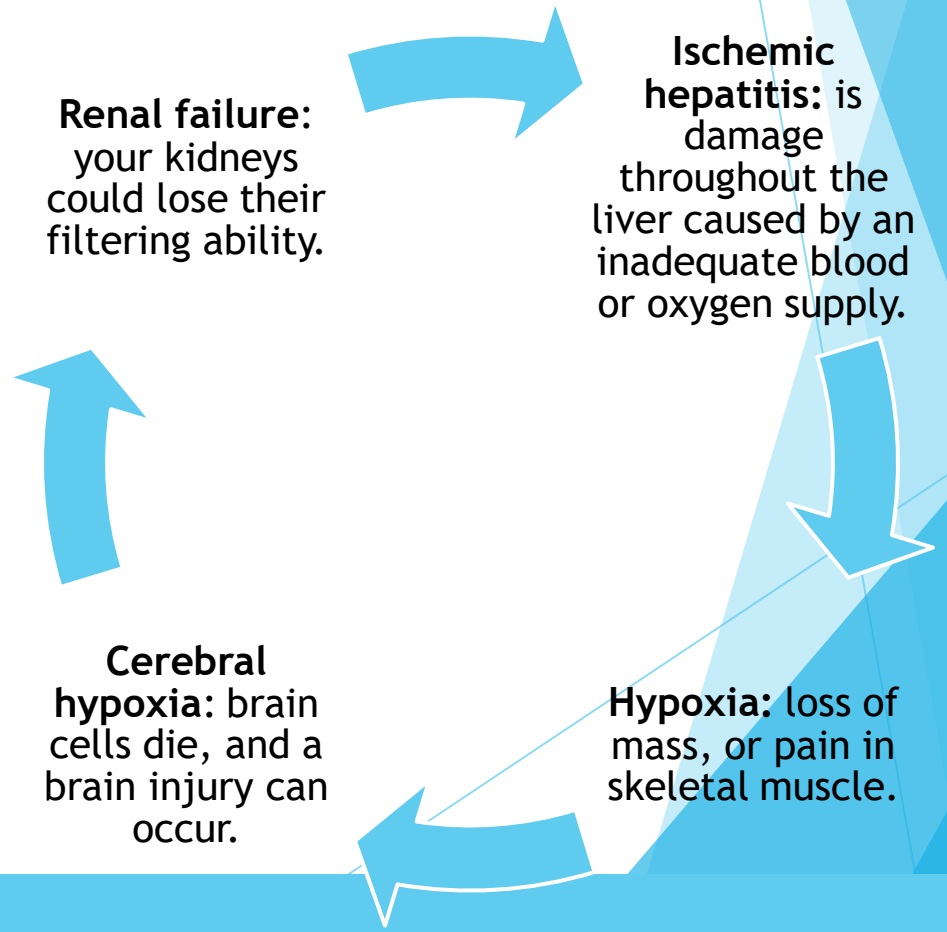
(2 types)100 – 200 million cells in the eye....

What part of our body uses oxygen?

Typically we inhale about 2000 gallons of air daily. That's enough to fill a swimming pool.

- Liver uses 20.4%
- Skeletal muscles 20%
- Brain uses 20%
- Heart uses 11.6 %
- Kidney uses 7%
- Lung uses 5%
- Skin 4.8%
- Rest of the body 17.6 %

What happens when there is a lack of oxygen to these areas???



As stated early on... air is a mixture of gases and aerosols (tiny solid particles). Since this is the case...

- Our noses can detect about 10,000 different distinctive scents . ***6 Million!!!!***
- When we smell something, we are detecting the smallest part of a substance in the air. The distinctive scents are substances in the gaseous state. Cells have particles....do they have a scent as well??? (SELAH)….
- Our sense of smell is called olfaction. Our sense of smell relies on your ***nose's recognition*** of tiny particles in the air called odorants. Odorant particles are released from their source for many different reasons. **(Smell intelligence)**

Wait a minute…let me get this staright……

- Since air is a mixtrure of gases and tiny solid particles, what if we controlled the gases and tiny particles that makes up the air in our home?
- Could we change the atmosphere in our homes or office spaces?
- Could this affect the air quality in our homes?

1. **Egypt- Fragrance of the Gods**
2. **The Land Stank - Ex 8:1-13**

CONCLUSION OF THE MATTER:

oxygen intake and air quality are important to our well-being because **we can create atmospheres to dwell in**.(**selah)** Knowing that our cells (as individuals) are unique but (collectively) they make up the organs, and those organs (work together) to make the systems (11) of the body, and the systems of the body work together to: control, protect and direct the body. All of these from the smallest (CELL) to the greatest(SYSTEM) are affected by our lack of oxygen and poor air quality in our atmosphere (**controllable enviorment**).

WE CAN MANUFACTURE A SPACE THAT COULD MOVE US FROM DEPRIVING OUR CELLS TO PROLIFERATION.

HOW

more oxygen and greater air quality

"Air pollution kills an estimated seven million people worldwide every year. WHO data shows that 9 out of 10 people breathe air that exceeds WHO guideline limits containing high levels of pollutants, with low- and middle-income countries suffering from the highest exposures. WHO is supporting countries to address air pollution.

From smog hanging over cities to smoke inside the home, air pollution poses a major threat to health and climate. The combined effects of ambient (outdoor) and household air pollution cause about seven million premature deaths every year, largely as a result of increased mortality from stroke, heart disease, chronic obstructive pulmonary disease, lung cancer and acute respiratory infections." World Health Organization...

What can I do.....

- ❑ Air Conditioning: controlling the humidity, ventilation, and temperature.

<u>Mistakes that take our breathe away</u>

1. Filter
2. Abir la puerta
3. Go outside

- ❑ Air filtration: Air filtration is the process of ridding the air of airborne particles.

<u>Mistakes that limit our breathing</u>

1. Bring it in, breathe it in- remove shoes please
2. Superman changed in a phone booth- change clothes
3. Dusting vs Wiping
4. Baby Breathing

- ❑ Air purification: air purifier emits something to kill, neutralize, transform or otherwise render airborne toxins harmless.

<u>Mistakes that go unnoticed</u>

1. **V**olitile **O**rganic **C**ompounds https://www.epa.gov/indoor-air-quality-iaq/volatile-organic-compounds-impact-indoor-air-quality
2. What does the Garden of Eden and NASA have in common?

Lung Detox

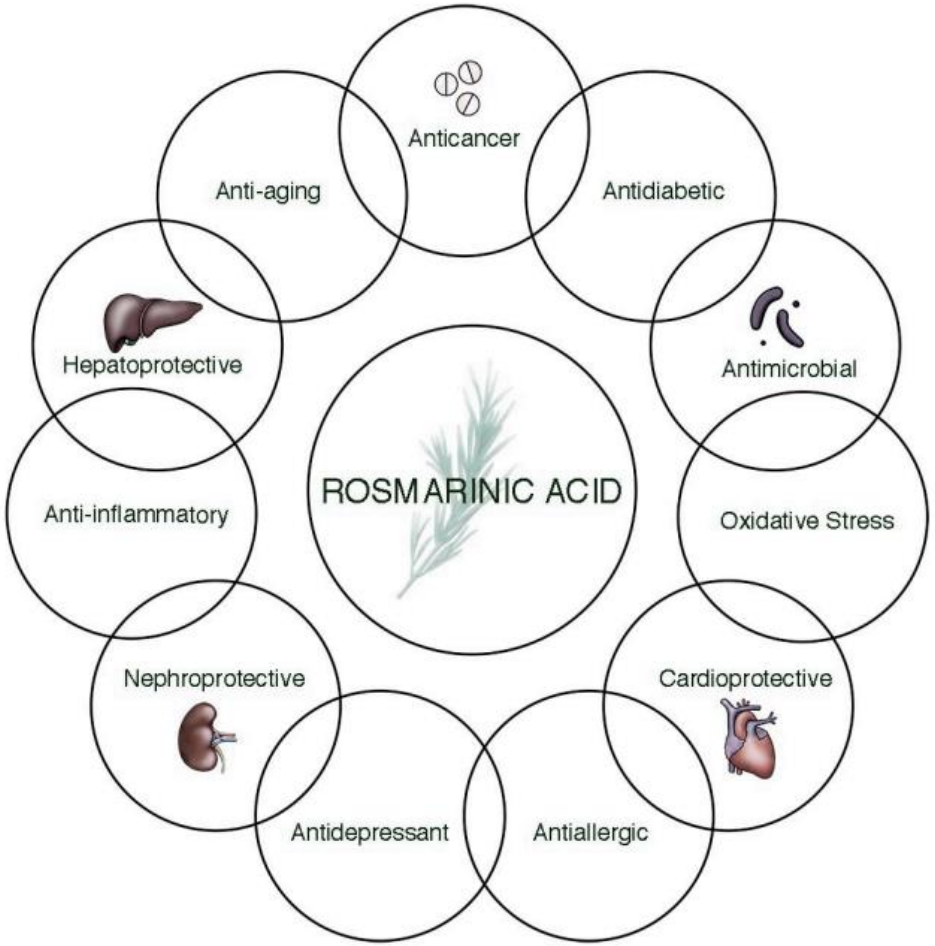
- Your lungs are some of your most important organs, and most human beings can live for mere minutes without air. Therefore, it is important to keep your lungs healthy to ensure that they can perform at their best throughout your life. Although you have little control over the air you breathe, you can take steps to detox your lungs using verified methods that are backed up by science.

#1 Oregano the original

- **Cook with oregano to reduce inflammation and congestion.**
- The V.O.Cs in oregano: thymol and carvacol, have shown to inhibit growth of bacteria like staphylococcus aureus and pseudomonas aeruginosa.
- Oregano can be used in cooking in its dried or fresh forms.A few drops of oregano oil in milk or juice can be taken once a day for as long as you want to receive health benefits.
- Oregano's benefits are due to its carvacrol and rosmarinic acid content. The natural decongestants and histamine reducers come from the carvacrol and rosmarinic that have positively impact on the respiratory tract and nasal passage airflow.

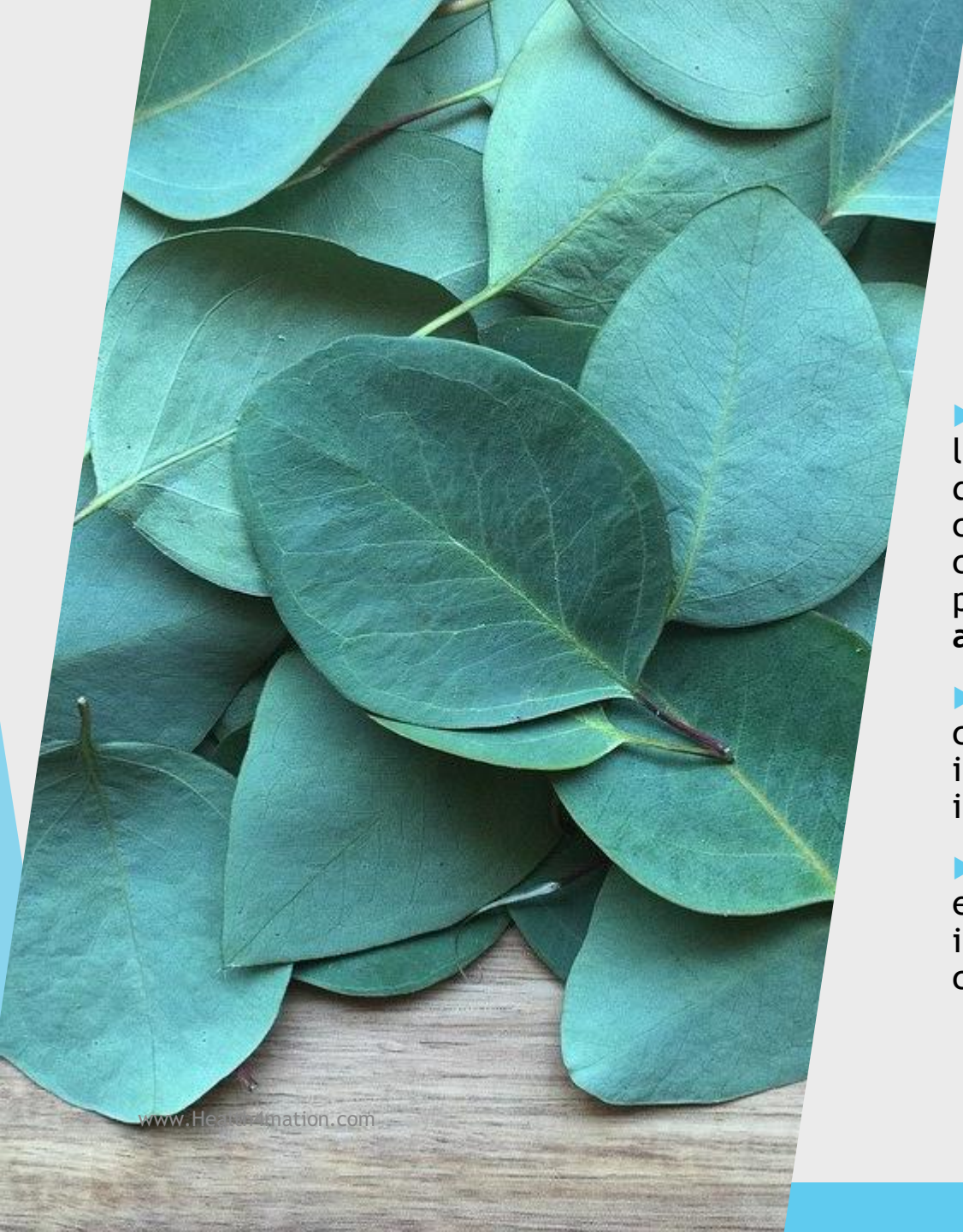
Enterobacteriaceae

- *ENTEROBACTER* IS A GENUS BELONGING TO THE FAMILY OF ENTEROBACTERIACEAE THAT IS ASSOCIATED PRIMARILY WITH HEALTHCARE-RELATED INFECTIONS. THERE ARE CURRENTLY 22 SPECIES OF *ENTEROBACTER*. HOWEVER, NOT ALL SPECIES ARE KNOWN TO CAUSE HUMAN DISEASE. *ENTEROBACTER* SPECIES ARE RESPONSIBLE FOR CAUSING MANY NOSOCOMIAL INFECTIONS, AND LESS COMMONLY COMMUNITY-ACQUIRED INFECTIONS, INCLUDING URINARY TRACT INFECTIONS (UTI), RESPIRATORY INFECTIONS, SOFT TISSUE INFECTIONS, OSTEOMYELITIS, AND ENDOCARDITIS, AMONG MANY OTHERS. CERTAIN SPECIES OF THIS BACTERIUM CAN BE PART OF THE MICROFLORA OF THE MAMMALIAN GASTROINTESTINAL TRACT, WHILE OTHER *ENTEROBACTER* SPECIES CAN BE PRESENT IN HUMAN SKIN SURFACES, WATER, CERTAIN FOODS, SOIL, AND SEWAGE.


Anticancer
Anti-aging
Antidiabetic
Hepatoprotective
Antimicrobial
ROSMARINIC ACID
Anti-inflammatory
Oxidative Stress
Nephroprotective
Cardioprotective
Antidepressant
Antiallergic

#2 the lovely lobelia inflata

- Lobelia contains an alkaloid known as lobeline, which thins mucus and breaks up congestion. This helps **to relax your lungs, break up congestion,** relaxes the airways and allowing for easier air consumption. Also, because lobelia helps to relax smooth muscles, it is included in many cough and cold remedies. Extracts of lobelia inflata contain lobeline, which showed positive effects in the treatment of multidrug-resistant tumor cells.
- Usage: You may add 5-10 leaves of lobelia and vaporize them for inhalation. Inhale the vapors for 10 minutes each day, morning and evening.



#3 expect more with eucalyptus

- Eucalyptus is a common ingredient in cough lozenges and syrups and its effectiveness is due to an expectorant compound called cineole, which can ease a cough, fight congestion, and soothe irritated sinus passages. **Steam eucalyptus to take advantage of its expectorant properties.**
- As an added bonus, because eucalyptus contains antioxidants, it supports the immune system during a cold or other illness.
- Usage: You may add a few drops of eucalyptus oil into hot water and do a steam inhalation for 15 minutes each day to cleanse the lungs.

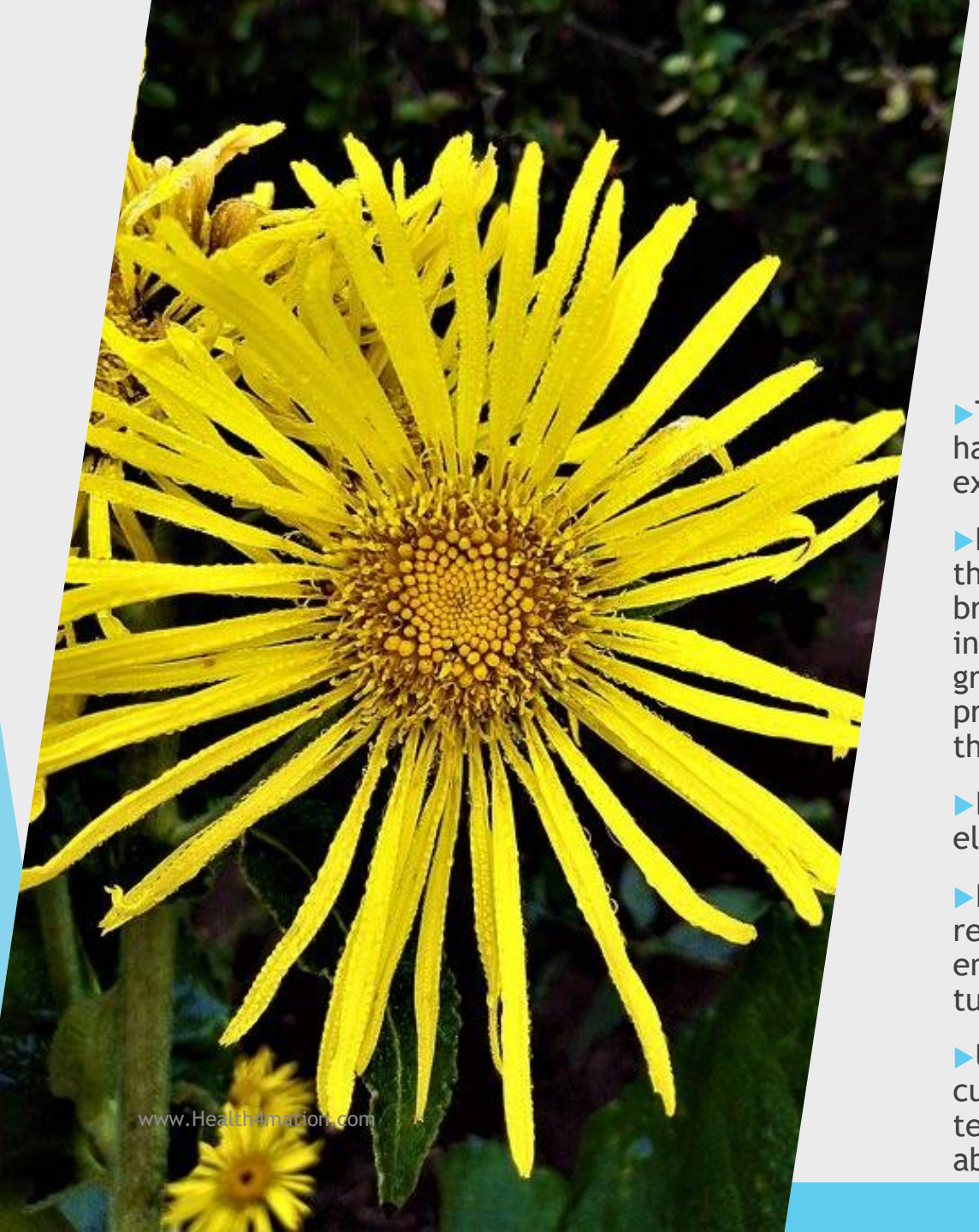
#4 mucus busting mullein

- **Take mullein to clear mucus and cleanse the bronchial tubes.**

- Both the flowers and the leaves of the mullein plant are used to make an herbal extract that helps strengthen the lungs.
- Mullein is used by herbal practitioners to clear excess mucus from the lungs, cleanse the bronchial tubes, and reduce inflammation present in the respiratory tract.
- Usage: You can make a tea can from one teaspoon of the dried herb and one cup of boiled water. Alternatively, you can take a tincture form of this herb.

#5 minty for respiratory

- **Use peppermint to soothe your respiratory muscles.** Peppermint and peppermint oil contain menthol, a soothing ingredient known to relax the smooth muscles of the respiratory tract and promote free breathing.
- Many people use therapeutic chest balms and other inhalants that contain menthol to help break up congestion.
- Additionally, peppermint is an antioxidant and fights harmful organisms.
- Usage: You may chew on 3-5 peppermint leaves each day to enjoy its anti-histaminic benefits.



#6 Elecampe

- The root of the elecampane plant helps kill harmful bacteria, lessens coughs, and expels excess mucus.
- Elecampane contains inulin, a phytochemical that coats and soothes the lining of the bronchial passages and acts as an expectorant in the body. In the respiratory system, it gradually relieves any fever that might be present while battling infection and maximizing the excretion of toxins through perspiration.
- If you have a tickling cough or bronchitis, elecampane may be able to help.
- It acts on excess mucus and toxins in the respiratory tract, it is often helpful with emphysema, asthma, bronchial asthma, and tuberculosis.
- Usage: You can use one teaspoon of herb per cup of water in an infusion, or one-half to one teaspoon of tincture, three times a day for about 3 months.

#7 hot showers

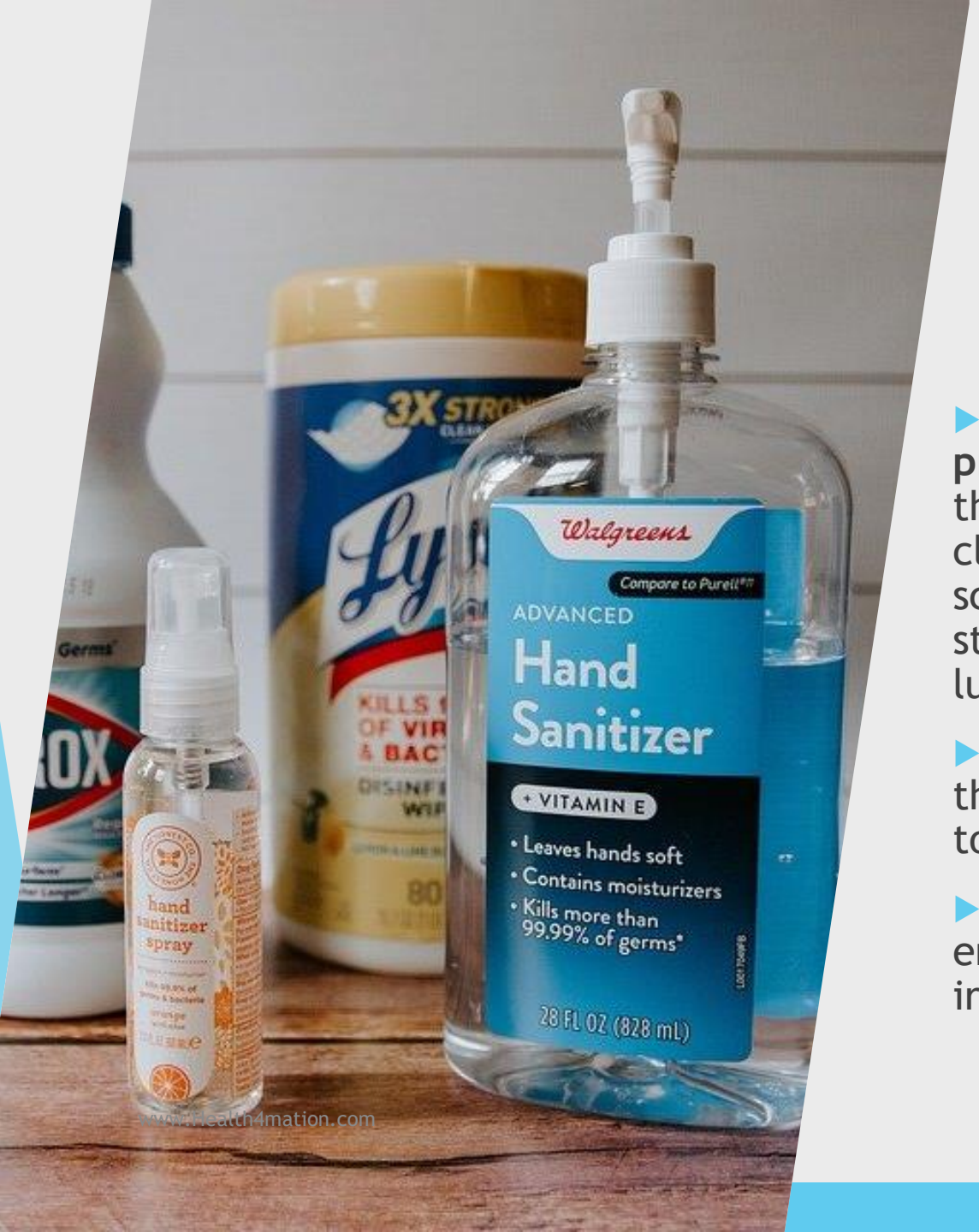
- **Take hot showers to clear your lungs.** Taking a shower with hot water for twenty minutes can be really helpful in clearing out your lungs.
- If you can sit in a sauna, the hot air will be even more effective in clearing your lungs.
- It is very important to allow your body to get rid of toxins through sweating.
- A sauna or hot water increases the secretion of sweat, and helps the lungs rid themselves of toxic substances.

#8 Please Dont

Smoking tobacco is a great way to introduce a variety of toxins directly into your lungs.

Tobacco smoke, nicotine, and the variety of other unhealthy substances found in cigarettes wreak havoc on your respiratory tract. (7000 chemicals)

In addition to lowering your lung capacity, smoking puts you at risk for cancer and other long-term health complications.



#9 V.O.C's

- **Stay away from common toxic products.** Eliminate household toxins that are part of detergents, cleansers, bleaches, and chemically scented air fresheners that have strong fragrances and might harm the lungs.
- Pesticides must go as well, and there are alternatives that aren't toxic for humans.
- All toxic commercial pesticides emit caustic gases or vapors that irritate the lungs.

SNAKE PLANT

PEACE LILY

SPIDER PLANT

Air purifiers

96 DIFFERENT PLANTS THAT HELP TO ABSORB V.O.C.'S...

Air purifiers

- These plants are known to absorb formaldehyde, ammonia, benzene, trichloroethylene and hydrates, as well as xylene. You can use these plants ask governors in your home over air quality control. Also remember to clean your air conditioner coils bi-annually and air filters four (4) times annually. Use a natural, high filtration type that removes one (1) micron to three (3) micron size particles. Small steps well make it easier for your body to have a constant source of clean air in the place you spend the most time in.

Air purifiers

bamboo plants (Rhapis excelsea)

Philodendron (philodendron spp)

Air purifiers

Corn plant (Dracaena fragrans)

English ivy (Hedera helix)

Air purifiers

Bromeliads (Crypttanthus spp)

Chrysanthemum
(Chrysanthemum spp)

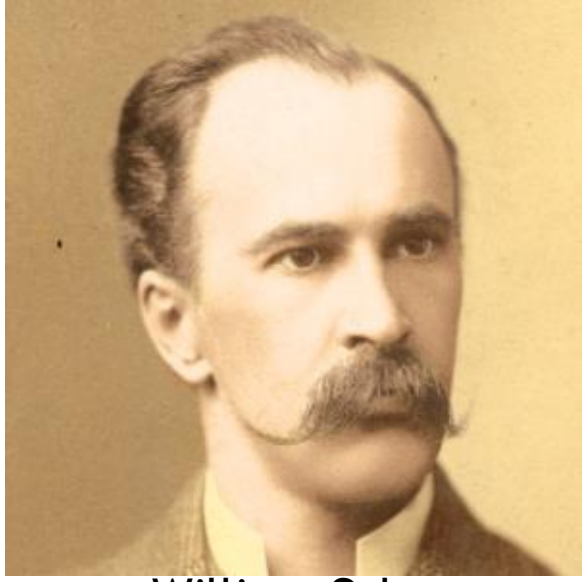
Air purifiers

House type palms

Golden pothos (Epipremnum aureum)

Air purifiers

Ficus tree



William Osler

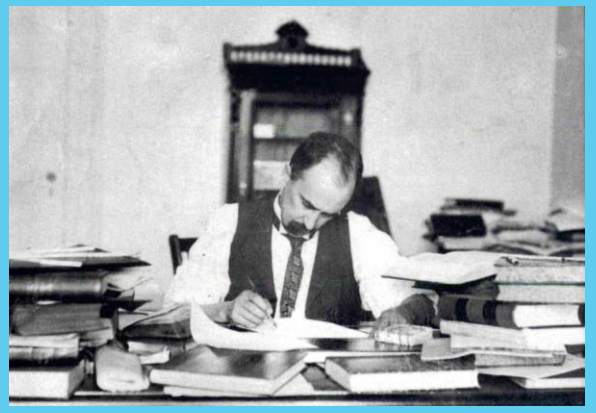
“Patients should have rest, food, fresh air, and exercise – the quadrangle of health.”

"The good physician treats the disease; the great physician treats the patient who has the disease."

"Medicine is a science of uncertainty and an art of probability.

One of the first duties of the physician is to educate the masses not to take medicine."

"The practice of medicine is an art, not a trade; a calling, not a business."



William Osler one of founder of John Hopkins Hospital.

Thank you

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Respiratory system: