## Why is Steamed Garlic Lemon Broccoli an anticancer dish

Philippine Daily Inquirer · 6 Sep 2018 · C2 · REGGIE ASPIRAS

Dr. Christine Gonzalez is a naturalist, educator, author, researcher and a doctor of naturopathic medicine. She has a Ph.D. in Natural Health and a Ph.D. in Integrative and Functional Nutrition.



Her work is focused on the treatment of chronic diseases, especially end-stage cancer and auto-immune diseases.

She has dedicated her life to cancer control and prevention through health education.

Before setting up the Wellness Institute, Manila, in 2001, she ran a medical practice in Silicon Valley, California.

In 2018 she opened a disease prevention facility in Lourdes, France.

During our recent conversation, I was struck by her claim that "DNA is not our destiny and neither are we doomed by bad genes."

She said that the roadmap to a longer, healthier life may lie in the groundbreaking new field of "epigenetics."

Epigenetics is the study of molecular mechanisms by which the environment controls one's genes activity.

Epigeneticists examine the factors and patterns that influence genes, whether these are turned on or off, active or dormant.

These patterns of genes expression are governed by the epigenome that acts as mechanism that tells your genes to switch on or off. The epigenome changes in response to signals (that come from inside the cell, from neighboring cells, or from the outside world).

Simply put, Gonzalez said, epigenetics tells us that what we do, how we live, what we eat and where we are—can affect how our genes express themselves.

Perhaps the most intriguing principle of epigenetics, she added, is that meaningful changes in gene expression can occur without changing our underlying genetic "code of life."

She said: "You ARE changing your genetics daily, and perhaps even hourly, from the food you eat, the air you breathe, and even the thoughts you think.

"Now that we realize our fate is not sealed at the twining of our double helix... we avail ourselves of a whole new world of possibilities." She pointed out that 90-95 percent of all cancers are environmental (outside of genetics), of which 30-35 percent are traced to diet.

That said, Gonzalez declared there is absolutely nothing that fights cancer, protects cells from carcinogenic substance damage and prevents cancer from developing, more than green, leafy vegetables. She explained this is due to the phytonutrients and chlorophyll contained in vegetables.

Several studies have demonstrated the impact of cruciferous vegetables, green tea, and spices such as curry and black pepper on epigenetic modifica- tions in female cancers. Further, evidence suggests that plant-based foods slow the cell growth of one of the most prolific cancers, breast cancer.

It's fascinating to think that simply eating cruciferous vegetables (broccoli, cauliflower, Brussels sprouts, cabbage) and drinking five cups of green tea a day—loaded with sul-foraphane—help slow down cancer cell growth.

Gonzalez gave her recipe for Steamed Garlic Lemon Broccoli, a "tangy, refreshing anticancer dish."

Broccoli, she said, contains sulforaphane, a chemopreventive compound that slows the growth of cancer, instigates cell death and controls gene regulation in DNA to preclude cancer progression.

Garlic contains bioflavonoids, like quercetin, that can actually revert a

cancer cell to a healthy cell. It blocks carcinogens from reaching their targets, destroys cancer cells and suppresses tumor growth.

Lemons are rich in Vitamin C, flavonoids and limonoids, compounds that help stop the formation and growth of cancer cells.

Lemon extracts can successfully destroy malignant cells in a wide range of cancers, including breast, colon and lung.

While also giving us her recipe for green tea, Gonzalez said we're the "caretakers of our genetic roadmap."

Steamed Garlic Lemon Broccoli

2 heads broccoli, separated into florets

2 tsp extra virgin olive oil

1 tsp sea salt Ground black pepper

1 clove garlic, minced

1 tsp lemon/calamansi juice

In a large bowl, toss broccoli florets with olive oil, salt, pepper and garlic. Steam 1015 minutes. Transfer to a serving platter. Squeeze lemon juice liberally over broccoli before serving. Fresh Green Tea

Use 2 grams (approximately 1 tsp) of loose green tea leaves (ideally organic, non-irradiated) for every 6 oz water.

You can use tap, filtered or spring water. Opt for fresh cold water that has not been previously boiled.

Avoid fluoridated tap water and reboiling (doing so concentrates the chemical).

Heat water to 160°-180°F or to just short of boiling.

Put leaves in a teapot or cup. Pour water over leaves.

Put lid on teapot or cup. Depending on variety of green tea, steep 1-3 minutes. Small leaves infuse faster than large leaves.

Drink 3 cups a day of green tea as an anticancer beverage, 5 cups a day for cancer control. All these and more are included in Gonzalez's book, "Yes, You Can Prevent and Control Cancer," 3rd edition, which will be launched on Sept. 16.