

## Exercise, Nutrition, and Prostate Cancer: Your Questions, Answered

Dr. June M. Chan, Professor in the Departments of Urology and Epidemiology & Biostatistics at UCSF, was a guest on a [PCF webinar](#) on Heart Health and Prostate Cancer. She discussed current research on cardiovascular disease risk factors and prostate cancer, based on studies that have collected data on thousands of men over decades. She also provided a set of lifestyle recommendations to help lower a person's risk of cardiovascular disease, overall cancer, and lethal prostate cancer.

Dr. Chan has followed up with her answers to common questions posed before and during the webinar, covering exercise recommendations, the Mediterranean diet, portion sizes, beverages, supplements, and more.

### Exercise

**Q. With respect to the importance of exercise, how much good research has there been that defines the frequency and effort required?**

A. Recommendations following [national guidelines](#) are 150-300 minutes per week of moderate intensity aerobic exercise and 2 times per week strength training.

An important point is the **intensity** of exercise, based on the heart rate “zone” you get into. You can get this information from a wearable device like a FitBit watch. Many wearables will rate exercise intensity as light, moderate, vigorous, or peak. If you are exercising at vigorous-peak intensity, then some studies will “credit” this as double the minute count.

In other words, you can meet the minimum of the guidelines by doing 5 days per of moderate exercise at 30 minutes per session OR by doing 3 days of vigorous exercise at 25 minutes per session. Additionally, 2 bouts of strength training per week is recommended; and for adults over age 65 yrs, balance exercises are also recommended (e.g., practice standing on one foot). See [this page](#) for suggestions on home-based exercises, and be sure to speak with your doctor if you are new to exercise or are undergoing treatment.

There is some [recent research](#) suggesting that for patients who have opted for a prostatectomy, 225 minutes per week of moderate exercise prior to surgery is an appropriate “dose” that may improve two key measures of prostate cancer outcomes. This is preliminary, and will be tested in a larger clinical trial.

During the webinar, Dr. Avirup Guha of Wellstar MCG Health provided this additional reference from the American Heart Association: [Life's Essential 8](#).

**Q. Is there any information on weight training and risk of death from prostate cancer?**

A. Please see above; additionally, strength training is particularly recommended for men on hormone therapy, as it may help with many of the side effects (e.g., improves body composition, reduces muscle loss, and may improve quality of life).

## **Foods and Diet**

### **Q. What are the effects of dairy protein on prostate cancer?**

A. We have not looked at data on this specifically, but there's no evidence that protein in general is linked to prostate cancer progression.

### **Q. Is 2% milk ok?**

A. Reducing saturated fat intake is recommended for both heart health and lowering risk of prostate cancer progression. The type of fat in milk is saturated fat, so if you can transition to skim milk or a plant-based "milk," that would be better. However, small changes matter: If you are switching from drinking whole milk to 2%, that's a good change, or if you are using 2% instead of cream, that's better. Reducing saturated fat is a good goal overall.

### **Q. How much saturated plant fat per day is recommended?**

Please see the general American Heart Association Guidelines, [linked here](#).

### **Q. What is the difference between eating cooked vs. raw tomatoes?**

A. Cooking tomatoes, especially with a little healthy fat source (like olive oil) is believed to make the lycopene in tomatoes more bioavailable (available for your cells to use). Lycopene is a naturally-occurring antioxidant that "mops up" harmful molecules in the body called free radicals, thereby reducing tissue damage and changes in cells that can lead to cancer.

### **Q. Can you speak about the Mediterranean diet?**

A. The Mediterranean diet is consistent with the general diet recommendations we provided and is linked to beneficial health outcomes in general, as well as some data for prostate cancer specifically.

### **Q. Portion size is important, so how do you manage that?**

A. If you want to work on portion size, it could be helpful to familiarize yourself with what a single "portion" is. You can do this by reading nutrition labels and getting a food scale. It is helpful to visualize what one ounce of nuts, or two ounces of vegetables, or three ounces of meat looks like on a plate, when you measure it by weight (instead of volume).

If you combine measuring out portions using a scale with tracking your diet in an app (e.g., MyFitnessPal) for a few weeks, you can quickly start to realize what is "one serving" for your usual, commonly eaten foods, vs. what is more than one serving. This could help with portion control.

As a bonus, when cooking at home, a food scale also saves on cleanup. Instead of using multiple measuring cups, you can add ingredients to the bowl sitting on the scale by weight.

**Q. What are your thoughts regarding plant-based meat products (such as the Impossible burger)?**

A. These are highly processed foods. It is recommended to check the salt, fat, and sugar content. Homemade black-bean burgers, for example, or tempeh (a fermented soy product) are likely to be healthier than commercially-prepared plant-based "burgers." With home cooking, you can control the amount of added fat and salt and minimize processing. You might consider plant-based meat products as an alternative for the occasional restaurant meal (instead of a beef burger).

Of note, plant "burgers" are better for the environment vs. beef burgers. In general, plant-based foods have a lower carbon footprint and water use vs. animal foods.

**Q. What is the recommendation for how much choline I should be consuming? There seems to be a lack of information on this, although I was told I should reduce my intake.**

A. Our team did publish on elevated risk of lethal prostate cancer related to choline intake several years ago, although that finding has not been corroborated by other studies. One reason we looked at choline was because of an observed association between lethal prostate cancer and eggs, dairy, and red meat.

Dr. Stacey Kenfield, an investigator also on the team at UCSF, [notes the following](#) regarding choline and eggs: A direct link has not been firmly established (for men with prostate cancer) and there is no strong evidence at this point to suggest the need to completely exclude all food sources of choline from the diet. Choline is a required nutrient, and until we know why, it is recommended to limit whole eggs (including yolks) to an average of 2 per week or less. Almost all of the choline in eggs is contained in the yolk, not in the white. You can reduce choline by using egg whites without the yolks.

**Q. What are your thoughts on reducing intake of seed oils, such as those containing linoleic acid?**

A. Please consult the Diet Guide on the UCSF website:

<https://urology.ucsf.edu/lifestyle/resources>

**Q. I am vegan. Should I add fish to my diet?**

A. I am not aware of data that has directly compared a vegan vs. pescatarian diet. It is likely fine to stay on vegan diet, and ensure you are getting healthy unsaturated plant-based fats. Please consult a nutritionist regarding your individual health concerns.

**Q. What are your thoughts on the benefits of extended, multiple day complete fasts in fighting all cancers in general and specifically prostate cancer?**

A. Please consult the Diet Guide on the UCSF website:

<https://urology.ucsf.edu/lifestyle/resources>

## **Supplements**

Individuals often have questions on nutritional supplements, such as:

- Omega-3 fatty acids
- B vitamins
- Other vitamins/minerals
- Other supplements to potentially lower the risk of prostate cancer progression or biochemical recurrence

For these questions, Dr. Chan recommends the Diet Guide on the UCSF website:

<https://urology.ucsf.edu/lifestyle/resources>

## **Beverages**

The Diet Guide on the UCSF website: <https://urology.ucsf.edu/lifestyle/resources> has helpful information on several types of beverages, including:

- Fruit juices
- Coffee and caffeine
- Green tea

### **Q. What about non-sugar soft drinks?**

A. These have not been studied for prostate cancer, but it is recommended to be cautious generally about drinks sweetened with artificial sweeteners, given some recent news regarding erythritol and heart disease risk. Please see [this link](#).

### **Q. What are your thoughts about the beverage kombucha?**

A. I am not familiar with any data on kombucha and prostate cancer.

## **Smoking**

### **Q. Would quitting smoking after the cancer has spread help the cancer in effect "slow" down the rate as to which it grows?**

A. Studies suggest that people who have quit smoking for 10 years or more are less likely to die from their prostate cancer than those who quit more recently or who are current smokers. Speak to your doctor if you need help to quit.

## **Other**

### **Q. Is there a benefit of saunas?**

A. There is limited research on the topic. [This study](#) of Finnish men found no association between frequency of sauna use and risk of cancer overall. The findings in the study were inverse (protective direction) but not statistically significant for prostate cancer, that is, the results could be explained by chance alone. There is no clear evidence of an adverse effect of sauna use on risk of prostate cancer.