Curve.life

Episode 07 (transcript)

Food and Cancer

In this and the next video we will provide introductory information about food and cancer. This video focuses on two main topics. First, we look at why there is so much confusion and misunderstanding about food. Second, we look at the evidence regarding food's impact after a cancer diagnosis.

We want to empower you to help yourself. Let's begin.

Food is an area where confusion is rife. This is partly because the way food interacts with the body is extremely complicated. Also a food's nutritional content can vary depending on its origin and the methods by which it's cooked.

It's somewhat ironic that the human race is preparing to colonize Mars yet still doesn't know what to eat for dinner.

Before discussing food's impact on cancer, let's first examine the main factors that contribute to food's complexity.

Primarily, because we know so little there is gray everywhere, and this is used to the advantage of food lobbies.

Soda companies want you to think sugary drinks can be part of a balanced diet.

The pork lobby doesn't want you to know that tasty bacon might be contributing to some cancers.

There is so much at stake here, no pun intended, that the consumer normally has no idea who or what to believe.

Secondly, each food typically contains thousands of different compounds and how they interact with the body is poorly understood.

Plus, it's not just individual foods we need to consider; meals consist of numerous ingredients and they all interact differently.

And, as with most lifestyle interventions, the resulting effect of the body's interaction with these foods usually only becomes apparent over long periods of time.

Complicating matters is each individual's genetic makeup, which also plays a role in how we react to food. This, in turn, depends on our genetic expression (or phenotype).

This is epigenetics and we know from earlier videos that the foods you eat can actually alter your genetic expression.

Finally, the foods you eat interact with your microbiome to produce yet further affects on the body. The microbiome is truly fascinating but also little understood.

It contains trillion of microbes, mainly bacteria, but also viruses and yeast. It weighs as much as your brain and is known to play an important role in numerous diseases.

The complexity this presents is compounded by society's tendency to discuss food only via its simplistic macro (fat, carbohydrate, protein) and micro (vitamins and minerals) constituents.

Essentially, this language we have developed is incomplete. We're missing the broader picture.

Let's look at an apple, for example. Simple, you'd think, but actually, far from it. Apples contain Vitamin C, a known antioxidant.

But why not take a vitamin c supplement instead? Well, because although the average apple only contains 5.7mg of Vitamin C, it also contains many other antioxidants, such as quercetin, which add to the effects of the vitamin C.

So, here's the key point - the WHOLE is greater than the sum of its parts.

With such complexity, it is folly to aim for precision. But we can provide helpful rules of thumb to aid you in making sensible dietary decisions, while acknowledging the uncertainties.

"But where's the evidence food can actually help?" Good question. Let's take a look.

First, there's no doubt that diet is important in helping to prevent cancer. Broadly speaking, this is not seriously disputed. Yet, its role in helping post-diagnosis is only now starting to filter through to the broader medical community.

For example, the World Cancer Research Fund published its survivor diet guidelines in 2018, which are very similar to its cancer prevention guidelines.

Second, lab studies on animals have also shown how powerful some foods may be in slowing cancer's advance.

Third, we can't easily test diet as a treatment for cancer because withholding established drugs in order to do so would be unethical. But you can look at food in "wait and watch" circumstances, such as prostate cancer, where patients can opt whether to undergo immediate treatment or wait to see how things develop. Here, at least one study has shown food to help slow and even reverse the rise of cancer.

There are also numerous studies which assess the impact diet can have on cancer recurrence. For example:

An Illinois study in 2010 showed that a good diet was associated with better survival rates after surgery and chemotherapy in ovarian cancer patients.

In 2013, German postmenopausal breast cancer patients eating a healthy diet experienced reduced cancer and overall mortality.

Another study that year showed that colorectal cancer patients with poor diets pre-diagnosis had a high risk of tumor recurrence and mortality.

But, as you might expect with cancer âÄì there have also been a number of studies showing no link between diet after diagnosis and better outcomes.

So where does that leave us? Well, again, it's gray; there's a lot of uncertainty. But we don't require certainty. We require reasonable evidence that diet might help, and quite frankly we have this.

There are no guarantees, but it helps many and there is little to no downside, only upside, including reduced risk of other diseases, such a heart disease.

Now that we know this, we'll use the next episode to provide practical suggestions about what healthy eating means for a cancer patient.