



FITNESS & NUTRITION EXPERT PROGRAM

WELLNESS SESSION 1:

Introduction to wellness,
hormones and the nervous
system



Before we get ready to rock, just a few things

1. **Please make sure all phones are muted.**
2. **In case of tech probs, this is what to do:**
 - If you get kicked out or power out, just log back in
 - If we get kicked out or power out, we will email you a back up link to log in to asap to continue on class.
3. **Access to live class recordings:**
 1. Each class is taped
 2. Links to access the recordings will be sent a max of 48hrs post class
4. **We heart questions!**
 - Please type all questions in the chat box. If you want your question to be anonymous, please just send to "HOST"



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Wellness Session 1 : What we are going to cover



WHAT IS WELLNESS?

The definition of wellness and current factors affecting our wellness

STRESS, HORMONES AND THE NERVOUS SYSTEM

Understand what stress is, how it affects our bodies and the role our hormones and nervous system play in this

HAPPY THOUGHTS AND OUR HEALTH

The difference between love and fear & how our thoughts change our health

THE IMPORTANCE OF SLEEP

What are the sleep cycles, how much sleep do we need and tips for better sleep

DETOXIFICATION SYSTEMS

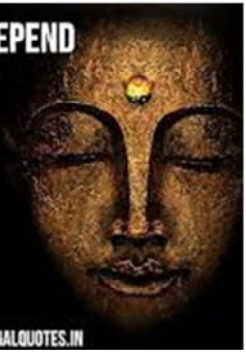
What they are and easy at home detox methods

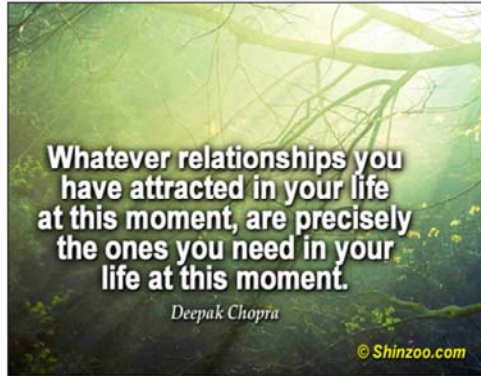


**HAPPINESS DOES NOT DEPEND
ON WHAT YOU HAVE OR
WHO YOU ARE.
IT SOLELY RELIES ON
WHAT YOU THINK.**

~ Buddha

WWW.DAILYINSPIRATIONALQUOTES.IN







"Every time you are tempted
to react in the same old way,
ask if you want to be
a prisoner of the past or...
a pioneer of the future."
- Deepak Chopra

www.lovedayelaxoi.com

What you need before we start:



1. Water
2. Put your finger tips together
3. Take 3 deep breaths



What is wellness?

Wellness – by Collins English Dictionary

(ˈwɛlnəs)*n*
1. the state of being in good physical and mental health

well-ness – by American Heritage Dictionary

(wɛlˈnɪs)*n.* The condition of good physical and mental health, especially when actively maintained by proper diet, exercise, and avoidance of risky behavior.

Wellness – by World Health Organization

Health/wellness is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity. (same since 1948!)



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wellness

(ˈwɛlnəs)*n* **1.** the state of being in good physical and mental health

[Collins English Dictionary – Complete and Unabridged](#) © HarperCollins Publishers 1991, 1994, 1998, 2000, 2003

well-ness

(wɛlˈnɪs)*n.* The condition of good physical and mental health, especially when actively maintained by proper diet, exercise, and avoidance of risky behavior.

American Heritage® Dictionary of the English Language, Fifth Edition. Copyright © 2011 by Houghton Mifflin Harcourt Publishing Company. Published by Houghton Mifflin Harcourt Publishing Company. All rights reserved.

<http://www.who.int/about/definition/en/print.html>

WHO definition of Health

Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity.

The correct bibliographic citation for the definition is:
Preamble to the Constitution of the World Health Organization as adopted by the International Health Conference, New York, 19-22 June, 1946; signed on 22 July 1946 by the representatives of 61 States (Official Records of the World Health Organization, no. 2, p. 100) and entered into force on 7 April 1948.
The Definition has not been amended since 1948.

wellness

(ˈwɛlnəs)*n* **1.** the state of being in good physical and mental health

[Collins English Dictionary – Complete and Unabridged](#) © HarperCollins Publishers
1991, 1994, 1998, 2000, 2003

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The Definition has not been amended since 1948.



Source: http://www.nationalwellness.org/?page=Six_Dimensions

Six Dimensions of Wellness

Developed by Dr. Bill Hettler, co-founder of the National Wellness Institute (NWI), this interdependent model, commonly referred to as the Six Dimensions of Wellness, provides the categories from which NWI derives its resources and services.

To download a pdf handout about the Six Dimensions of Wellness, go to http://www.nationalwellness.org/?page=Six_Dimensions

Definition of Wellness

The term wellness has been applied in many ways. Although there might be different views on what wellness encompasses, the National Wellness Institute--along with the help of leaders in health and wellness--shared many interpretations and models of wellness.

Through this discussion, there appears to be general agreement that: Wellness is a conscious, self-directed and evolving process of achieving full

potential

Wellness is multidimensional and holistic, encompassing lifestyle, mental and spiritual well-being, and the environment

Wellness is positive and affirming

The definition of wellness, long used by the National Wellness Institute is consistent with these tenets. *Wellness is an active process through which people become aware of, and make choices toward, a more successful existence.*

CURRENT FACTORS AFFECTING OUR WELLNESS



1. Lack of physical activity
2. Lack of nutrition and nutrient dense food
3. Increase pressure from work / longer work hours
4. Lack of connectivity with our communities (it's a tech world!)
5. Increase in overall stress (lack of coping mechanisms)
6. Increase in toxins in the environment / food
7. Setting unrealistic expectations for ourselves

And these are just to name a few....



http://www.ilo.org/safework/info/publications/WCMS_211571/lang--en/index.htm


What is stress?

Stress is the body's response to a real or perceived threat.

Stress is a *reaction* to a situation—it isn't about the actual situation. We usually feel stressed when we think that the demands of the situation are greater than our resources to deal with that situation.

Let's do a stress test!

http://www.cmha.ca/mental_health/whats-your-stress-index/#.VW9Zc9JViko



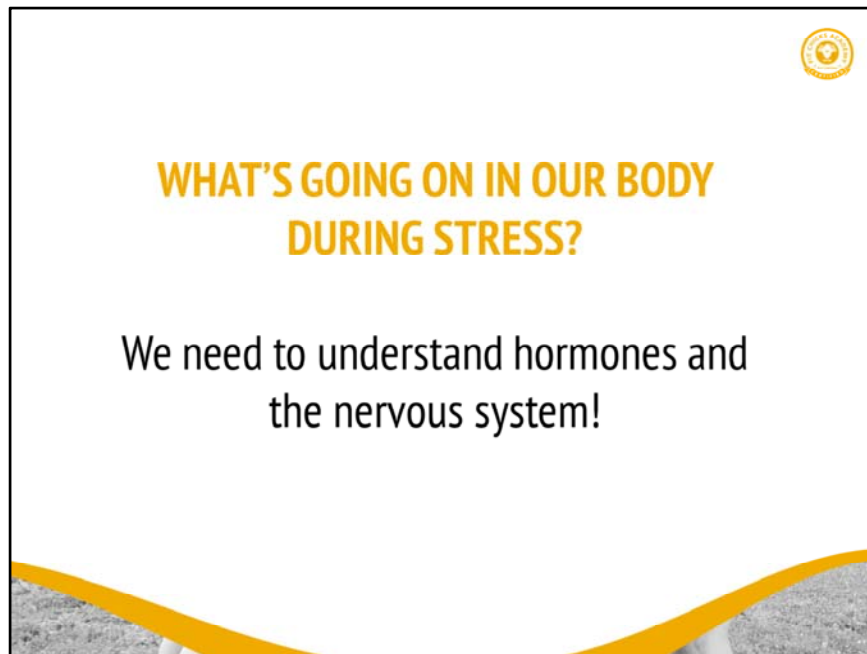
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Source: Canadian Mental Health Association www.cmha.ca

What is stress?

Stress is the body's response to a real or perceived threat. That response is meant to get people ready for some kind of action to get them out of danger. But most of the threats people face today aren't something that they can fight or run away from. These threats are usually problems that people have to work through. Some stress can be a good thing. It can motivate us to focus on a task or take action and solve a problem. In this situation, stress is manageable and even helpful. When stress is unhelpful, people may feel overwhelmed or feel like they can't possibly fix the problem. In these cases, some people avoid dealing with the original problem altogether, which may make the problem—and stress—worse. It can be very hard to concentrate, make decisions, and feel confident when a person experiences a lot of stress. Many people experience physical sensations like sweating, a racing heart, or tense muscles. Over time, stress can also have a big impact on physical health. Sleep difficulties and headaches are common problems related to stress. People are also more likely to get sick when they're experiencing a lot of stress.

Stress is a *reaction* to a situation—it isn't about the actual situation. We usually feel stressed when we think that the demands of the situation are greater than our resources to deal with that situation. For example, someone who feels comfortable speaking in public may not worry about giving a presentation, while someone who isn't confident in their skills may feel a lot of stress about an upcoming presentation. Common sources of stress may include major life events, like moving or changing jobs. Long-term worries, like a long-term illness or parenting, can also feel stressful. Even daily hassles like dealing with traffic can be a source of stress.



What can I do about it?

Taking action is the first step. Ignoring the effects of stress can lead to other mental health problems. There is no one right way to deal with stress. The tips below are common strategies that are helpful for many people. Try them out and see what works best for you. Remember to look at both short-term and long-term solutions when you're dealing with stress.

Identify the problem. Is your job, school, a relationship with someone, or worries about money causing stress? Are unimportant, surface problems hiding deeper problems? Once you know what the real problem is, you can do something about it.

Solve problems as they come up. What can you do, and what are the possible outcomes? Would that be better or worse than doing nothing? Remember, sometimes solving a problem means doing the best you can—even if it isn't perfect—or asking for help. Once you've decided on a solution, divide the steps into manageable pieces and work on one piece at a time. Improving your problem-solving skills is a long-term strategy that can help you feel like you're in control again.

Talk about your problems. You may find it helpful to talk about your stress. Loved

ones may not realize that you're having a hard time. Once they understand, they may be able to help in two different ways. First, they can just listen—simply expressing your feelings can help a lot. Second, they may have ideas to help you solve or deal with your problems. If you need to talk with someone outside your own circle of loved ones, your family doctor may be able to refer you to a counsellor, or you may have access to one through your school, workplace, or faith community.

Simplify your life. Stress can come up when there are too many things going on. Learning to say no is a real skill that takes practice. Try to look for ways to make your to-do list more manageable.

Learn helpful thinking strategies. The way you think about situations affects the way you respond to them. Unhelpful thoughts, such as believing that everything must be perfect or expecting the worst possible outcome, can make problems seem bigger than they really are.

Learn about stress management. There are many useful books, websites, and courses to help you cope with stress. There are also counsellors who specialize in stress. There may be stress management courses and workshops available through your community centre, workplace, or school.

Start on the inside. Practices like yoga, meditation, mindfulness, prayer, or breathing exercises can help you quiet your mind and look at problems from a calmer, more balanced point of view. With time, these practices can help you manage your response to stressful situations as they come up.

Get active. Physical activity can be a great way to reduce stress and improve your mood. Activity could be anything from taking up a new sport to walking. The most important part is that it gets you moving and you enjoy it—it shouldn't feel like a chore. If you experience barriers to physical activity, try talking to your doctor or care team for ideas.

Do something you enjoy. Making time for hobbies, sports, or activities that you find fun or make you laugh can temporarily give you a break from problems. Listen to music, read, go for a walk, see a friend, watch your favourite movie, or do whatever makes you feel good. This can give you a little mental distance from problems when you can't deal with them right away.

Can I prevent stress?

Stress is part of being human—no one can eliminate *all* stress from their life or prevent stress from ever happening in the future. The goal of stress management is to bounce back from problems or challenges and maintain wellness. All of the above

strategies can help you take control of stress so it doesn't control you in the future. Remember to practice them often, even when you're not feeling stressed. That way, you'll know exactly what works for you. It's also much easier to deal with difficulties when you're in control and know that you can deal with whatever comes up.

What are hormones?

- chemical messengers that are secreted directly into the blood, which carries them to organs and tissues of the body to exert their functions.
- Many types of hormones that act on different aspects of bodily functions and processes such as
 - Reproduction
 - Responses to stress and injury
 - Growth and sexual development
 - Body energy levels
 - Internal balance of body systems
 - Bone and muscle strength



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Source: <http://www.news-medical.net/health/What-are-Hormones.aspx>

Hormones are chemical messengers that are secreted directly into the blood, which carries them to organs and tissues of the body to exert their functions. There are many types of hormones that act on different aspects of bodily functions and processes. Some of these include:

Development and growth

Metabolism of food items

Sexual function and reproductive growth and health

Cognitive function and mood

Maintenance of body temperature and thirst

Where are they secreted from?

Hormones are secreted from the endocrine glands in the body. The glands are ductless, so hormones are secreted directly into the blood stream rather than by way of ducts. Some of the major endocrine glands in the body include:

Pituitary gland

Pineal gland

Thymus

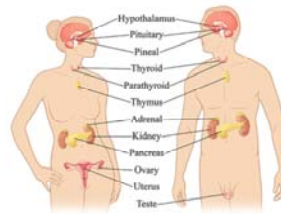
Thyroid
Adrenal glands
Pancreas
Testes
Ovaries

What are hormones cont'd



- Secreted from the endocrine glands in the body.
- The glands are ductless, so hormones are secreted directly into the blood stream rather than by way of ducts. Some of the major endocrine glands in the body include:

- Pituitary gland
- Pineal gland
- Thymus
- Thyroid
- Adrenal glands
- Pancreas
- Testes
- Ovaries



- Hormones are powerful. It takes only a tiny amount to cause big changes in cells or even your whole body. That is why too much or too little of a certain hormone can be serious.

Source: <http://www.hormone.org/hormones-and-health/the-endocrine-system>

The Glands of the Endocrine System

Your endocrine system is made of many glands and organs. They have different functions, and work together to keep you healthy. These are the glands of your endocrine system:

Adrenal glands - influence the way your body uses energy, they also release a hormone called adrenaline when you are under stress

Hypothalamus - part of your brain that controls hormone production by releasing different chemicals to the pituitary gland

Ovaries - produce estrogen and progesterone in women, and also release egg cells

Pancreas - releases the insulin your body needs to metabolize sugar; problems with the pancreas can lead to diabetes

Parathyroid - located behind the thyroid gland, they are essential for proper bone development

Pineal gland - connects the endocrine system with the nervous system; produces several important hormones, including melatonin, important to sleep/wake cycles and sexual development

Pituitary gland – likely the most important gland in your body, it is crucial to growth, mental development and reproduction; influences or controls the rest of your endocrine system

Testes - produce the hormone testosterone; in men, testosterone maintains sperm production and bone mass

Thymus - crucial to normal immune function in childhood; once a child reaches puberty, its tissue is replaced by fat

Thyroid gland – located in the front of your neck, it releases hormones that control your metabolism and govern the way your body uses energy

The nervous systems



The automatic nervous system is most important in two situations:

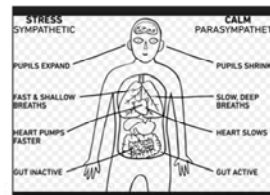
In emergencies that cause stress and require us to **"fight" or take "flight"** (run away)

In non emergencies that allow us to **"rest" and "digest."**

It is always working

It is divided into 3 parts:

1. Sympathetic Nervous System
2. Parasympathetic Nervous System
3. Enteric Nervous System



Source: <https://faculty.washington.edu/chudler/auto.html>

So you are at a park hanging out and suddenly:



1. A bear appears!

This activates your sympathetic nervous system

Uses energy

"Fight or Flight" responses such as blood pressure rises, your heart beats faster & digestion slows down

2. You curl up under a beautiful tree and read a book

This activates your para-sympathetic nervous system

Saves energy

"Rest & Digest" responses such as blood pressure can decrease, pulse rate can slow & digestion start

3. You suddenly get nervous thinking about a date and have diarrhea

This is the enteric nervous system

It is the meshwork of nerve fibres in the gastrointestinal tract, pancreas and gall bladder (this is where gut feelings come from!)

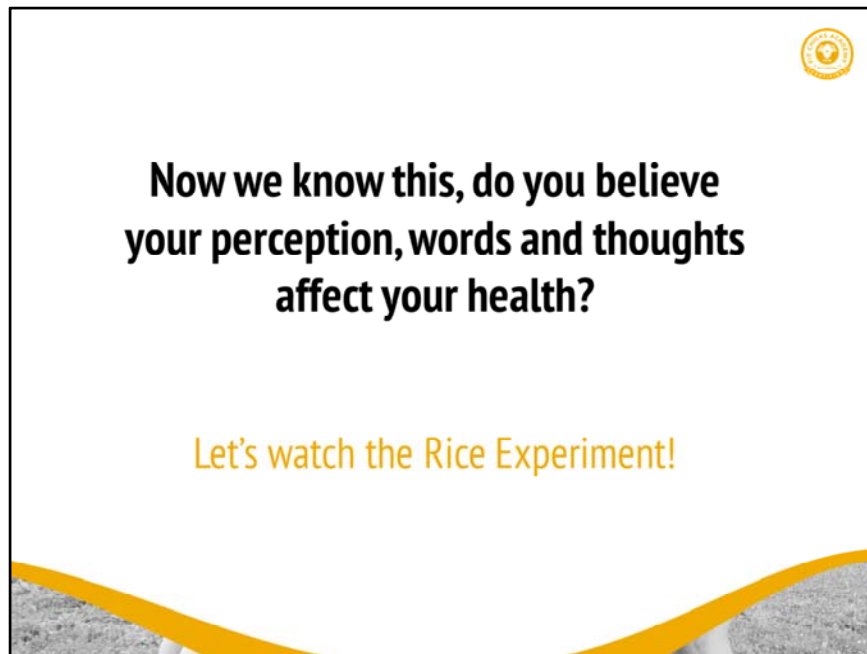
It is a nice, sunny day...you are taking a nice walk in the park. Suddenly, an angry bear appears in your path. Do you stay and fight OR do you turn and run away? These are "Fight or Flight" responses. In these types of situations, your sympathetic nervous system is called into action - it uses energy - your blood pressure increases, your heart beats faster, and digestion slows down

It is a nice, sunny day...you are taking a nice walk in the park. This time, however, you decide to relax in comfortable chair that you have brought along. This calls for "Rest and Digest" responses. Now is the time for the parasympathetic nervous to work to save energy. This is when blood pressure can decrease, pulse rate can slow, and digestion can start

The [enteric nervous system](#) is a third division of the autonomic nervous system that you do not hear much about. The enteric nervous system is a meshwork of nerve fibers that innervate the viscera (gastrointestinal tract, pancreas, and gall bladder).

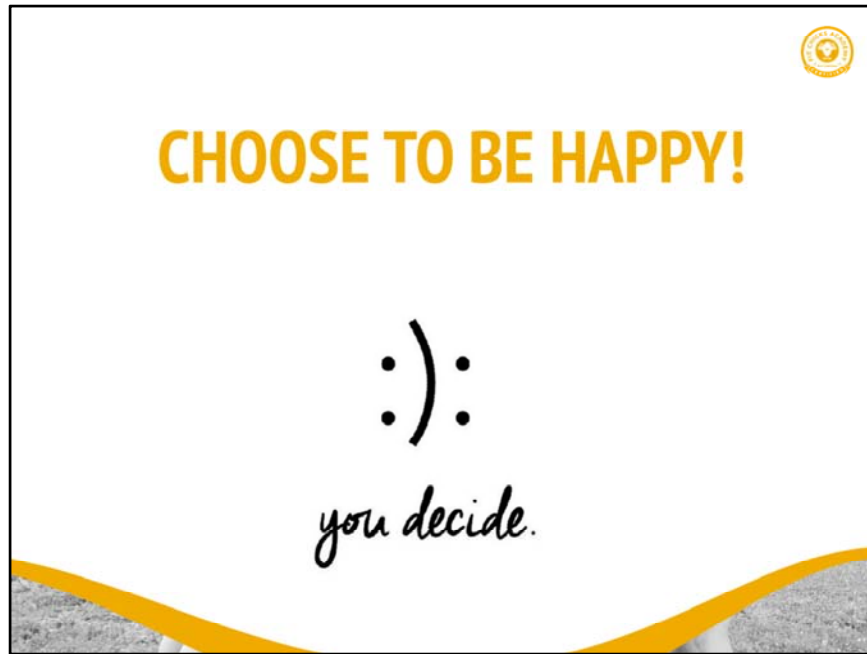
It should be noted that the autonomic nervous system is always working. It is NOT only active during "fight or flight" or "rest and digest" situations. Rather, the autonomic nervous system acts to maintain normal internal functions and works with

the somatic nervous system



Dr Emoto Rice Experiment - <https://youtu.be/Ehlw-9PJkIE>

Recreation of Dr Emoto Rice Experiment - <https://youtu.be/4sbzCaEsHfw>



You have to choose to be happy and healthy. This is not always a natural state but a habit you can create by being aware!

The 2 emotions: love & fear

There are only 2 fundamental human emotions that all others stem from: Love & Fear

Fear = All negative emotions ie anger, anxiety, hate, guilt

Love = All positive emotions ie happiness, joy, peace & contentment

They are opposites!

We can't feel these emotions at the exact same time

If in fear, we are not in a place of love

If in a place of love, we cannot be in a place of fear



http://www.yourhormones.info/glands/adrenal_glands.aspx

“There are only two emotions: love and fear. All positive emotions come from love, all negative emotions from fear. From love flows happiness, contentment, peace, and joy. From fear comes anger, hate, anxiety and guilt. It's true that there are only two primary emotions, love and fear. But it's more accurate to say that there is only love or fear, for we cannot feel these two emotions together, at exactly the same time. They're opposites. If we're in fear, we are not in a place of love. When we're in a place of love, we cannot be in a place of fear.”

How does this affect the body?



All mammals including humans, have **2 different responses when feeling love or fear**



Don't think it is important? Each of these physical responses has HUGE impact on your body, weight, health and overall well being

Various spiritual teachings say that there are only two fundamental emotions: love and fear. For the body, this is true. All mammals, including humans, have two opposing hormonal responses to stimuli. Threatening stimuli cause an increase of stress hormones—adrenaline and cortisol. Soothing or reassuring stimuli cause an increase in oxytocin.

A sudden threat triggers the fight-or-flight response associated with adrenaline. Adrenaline steps up heart rate, increases respiration, activates muscles, and promotes hyper-alertness. Longer-term stress (from a few minutes to days and weeks) increases a different stress hormone: cortisol. Cortisol, too, makes us hyper-vigilant, but its evolutionary functions are quite different than the temporary jolt of adrenaline designed to propel us out of danger.

The stress encountered by mammals—and our hunter-gatherer ancestors—was chiefly physical, not emotional. The most common physical stressors were probably starvation, long migrations, and critical injury. To cope with such emergencies, cortisol begins to break down non-essential organs and tissues to maintain blood sugar and feed vital organs. When cortisol stays at high levels, it automatically digests bones, muscles and joints to obtain these key nutrients. The result is elevated blood

fats and sugar, which are related to many disorders. Another side effect is hunger; we reach for high-calorie foods.

Today our biggest long-term stressors are emotional and mental, not physical. In effect, we are a “new” scientific experiment. We face threats in the form of potential job loss, the pressure of commuting in heavy traffic, a barrage of fear-producing media, relationship disharmony in a marriage, etc. Even though these are not physical threats, our body has only one, automatic response: more cortisol. Cortisol is very hard on the body, so all these threats indirectly become physical threats.

Fortunately, we have a built-in mechanism for countering stress, which forms the basis of our alternative response to stimuli. It entails another hormone, called oxytocin. Apart from its functions of inducing emotional bonding, labor, and lactation, oxytocin counters the effects of cortisol. This anti-stress effect of oxytocin is a recent discovery, and very exciting, because it points the way to better health by entirely natural means.

Fear: how does this affect the body?



When feeling fear, increase of 2 stress hormones: adrenaline & cortisol

Sudden threat triggers “fight or flight” associated w adrenaline

Kicks your body into high gear when sensing danger!
Steps up heart rate, increase breathing, activates you are ready to go Rocky or run for the hills!

Long term stress increases a different stress hormone: cortisol!

To cope with emergencies, breaks down non essential organs & tissues to maintain blood sugar
When it stays high, digests bones, muscles & joints to obtain key nutrients...this means elevated fats & sugars!
Another side effect is hunger (a-ha I know why I was reaching for doritos now!
Cortisol is very hard on your body!!

[Cortisol](#) is an important hormone in the body, secreted by the adrenal glands and involved in the following functions and more:

- Proper glucose metabolism
- Regulation of blood pressure
- Insulin release for blood sugar maintenance
- Immune function
- Inflammatory response

Normally, it's present in the body at higher levels in the morning, and at its lowest at night. Although stress isn't the only reason that cortisol is secreted into the bloodstream, it has been termed “the stress hormone” because it's also secreted in higher levels during the body's [‘fight or flight’](#) response to stress, and is responsible for several stress-related changes in the body. Small increases of cortisol have some positive effects:

- A quick burst of energy for survival reasons
- Heightened memory functions
- A burst of increased immunity
- Lower sensitivity to pain
- Helps maintain homeostasis in the body

While cortisol is an important and helpful part of the body's response to stress, it's important that the body's [relaxation response](#) to be activated so the body's functions can return to normal following a stressful event. Unfortunately, in our current high-stress culture, the body's stress response is activated so often that the body doesn't always have a chance to return to normal, resulting in a state of [chronic stress](#).

Higher and more prolonged levels of cortisol in the bloodstream (like those associated with chronic stress) have been shown to have negative effects, such as:

- Impaired cognitive performance
- Suppressed thyroid function
- Blood sugar imbalances such as hyperglycemia
- Decreased bone density
- Decrease in muscle tissue
- Higher [blood pressure](#)
- Lowered [immunity](#) and inflammatory responses in the body, slowed wound healing, and other health consequences
- Increased abdominal fat, which is associated with a greater amount of health problems than fat deposited in other areas of the body. Some of the health problems associated with increased stomach fat are [heart attacks](#), [strokes](#), the development of [metabolic syndrome](#), higher levels of "bad" cholesterol (LDL) and lower levels of "good" cholesterol (HDL), which can lead to other health problems!

To keep cortisol levels healthy and under control, the body's relaxation response should be activated after the fight or flight response occurs. You can learn to relax your body with various stress management techniques, and you can make lifestyle changes in order to keep your body from reacting to stress in the first place. The following have been found by many to be very helpful in relaxing the body and mind, aiding the body in maintaining healthy cortisol levels:

Love: how does this affect the body?

When feeling LOVE, the body releases oxytocin

Induces bonding, labor, lactation (all the mom stuff!)

Recent study shows oxytocin counters the effects of cortisol

Activities that produces more oxytocin

- Meditation
- Yoga
- Exercise
- Massage
- Support groups
- Happy thoughts and words of love
- SEX, SEX AND MORE SEX!

Fortunately, we have a built-in mechanism for countering stress, which forms the basis of our alternative response to stimuli. It entails another hormone, called oxytocin. Apart from its functions of inducing emotional bonding, labor, and lactation, oxytocin counters the effects of cortisol. This anti-stress effect of oxytocin is a recent discovery, and very exciting, because it points the way to better health by entirely natural means.

As you can see from the chart above, nearly all the negative effects of continued stress on the body and mind are related to elevated levels of cortisol. These include: chronic anxiety and depression, emotional over-reaction, negativity, weight gain, heart disease, high blood pressure, and weakened immunity. Oxytocin, by countering cortisol, can ameliorate all of these conditions—as well as some others (see list of recent discoveries at end of article)

Numerous activities produce more oxytocin: meditation, yoga, exercise, massage, caring for a pet, joining a support group, worshipping, and so forth. Yet one of the most important avenues for decreasing stress and increasing levels of oxytocin lies in our intimate relationships. In *Love & Survival*, Dr. Dean Ornish points out that love and intimacy are such powerful determinants of health that if they were produced in

pill form, doctors who failed to prescribe them for unhealthy patients would be guilty of malpractice.



Fear - Cortisol	Love - Oxytocin
Aggression	Anti-stress hormone
Arousal, Anxiety, Feeling stressed-out	Feeling calm and connected, Increased curiosity
Activates addictions	Lessens cravings & addictions
Suppresses libido	Increases sexual receptivity
Associated with depression	Positive feelings
Can be toxic to brain cells	Facilitates learning
Breaks down muscles, bones and joints	Repairs, heals and restores
Depresses immune system	Faster wound healing
Increases pain	Diminishes sense of pain
Clogs arteries, Promotes heart disease and high blood pressure	Lowers blood pressure, Protects against heart disease
<small>Obesity, Diabetes, Osteoporosis</small>	---



The Importance of Sleep



Sleep cycles

Why is sleep important?

- Affects how we look, feel and perform on a daily basis
- It is when our body rebuilds itself ie muscle repair
- Memory consolidation and decision making
- Releases hormones regulating growth and balance our appetites by helping to regulate levels of the hormones ghrelin and leptin, which play a role in our feelings of hunger and fullness. So when we're sleep deprived, we may feel the need to eat more, which can lead to weight gain.
- hormone cortisol dip at bed time and increase over the night to promote alertness in morning.
- contributing to a healthy immune system

The one-third of our lives that we spend sleeping, far from being "unproductive," plays a direct role in how full, energetic and successful the other two-thirds of our lives can be!

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<http://sleepfoundation.org/how-sleep-works/what-happens-when-you-sleep>

When we sleep well, we wake up feeling refreshed and alert for our daily activities. Sleep affects how we look, feel and perform on a daily basis, and can have a major impact on our overall quality of life.

To get the most out of our sleep, both quantity and quality are important. [Teens](#) need at least 8 hours—and on average 9¼ hours—a night of uninterrupted sleep to leave their bodies and minds rejuvenated for the next day. If sleep is cut short, the body doesn't have time to complete all of the phases needed for muscle repair, memory consolidation and release of hormones regulating growth and appetite. Then we wake up less prepared to concentrate, make decisions, or engage fully in school and social activities.

How Does Sleep Contribute to All of These Things?

Sleep architecture follows a pattern of alternating REM (rapid eye movement) and NREM (non-rapid eye movement) sleep throughout a typical night in a cycle that repeats itself about every 90 minutes.

What role does each state and stage of sleep play?

NREM (75% of night): As we begin to fall asleep, we enter NREM sleep, which is composed of stages 1-4

Stage 1

- * Between being awake and falling asleep
- * Light sleep

Stage 2

- * Onset of sleep
- * Becoming disengaged from surroundings
- * Breathing and heart rate are regular
- * Body temperature drops (so sleeping in a cool room is helpful)

Stages 3 and 4

- * Deepest and most restorative sleep
- * Blood pressure drops
- * Breathing becomes slower
- * Muscles are relaxed
- * Blood supply to muscles increases
- * Tissue growth and repair occurs
- * Energy is restored
- * Hormones are released, such as: Growth hormone, essential for growth and development, including muscle development

REM (25% of night): First occurs about 90 minutes after falling asleep and recurs about every 90 minutes, getting longer later in the night

- * Provides energy to brain and body
- * Supports daytime performance
- * Brain is active and dreams occur
- * Eyes dart back and forth
- * Body becomes immobile and relaxed, as muscles are turned off

In addition, levels of the hormone cortisol dip at bed time and increase over the night to promote alertness in morning.

Sleep helps us thrive by contributing to a healthy immune system, and can also balance our appetites by helping to regulate levels of the hormones ghrelin and leptin, which play a role in our feelings of hunger and fullness. So when we're sleep deprived, we may feel the need to eat more, which can lead to weight gain.

The one-third of our lives that we spend sleeping, far from being "unproductive," plays a direct role in how full, energetic and successful the other two-thirds of our lives can be.

Sleep cycles

What is enough sleep?

- Adults and young adults (18-25) = 7-9 hours
- Teenager = 8 - 10 hours
- School age (6 - 13) = 9 -11 hours
- Preschool = 10 - 13 hours
- Toddlers = 11 - 15 hours
- Babies (new born to 11 months) = 12 - 17 hours

How Does Sleep Contribute to All of These Things?

Sleep architecture follows a pattern of alternating REM (rapid eye movement) and NREM (non-rapid eye movement) sleep throughout a typical night **in a cycle that repeats itself about every 90 minutes.**



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SLEEP DURATION RECOMMENDATIONS



Sleep cycles- NREM



NREM (75% of night) and there are 4 stages:

Stage 1	Stage 2	Stage 3 & 4
Between being awake and falling asleep * Light sleep	* Onset of sleep * Becoming disengaged from surroundings * Breathing and heart rate are regular * Body temperature drops (so sleeping in a cool room is helpful)	* Deepest and most restorative sleep * Blood pressure drops * Breathing becomes slower * Muscles are relaxed * Blood supply to muscles increases * Tissue growth and repair occurs * Energy is restored * Hormones are released, such as: Growth hormone, essential for growth and development, including muscle development

Sleep cycles - REM

REM (25% of night) :

First occurs about 90 minutes after falling asleep and recurs about every 90 minutes, getting longer later in the night

- * Provides energy to brain and body
- * Supports daytime performance
- * Brain is active and dreams occur
- * Eyes dart back and forth
- Body becomes immobile and relaxed, as muscles are turned off (you are paralyzed!)

What are your dreams telling? Let's talk!



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How to get better sleep

1. Set up a sleep schedule like you would for a child
2. Practice a wind down ritual before bed (ie a warm bath, deep breathing, etc)
3. Turn off all electronics (don't disrupt your circadian rhythm!) and do not bring into the bed room or use 60 min before bed
4. Get black out curtains or a sleep mask for complete dark
5. Make your bedroom for sleep and sex only
6. Keep your bedroom cool (between 60 – 67 degrees)
7. Keep a bedtime journal! Do a thought dump before bed so you wont be stressed



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<http://sleepfoundation.org/sleep-tools-tips/healthy-sleep-tips>

Detoxification systems



THE LIVER DETOX PATHWAYS AND ESSENTIAL NUTRIENTS



What is a detox?

- A detox is a process of eliminating toxins, "detoxication" or "detoxification,"

How does the body detoxify?

Different tissues detoxify in varying ways.

- **Lungs** can detoxify by removing gases (gas [anesthetics](#) are removed from the body by the lungs).
- **Skin** can detoxify by reducing the penetration of toxic substances (toxins in water don't get in through the skin well; however, toxins in oils do penetrate easily).
- **Digestive System** can detoxify by eliminating toxic foods, by either vomiting or diarrhea.
- **Kidneys** detoxify by secreting toxins or filtering toxins out of the blood into urine.
- **Liver** detoxifies by changing the chemical nature of many toxins.

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Lungs can detoxify by removing gases (gas [anesthetics](#) are removed from the body by the lungs).

Skin can detoxify by reducing the penetration of toxic substances (toxins in water don't get in through the skin well; however, toxins in oils do penetrate easily).

Digestive System can detoxify by eliminating toxic foods, by either vomiting or diarrhea.

Kidneys detoxify by secreting toxins or filtering toxins out of the blood into urine.

Liver detoxifies by changing the chemical nature of many toxins.

Easy detox methods



1. Drinking lemon & warm water first thing in the morning to aid digestion
2. Drinking dandelion root tea, taking burdock or milk thistle to help promote liver cleansing
3. Taking vitamin c to support the adrenals glands and helps the body produce glutathione, a liver compound that drives away toxins.
4. Take saunas to promote sweating or hydrotherapy with showers (alternate between hot and cold showers)
5. Practice dry brushing 1 - 2 times per day

BENEFITS OF DRINKING LEMON WATER EACH DAY

- Helps shed toxins from the body
- Acts as a liver tonic
- Improves skin tone and quality
- Works as a natural diuretic
- Helps dissolve gallstones
- Breaks down phlegm
- Relieves nausea
- Relieves constipation
- Is a digestive aid
- Alkalizes the body
- Improves immunity



To help the body produce glutathione it is also recommended to consume sulfur-rich foods. The main ones in the diet are garlic, onions and the cruciferous vegetables (broccoli, kale, collards, cabbage, cauliflower, watercress, etc.).

Easy detox methods



1. Eat a diet high in fibre
(promotes your poops!)
2. Drink lots of water!
3. Use positive words and mantras
4. Exercise



Wellness Session 1 : Recap



WHAT IS WELLNESS?

The definition of wellness and current factors affecting our wellness

STRESS, HORMONES AND THE NERVOUS SYSTEM

Understand what stress is, how it affects our bodies and the role our hormones and nervous system play in this

HAPPY THOUGHTS AND OUR HEALTH

The difference between love and fear & how our thoughts change our health

THE IMPORTANCE OF SLEEP

What are the sleep cycles, how much sleep do we need and tips for better sleep

DETOXIFICATION SYSTEMS

What they are and easy at home detox methods



Any questions or inquiries, please email:

fne@fitchicks.ca



Want to watch this class again?

The link will be posted within 48 hours
for you to access.