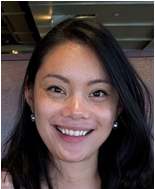


COVID-19 - A heavy burden on our minds, hearts and waistlines

Why obesity rates will rise and tips for prevention

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COVID-19 is an unprecedented global health crisis which will impact us all. It is a serious condition that will cost hundreds of thousands of lives. Hopefully, for the majority of people, they will not be impacted directly by a hospital admission or death amongst family or friends, but may suffer from other health impacts of the outbreak. There has been much discussion about how COVID-19 will affect us psychologically and economically - but what about the physical health implications?

Dietary intake will likely increase for both physiological and psychological reasons. There are obvious sources of emotional stress: fear for your wellbeing or the wellbeing of your loved ones; stress of being isolated; taking care of children; and financial stress from being out of work or laid off. Chronic stress leads to increased production of glucocorticoids (GC). In an acute setting of hours, increased GC would cause negative feedback through the hypothalamo-pituitary-adrenal (HPA) axis. However, over days this becomes a chronic situation where high concentrations of GC will cause: 1) increased expression of CRF which triggers a chronic stress-response cascade 2) increased prominence of pleasurable or compulsive activities, which drives drinking alcohol or eating foods high in sugar or fat content and 3) GC will also increase abdominal fat deposits (Dallman et al, 2003).

With COVID-19 and social distancing, we have undergone a massive societal shift to staying at home which is likely to continue for several months. Fear of going to the grocery store may lead to higher intake of processed foods, frozen dinners, and take out. Amongst children and youth, increased screen time is associated with increased ingestion of energy dense foods (Robinson, 2017). Specific to Canadian youth, overweight children with greater than 2 hours of screen time consumed more calories through less nutrient dense foods (Shang et al, 2015). Furthermore, there is evidence that the tendency towards boredom is associated with emotional overeating (Crockett et al, 2015). This is not only dangerous with respects to the issue of obesity, but may also trigger those with eating disorders to restrict, binge, or compensate with cleanses, laxatives, diuretics or excessive exercise. Self-medication of anxiety with alcohol is another reason to suspect that weight increases are on the horizon.

Besides intake, the other major threat while staying at home is inactivity. For those who are able to work from home, this will mean a major change in the number of steps taken each day - even to go to meetings, get lunch or washroom breaks. Recreational fitness is also at risk. For active populations with the discipline and motivation to continue their routines, they have adapted to home workouts, outdoor runs and bike rides, and online classes. But for many, especially those in urban centres, not having access to a gym or physically distant enough outside space is a major limitation to physical activity.

What can family physicians and other primary care providers do to mitigate the risk of weight gain for our patients? Often weight gain is put on the back burner for patients as a health issue. We need to raise the issue proactively for patients we feel are at risk or already have gained weight. Checking in with your patients about their nutrition and physical activity patterns may be required for patients who are at risk such as the very sedentary, the depressed/anxious or patients with cardiac risk factors.

The next hurdle for physicians is what to suggest - we know that specific information in small quantities is a key

to motivational interviewing. Of course, these suggestions must be personalized to the patient and work within the confines of their socioeconomic status. Here is some specific advice for patients, of which you may present 1 or 2 tips within a given encounter:

- Validate their stress and collaborate on healthy ways of relieving stress instead of snacking or drinking alcohol
- Review meal planning and encourage stocking up on frozen fruits and vegetables instead of frozen meals and take out.
- Encourage home cooked meals and trying new recipes as a fun family activity.
- Encourage mindful eating as a family, and avoiding snacks while watching T.V. or screens
- Discuss amounts of physical activity, and specifically, advise them to get their heart rate elevated for at least 10 mins at a time, multiple times a week.
- Instead of scheduled gym time or workout time, acknowledge the pressures of home and work balance and allow them to plan more loosely, but aim for weekly goals of physical activity.

Guiding patients to talk about their goals instead of their obstacles can help to impact long-term change (Reims and Ernst, 2016). You and your patient may collaborate together to set a goal based on the tips above. Remember to make this target measurable with a clear timeline for achievement. The more specific and personalized, the more likely the patient is to follow-through. Setting a brief follow-up appointment will help to hold patients accountable.

Unfortunately, the COVID-19 pandemic will result in a variety of health implications. However, with an understanding of the factors involved, and a bit of motivational interviewing and follow-up, we can help our patients keep the pounds and the associated complications at bay.

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