

HOW FOOD AND GROOVE AFFECT YOUR MOOD

Know the links, and
how food & physical
activity can help!



CSEM Nutrition et services alimentaires
EMSB Nutrition and Food Services

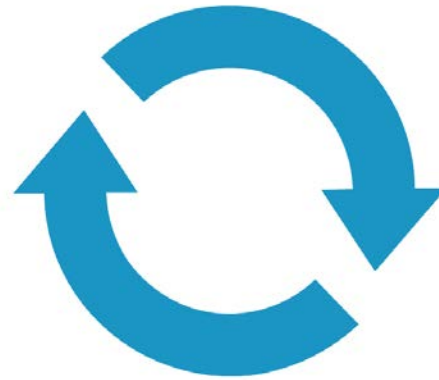
Presenters:

Katherine Baker, Physical Education and Health Consultant
Giuliana Di Quinzio, Dietitian

TODAY'S OBJECTIVES

FOOD AND MOOD:

What we eat can affect how we feel, and how we feel can affect what we eat!



Happy



OK



Sad



- The importance of a healthy gut
- The links between stress and your diet
- How different nutrients can impact the way you feel
- The Impact of Physical Activity on overall health

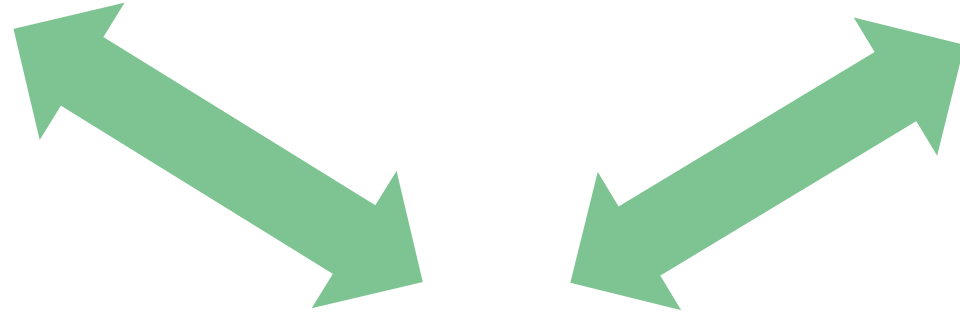




Food



Physical Activity



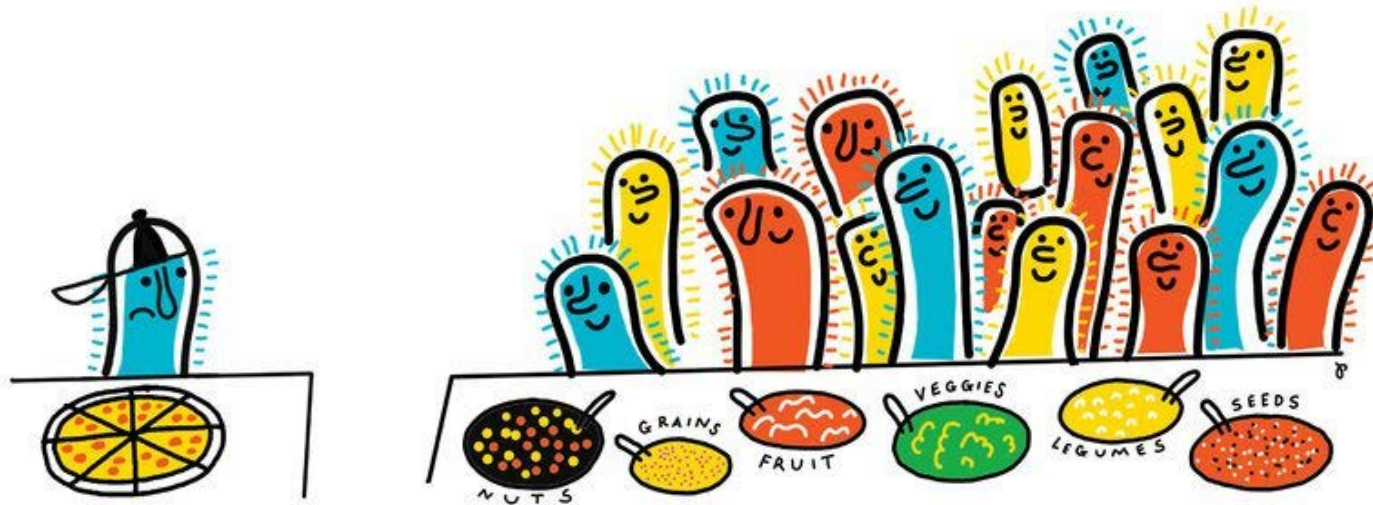
Mood



LISTEN TO YOUR GUT (MICROBIOME)!

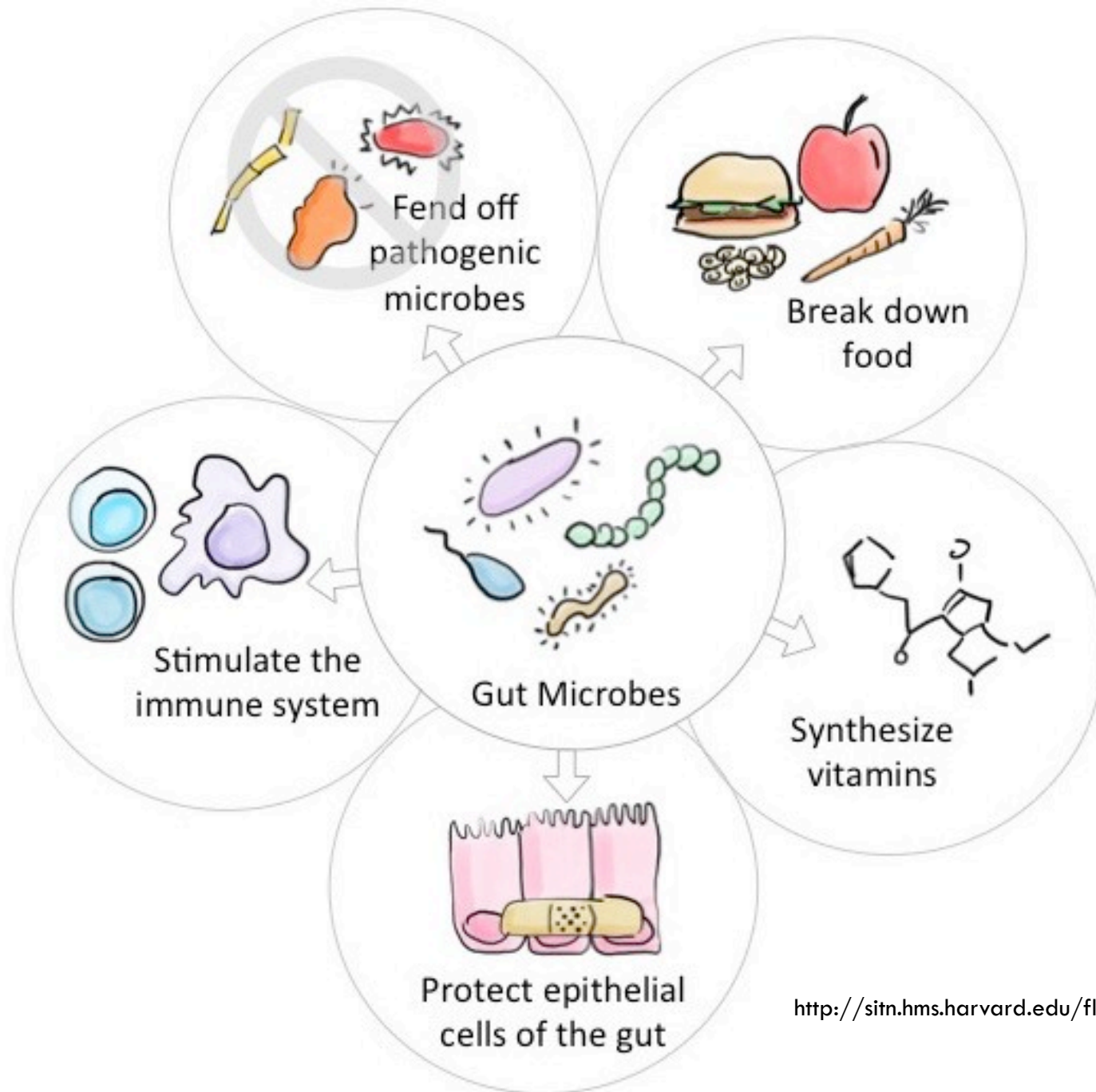
Having a “**healthy gut**” promotes good physical & mental health!

- ✓ **More “good” bacteria**, less “bad” bacteria
- ✓ A **variety** of different kinds of bacteria



There’s approximately the same number of bacteria in our gut as the number of cells in our body!

38 000 000 000 000 bacteria



Happy



OK



Sad



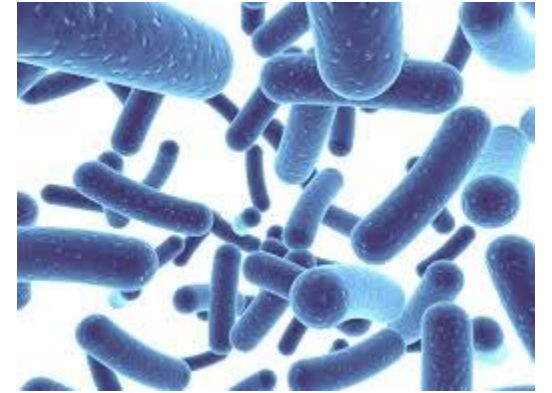
QUESTION #1

True or False: Probiotics are live bacteria that help promote a healthy digestive system

PROBIOTICS

What are they?

Live “good” bacteria



Yogurt



Sauerkraut



Pickles



Miso Soup



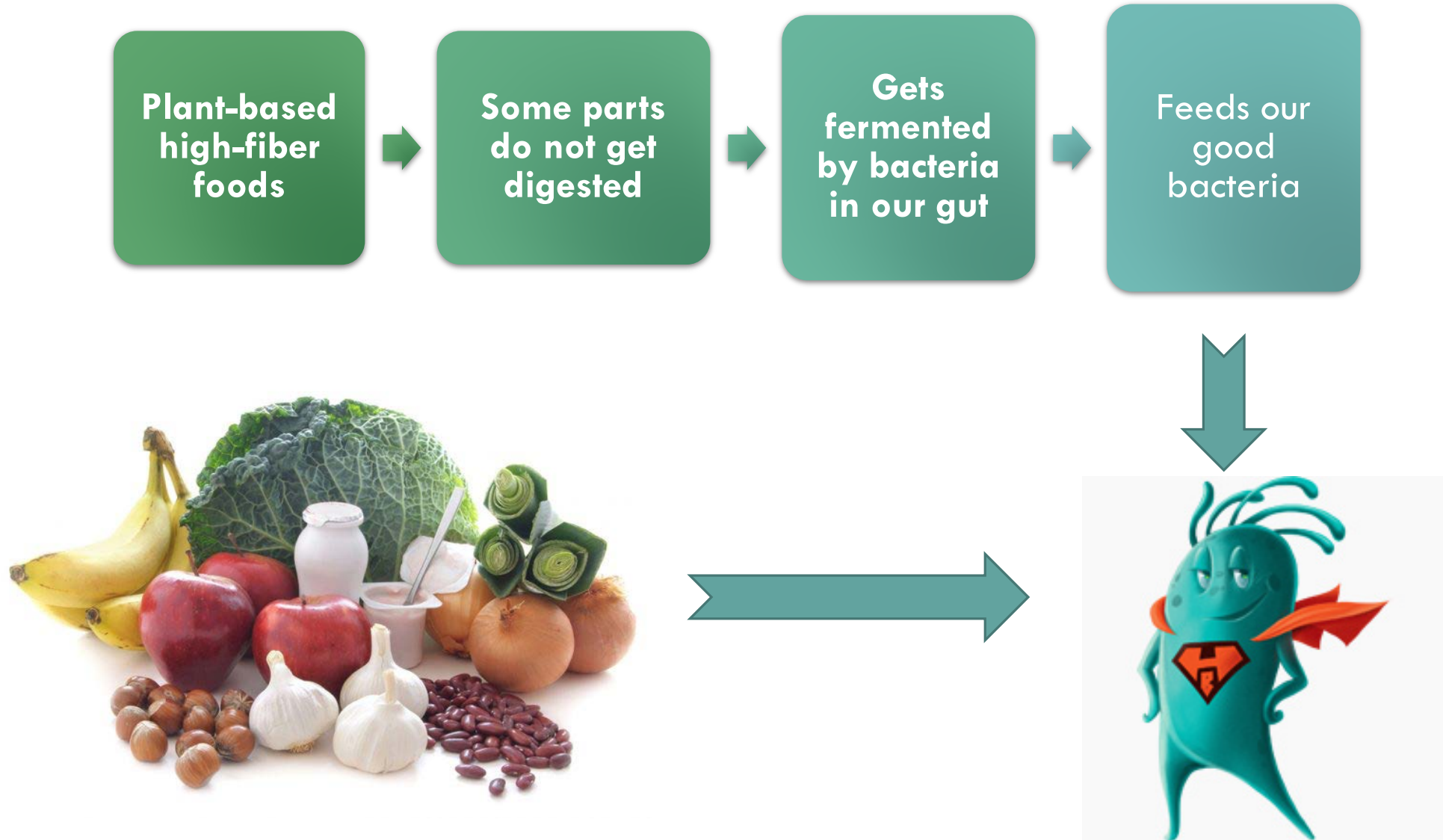
Kombucha



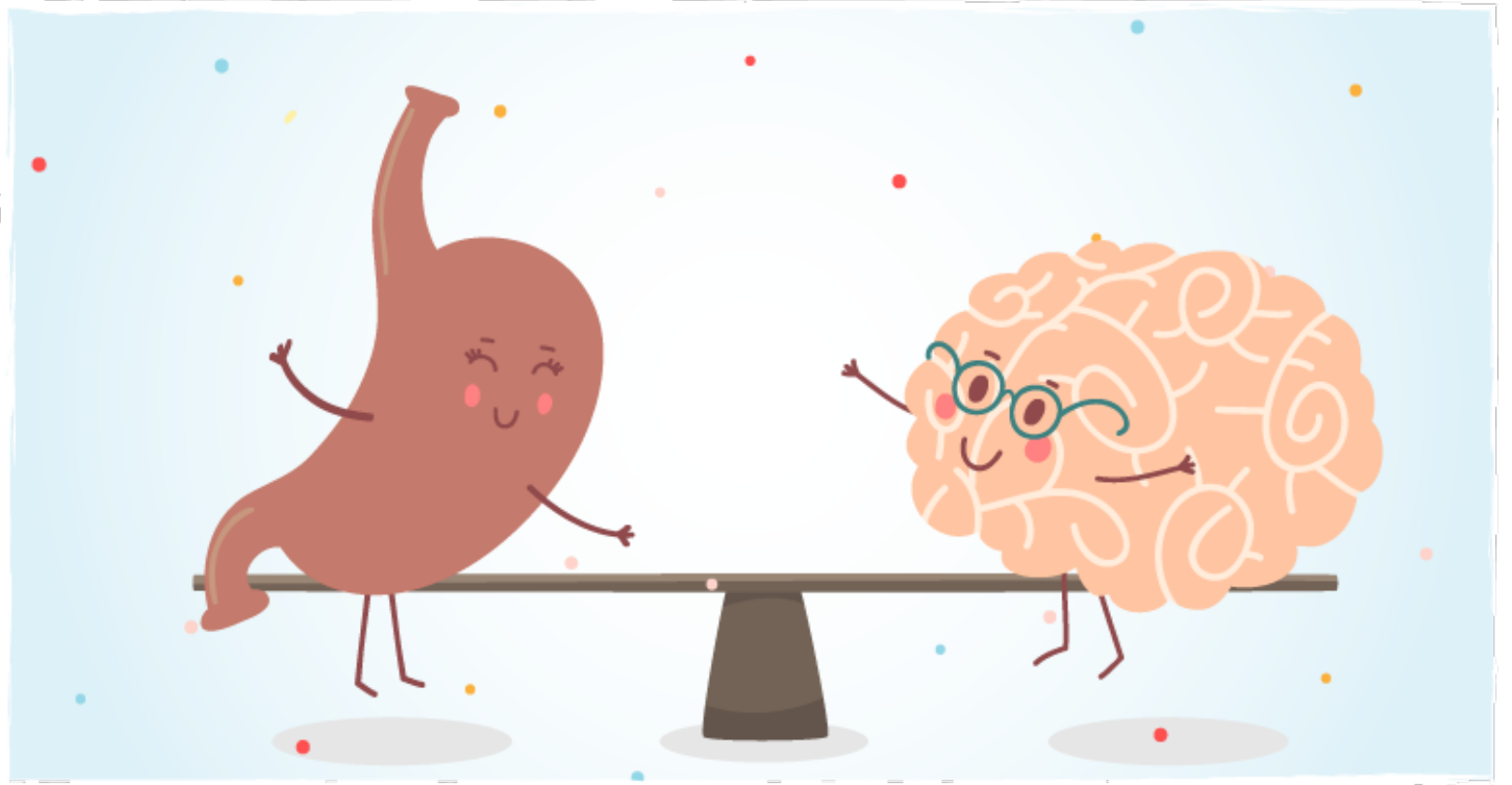
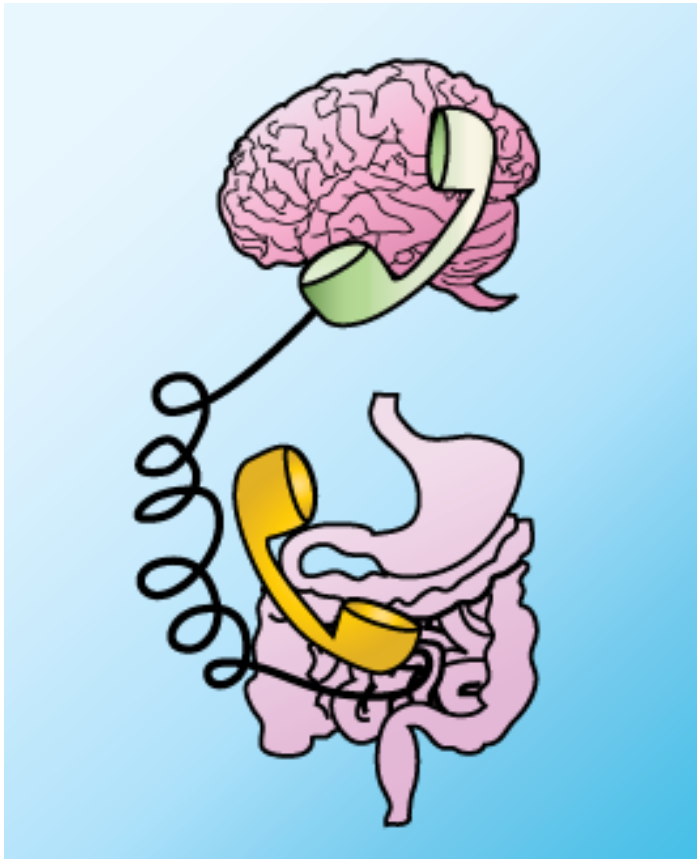
Kimchi

Probiotics are **live friendly microbes** (bacteria) , which can confer a health benefit; in helping digest food, maintain health and fight disease and impact our mood.

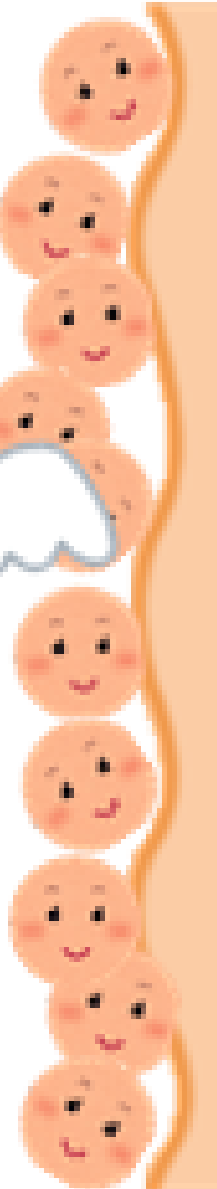
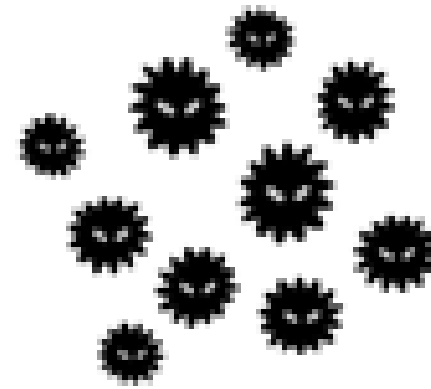
PREBIOTICS



HOW DO THE GUT & BRAIN COMMUNICATE?



Good bacteria physically colonize all the surface area of the intestinal wall, creating a barrier to harmful bacteria, and prevent toxin from seeping through the mucous membrane into the bloodstream.

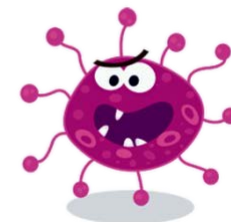


Tummy Buddy



Vs

Tummy Baddy



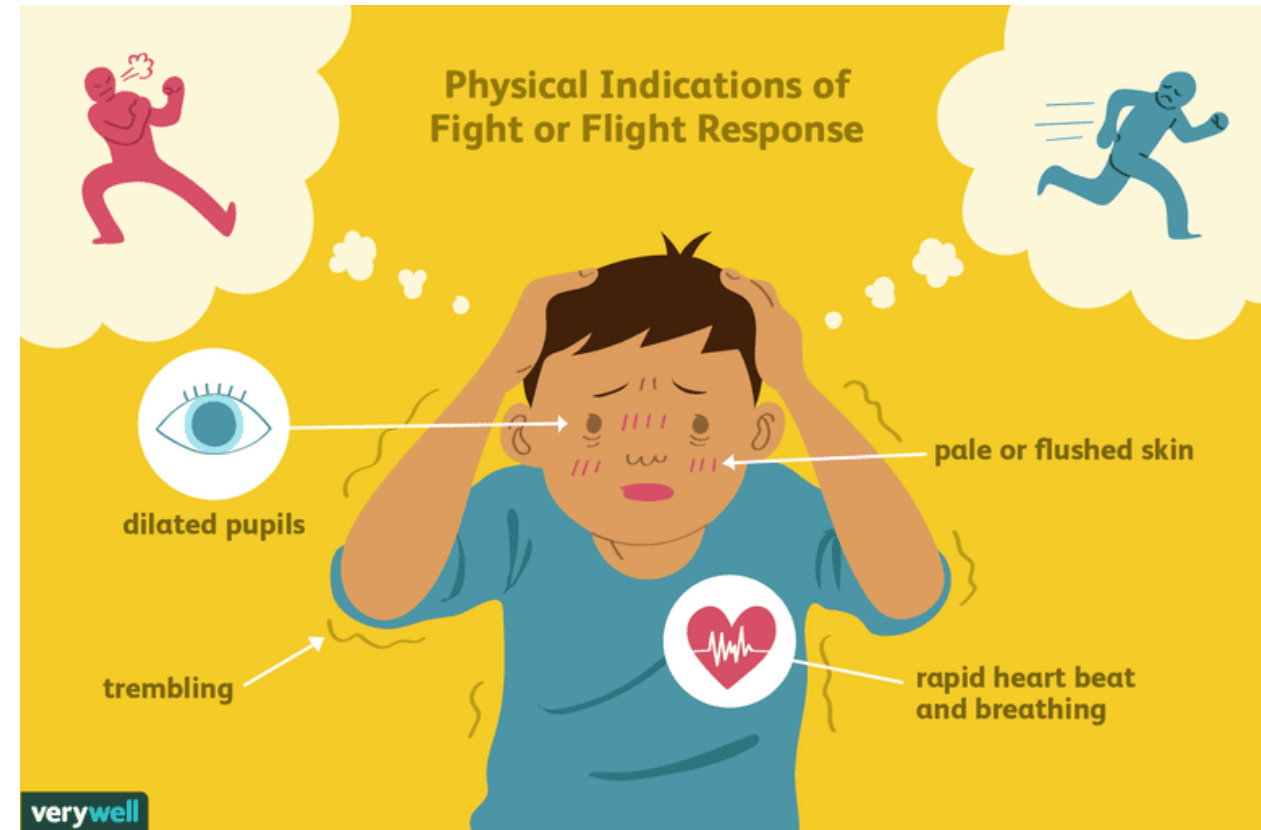
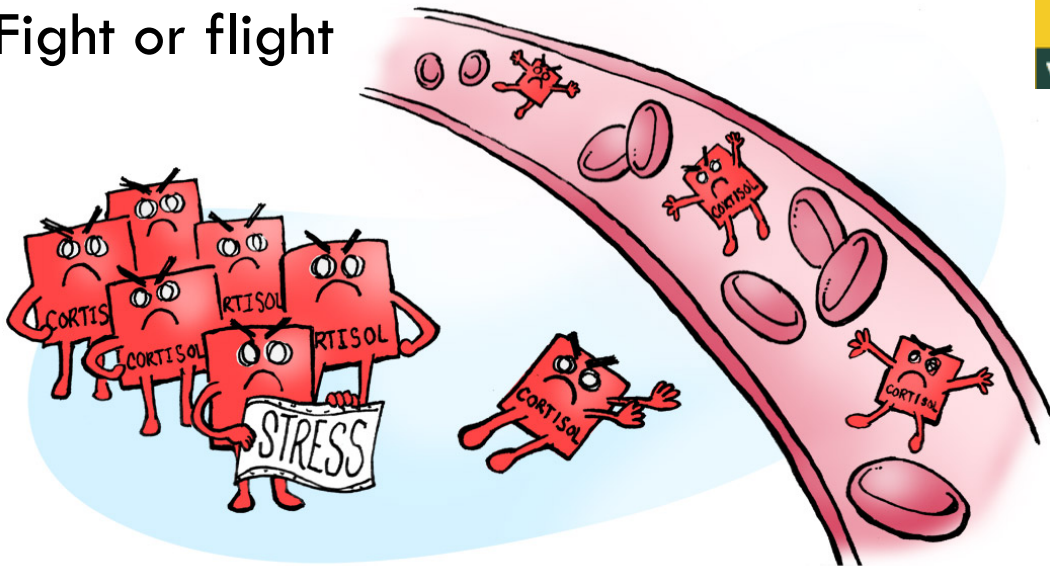
STRESS IS A STRATEGY TO SURVIVE A DANGEROUS SITUATION!



WHAT IS STRESS?

The stress response is an **adaptive** mechanism – meant to be useful in getting you through a threatening event

- "Stress hormones" – cortisol & adrenaline
- Fight or flight



When does stress become a **issue**? When it's **chronic** or **severe**!

QUESTION #2

Show of hands!

How many of you eat more when you are stressed? What type of food do you choose?

HOW DO WE DEAL WITH STRESS?

Chronic stress → harder to monitor our eating behaviour

People respond to stress differently... stress can **increase** or **decrease** your appetite!



Reach for **high fat/sugar comfort foods** → feel better temporarily → then feel guilty → then eat more...

Vicious cycle!



Eat less → feel **lethargic, low energy** → continue to eat less due to lack of energy...

Vicious cycle!



TRUE PHYSICAL HUNGER



Physical Hunger

- Gradual
- Can wait
- Satisfied with a variety of foods
- Stops when full
- No guilt

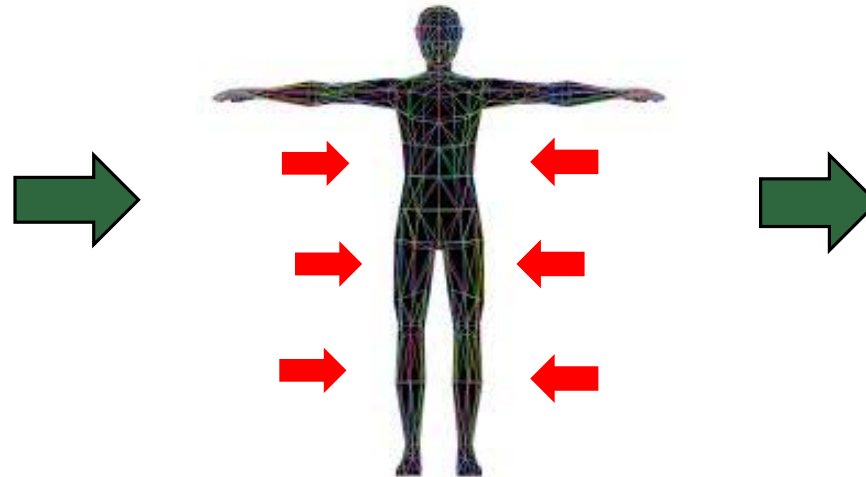


STRESS AND YOUR DIET

Stress



Body uses up vitamins & minerals that protect cells from damage



Need MORE!
ex: B vitamins, vitamin C, magnesium, selenium



However, when people are stressed they often eat foods lacking in these nutrients...

A **nutrient-rich diet** may help you be better able to **COPE with stress!**



ROMAINE



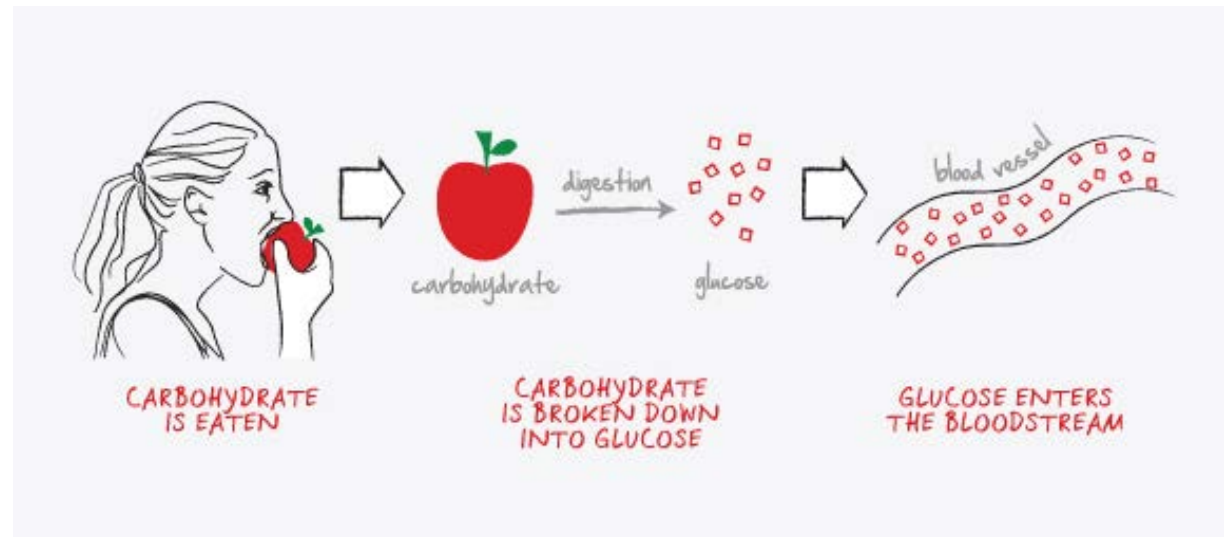
CALM!

A look into
different nutrients
that can affect
our mood!

EFFECTS OF CARBOHYDRATES



Glucose = the preferred fuel source for the brain! The brain uses 20% of all energy needed by the body



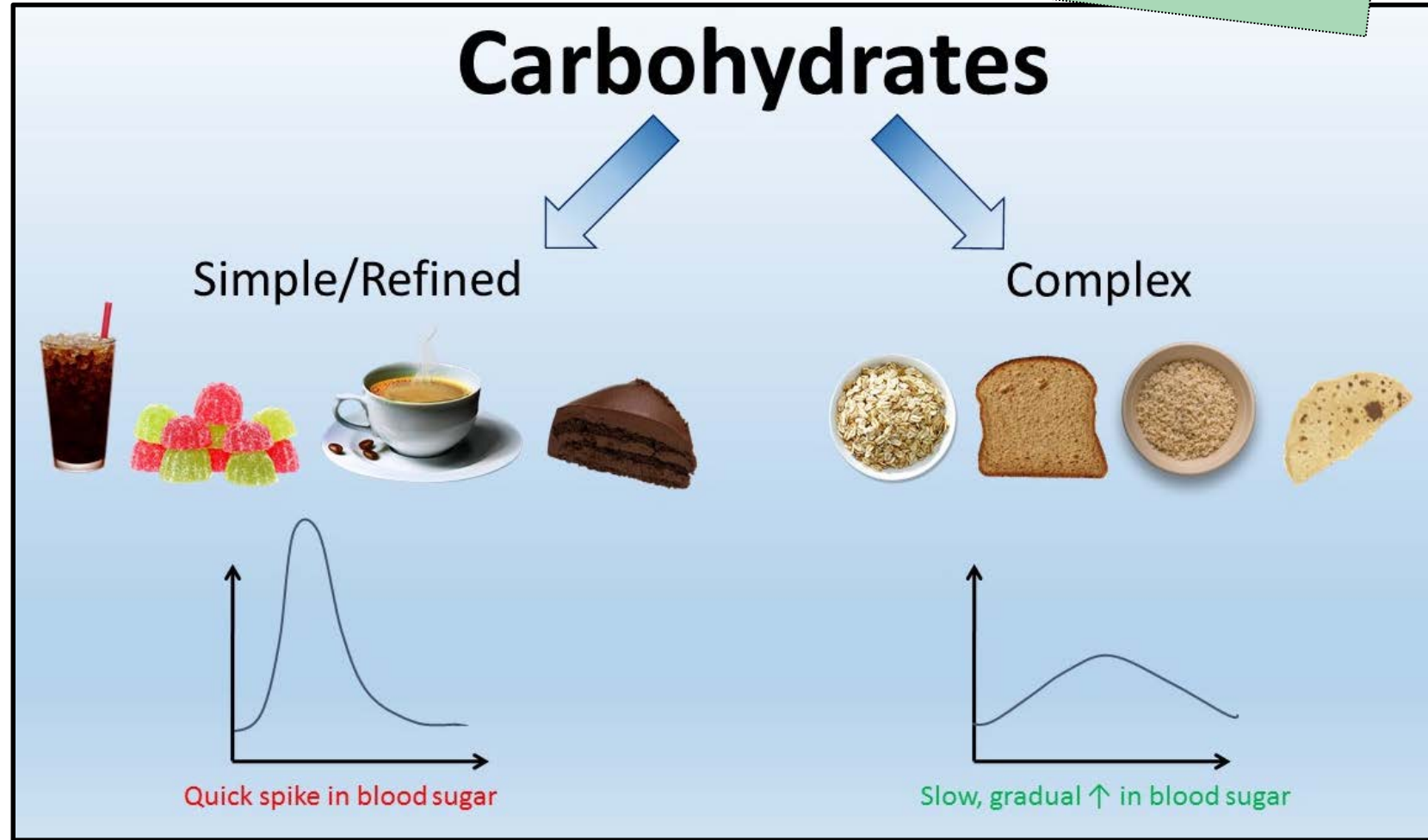
What happens if you don't eat enough carbohydrates?
May feel **weak, tired**, and have **difficulty focusing/concentrating**

EFFECTS OF CARBOHYDRATES

Diets high in **refined sugars** → linked with impaired brain function and possibly lower moods

Stable blood sugar = stable mood!

1. Choose **complex carbohydrates** → whole grain bread & pasta, brown rice, oats, lentils
2. Limit foods high in simple sugars
3. Avoid meal skipping



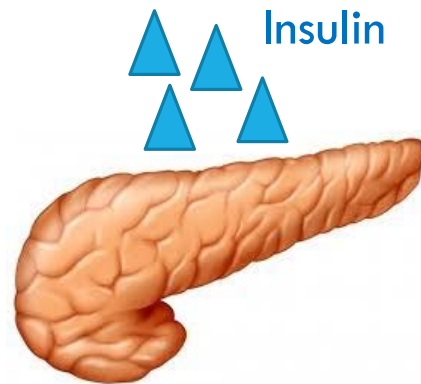
EFFECTS OF CARBOHYDRATES

Did you know? About 90% of our serotonin is produced in our gut!

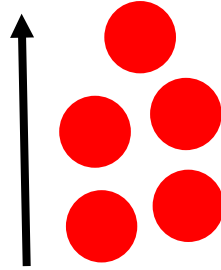
Do you feel better after eating carbs?

That's because carbs can increase **serotonin**!

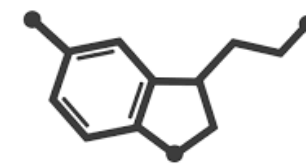
Serotonin = a “feel good” chemical messenger (neurotransmitter) that regulates our mood



Tryptophan



SEROTONIN



QUESTION #3

Which of the following foods contain simple/refined sugars?

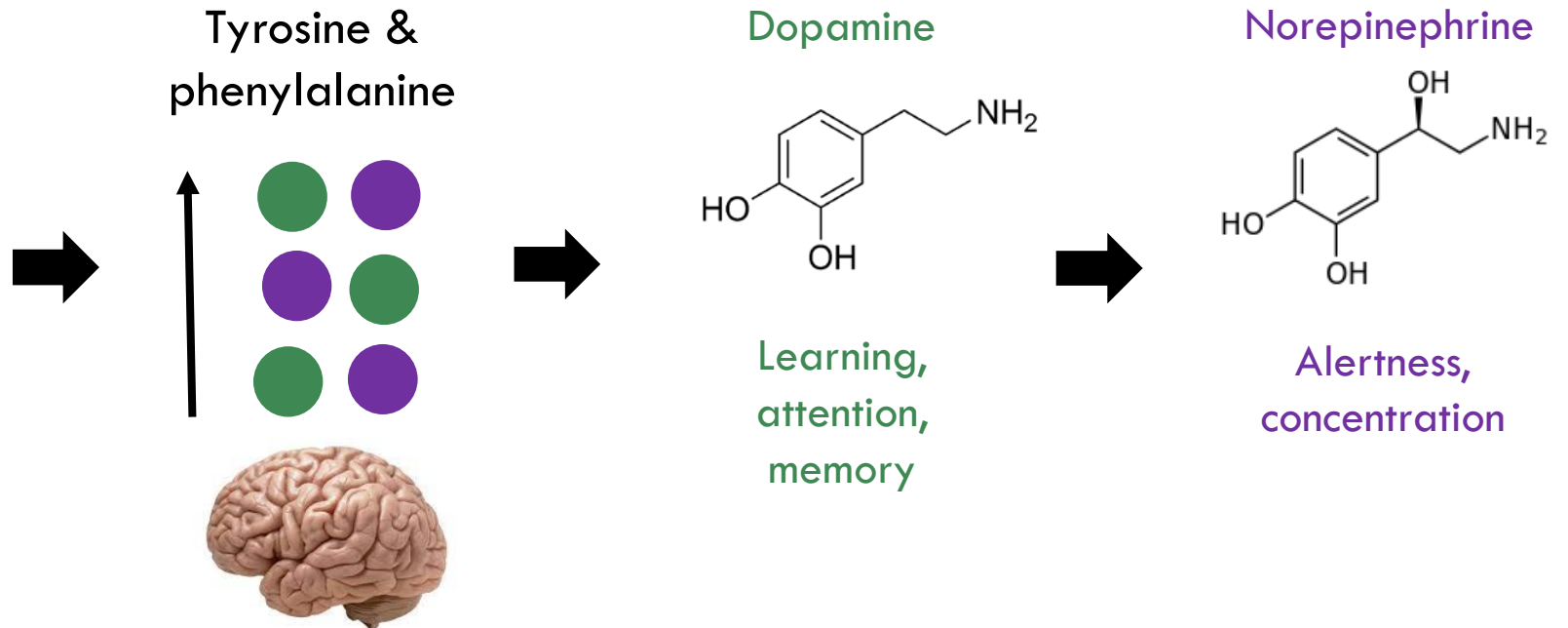
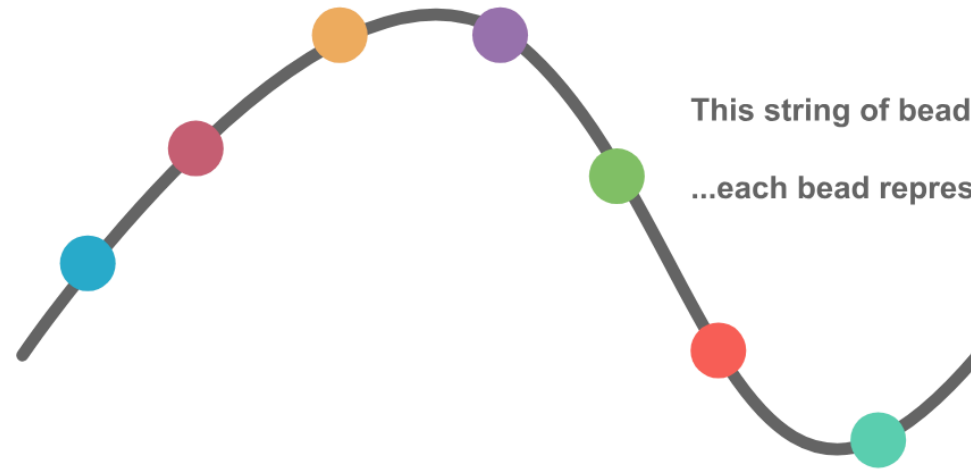
A) candy, soda, chocolate, sweetened cereals

B) whole grain pastas and breads

C) maple syrup, honey

D) A and C

EFFECTS OF PROTEIN



EFFECTS OF FATS

Fat = the major **storage** form of **energy** in our body; **concentrated source** of energy

Foods high in “bad” (**saturated**) fats:

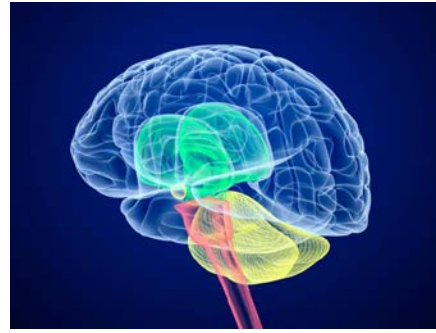
- Short-term effects → long time to digest, feel **sluggish**
- Long-term effects → some evidence of **impaired cognitive functioning** (learning & memory), increased **sensitivity to stress**



QUESTION #4

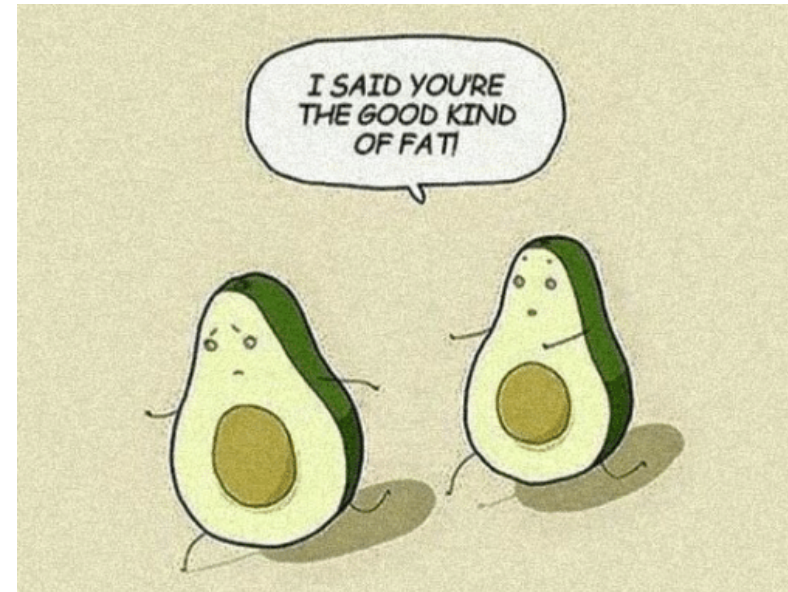
True or False: Omega 3 fats are needed for proper brain health and can positively impact your mood.

EFFECTS OF FATS



About 35% of the brain/nervous system tissue is made of **polyunsaturated fatty acids!**

Omega 3 fatty acids (EPA & DHA) → needed for **proper brain health**; reduces inflammation; possible positive impact on mood



WHAT ABOUT MICRONUTRIENTS?



Nutrients you need
in small amounts!

Get your vitamins & minerals from eating a **healthy, balanced diet**
with lots of **fruits & vegetables**.

Lack of certain micronutrients can **affect how you feel!**

Iron → weak, tired, lethargic



B vitamins → tired, feeling depressed, irritable



Selenium → can increase chance of negative moods



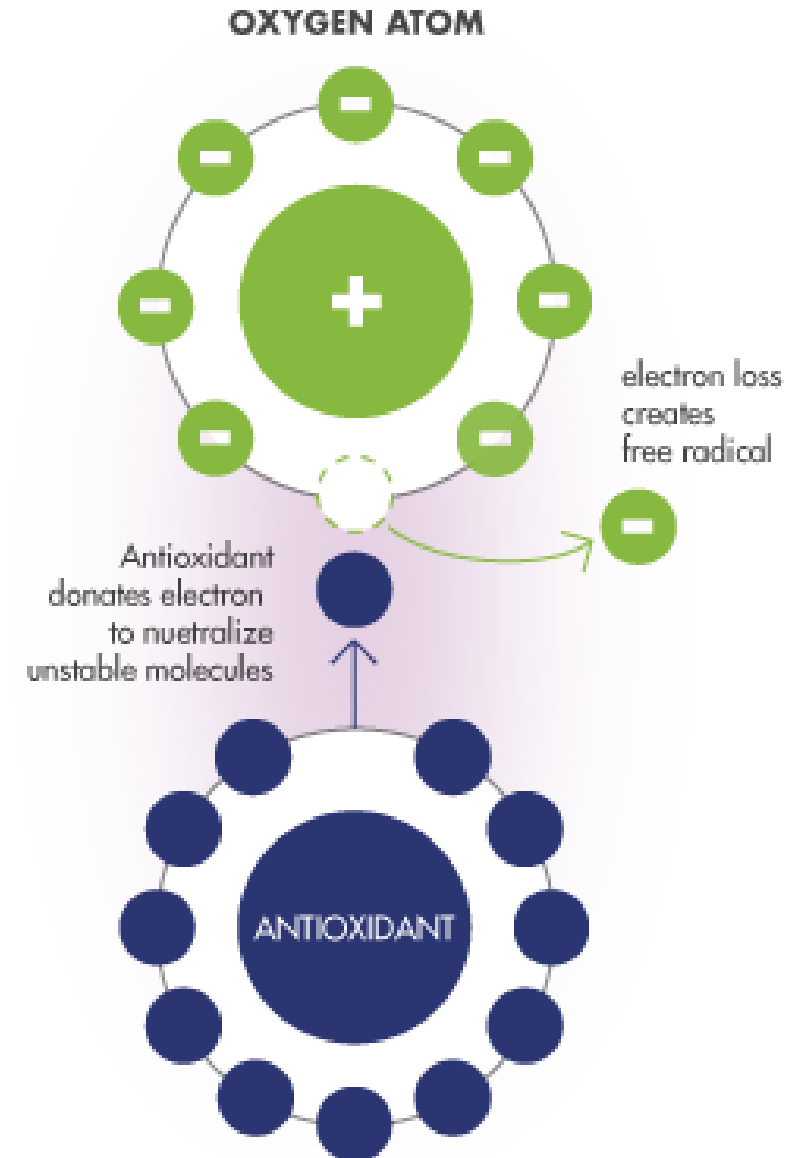
Sources
of all 3:



ANTIOXIDANTS

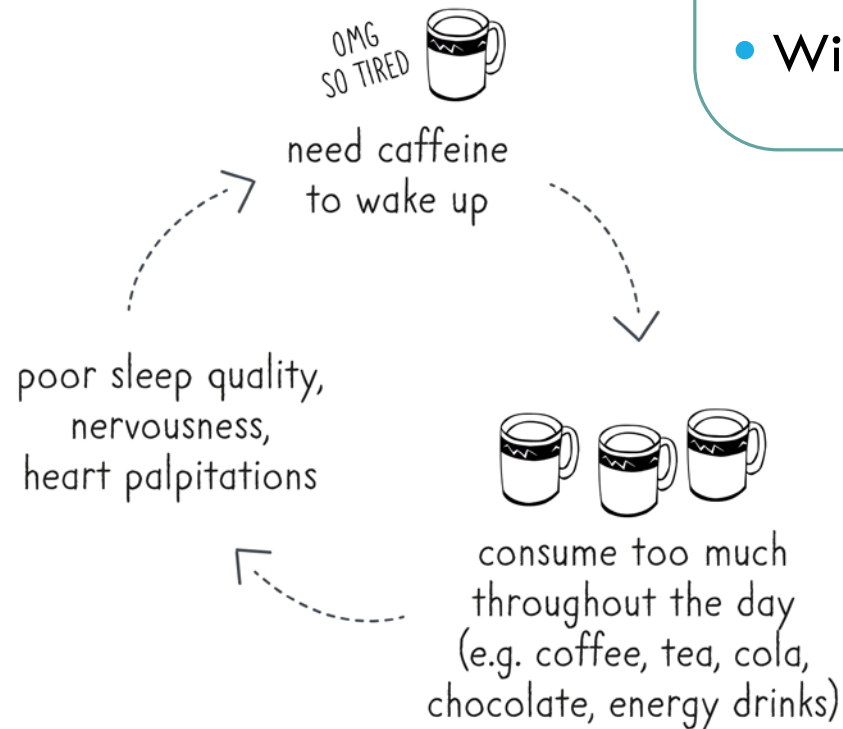


- **Stress** → molecules that can damage brain tissue
- Certain **vitamins & minerals** contain antioxidants which **neutralize** these molecules and **protect** our cells from damage
- Vitamins A, C, & E; selenium; plant chemicals (ex: flavanoids)
- Improves your body's **ability to cope** with stress



CAFFEINE

the vicious cycle of caffeine overuse



- Caffeine = a stimulant!
- Too much → anxiety, irritability, nervousness, difficulty sleeping
- Withdrawal symptoms



Daily limit for adults is **400 mg**

What's in your cup?



Starbucks
grande (16 oz)
310 mg



Tim Horton's
medium (14 oz)
205 mg



McDonald's
medium (16 oz)
145 mg

QUESTION #5

Symptoms of dehydration include:

- Difficulty concentrating & thinking clearly
- Fatigue
- Impaired memory
- All of the above

HYDRATION



Impaired
memory

Difficulty
concentrating

Fatigue

Dehydration

Possibly
lower mood

Unable to
think clearly

Aim for:

Women – 9 cups (2.2 L)

Men – 12 cups (3 L)

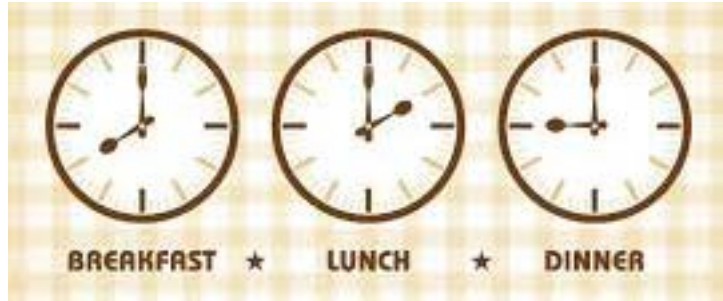
Fluids include water, milk, juice, coffee, tea, soups, and fluids from fruits & vegetables



1		Good
2		Good
3		Fair
4		Dehydrated
5		Dehydrated
6		Very dehydrated
7		Severe dehydration



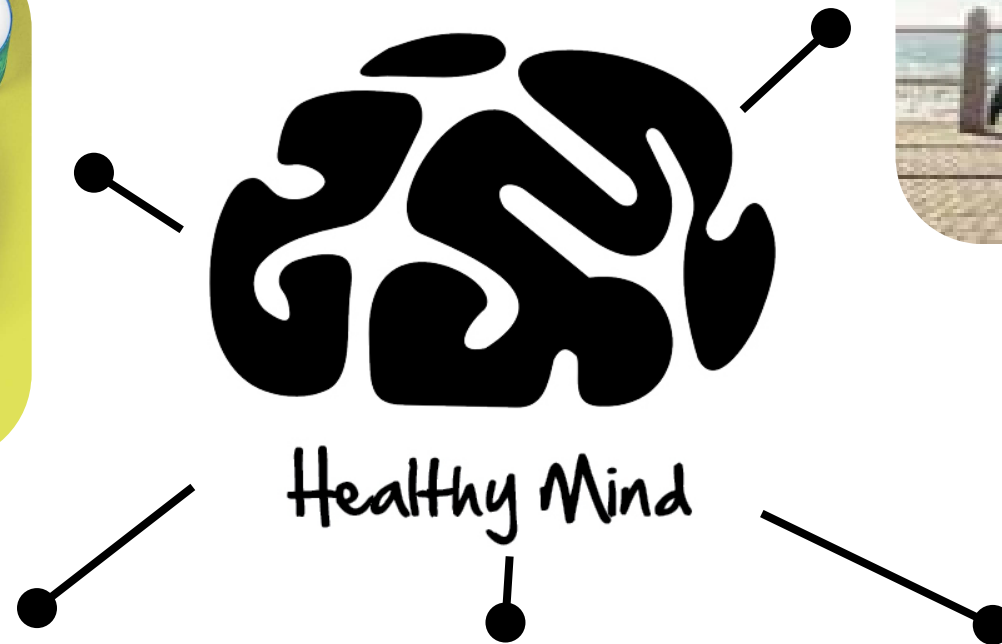
MEAL TIMING & SPACING



Food is fuel!

- **Poor timing/spacing** – fatigue, poor focus and concentration, agitation, irritability
- **Skipping meals** → blood sugar drops → tired, irritable
- Eating regularly **fuels your body & brain**, and may help keep your mood stable
- Not eating enough calories throughout the day → feel foggy, tired, low energy

A HEALTHY LIFESTYLE!



Physical Activity

Everything gets better when you get active.

Most of us know we should be more physically active. Unfortunately, when the majority of us think about physical activity, weight loss is usually the only benefit that comes to mind. But staying active isn't just about looking better. It's about living better. That's why we're starting a movement for movement. Because an active life is a better life.





A Common Vision for Increasing Physical Activity and Reducing Sedentary Living in Canada

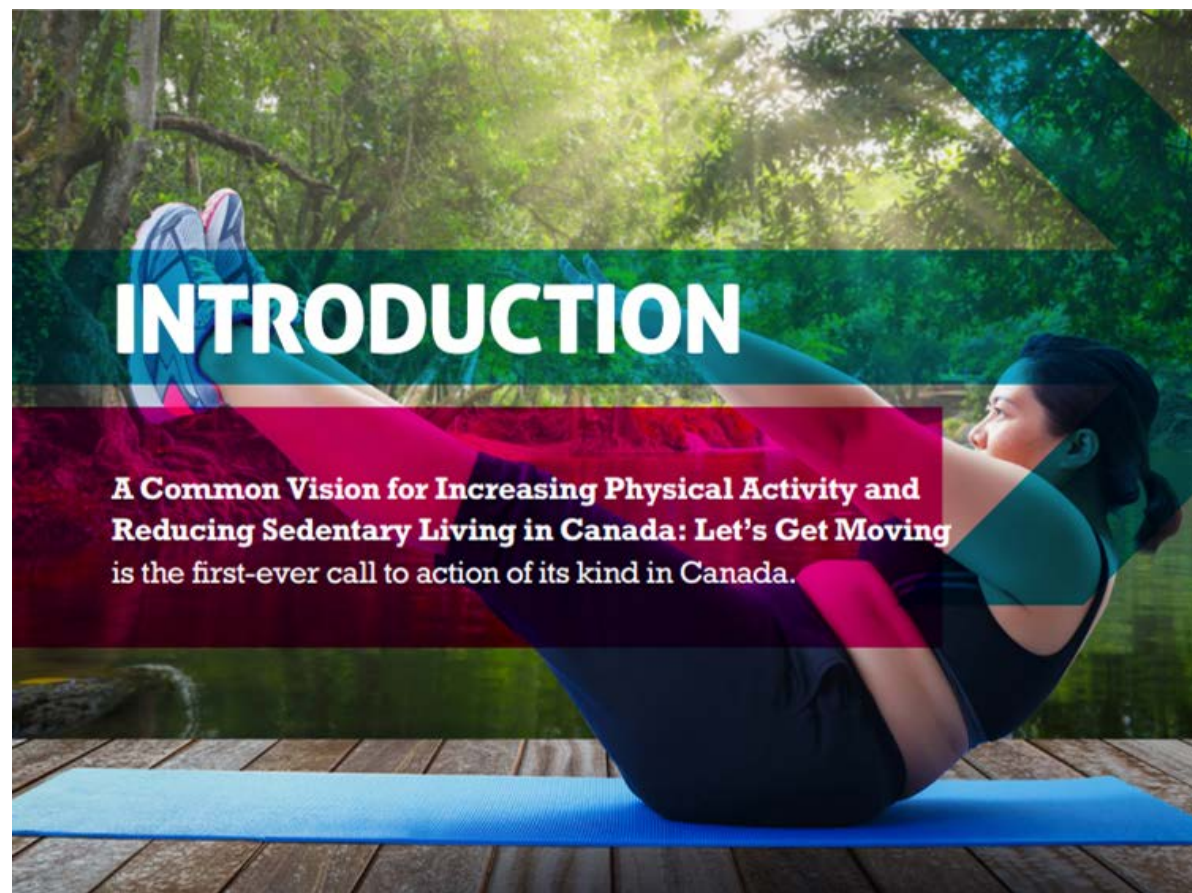


LET'S

GET

MOVING

The Common Vision: A Canada where all Canadians move more and sit less, more often.



INTRODUCTION

A Common Vision for Increasing Physical Activity and Reducing Sedentary Living in Canada: Let's Get Moving is the first-ever call to action of its kind in Canada.

Physical activity is one of the most basic human functions.

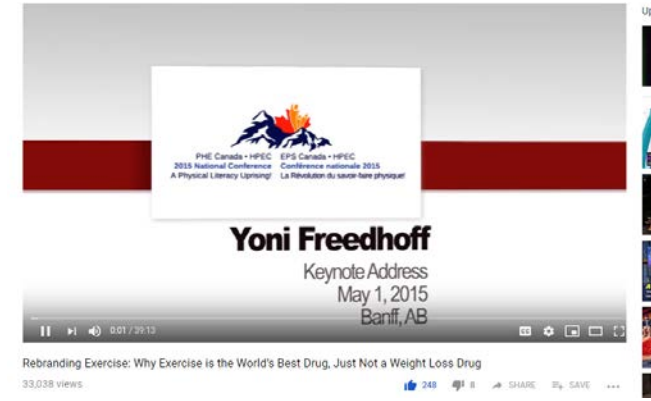
- It can happen at home, at school, at work, during leisure time and while getting from place to place.
- Historically, physical activity was incorporated into people's daily lives through physically demanding work, less reliance on automation and less dependency on automobiles.
- It was easier to be active because work, chores and daily living in general were more physically demanding.
- Furthermore, here in Canada, the lives of many Indigenous Peoples historically were based on holistic relationships to the land, where physical activities were part of everyday living and cultural orientation. This relationship was impacted by the historical effects stemming from government policies, such as those leading to displacement from their traditional territories, settlement on reserves, and residential schooling.

Today, physical activity has largely been designed out of our lives. What's more, many people think they have to go out of their way to be physically active – that it's something done only during leisure time, at a gym or on a sports field. It's important to acknowledge that the societal shift away from physical activity has taken decades; it will take time to reverse this trend and return to a more active society.

Exercise is the
world's best drug,
but it's not a weight
loss drug

PRINT ARTICLE 

Dr. Yoni Freedhoff



All the Betters



**Love
Better**



Selected as the #1 **book**
in diet/exercise for
2015 by USA Best **Book**
Awards

"When it comes to exercise, most of us have gotten the message but still lack the motivation.
That's why we need this remarkable book."
— Daniel H. Pink, author of *Drive: The Surprising Truth About What Motivates Us*

MICHELLE SEGAR, Ph.D.

**How the Simple Science of Motivation
Can Bring You a Lifetime of Fitness**

NO SWEAT



QUEBECERS ON THE MOVE!

ENSEMBLE  
on fait avancer le Québec

Québec 

**New Policy unveiled
April 3rd, 2017**



POLICY VISION:

“IN 2027, QUEBECERS OF ALL AGES WILL BE ACTIVE THROUGH THE REGULAR AND SAFE PRACTICE OF PHYSICAL, SPORT AND RECREATIONAL ACTIVITIES AS A VALUED PART OF THEIR DAILY LIVES. THEY WILL HAVE FUN, RELAX, EXPERIENCE A SENSE OF SATISFACTION AND ACCOMPLISHMENT, AND FEEL THE MANY BENEFITS OF REGULAR ACTIVITY, SUCH AS PHYSICAL AND PSYCHOLOGICAL WELL-BEING, A BETTER QUALITY OF LIFE AND, SOMETIMES, A CLOSER CONNECTION WITH NATURE”.



PHYSICAL

LITERACY

|

Physical literacy

is the...



...to be

active for life



If you can't



Catch
Jump
Run
Swim
Throw

You won't
take part in



Soccer
Basketball
Volleyball
Track and Field
Squash
Badminton
Rugby
Tennis



If you can't



Catch
Jump
Throw
Swim
Run

You won't
take part in



Baseball
Softball
Bowling
Soccer
Goalball
Football
Rugby



If you can't



Throw
Jump
Swim
Catch
Run

You won't
take part in



Swimming
Diving
Water Polo
Scuba
Kayaking
Sailing
Surfing

Physical literacy is a journey upon which children and youth, and everyone, develop the knowledge, skills, and attitudes they need to enable them to participate in a wide variety of activities.

Physical Literacy is the motivation, confidence, physical competence, knowledge and understanding to value and take responsibility for engagement in physical activities (Whitehead, 2016).





LIFESTYLE | TIPS

How to dress your baby for spending time outdoors in the winter

How to dress your baby for spending time outdoors in the winter

New documentary shows creativity is the key to greatness

5 tips to make your family winter hikes memorable

Get monthly tips and activities

Your name

Your email address

- Yes, please also send me the biannual AfL Pro Newsletter for educators, coaches and rec leaders

SUBSCRIBE NOW

Newsletter archive



What is physical literacy?

Learn why it's so important.

The Science Is In

KIDS + STEPS + SWEAT = HEALTHIER BRAINS

Kids need to drop the phones, turn away from the screens, get off the couch and break a sweat. It's time for them to get moving more - for the sake of their brains.

For decades we've known that physical activity improves heart health, helps maintain healthy body weights and builds strong bones and muscles in kids across a range of skills and abilities.^{1,2,3,4,5,6,7,8,9,10,11,12,13,}

^{14,15,16,17,18,19,20,21,22,23,24,25} **Now we are taking a closer look at what physical**

Why does this matter? It's all about **the brain + body equation.**

There are important connections between the health of the body and of the brain, connections that must be fostered in order for kids to reach their mental, emotional and intellectual potential. Kids' bodies have to move to get the wheels in their brains turning. They need to be active. Their brain health depends on it. A growing body of evidence indicates



Canadian kids
need to move
more to boost
their brain health

2018

The ParticipACTION Report Card on
Physical Activity for Children and Youth

Ad closed by Google

Fitness: The more kids exercise, the better they learn

Schools can safely put to rest the idea that more time in the classroom and less time in the gym leads to smarter students.

JILL BARKER, SPECIAL TO MONTREAL GAZETTE Updated: March 18, 2018



Fitness: Teaching the ABCs of physical literacy

Educators and parents need to be reminded that phys-ed isn't just an opportunity to chase a ball or learn how to play sports.

JILL BARKER, SPECIAL TO MONTREAL GAZETTE Updated: September 9, 2018



PE vs. PA

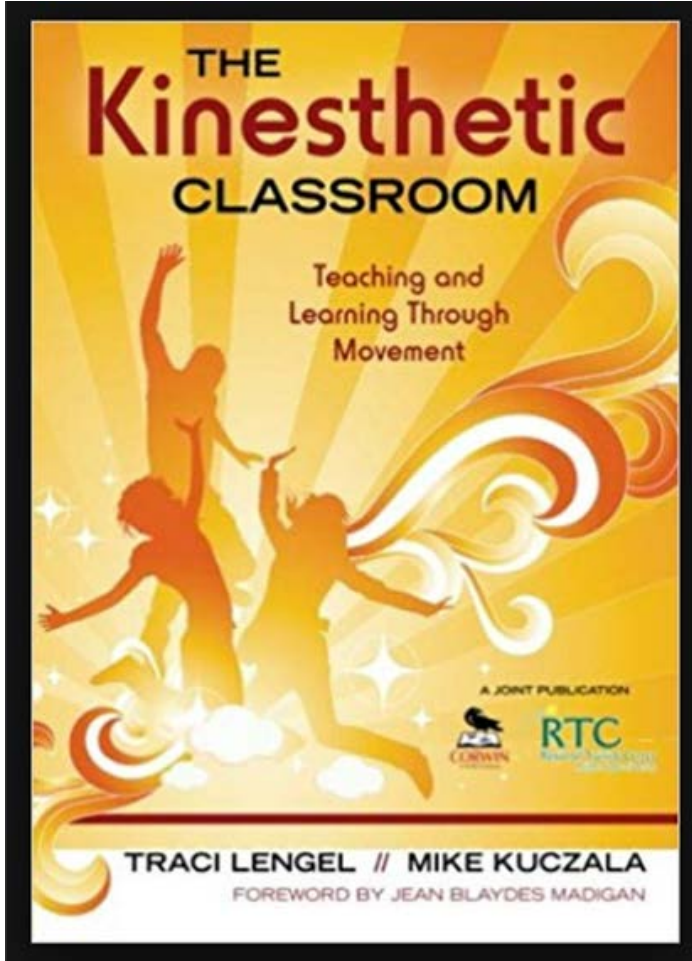
Physical Education - the instructional program designed to teach national and state standards and to develop physically educated individuals who have the knowledge, skills, and confidence to enjoy a lifetime of physical activity

Physical Activity - bodily movement that substantially increases energy expenditure



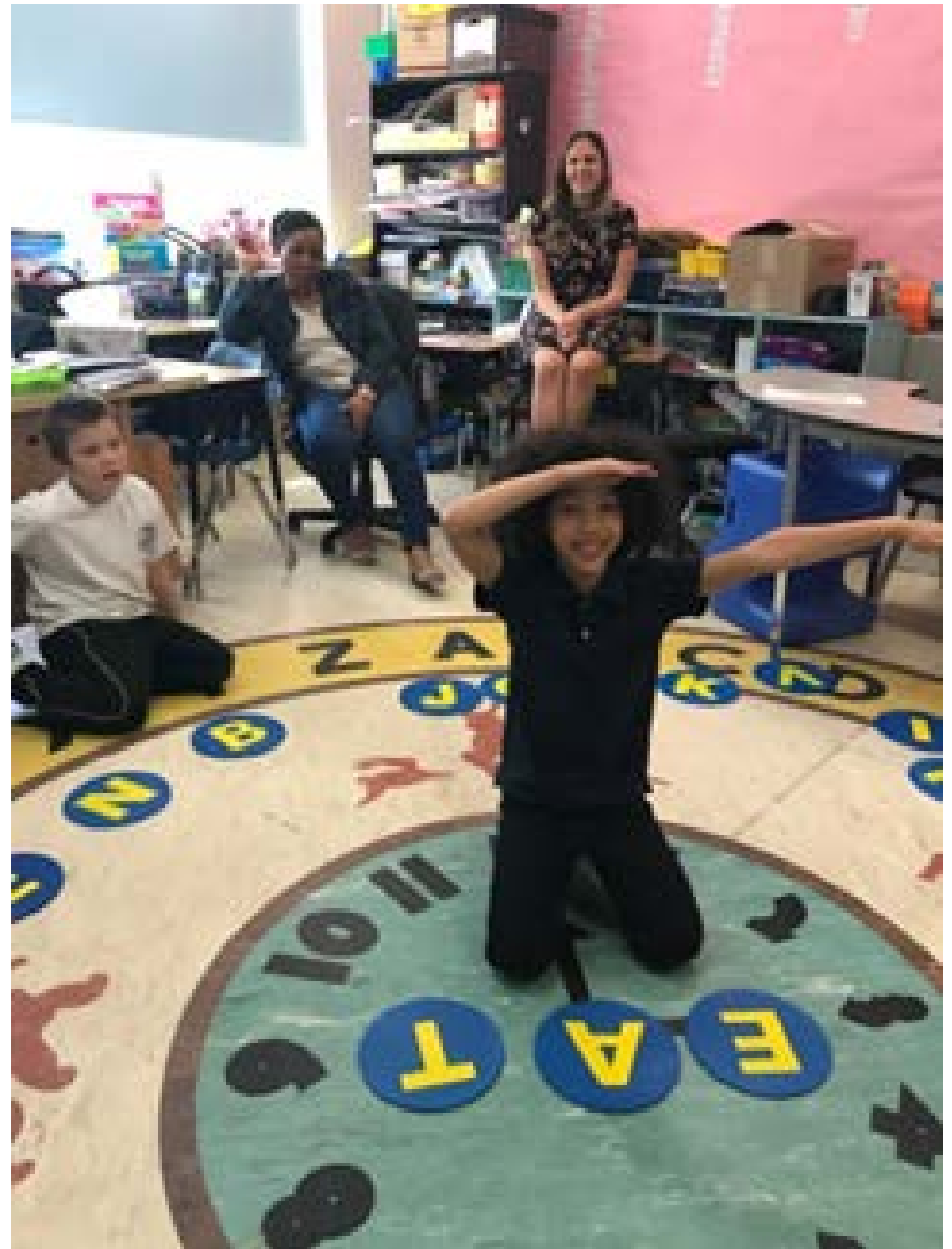


Mike is a bestselling speaker and innovator in both education and business.





Active Language Arts at St.
Raphael



Quality Physical Education Programs- a reason to celebrate* in our province!

- Physical Education and Health a course requirement from Gr.1 - CEGEP
- Taught by specialists!

*with the exception of subject-time allocation in high school







Building competence and confidence!

Active Transport: Trottibus + Learn to Bike



  [TROTIBUS AT A GLANCE](#) [SETTING UP A TROTIBUS](#) [PARTICIPATING SCHOOLS](#) [PARTICIPATE](#)

Find your child's school

REGION*
Montréal

SCHOOL BOARD
Commission scolaire English-Montréal

SCHOOL*
Choisir une école

[There's no Trottibus at your child's school? Find out how to get one started >](#)

[NEXT STEP >](#)



Taking students into the community.



Family Physical Activity Night at Royal Vale





Extra Initiatives
beyond Physical
Education and
Health Classes.

Marymount Academy Bike Club





Elementary school teaching rock climbing in the secondary school ...the rock climbing wall replaced old squash courts



THANK YOU! ANY QUESTIONS?



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VIDEO: HOW THE FOOD YOU EAT AFFECTS YOUR BRAIN

<https://www.youtube.com/watch?v=xyQY8a-ng6g>

