

# Could Camel Milk Be A Possible Cure For Cancer?



You may have heard that camel milk has many amazing therapeutic benefits, but did you know that it also has anti-cancer properties?

In 2016 it was estimated that over 1.6 million people would be diagnosed with cancer in the US and almost 600,000 would die from it. In fact, cancer is one of the leading causes of death worldwide.

That's why camel milk's anticancer properties are such an amazing discovery.

Researcher have tested camel milk in a variety of lab studies and found it helps fight liver and breast cancer — though further research is required to understand its effect on human patients.

While camel milk doesn't take the place of traditional cancer treatments, it could eventually serve as a complementary cancer therapy and provide hope to those fighting this awful disease.

So let's take a closer look at cancer, its causes, its common treatments, and

how exactly camel milk fights cancer cells.

## Causes Of Cancer

While we don't know everything about what causes cancer, we have some information about possible causes. For example, carcinogens and gene mutations play a huge role in the development of cancer.

### Carcinogens

Carcinogens are substances that cause cancer. They often do this by changing a person's DNA in a harmful way by causing cells to divide faster than normal.

A person might come into contact with carcinogens through:

- Air pollution
- Exposure at work
- Exposure at home
- Natural exposure (like the sun)
- Medical treatment
- Other lifestyle factors

### Genes

Genes are the instruction manuals for our bodies. They're made up of DNA, which tells all the cells in our bodies exactly what to do.

However, genes may have a genetic mutation — meaning they don't work the way they should. When a person has a gene mutation, it can cause many problems, including cancer.

Genetic mutations are inherited or acquired later in life in one cell and passed down to others. For cancer to happen, a person has to have at least two gene mutations.

# Effective Cancer Treatments

Fortunately, cancer is widely studied, and researchers are always searching for better and more effective treatments.

Today, common treatments include:

- Surgery
- Chemotherapy
- Radiation therapy
- Targeted therapy
- Immunotherapy

## Surgery

Surgery is used in many ways to treat cancer, including:

- Helping diagnose or finding the severity of cancer
- Curing the disease (in cases where the tumor can be entirely removed)
- Reducing pain experienced by cancer patients
- Improving a patient's appearance after treatment
- Enabling a patient to get other treatments

## Chemotherapy

Chemotherapy is a treatment that kills cancer cells once they've spread throughout the body. It can be used for a few different purposes in cancer care.

For example, sometimes chemo is intended to cure cancer. In other cases, it may control the spread of cancer cells, giving a patient more time to live and better quality of life.

Chemotherapy eases the symptoms of cancer and increases the comfort of a patient.

## Radiation Therapy

Radiation therapy targets specific parts of the body with radiation to stop cancer cells by damaging or killing them.

It can be easier on the body than chemotherapy because it only exposes part of the body to radiation — unlike chemo, which sends radiation throughout the body.

## **Targeted Therapy**

Targeted therapy drugs target the differences in cells, going after cancer cells while leaving the healthy cells alone by:

- Stopping cells from dividing
- Stopping the blood vessels that feed cancer
- Helping the immune system kill cancer

## **Immunotherapy**

Immunotherapy is a treatment that helps the immune system fight cancer more effectively by giving it man-made elements to enhance its cancer-fighting abilities.

It can target overall immune functions, or it can be specialized to affect specific cancer cells.

## **Camel Milk For Cancer Patients**

So, how can camel milk help fight cancer?

A 2012 study tested the anticancer properties of camel milk against liver and breast cancer, comparing it to the effects of cow milk.

For 24 hours, liver cancer cells were exposed to both camel and cow milk, in various concentrations.

At the end of the 24 hours, the test showed that treatment with 80 milligrams per milliliter of camel milk lowered the reproduction of liver cancer cells by approximately 50%, while treatment with cow milk had no effect on cancer cells.

To test camel milk's effect on breast cancer cells, researchers incubated cancer cells with camel milk for six hours. Researchers observed that

treatment with camel milk reduced oxidative stress — a contributing factor in cancer.

Another study published in the Journal of Biomedicine and Biotechnology also tested camel milk's anticancer properties against liver cancer.

Camel milk was incubated for 24 hours with Cytochrome P450 1a1 (a gene that activates liver cancer). At concentrations of 25 uL/mL and 100uL/mL, the camel milk inhibited the cancer-promoting gene by 63% and 80%.

After incubation with 25 uL/mL and 100uL/mL camel milk for six hours, the liver cancer cells showed an increase of 2.5 and 8 fold in genes that protect against cancer.

## **Hope For A Future Cancer Cure**

While further research is needed to determine camel milk's anticancer effects on human subjects, the findings of the previous and ongoing studies are very promising.

Researchers already know that camel milk has antioxidant properties and can increase genes that protect against cancer and decrease cancer-causing genes.

As we move forward and learn more, it's possible that camel milk could be used as cancer therapy alongside traditional treatments like surgery, chemotherapy, radiation therapy, targeted therapy, and immunotherapy.

So keep your ears open — a time may come when camel milk could offer hope for those battling cancer.