

## PERFORM Colloquium, April 23, 2020 – Q & A

### 1. How to regulate sleeping during the pandemic? Working from home results in sleepy during days and cannot sleep well on time. Any comment?

**Melodee:** It's expected that the coronavirus pandemic causes a sense of loss of normalcy and insomnia due to loss of control, worry and anxiety. Furthermore, it's tempting to oversleep even if you are working from home without a specific start/end time. My suggestions would be as follows:

- 1) Establish a daily routine – keep consistent bedtimes/wake-times, eating schedules, showering, work times, etc.
- 2) Keep your sleep to ~7 to 8 hours/night. If you are sleepy during the day, take a brief (less than 30 min) nap in the early afternoon. Our research has shown that naps closer to bedtime may result in problems with nighttime sleep.
- 3) Wind-down time before bedtime – get ready for bed by putting on your pajamas, dimming the lights, and avoiding caffeine products.

By doing this, it will not only result in improved sleep due to better sleep hygiene but will also restore your sense of control.

### 2. Do you think it's good to pick one day during the week (ex: Sunday) to meal prep for the entire week? It becomes a tad overwhelming especially now with the Covid-19.

**Théa:** Meal preparation of many meals on one day per week can be a strategy. However, research suggests that we do what we can sustain and enjoy. In terms of habits and goals, research suggests choosing 1-3 things max. to work on at a time. While we don't have specifics for number of meals to make during the week, I interpret the research on habits to choose 2 items to make during a meal prep day, and I make enough portions to use during several days of the week (2-4 days). So I make usually a soup and either a casserole or meal that can be stretched to make leftovers. This covers us for lunches for half the week, and at least 2-3 suppers. I then have a few easy go-to meals for the remaining two week days and on the weekends, we enjoy preparing other meals that we eat each day. For breakfast, I choose easy items, like whole-grain cereal (oats or other bought cereals), bread (I am lucky and have a bread machine so I spend 5 minutes a week making a loaf), and on the weekends we rotate and make either pancakes, waffles, crêpes, muffins, and eggs.

### 3. Does exercising too close to bedtime result in sleep problems?

**Christina:** Yes, it can. It depends on the intensity. Exercise is a stressor on the body and thus it releases stress hormones such as epinephrine and cortisol that increase sugars and fats into our system. The higher the intensity, the higher the concentration of those hormones. Our body uses sugars and fats during exercise and then stores them during rest. These sugars and fats give us energy and can make it difficult to sleep. Physical activity increases endorphins in our blood. These are mood-enhancing hormones. For example, serotonin increases during exercise and can sometimes make us feel too good to sleep. Exercise increases blood circulation and increase oxygen in our brain, which can stimulate the brain to give us great ideas right when we are ready to sleep. Yoga and meditation or another exercise at a light intensity may help you sleep and calm you from the emotions of the day. Perhaps wait 1-2 hours after moderate to vigorous exercise before going to bed. Play with different types of exercise prior to sleep to find which one helps you sleep better.

**Melodee:** The research is mixed on this topic. It may depend on the individual's fitness level (and the intensity of the exercise routine). Some researchers have reported that high intensity exercise close to bedtime results in sleep disruption.

### 4. Can we still have unhealthy snacks from time to time? Like chips, cereal, etc

**Théa:** Of course, it is all a matter of how often and how much. A strategy can be to choose when you want to enjoy these and use smaller packages so that you do not have large quantities visible and accessible, as we all eat what is simple and most readily available.

### 5. How much time after eating should you wait before doing high intensity exercise?

**Théa:** This could vary for each person according to your experience with any stomach upset. It also depends on what you eat, in general if you have foods that contain carbohydrate, like fruits or grains, these are lower in protein and very easily digested. It is actually recommended to consume a carbohydrate rich snack before exercise to reduce fatigue, inflammation and risk of injury if you haven't eaten a meal in 2-3 hrs before your HIIT session. If you ate a meal with protein foods (meat, poultry, eggs, dairy, legumes, nuts or seeds, fish or seafood), this will take longer to digest and it is best to delay exercise 30 min. or more to avoid stomach upset, depending on each person's individual experience and comfort.

**Christina:** It depends. Testing guidelines recommend waiting 3 hours. The American College of Sports Medicine (ACSM) recommends waiting for 1-3 hours before maximal or high intensity exercise, depending on your digestive system, to prevent gastrointestinal discomfort. However, not every person digests the same way. If you are going to eat something prior to waiting 3 hours, eat easily digestible carbohydrates such as **whole grains, low-fat or fat-free yogurt, fruit, and vegetables**. It takes a while to learn what your digestive system will tolerate. It usually requires a bit of trial and error.

## 6. Do certain foods or diets help with sleep? I've heard of a "jet lag" diet.

**Théa:** In studies looking at nutrition and behaviour, people who eat foods that contain very little protein and mainly sugar report feeling sleepier over time (and if the context of eating the sweet item does not have associations that make people more alert, e.g. think carnivals and cotton candy etc.). This is because the sugar can influence the production of serotonin in the brain, which can make us feel sleepy. However, this only occurs if there is no protein eaten, as this favours the transfer of the protein building blocks (i.e. amino acids) circulating in our blood to the brain that are precursors for serotonin. However, eating foods concentrated in sugar, with minimal protein is not recommended as a long-term strategy for health.

For shift workers and those who work on the road, it is recommended to maintain a routine, eating the main meal as early in the day as possible and before work and to avoid eating too much during the night, packing healthy snacks, limiting caffeine, alcohol, fatty or sugary foods and drinks.

I am not familiar with any research studies evaluating the “jet-lag” or Extreme Argonne CIA version diet, comprised of fasting, avoiding caffeine and alcohol, and eating your first meal according to the time-zone of your destination.

## 7. Are dried fruits okay to eat as snacks? I know they can contain a lot of sugar at times

**Théa:** Of course, all foods can fit! It depends on how often and how much, just like for any food or beverage. A recommended portion is roughly a quarter cup, or the amount that fits in the palm of your hand. A strategy that is recommended is to build snacks that have two food groups, e.g. a protein (nuts, seeds, cheese, yogurt, milk, soy beverage) and a fruit, or a grain choice (bar, crackers, bread) and a fruit.

## 8. What are some dishes that can be easily made and then stored for eating at a later time?

**Théa:** Check out some of the resources for recipes below, especially the “[Making a casserole from what's on hand](#)” link and the [Safe food storage](#) links.

## Resources

- ❖ [What to eat to maintain an immune system-friendly diet](#) – Leslie Beck, RD, The Globe and Mail
- ❖ [No, you probably can't 'boost' your immune system to prevent coronavirus. Here's why.](#) – Cara Rosenbloom, RD, The Washington Post
- ❖ Recipes: Guelph Family Health Study – [Rock what you've got](#) , “[Making a casserole from what's on hand](#)”, [Cookspiration](#) & [Défi Santé](#)
- ❖ [General Food Safety tips](#) & [Safe food storage](#) – Health Canada, [Food Safety in the Home](#), CPHA
- ❖ Mindful eating: Dr. Jean Kristeller – [The joy of eating half a cookie](#), Michelle May – [Am I Hungry?](#), Thich Nhat Hanh and Dr. Lilian Cheung – [Savor](#), Dr. Jan Chozen-Bays – [Centre for Mindful eating](#), Susan Albers – [Eating mindfully](#), Hedy Kober – [How mindfulness can help us?](#) TED Talk
- ❖ [Nudge](#) – Improving decisions about health, wealth, and happiness, Dr. Richard Thaler and Dr. Cass R. Sunstein
- ❖ Canadian Society for Exercise Physiology - [Canadian 24-HR Movement Guidelines](#)

## Contributors:

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**Christina Weiss, M.Sc., CSEP/ FKQ Certified:** Christina is a clinical exercise physiologist who is specially trained to work with special populations that include medical high-risk and chronic illness population, such as people with disabilities, arthritis, and other related conditions that reduce and limit mobility, with a specialization in adapted physical activity. Christina primarily oversees all programming related to the [PERFORM Centre Conditioning Floor](#). She also coordinates the CEP, (Clinical Exercise Physiology), internship, apprentice and volunteer programs on the Conditioning Floor.

**Melodee Mograss, PhD:** Dr. Mograss is a cognitive neuropsychologist with expertise in sleep, electrophysiological (EEG/PSG) methods and neurobehavioral performance. She coordinates research activities in the [PERFORM Sleep Lab](#).