

# STRESS REDUCTION

## Stress hormones:

- Increase the production of free radicals which lead to DNA damage
- Increase inflammatory proteins which impair immune function and promote cancer growth
- Impair immune cell function
- Reduce the ability of abnormal cells to undergo apoptosis (cell death) and DNA repair.
- Stimulate the production of growth factors that promote

## Stress reduction can

- Modulate breathing
- Decrease stress hormone production
- Lower blood pressure

## Stress reduction techniques can improve quality of life.

- Massage therapy
- Meditation
- Guided imagery
- Yoga
- Cognitive based therapies
- Prayer
- Walking on the beach
- Journaling
- Mindfulness



The act of prayer requires the supplicant to become quiet, release tension and let go of stress.

Repetitive prayer such as praying the Rosary can mimic the chanting and breathing of yoga

Patients with a belief in God live longer than those who neither believe or pray.

Integrative oncology 2012



Patients who were prayed for did better than those who were not.

California Pacific Medical Center 1998



Breast cancer survivors who practiced yoga for three months had reduction in cancer related fatigue and improved vigor and improved sleep.

Breast cancer survivors had less risk of recurrence and improved survival if they received psychological interventions, relaxation training and therapy hours compared to those that did not.

Clinical Cancer Research 2010