Eat healthy, Sleep lots and Keep Exercising!

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The onslaught of access to information within our modern world has resulted in countless health, exercise and nutrition "gurus" with strong opinions, but many have little expertise. For example, just because everyone is experienced at eating, since we all do it every single day, doesn't make someone an expert at nutrition (unless they have gone to school for a long, long time). This is analogous to saying that I'm very experienced at flying (which is very true), and thus I should be an expert at flight (but, trust me, you don't want me flying the plane!). Furthermore, with the explosion of technology and science (e.g. smart watches, which claim to measure nearly everything), the simple recommendations around how to "stay healthy" have become very complicated, with lots of measurements and feedback, resulting in numerous "programs" and very polarizing opinions. Therefore, this short article is a throwback to the basics, of which I ask my two young boys (aged 7 and 3 years) at least once per week:

"What are the three things required to grow strong, prevent sickness and live a long and happy life?"

The kid's answer: 1) Eat healthy (and in moderation [authors addition]); 2) Sleep lots; and 3) Keep Exercising!

"Healthy Eating" [and in moderation]

If there is a single book out there that I believe is a "must read" regarding a balanced and healthy perspective on food in our modern society it is "In Defense of Food: An Easter's Manifesto" by Michael Pollan. Within this incredibly well written book, Pollan has thought-provoking quotes such as: "You are what you eat eats." OR "Eat food, not too much, focus on plants". The concepts and quotes can go on and on and on.

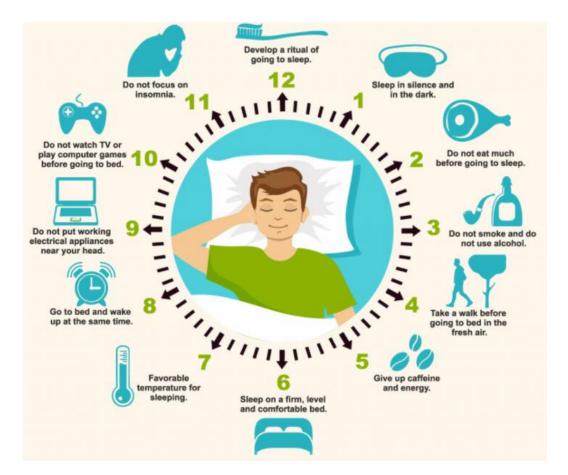
If you have come here to read and get the 'perfect' diet from me – you have come to the wrong spot. Humans are incredibly adaptable, and can thrive on many different dietary approaches, but here are 8 key themes from Pollan's series of books that especially resonate:

- Don't eat anything your great grandmother wouldn't recognize as food. "When you pick up that box of
 portable yogurt tubes, or eat something with 15 ingredients you can't pronounce, ask yourself, "What are
 those things doing there?"
- 2. Try not to eat anything with more than five ingredients, or ingredients you can't pronounce.
- 3. Stay out of the middle of the supermarket; shop on the perimeter of the store. Real food tends to be on the outer edge of the store near the loading docks, where it can be replaced with fresh foods when it goes bad.
- 4. Don't eat anything that won't eventually rot.
- 5. It is not just what you eat, but how you eat. Always eat slowly to allow your body to give "fullness signals" back to brain to slow eating, and unless a world-class athletes training many hours, try and leave the table comfortably fed, not overwhelmingly full.
- 6. Families traditionally ate together, around a table and not a TV, at regular meal times. It's a good tradition. Enjoy meals with the people you love.
- 7. Don't buy food where you buy your gasoline. In the U.S., 20% of food is eaten in the car.
- 8. Try and get your calories from food that takes time to chew and process and hydration from water. Stay away from liquid calories or heavily refined sugars.

"Sleep Lots"

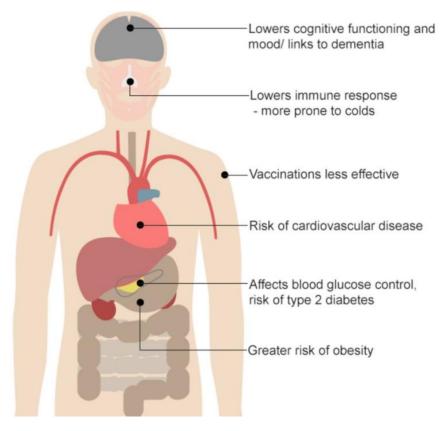
"I love sleep. My life has a tendency to fall apart when I'm awake, you know?" - Ernest Hemingway.

Essential elements to great sleep are routine, routine, routine. I'm sure many of you have experienced what a small child is like when they have gotten out of their sleep routine, even by just 1 hour less of sleep...the next day is a challenge. Adults are the same, but we can just regulate our behavior a bit better – but we are still compromising on our health and performance. The infographic below highlights 12 great recommendations for optimizing sleep. A big "take home" below is around the use of TV, computer or phone in the period right before bed. Try and ensure that you limit bright light on the eyes for at least 30 to 60min prior to when you hope to fall asleep. Light on the eyes actually slows natural melatonin release and delays sleep onset. In other words, it is not ideal to have your phone or TV in your bedroom right before trying to sleep. Many new electronic reading devices actually have technology to eliminate backlight going right into your eyes, and instead use side or top light (so it looks like an actual piece of paper).



Most sleep experts recommend 7 to 9 hours of sleep (as long as you feel rested within ~20-30min of waking, you know you're having enough and you don't need to worry any more about it). Teenagers need more, and should aim for 8 to 10 hours of sleep. However, about half of teenagers don't get this amount of sleep, and nearly 50% of teenagers check their phone after going to bed, and ~10 to 15% check their phone many times per night!

A review of 153 studies with a total of more than five million participants found short sleep was significantly associated with diabetes, high blood pressure, cardiovascular disease, coronary heart disease and obesity.



For an extensive scientific overview on sleep, see: https://www.ncbi.nlm.nih.gov/books/NBK19960/pdf/Bookshelf NBK19960.pdf

Finally, if you snore extensively or are getting up more than 3 or 4 times per night or have extensive tossing and turning, you may be suffering from sleep apnea and should ask your primary care provider for a potential referral to a sleep expert.

"Keep Exercising"

Exercise is the most powerful "drug" out there to keep you healthy. The evidence is clear, and entire global organizations such as "Exercise is Medicine" have created clear research based guidelines (see: https://www.exerciseismedicine.org/). Exercise literally benefits the entire body.

What are the benefits of exercise on physical health?



Exercise also benefits mental health.

What are the benefits of exercise on mental health?



Reduce stress levels Exercise can help to reduce your cortisol levels



Reduced anxiety When you exercise your brain releases endorphins which can help to calm you down



Reduced risk of depression Exercise can help to improve your mood

Statistics from PHYSICAL ACTIVITY STATISTICS, 2015 BRITISH HEART FOUNDATION



Improves social well being

Whilst exercising you might meet new people and develop more friendships

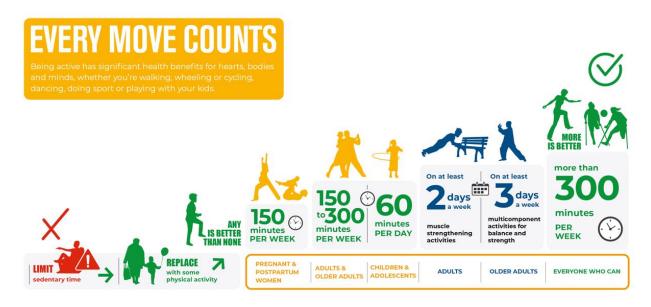


Increased self esteem As you become faster, fitter and stronger you start to improve your self confidence



Boost Brainpower Exercise can help to improve cognitive functioning including decision making and learning For parents looking for tips for active children, I would highly recommend Active 4 Life website here: <u>https://activeforlife.com/</u>

Every little bit of exercise helps, and the minimal weekly dose should be 150 min/week (or just over 20min/day), but more is also better.



https://www.who.int/health-topics/physical-activity

When it comes to cancer, a recent 2016 study shows that exercise lowers the risk of 13 specific types of cancers (esophageal cancer, liver cancer, stomach cancer, kidney cancer, and myeloid leukemia. In addition, physical activity was strongly associated with a decreased risk of multiple myeloma, a blood cancer, as well as cancers of the head and neck, rectum, bladder, and lung (in current and former smokers). The only exceptions were colon, breast and endometrial cancers. This was based on the minimum of 150 min/week – so this is a huge impact on lowering your risk of cancer.

How to implement change

There are many behavior change frameworks and constructs in the research literature, but most approaches now examine a more holistic approach. In most change implementation approaches, it tends to boil down to whether the person is "Ready", "Willing" and "Able" to make change (See Stephen Covey's book on 7 Habits of Highly Effective People), in which forming a new habit does take consistent effort and time (at least a few weeks, if not a few months, depending on what new habit is being formed.



Here are some steps I've found helpful in trying to implement a new change, such as exercise, sleep or nutrition:

- 1. Set goals that are initially very attainable and realistic. Start slow and steady, and celebrate them.
- 2. Create a balanced routine. Be realistic with your time, but also firm to say that these time periods will work with my schedule. You might need to work creating time to accomplish your goals with your family, so they are invested as well. Sometimes building activity into your daily routine can include lunch breaks, or shifting your work schedule a bit, to include just a couple of extra 30min periods a few times per week.
- Plan different exercise activities, so there are a range of things you enjoy to do (e.g. from walking, to cycling, to skating, to running, to swimming to pickle ball to snow shoveling etc etc). Start with activities you enjoy the most. Or plan to implement a new healthy meal once per week, so it starts to become part of your normal food planning.
- 4. Be Patient: Celebrate your weekly goals, but progress does take time, and getting into a new habit/routine, can take weeks to months.
- 5. Allow time for recovery many people start too hard, and end up sore, over-tired and stop.
- 6. Meet people when you meet people to exercise, or even to make and learn to make new foods, you are held more accountable.
- 7. Put your goals and schedule on paper or in your work calendar. When you write down goals, with a checklist, it can lead to much higher rates of success.

Conclusions

Although most of my job is working with world-class Olympic athletes and coaches to optimize performance, much of what we do with them still comes back to these three main simple things: Eat healthy and sleep a lot (or maximize recovery) so we can, in turn, maximize training (and in some of our Olympic athletes, this means training 20 to 30 hours/week!). That said, most of us mere mortals will want to try and implement some of these recommendations above just so we can feel and look better; for a longer life, but also a much higher quality of life. If we want to start on a few things above, I might recommend starting with two things: 1) increasing weekly exercise, as this habit tends to result in better sleep and more awareness of healthy nutrition; 2) try and minimize

and eliminate liquid calories (booze) and the use of too much refined sugar. If you can implement just these 2 things over a 3 month period, you will see and feel a lot of positive outcomes. From there, you can try and implement other elements highlight within.

Most of the modern research now suggests this: Adapting caloric intake (decreasing and/or moderating energy intake) will have the greatest impact on weight control (exercise only has minimal impact on body weight control). However, consistent exercise, regardless of most body weights (even obese individuals) will absolutely allow for the best short term and long-term health outcomes. So to finish: the godfather of the American fitness industry Jack Lalanne has often remarked, "Exercise is King, while nutrition is Queen; put them together and you have a Kingdom!"

Dr Trent Stellingwerff is originally from Grand Bend, Ontario and a proud graduate of Grand Bend Public School and North Lambton Secondary. His parents (Steve & Jeannette), brother and wife (Troy & Julie) still live in the greater Grand Bend area. He also got an A+ grade in OAC High School Accounting while undertaking a final project with Simon Desjardine ;).

Currently, Trent serves as the Senior Advisor for Research and Development at the Canadian Sport Institute Pacific (Victoria, Canada) while serving as an academic adjunct at the University of Victoria and University of British Columbia. In this role, he directs several different student supported research projects in the field of physiology and nutrition interactions, as well as environmental (altitude and heat) physiology. He also provides (or provided) sport-science expertise to Canada's National Olympic/Paralympic Track and Field, Rowing, Triathlon and Mountain bike teams. Trent has more than 115 peer-reviewed scientific publications, authored >10-book chapters and is a member of the International Advisory Board for the International Olympic Committee (IOC) Sports Nutrition Diploma Program. Over the years, Trent has attended and serviced athletes and sports over 4 Olympic/Paralympic Games and >15 World Championships.

