



**dr. nalini** L.A.C., O.M.D.

A LEADER IN ALTERNATIVE AND INTEGRATIVE MEDICINE

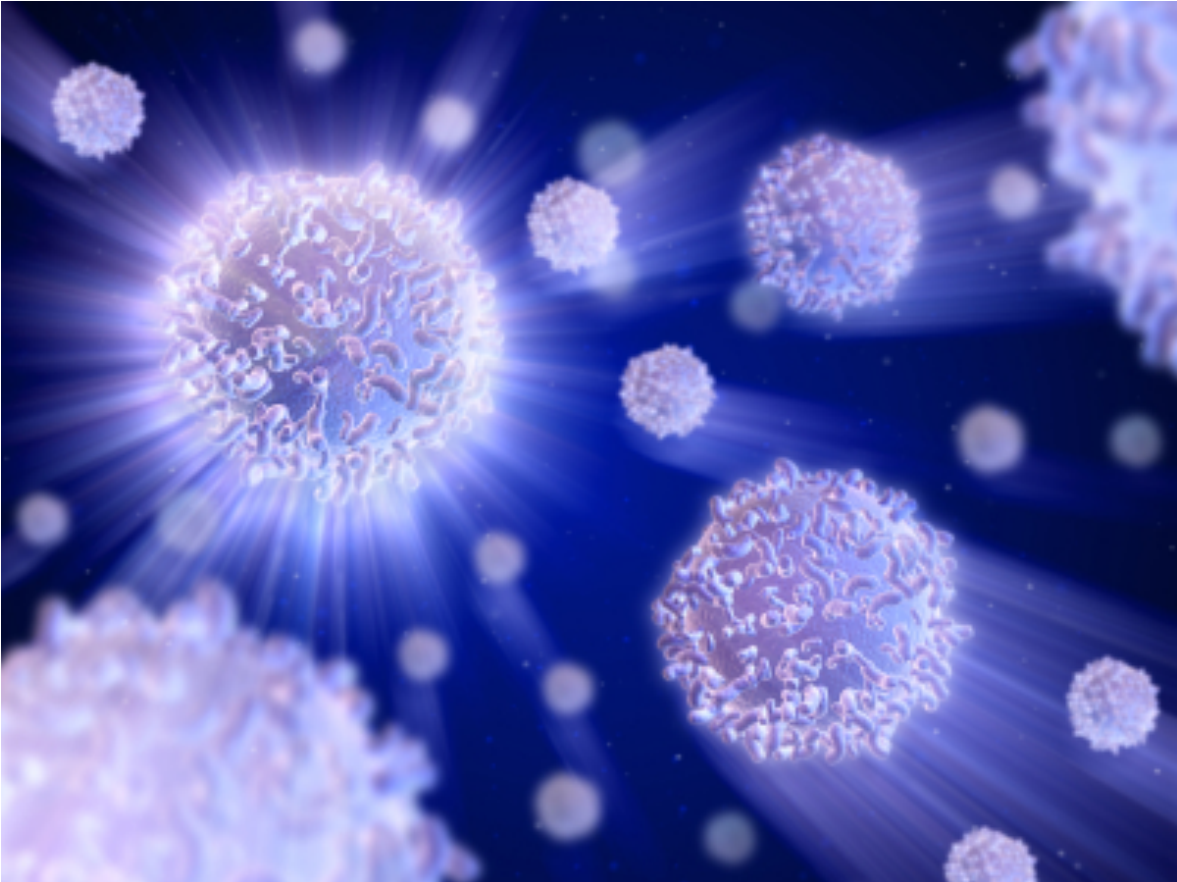
# Twelve Ways to Boost Your Immune System Destroy Cancer Cells and Fight Infections Naturally

## How to Increase Natural Killer Cells Your Own Search and Destroy Body Guards



by Dr. Nalini Chilkov, O.M.D., L.Ac.  
Integrative Medicine & Cancer Support Expert

## Boost Your Natural Immunity to Cancer and Infections by Stimulating Your Own Natural Killer Cells



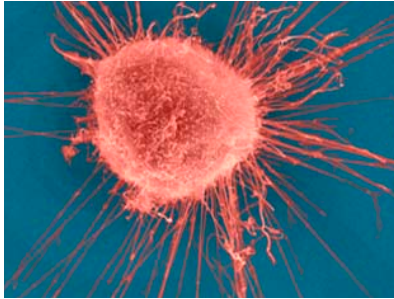
**Natural Killer (NK) Cells are aptly named as true warriors of our own innate immune system.**

Nature has provided us with our own always ready army of white blood cells to help us fight infections and target cancer cells.

NK cells, a special type of white blood cells, are responsible for immune system surveillance. They are always patrolling the body on a "search and destroy" mission.

# What Do Natural Killer Cells Do?

**-Natural Killers Cells act fast!! They kill viruses and cancer cells quickly....**



unlike other parts of our immune system that take time...up to several days...to get mobilized.

**-Natural Killer cells kill cells that are infected with viruses and some bacteria such as MRSA (Multi Drug Resistant Staph a) which does not respond to antibiotic drugs.**

**-NK reject and destroy cancer cells found in malignant tumors.**

**-Natural Killer cells alert and regulate the rest of the immune system to mobilize against abnormal cells through cell to cell communication signaling. Here's how they work:**

- NK secrete a substance called perforin that punches holes in the target cell membrane, causing it to burst.
- Or, they can punch a few holes in the target cell membrane and then insert a natural protein with anticancer effects produced by the body in response to the presence of toxic substances, such as bacterial toxins, through the holes. This process causes the target cell to die slowly.
- Yet another mechanism is to secrete substances called granzymes. Granzymes are enzymes that cut up a cell's DNA (genetic material) and thus also cause that cell to die.

## **Natural Killer Cells Reduce Cancer Recurrence**

One of the key characteristics of cancer cells is that they can become immortal. Cancer cells have figured out how to stay alive and fail to die. Cancer cells typically do not go through the natural cell life cycle and natural death process called apoptosis and thus keep growing and growing. NK cells function to arrest unregulated cancer cell growth and cause the cancer cell to die, stopping the spread of cancer.

One common side effect of cancer chemotherapy is the destruction of bone marrow function which leads to abnormally low numbers of white blood cells including NK cells. Boosting NK Cells after chemotherapy is vitally important to prevent cancer recurrence and infections.

Studies have shown that cancer patients with a low activity of NK cells have shorter remissions,



greater tumor burdens and an increased risk for lymph node metastasis. Response rates to chemotherapy may be lower and recurrence rates after surgery may be higher in patients with low baseline NK cell activities. It is also not uncommon for the activity of NK cells to decrease just prior to a recurrence in a patient's cancer. It may be possible to improve a cancer patient's risk for recurrence by maintaining a high NK cell activity level.

# Twelve Natural Ways to Boost Your Immunity

## **Herbal Medicines Increase NK Cells**

### **Imperial Herbs of Chinese Medicine for Boosting Immunity**

1. Astragalus Root Huang Qi
2. Reishi Mushroom Ling Zhi
3. Shitake Mushroom Hua Gu
4. Turkey Tail Mushroom Yun Zhi
5. Chinese Caterpillar Fungus Dong Chong Xia Cao

## **Ancient Traditional Chinese Herbal Tonic**

6. Ginseng and Astragalus Formula Bu Zhong Yi Qi Tang

## **Vitamins Increase NK Cells**

7. Vitamin E
8. Vitamin C
9. Vitamin A and Beta Carotene

## **10. Exercise Increases NK Cells**

## **11. Sleep Increases NK**

## **12. Relaxation Increases Natural Killer Cells**

Massage  
Mediation  
Relaxation

# HERBAL MEDICINES INCREASE NATURAL KILLER CELLS

## IMPERIAL HERBS OF CHINESE MEDICINE FOR BOOSTING IMMUNITY

These herbal medicines revered in Asia for their health promoting effects are rich in polysaccharides, vitamins, minerals, proteins, carbohydrates and fats.

Constituents of these natural medicines strengthen the immune system, support anti-inflammatory functions and fight disease causing organisms. h

These tonic herbs are traditionally used to assist the immune system to destroy bacteria and viruses. They contain constituents that have anti-cancer and anti-tumor effects and may help extend the survival of patients with some cancers when used with chemotherapy.



Here are the top five Chinese Medicinal Immune Herbs

- 1 Astragalus Root (Astragalus membranaceus) Huang Qi
- 2 Reishi Mushroom (Ganoderma lucidum) Ling Zhi
- 3 Shitake Mushroom (Lentinus edodes) Hua Gu
- 4 Turkey Tail Mushroom (Coriolus versicolor) Yun Zhi
- 5 Chinese caterpillar fungus (Cordyceps sinensi) Dong Chong Xia Cao

## 6. GINSENG ASTRAGALUS FORMULA

### BU ZHONG YI QI TANG IN CHINESE TRADITIONAL MEDICINE

has been shown in numerous studies to increase Natural Killer Cell numbers and activity. It has been suggested in China and Japan that the elderly and any other immune compromised persons use Bu Zhong Yi Qi Tang on a daily basis to improve resistance to infections and reduce incidence and growth of cancers.

These herbs may be taken as teas, powders, capsules or added to your food cooked into soups.

# Vitamins Increase Natural Killer Cells

## 7. Vitamin E

Vitamin E is an important antioxidant and immune booster.



### Vitamin E:

- stimulates the production and increase the activity of natural killer and B cells, (those that seek out and destroy bacteria and cancer cells) and
- may also reverse some of the decline in immune response commonly seen in aging.

Supplementation with only 200 iu per day has been shown to markedly decrease the incidence of infections in the elderly. (Source: nuts, seeds, vegetable oils, whole grains)

## 8. Vitamin C

tops the list of immune boosters for many reasons. Vitamin C:



- increases the production of infection-fighting white blood cells and antibodies, and
- increases the levels of interferon (this is the antibody that coats cell surfaces thus restricting the entry of viruses into the cells).

Vitamin C has also been shown to increase the numbers and activity of both NK Cells and Interferon, our body's own antiviral response system.

(Source: [parsley](#), [broccoli](#), [bell pepper](#), [strawberries](#), [oranges](#), [lemon juice](#), [papaya](#), [cauliflower](#), [kale](#), [mustard greens](#), and [Brussels sprouts](#))

## 9. Vitamin A and Beta Carotene

boost the immune system in a number of ways. Vitamin A and Beta Carotene increase the number of infection-fighting cells natural killer cells, and helper T-cells



- protect the respiratory system from infections
- (Source: Vitamin A from animals: [calf liver](#), [milk](#), and [eggs](#)  
Beta Carotene (pre-vitamin A from plants) :[sweet potatoes](#), [carrots](#), [kale](#), [spinach](#), [turnip greens](#), [winter squash](#), [collard greens](#), cilantro and fresh [thyme](#)

## 10. Exercise Increases Natural Killer Cells

**Moderate exercise increases both  
the number of Natural Killer cells  
and the activity of Natural Killer cells**

Some researchers call these “exercise activated cells”. Therefore take a walk, do some yoga or tai chi, go for a hike or a bike ride on a regular basis to keep your immunity robust.



Moderate exercise will thus increase your immune system’s capacity to fight viral infections and cancer. (Please note that intense and prolonged exercise can actually lower immunity.) Some integrative oncologists such as Keith Block, M.D. actually have their patients receive

chemotherapy in his office while walking on a treadmill to boost immunity during treatment! Don’t be a sedentary couch potato if you want to have a robust immune system.

# 11. GET SOME SLEEP INADEQUATE SLEEP DECREASES NATURAL KILLER CELLS



Just one night of poor sleep impairs normal immune function while a good night's sleep increases your resistance to infections and the ability to fight cancer.



# 12. RELAXATION, MASSAGE and MEDITATION BOOST IMMUNITY and INCREASE NATURAL KILLER CELLS



## **Have A Massage**

Deep relaxation produces profound chemical changes in levels of stress hormones such as cortisol and neurotransmitters such as dopamine and serotonin leading to an increase in Cancer Fighting Natural Killer Cells. Natural Killer Cells Increase following massage therapy.



## **Relax-Meditate**

The lowering of the stress hormone cortisol through relaxation or meditation leads to an increase in immune capacity and Natural Killer Cells. Take some time everyday to relax deeply in order to boost your immunity.

## What Else Can You Do to Enhance Your Immune System?

- Treat any underlying infections if present.
- Drink lots of fresh pure water.
- Keep your stress levels under control.
- Avoid smoking and alcohol.
- Avoid excessive intake of caffeine from tea, coffee and soft drinks.
- Limit intake of refined grains and sugars.
- Avoid artificial sweeteners, colorings and flavorings.
- Avoid refined carbohydrates, white sugar and white flour, glucose, sucrose and corn syrup.
- Limit exposure to environmental pollutants.
- Eat a diet rich in fresh, unprocessed whole foods, nuts, seeds, fresh vegetables and fruits and healthy fats.
- Cook with herbs and spices that supply natural antioxidants and support anti-inflammatory functions such as ginger, garlic, turmeric, oregano, rosemary and thyme.
- Eat a rainbow of colors everyday including 6-12 servings of deeply pigmented fruits and vegetables.
- Include fermented foods such as yoghurt, kefir, miso, natto, sauerkraut and kim chi in your diet as a source of natural probiotics for supporting healthy intestinal ecology and function.
- Take a high quality multivitamin and mineral supplement to ensure that you have an adequate supply of the nutrients needed for the body every day.

## Dr. Nalini Chilkov, L.Ac.O.M.D.



combines her diverse training in Traditional Oriental Medicine, Modern Biomedicine and Cell Biology with 30 years in private practice. Dr. Chilkov primarily serves patients with cancer and complex, chronic illnesses alongside her Optimal Health and Wellness practice. She is a respected expert in Collaborative Integrative Cancer Care known both for her meticulous attention to detail and individualized treatment plans as well as her warmth and compassion.

Dr. Chilkov is a seasoned clinician and an innovator building bridges between modern and traditional healing paradigms, partnering with physicians to provide best outcomes for patients. She has been a lecturer at the School of Medicine at UCLA and UC Irvine in California as well as many schools of Traditional Oriental and Naturopathic Medicine over her long career.

Dr. Chilkov is a regular contributor to the [Health Section of the Huffington Post](#)

She has been recognized as a go to clinician in Suzanne Somers' book "Knockout: Interviews with Doctors Who Are Curing Cancer--And How to Prevent Getting It in the First Place. Dr. Chilkov sits on the Scientific Advisory Board of the Mederi Foundation for research, education and integrative care of patients with cancer and chronic illnesses.

Dr. Chilkov holds a degree in Cell Biology and is trained in Nursing, Travel and Wilderness Medicine. She stays abreast of leading medical research worldwide. Dr. Chilkov has provided care in medically underserved regions and wilderness areas on several continents.

Dr. Chilkov has a lifelong involvement in creative and meditative arts and has studied dance and music in West Africa. An avid hiker, Dr. Chilkov has climbed mountains in Africa, Asia, Europe and North America.

Dr. Chilkov has provided her patients with truly personal and individualized Integrative Care and brings a wealth of wisdom and expertise to her practice.



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Mindfulness-Based Stress Reduction in Relation to Quality of Life, Mood,

Symptoms of Stress, and Immune Parameters in Breast and Prostate Cancer

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