Lifestyle Medicine to Support Mood and Attention

Dr. Kellie Moore, ND of Ripple Wellness
for Camas School District
March 6th, 2024

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Before We Get Started

- This intention of this webinar is to educate, inspire, and empower - not to blame or shame

- This information is for educational purposes only and should not be considered medical advice

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Dr. Kellie Moore, ND

- Naturopathic physician at Ripple Wellness in Washougal

- Focus on preventing and treating chronic disease using lifestyle medicine

- Mother of four teenagers

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About Ripple

Multi-disciplinary clinic in Washougal
- Naturopathic medicine
- Acupuncture
- Massage
- Nutrition
- Mental health counselling
- Yoga Sessions
- Breathwork Sessions

Regular community classes – put your e-mail in the chat to stay in the loop!

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Outline

I. Introduction
II. Nutrition
III. Sleep
IV. Stress
V. Physical Activity
VI. Connection

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I. Introduction

The Scope of the Problem

- anxiety, depression and ADHD are the most commonly diagnosed mental disorders in children

- Among children ages 3-17, between 2016 - 2019:

  - ADHD 9.8% (approximately 6.0 million)

  - Depression 4.4% (approximately 2.7 million)

  - Anxiety 9.4% (approximately 5.8 million)

https://www.cdc.gov/childrensmentalhealth/data.html

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The Scope of the Problem

- these conditions often occur together and increase the risk of substance abuse and suicide

- Among children ages 12-17, between 2018 - 2019:
  - 18.8% seriously considered attempting suicide
  - 15.7% made a suicide plan
  - 8.9% attempted suicide
  - 2.5% made a suicide attempt requiring medical treatment

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The Scope of the Problem

- prevalence is increasing over time
  - "Ever having been diagnosed with either anxiety or depression" among children aged 6–17 years increased from:
    - 5.4% in 2003
   - 8% in 2007
    - 8.4% in 2011–2012

https://www.cdc.gov/childrensmentalhealth/data.html

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The Scope of the Problem

- the COVID-19 pandemic exacerbated those trends

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'It's Life or Death': The Mental Health Crisis Among U.S. Teens

Depression, self-harm and suicide are rising among American adolescents. For one 13-year-old, the despair was almost too much to take.

🎁 Share full article   ↗   🔖

Worried Sick: A Journey Into the Anxious Teenage Mind

▶ 14:46
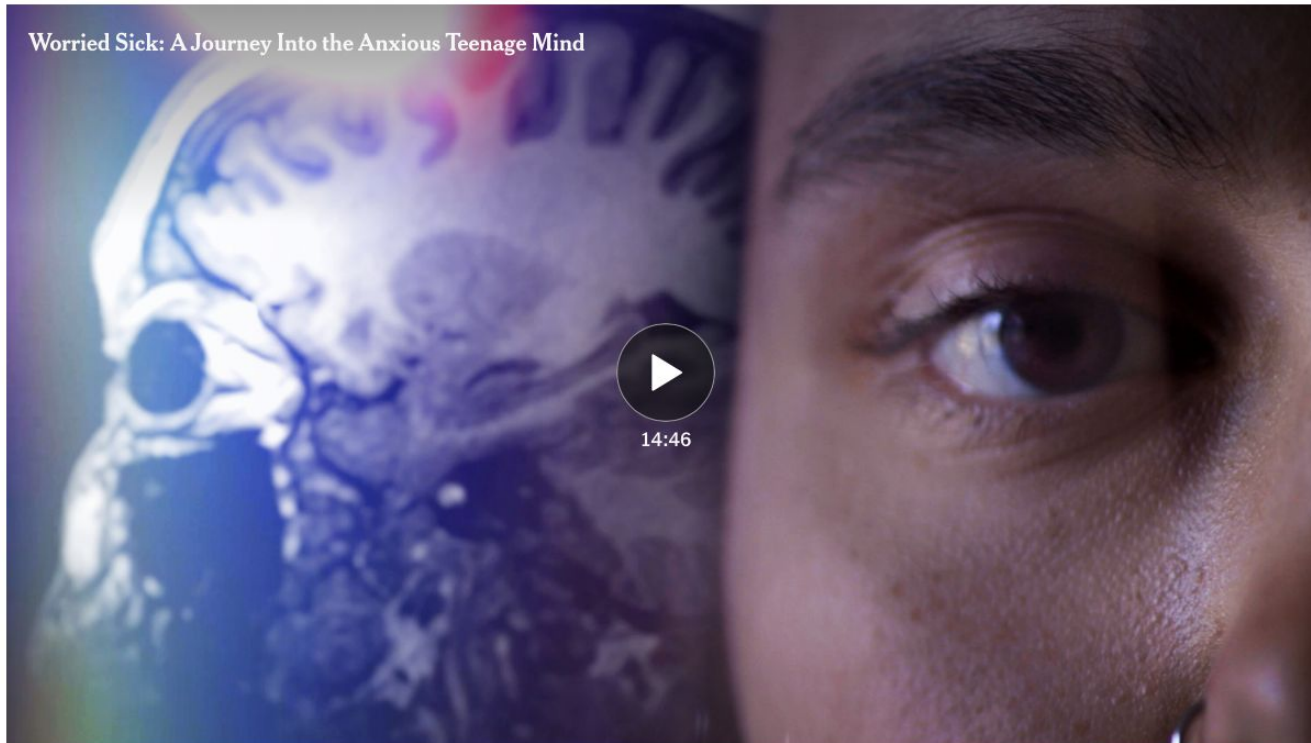
Why are so many American teenagers feeling anxious, depressed and even suicidal? Our video looks at the science behind the teen mental health crisis. The New York Times

By **Matt Richtel**   Photographs by **Annie Flanagan**
Matt Richtel spent more than a year interviewing adolescents and their families for this series on the mental health crisis.

Published April 23, 2022   Updated May 3, 2022

Leer en español

Resource Library

Anxiety and Depression Increase Among U.S. Youth, 2022 KIDS COUNTS Data Book Shows

Children in the United States are experiencing a mental health crisis.

SHARE

DATE

August 8, 2022

In 2020, 12% of U.S. children ages 3 to 17 were reported as having ever experienced anxiety or depression, up from 9% in 2016. This finding is among the key results from the 33rd edition of the

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AMERICAN PSYCHOLOGICAL ASSOCIATION

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2023 TRENDS REPORT

Kids' mental health is in crisis. Here's what psychologists are doing to help

Research is focused on child and teen mental health, exploring why they are struggling and what can be done to help them

By Zara Abrams   Date created: January 1, 2023   12 min read
Vol. 54 No. 1
Print version: page 63

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Research Update: Children's Anxiety and Depression on the Rise
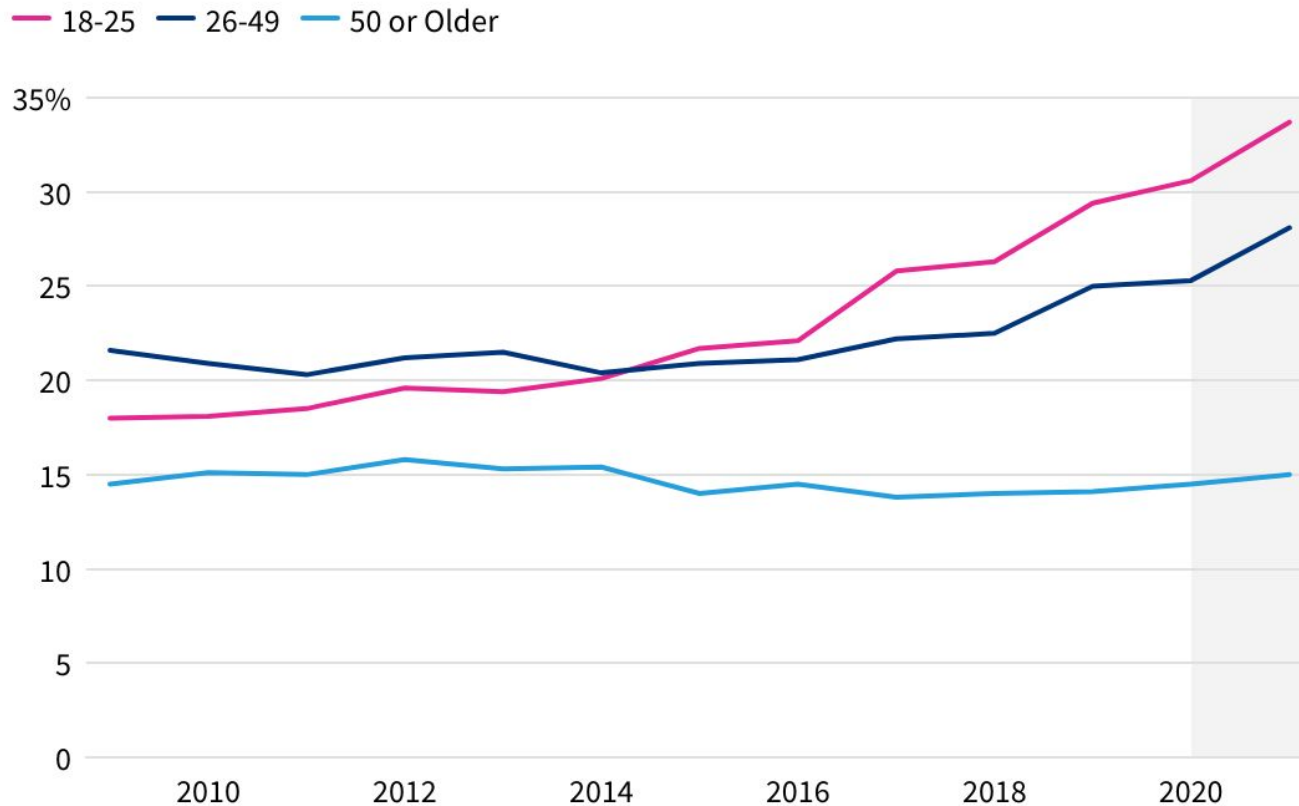

March 24, 2022 • Aubrianna Osorio

The Scope of the Problem

- rates are increasing in adults as well, especially young adults

In the past decade, mental illness among Americans under 25 surpassed that of people 26 to 49.

Percentage of adults with mental illness in the past year, by age group

— 18-25   — 26-49   — 50 or Older

Survey methodology changed in 2020 and 2021. Compare 2020 data to previous years with caution. Data from 2021 should not be compared to previous years.

Source: Substance Abuse and Mental Health Administration

USAFACTS

Root Causes of Mental Health Issues

Multi-factorial

- Biochemical

  - genes/epigenetics

  - nutrient deficiencies

  - insufficient sleep

  - sedentary lifestyle

  - gut microbiome imbalances

  - hormone imbalances

  - chronic illness/pain

Root Causes of Mental Health Issues

Multi-factorial

- Social

  - lack of meaningful work/purpose

  - disconnection from other people

  - lack of meaningful values

  - lack of status and respect

  - lack of hopeful or secure future

  - nature deficit

  - history of trauma/ACES

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Is the Term "Mental Health Disorder" Problematic?

The term mental health was coined in 1908, before we had the tools to understand the mind-body connection and assess the physiological factors that contribute to depression and anxiety.

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"If we are going to call natural physiological responses to a very unnatural environment a disorder - we are going to have a very hard time solving the problem of rising anxiety and depression among youth."
- David Bidler

Depression, anxiety and inattention may be natural physiological responses to chronic states of undernourishment, sleep deprivation, sedentary lifestyle, social disconnection, stress and overstimulation.

In other words - it's <u>not you</u> that is wrong or broken or not functioning properly,
it is the <u>environment you are in</u> that is dysfunctional.

Root Causes of Mental Health Issues

- For more information:

  - Johan Hari's books [Lost Connection and Stolen Focus](), [TED talk on root causes of anxiety and depression](), and [interviews with Dr. Rangan Chattergee MD on Feel Better, Live More Podcast](), and Lost Connections App

  - [David Bidler's interview with Dr. Rangan Chattergee on Feel Better Live More Podcast]()

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Lifestyle Medicine

- a medical specialty that uses therapeutic lifestyle interventions as a primary modality to treat chronic conditions

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PYRAMID OF THERAPEUTIC ORDER

- surgery
- medications
- botanicals
- nutraceuticals
- lifestyle
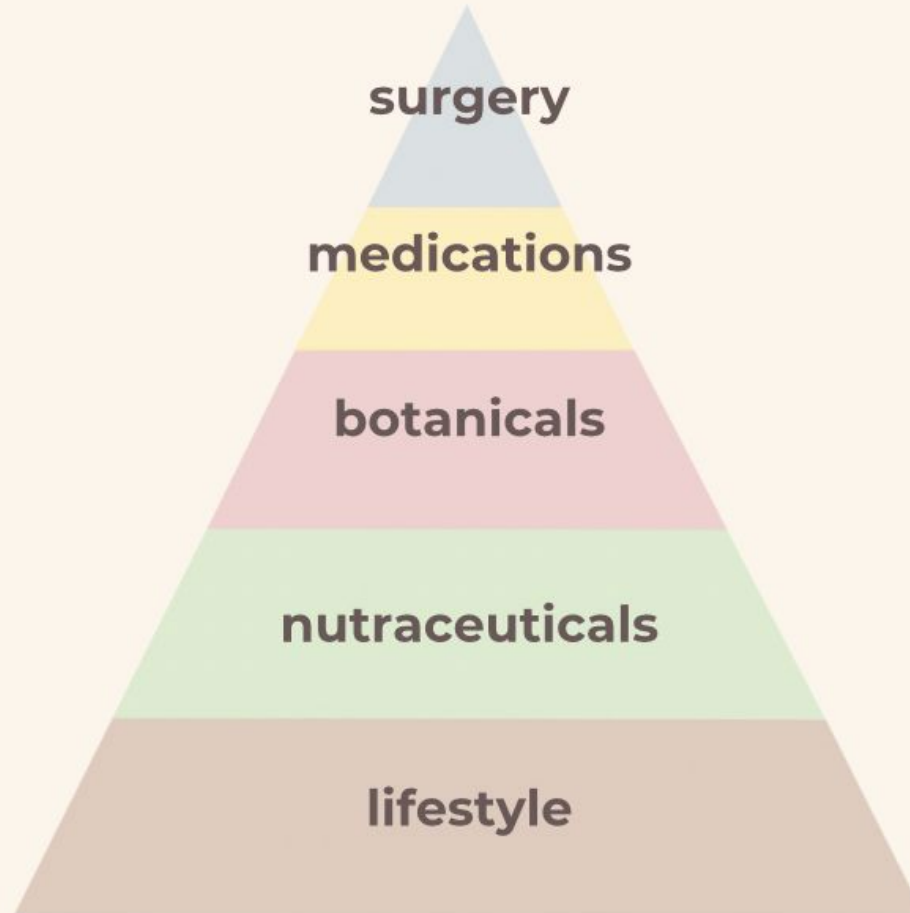
PILLARS OF HEALTH

nourishment

connecting with nature

sense of purpose

non-sleep rest

connecting with others

sleep

environment internal and external

movement

II. Nourishment

Diet is as important for mental health as it is for cardiovascular health.

Anti-Inflammatory Diet

- Sufficient

  - protein

  - fiber

  - healthy fats

  - phyonutrients

Anti-Inflammatory Diet

- balanced blood sugar

- supportive of microbiome

- minimal processing and "food-like substances"

- take into account individual food sensitivities and intolerances

Top 5 Recommended Food Categories for Mental Health from Dr. Drew Ramsey's, MD Book Eat to Beat Depression and Anxiety

- leafy greens
- rainbow of fruits and veggies
- seafood
- nuts, beans, seeds
- fermented foods

Interview on Dr. Chatteree's Podcast

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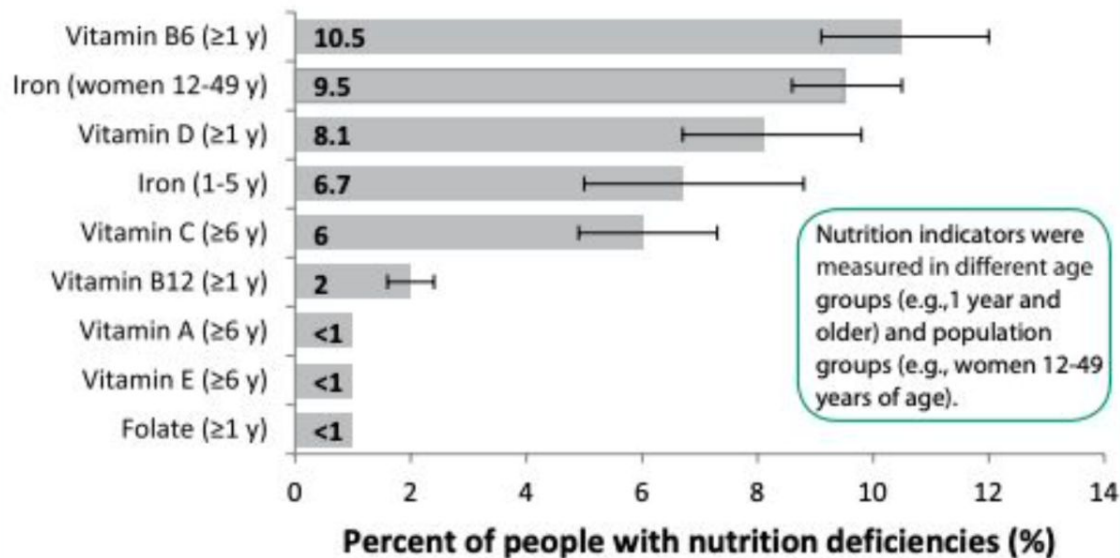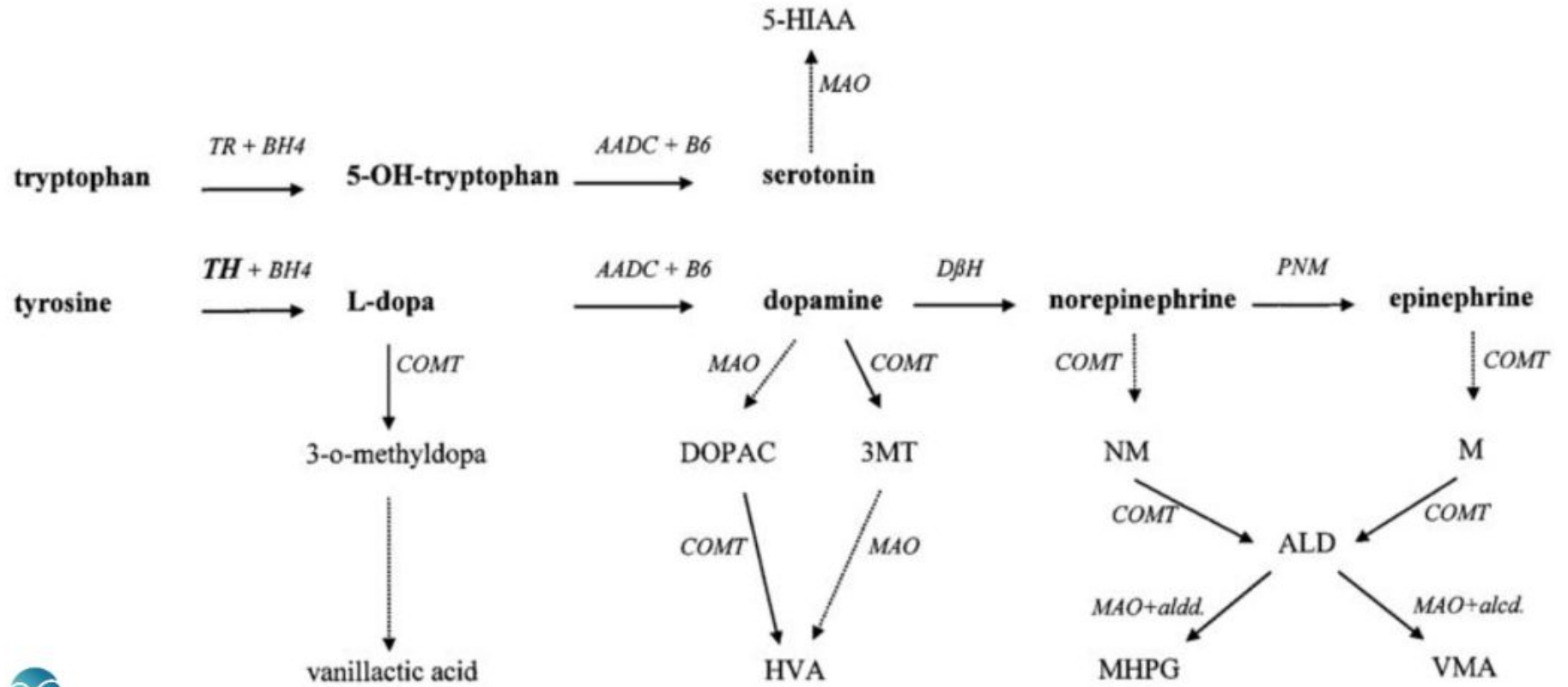|					
Strawberry	Apple	Tomato	Cherry	Raspberry	Watermelon
Orange	Banana	Pumpkin	Pineapple	Carrot	Lemon
Cucumber	Peas	Grapes	Kiwi	Pear	Broccoli
Blackberry	Beetroot	Blueberry	Fig	Passion Fruit	Plum
Cauliflower	Nuts	Mushroom	Onion	Garlic	Radish

Nutrition deficiencies in the U.S. population

The graph shows prevalence estimates of nutrition deficiencies among people who live in the U.S. (NHANES 2003-2006). Of all the nutrients listed, the most people had vitamin B6, iron, and vitamin D deficiencies, and the fewest people had vitamin A, vitamin E, and folate deficiencies.

Nutrition indicators were measured in different age groups (e.g., 1 year and older) and population groups (e.g., women 12-49 years of age).

National Center for Environmental Health

Division of Laboratory Sciences

CDC

Top Food Sources of Vitamin B6

Food	Milligrams (mg) per serving	Percent Daily Valued (DV)
Chickpeas, canned, 1 cup (c)	1.1	65
Beef liver, pan fried, 3 ounces (oz)	0.9	53
Tuna, yellowfin, fresh, cooked, 3 oz.	0.9	53
Salmon, sockeye, cooked, 3 oz.	0.6	35
Chicken breast, roasted, 3 oz.	0.5	29
Breakfast cereals, fortified with 25% of the DV for Vitamin B6	0.4	25
Potatoes, boiled, 1 c.	0.4	25
Turkey, meat only, roasted, 3 oz.	0.4	25

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Food Sources of Folate (Vitamin B9)

Food	Micrograms (mcg) DFE perserving	Percent Daily Value (DV)
Beef liver, braised, 3 ounces (oz)	215	54
Spinach, boiled, ½ cup (c)	131	33
Black-eyed peas (cowpeas), boiled, ½ c.	105	26
Breakfast cereals, fortified with 25% of the DV	100	25
Rice, white, medium grain, cooked, ½ c.	90	22
Asparagus, boiled, 4 spears	89	22
Brussels sprouts, frozen, boiled, ½ c.	78	20
Spaghetti, cooked, enriched, ½ c.	74	19
Lettuce, romaine, shredded, 1 c.	64	16
Avocado, raw, sliced, ½ c.	59	15
Spinach, raw, 1 c.	58	15

Food Sources of B12

Table 2: Vitamin B12 Content of Selected Foods [20]

Food	Micrograms per serving	Percent DV*
Beef liver, cooked, pan-fried, 3 ounces	70.7	2,944
Clams (without shells), cooked, 3 ounces	17	708
Nutritional yeast, fortified, from several brands (check label), about ¼ cup	8.3 to 24	346 to 1,000
Salmon, Atlantic, cooked, 3 ounces	2.6	108
Tuna, light, canned in water, 3 ounces	2.5	104
Beef, ground, 85% lean meat/15% fat, pan-browned, 3 ounces	2.4	100
Milk, 2% milkfat, 1 cup	1.3	54
Yogurt, plain, fat free, 6-ounce container	1.0	43
Breakfast cereals, fortified with 25% of the DV for vitamin B12, 1 serving	0.6	25
Cheese, cheddar, 1½ ounces	0.5	19
Egg, whole, cooked, 1 large	0.5	19
Turkey, breast meat, roasted, 3 ounces	0.3	14
Tempeh, 1/2 cup	0.1	3
Banana, 1 medium	0.0	0
Bread, whole-wheat, 1 slice	0.0	0
Strawberries, raw, halved, 1/2 cup	0.0	0
Beans, kidney, boiled, 1/2 cup	0.0	0
Spinach, boiled, drained, 1/2 cup	0.0	0

Sources of Vitamin D

Table 3: Vitamin D Content of Selected Foods [25]

Food	Micrograms (mcg) per serving	International Units (IU) per serving	Percent DV*
Cod liver oil, 1 tablespoon	34.0	1,360	170
Trout (rainbow), farmed, cooked, 3 ounces	16.2	645	81
Salmon (sockeye), cooked, 3 ounces	14.2	570	71
Mushrooms, white, raw, sliced, exposed to UV light, ½ cup	9.2	366	46
Milk, 2% milkfat, vitamin D fortified, 1 cup	2.9	120	15
Soy, almond, and oat milks, vitamin D fortified, various brands, 1 cup	2.5-3.6	100-144	13-18
Ready-to-eat cereal, fortified with 10% of the DV for vitamin D, 1 serving	2.0	80	10
Sardines (Atlantic), canned in oil, drained, 2 sardines	1.2	46	6
Egg, 1 large, scrambled**	1.1	44	6
Liver, beef, braised, 3 ounces	1.0	42	5
Tuna fish (light), canned in water, drained, 3 ounces	1.0	40	5
Cheese, cheddar, 1.5 ounce	0.4	17	2
Mushrooms, portabella, raw, diced, ½ cup	0.1	4	1
Chicken breast, roasted, 3 ounces	0.1	4	1
Beef, ground, 90% lean, broiled, 3 ounces	0	1.7	0

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Top Food Sources of Iron

Food	Milligrams (mg) per serving	Percent Daily Valued (DV)
Breakfast cereals, fortified with 100% of the DV for iron, 1 serving	18	100
Oysters, eastern, cooked with moist hear, 3 ounces (oz.)	8	44
White beans, canned, 1 cup (c)	8	44
Beef liver, pan fried, 3 oz.	5	28
Lentils, boiled and drained, 1/2 c.	3	17
Spinach, boiled and drained, 1/2 c.	3	17
Tofu, firm, 1/2 c.	3	17
Chocolate, dark, 45%-69% cacao solids, 1 oz.	2	11
Kidney beans, canned, 1/2 c.	2	11

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Source: NIH ODS

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Top Food Sources of Magnesium

Food	Milligrams (mg) per serving	Percent Daily Valued (DV)
Pumpkin seeds, roasted, 1 ounce (oz)	156	37
Chia seeds, 1 oz.	111	26
Almonds, dry roasted, 1 oz.	80	19
Spinach, boiled, 1/2 cup (c)	78	19
Cashews, dry roasted, 1 oz.	74	18
Peanuts, oil roasted, 1/4 c.	63	15
Cereal, shredded wheat, 2 large biscuits	61	15
Soy milk, plain or vanilla, 1 c.	61	15
Edemame, shelled, cooked, 1/2 c.	50	12

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Top Food Sources of Omega-3

Food	Grams per serving		
	ALA	DHA	EPA
Flaxseed oil, 1 tablespoon (tbsp)	7.26		
Chia seeds, 1 ounce (oz)	5.06		
English walnuts, 1 oz.	2.57		
Flaxseed, whole, 1 tbsp.	2.35		
Salmon, Atlantic, farmed, cooked, 3 oz.		1.24	0.59
Salmon, Atlantic, wild, cooked, 3 oz.		1.22	0.35
Herring, Atlantic, cooked, 3 oz.*		0.94	0.77
Canola oil, 1 tbsp.	1.28		
Sardines, canned in tomato sauce, drained, 3 oz.*		0.74	0.45

Next Steps

- If you are concerned that you or your child are not getting sufficient amounts of certain nutrients work with a provider to:
    - assess
    - test
    - create a meal plan
    - safely supplement

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III. Sleep

Do Your Children Get Enough Sleep?

6 in 10
Middle Schoolers

7 in 10
High Schoolers

DON'T GET ENOUGH SLEEP

Kids aged
6–12 need

9 to 12

Teens aged
13–18 need

8 to 10

HOURS OF SLEEP A NIGHT

https://www.cdc.gov/chronicdisease/resources/infographic/children-sleep.htm

Sleep is critical to prevent:

TYPE 2 DIABETES   **OBESITY**   **POOR MENTAL HEALTH**   **INJURIES**   **ATTENTION OR BEHAVIOR PROBLEMS**
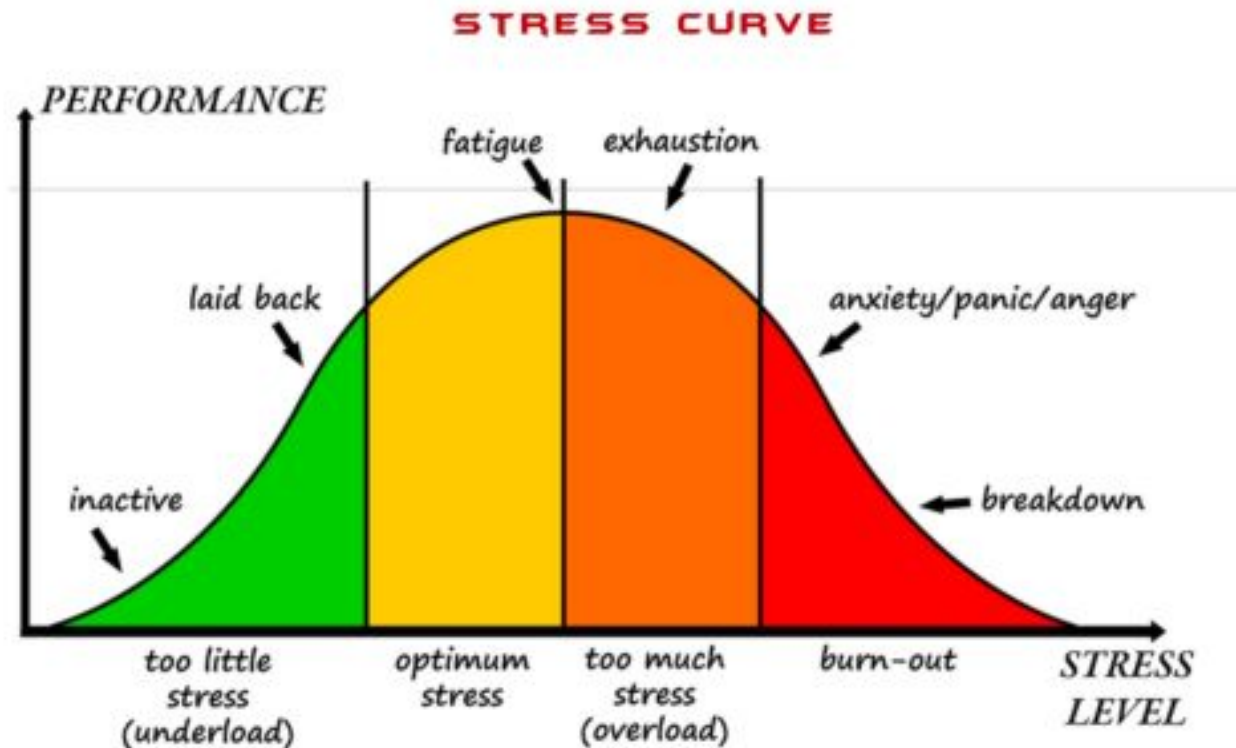
https://www.cdc.gov/chronicdisease/resources/infographic/children-sleep.htm

Sleep is When our Body:

- repairs
- detoxifies
  - produces melatonin (strong antioxidant)
- stores new information in long-term memory

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How to Encourage Sleep?

- behavioral:
  - outside during the day
  - evening wind-down
  - avoid blue light at night
- environment
  - bedroom is dark, cool and screen-free

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IV. Stress

Stress is Neither Inherently Good or Bad

STRESS CURVE

PERFORMANCE

fatigue — exhaustion

laid back

inactive

anxiety/panic/anger

← breakdown

too little stress (underload) — optimum stress — too much stress (overload) — burn-out

STRESS LEVEL

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Chronic stress prevents healing and promotes disease.

Play and Rest - the antidotes to stress

- ring-fence time in your family's schedule for unstructured play and rest

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V. Physical Activity

Physical Activity

- Reduces:

  - anxiety

  - depression

  - social withdrawal

- Improves:

  - self-esteem

  - cognition

VI. Connection

Connection, Purpose and Belonging

In modern societies we are conducting an experiment:

What happens when people are disbanded from their tribe and disconnected from the natural environment?

- Loss of **connection to nature**
- Loss of **purpose**
- Loss of **belonging**

- These are <u>psychological needs</u> that when they are not met can lead to mental and physical health conditions such as **anxiety, depression, obesity, cardiovascular disease and more**.
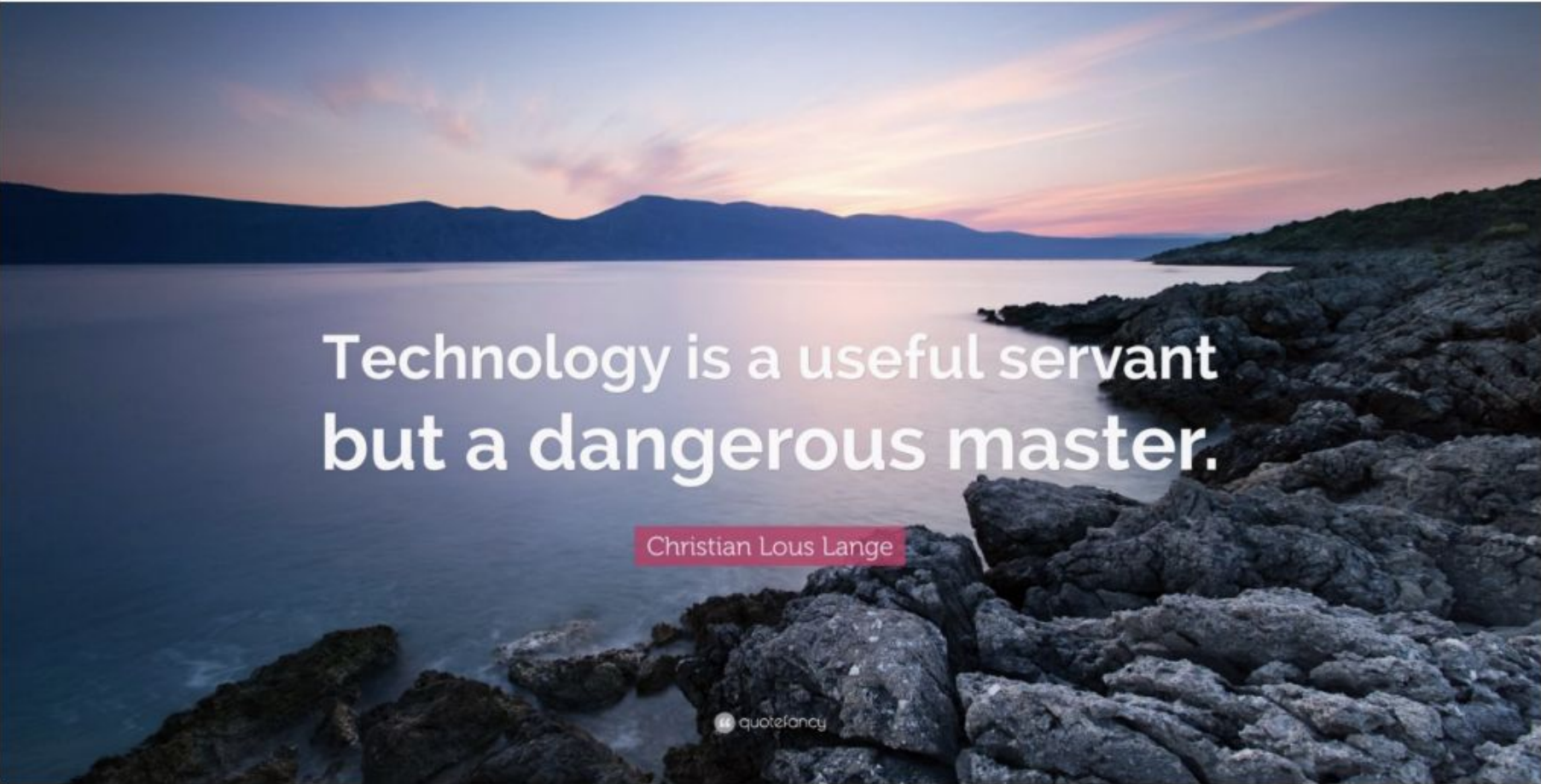
Connection to Self

- Help your kids cultivate:
  - Purpose
  - Autonomy/ Sense of control
  - Hopeful future
  - Understanding of their personal values
    - [Dr. Chattergee's interview with Morgan Housel](#)

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Connection to Community

- **Loneliness is a necessary signal to push you back to the tribe.** We are hard-wired to feel this for our protection.

- Modern societies are becoming lonelier.
  - Friendship networks have becoming increasingly narrow in modern times– starting with invention of TV.
  - In the 1990's, when researchers asked participants **how many close friends they had**, the most common answer was 5. When the research was repeated recently, **the most common answer was 0**.
  - According to a 2018 national survey, loneliness levels have reached an all-time high, with **nearly half of 20,000 U.S. adults reporting they sometimes or always feel alone**.
  - In May 2023, Surgeon General Vivek Murthy issued an advisory on "Our Epidemic of Loneliness and Isolation"

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Technology and Connection

Technology is a useful servant but a dangerous master.

Christian Lous Lange

Technology and Connection

How can you modify technology use to fit the Dr. Perlmutter **TIME** framework?

- T: **time** – before getting on your device or logging in to e-mail/social media, determine how much time you plan to spend there.
- I: **intention** - before getting on your device or logging in to e-mail/social media, determine your intention.
- M: **mindfulness** - while online, stay mindful of your time goal and intention. Are you getting distracted?
- E: **evaluate** – after using your device or spending time on social media. How do you feel?
  - Educated and empowered? *Great.*
  - Icky, guilty, angry, sad, jealous? *Not so great.*

https://drperlmutter.com/books/brain-wash/

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Connection to Nature

- Nature Deficit Disorder: a term (not a medical diagnosis) for the human costs of alienation from the natural world

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"We now know, not just intellectually but based on recent lived experience, that not all activities are created equal when it comes to enhancing our children's mood and behavior. **Prioritizing time in nature, exercise, and even some unstructured downtime is analogous to prioritizing our children's mental health,** which is more important now than ever."
- Rebecca Hershberg, PhD

https://www.nytimes.com/2020/06/23/parenting/nature-health-benefits-coronavirus-outdoors.html

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Take-Aways

Remember…

- many (but not all) of the factors that contribute to poor mental health are modifiable and in our control

- Empower your children to do what they can to support their mental health through lifestyle

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To Take a Deeper Dive

Schedule with Dr. Kellie

- www.ripplewellnessnw.com

- hello@ripplewellnessnw.com

- 360-207-0134

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Q + A

Thank you for coming this evening!

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