

Clinical Pearls

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Progressive Muscle Relaxation (PMR)

Submitted by Dwight McKee MD

An 11-year study of this stress management technique with breast cancer patients at the James Cancer Center of Ohio State University found that regular practice of the technique reduced the risk of dying of breast cancer by 56%. (<http://cancer.osu.edu/mediaroom/releases/Pages/Intervention-Program-Boosts-Survival-In-Breast-Cancer-Patients.aspx>)

There is no reason to think that these benefits would be confined to a single cancer type. There are also many other relaxation/stress management techniques (e.g. meditation, yoga, tai chi, chi-gung, heart math and other types of biofeedback) that have not been studied in relation to cancer outcomes, and which are also very likely equally beneficial.

Progressive muscle relaxation, or PMR, involves tensing and releasing the muscles, one body part at a time, to bring about a feeling of physical relaxation.

What to expect with progressive muscle relaxation

The researchers said that after 2 hours of training from an expert, patients are usually experienced enough to successfully practice the techniques on their own.

For a better idea of what to expect with PMR, try this exercise:

- Begin by tensing and relaxing the toes of one foot.
- Inhale as you briefly tense your muscles and exhale when releasing the tension.
- Gradually, work your way up into the muscles of one leg, tensing and relaxing.
- Repeat on the other leg.
- Continue up your body, tensing and relaxing each muscle group: your abdomen, torso, chest, fingertips, arms, shoulders, neck, and face.
- As you purposely release tension in each area, you may experience a feeling of relief.

Research Paper on Cancer Outcomes Flawed

Submitted by Robert Zieve, MD

A research paper released in the April 2012 issue of Health Affairs looked at cancer outcomes in the U.S. compared to cancer care in Europe and announced American Cancer Patients Live Longer Than Those in Europe; Higher-Priced Cancer Treatments in US Offer Better Survival.

Tomas Philipson, the Daniel Levin Chair in Public Policy at the University of Chicago, and his coauthors found that the cost of cancer treatment in the United States was higher than such care in ten European countries from 1983 to 1999. However, they also found that for most cancer types investigated, US cancer patients lived longer than their European counterparts. Cancer patients diagnosed during 1995-99, on average, lived 11.1 years after diagnosis in the United States, compared to just 9.3 years from diagnosis in Europe.

However, this study is flawed, says David Gorski in Science Based Medicine www.sciencebasedmedicine.org. That problem is embodied in lead time bias. Gorski says that using the time from diagnosis

to the time of death is not the correct way to analyze data like this.

Unless the rate of progression from the point of a screen-detected abnormality to a clinically detected abnormality is known, it is very difficult to figure out whether a treatment of the screen-detected tumor is actually improving survival when compared to tumors detected later. If investigators are to do so, the lead-time needs to be known and subtracted from the group with the test-based diagnoses. Moreover, this lead-time is usually stochastic. It will be different for different patients, with some progressing rapidly and some progressing slowly. This variability is responsible for a second type of bias, known as length bias.

Screening programs preferentially pick up tumors that are growing slowly and more likely to portend a good prognosis (or represent over-diagnosis), rather than tumors that are rapidly growing and likely to portend a worse prognosis. This problem is at the heart of the issue of over-diagnosis. Basically, over-diagnosis refers to disease detected by a screening test that, even if not treated, would never threaten the life or seriously threaten the quality of life of a patient. Frequently such disease is found in autopsy specimens. Aggressive screening can lead to more patients having a diagnosis of cancer for a longer period of time even without any real improvement in survival.

In a country where there is a lot of screening for cancer, lead-time bias will be a bigger issue. There will also be more over-diagnosis, which will inflate the apparent survival time after a cancer diagnosis in the population. In such a case, we would anticipate that some of the largest gains in apparent survival would be in cancers for which major screening programs were undertaken, cancers like breast and prostate cancer, which is exactly what the authors observed.

<http://www.sciencebasedmedicine.org/index.php/cancer-care-in-the-u-s-versus-europe/>

Dandelion in Cooking

Submitted by Donald Yance, CN, MH(AHG)

Dandelion is a choleric, diuretic, antioxidant, and anti-inflammatory; with potent redox-anti-oxidant activity, dandelion defends the liver against a wide variety of toxins. A recent research study proved that dandelion leaf extract effectively protects the liver against acetaminophen toxicity, which can cause acute liver failure and even death.¹

Italian-Style Sautéed Dandelion Leaves

Wash and clean one bunch of dandelion leaves. Slice into one-inch wide ribbons. Heat in 1-2 Tbls. of olive oil in a large skillet over medium heat. When oil is hot, but not smoking, add 1 tsp. of freshly crushed garlic, dandelion greens, and salt and pepper to taste. Sauté for 2-5 minutes, until greens are tender. Add a splash of good quality balsamic vinegar and powdered seaweed to taste. To vary the recipe, add 1-2 ozs. organic crushed tomatoes or 1 tsp. tomato paste while greens are sautéing. Serve, and enjoy!

¹Colle D, Arantes LP, Gubert P, da Luz SC, Athayde ML, Teixeira Rocha JB, Soares FA. Antioxidant properties of *Taraxacum officinale* leaf extract are involved in the protective effect against hepatotoxicity induced by acetaminophen in mice, *J Med Food*. 2012 Jun;15(6):549-56. Epub 2012 Mar 16.

Resveratrol Ball Recipe

Submitted by Nalini Chilko, LAc, OMD

Ingredients:

- 1 tsp resveratrol powder
- 1 tsp pure unsweetened organic cocoa powder
- 1/2 tsp cinnamon powder
- 1 tsp of almond butter (unsweetened)

Directions:

Mix together and roll into a ball. Eat!!!

Yum! You can't taste the resveratrol!

Options:

- Mash a soft date into it or a little date sugar (avoid if keeping it low glycemic).
- For those who don't love chocolate you can just do it with cinnamon and/or add some ginger, cardamom, vanilla to the mix.

Bone Marrow Broth and Botanical Bone Marrow Support

Submitted by Donald Yance, CN, MH(AHG) and Jason Miller, LAc

Marrow Bones:

Beef or Buffalo bones can usually be acquired from your local food co-op, or a local butcher. If you do not see them on the shelf (often in meat or frozen dept.), ask someone! Look for the pieces with the most marrow.

Recipe:

- 1 Quart:
- 2-3 large chunks of bone
- ¼ cup vinegar (white or apple cider)
- Hefty pinch of salt

A crockpot works best, but a stock pot will also work. For a one-quart crock, place 2 or 3 large chunks of bone in pot, cover with filtered water, add ¼ cup vinegar (white or apple cider vinegar is best) as this helps extract the minerals, especially calcium, out of the bone material. Add a hefty pinch of salt, and simmer for 4-6 hours. If desired, the fat can be partially or completely skimmed off the top. Use immediately, store in fridge for up to a week, or freeze. If freezing, cool first then transfer to wide neck glass quart jars leaving an inch or two at the top. Place lid on only after frozen.

For a two-quart crock, double all quantities.

Tips: Bone cuts can differ dramatically in size, for the quantities stated here I am assuming each bone is roughly the size of an average fist. Making broth is an imprecise art ~ if the broth comes out too heavy (you will know when you eat it what your taste is!), water down the batch and either use less bone material next time, or more water. If it seems to thin, add less water or more bone material to the next batch. You will get the hang of it ~ trust yourself! The broth should have a nice rich deep brown color, and should lend a savory, velvety texture to your soups, stews and sauces.

Uses: Replace plain water in any recipe, or when cooking grains, with bone or other meat broth (chicken, beef or fish) for added nutrition. For more information on why and how to use broth and for other excellent nutritional advice, visit westonaprice.org at the Nourishing Traditions website, and search for the "Broth is Beautiful" article.

Herbs: Jade Mountain (541 482 2107) sells a product called Nourish Yourself Soup Mix - it contains whole herbs:

- Astragalus
- Dang gui
- Longan berry
- Yi yi (lachryma coix seeds)

Cooking these herbs with the bone marrow broth works well and makes a very nourishing soup broth that you can eat daily with alternating ingredients.

Astragalus plus Dang gui in a 6:1 ratio represents a TCM formula called Dang gui bu xue tang, which means "dang gui decoction to build the blood". With any enriching formula you can always add some good aromatic, dampness transforming herbs too, such as Sha ren (amomum- which is a Chinese cardamom) and chen pi, (citrus reticulata - dried citrus peel).

Suggestions to Treat Diarrhea from Chemotherapy Treatments

Submitted by Donald Yance, CN, MH(AHG) and Jason Miller, LAc
Tea:

- strong peppermint tea
- strong tannin tea, such as black tea
- strong red raspberry leaf tea
- strong avena, American cranesbill or bistort tea

Other:

- psyllium powder without too much water
- slippery elm powder mixed into a gruel
- carob powder stirred into water to form a gruel
- strawberry leaf syrup from the drugstore
- live yogurt (probiotics)
- sacchromyces boulardii
- powdered bentonite clay – 1-2 tsp daily

If really bad:

- belladonna tincture in drop dosing—best supervised by an experienced herbalist/naturopath experienced with this.

Think of Silymarin in Non-Small Cell Lung Cancer

Source: Mederi Foundation Monthly Round Table,
www.mederifoundation.org

Silymarin is very safe and is kidney protective in chemotherapy. It is best to obtain this product from a good company, like JHS. Silibinin is a subset of silymarin, for those that might not know this.

Mol Carcinog. 2010 Mar;49(3):247-58. doi: 10.1002/mc.20595. Silibinin inhibits human nonsmall cell lung cancer cell growth through cell-cycle arrest by modulating expression and function of key cell-cycle regulators. Mateen S, Tyagi A, Agarwal C, Singh RP, Agarwal R. Source: Department of Pharmaceutical Sciences, School of Pharmacy, University of Colorado Denver, Aurora, Colorado 80045, USA. Erratum in Mol Carcinog. 2010 Sep;49(9):849.

Galectin-3 Levels and Citrus Pectin

Submitted by Robert Zieve, MD

The Galectin-3 lab test is an important test to do in all patients diagnosed with cancer. According to Dr. Dwight McKee, levels of greater than 18 in patients diagnosed with cancer generally call for adding Modified Citrus Pectin to patient oral protocols. He also recommends modified citrus pectin in all metastatic cancers and those with high risk of metastasizing. This product is generally tolerated well when taken as 1 scoopful in a glass of warm water between meals. The dose may need to be 1 tbs. twice daily if galectin-3 is over 18 and is rising. If the values on this test are rising, adjust the dose of citrus pectin accordingly upward. Many high quality companies offer this product.

Integr Cancer Ther. 2010 Jun;9(2):197-203. doi:10.1177/1534735410369672. Epub 2010 May 11. PectaSol-C modified citrus pectin induces apoptosis and inhibition of proliferation in human and mouse androgen-dependent and -independent prostate cancer cells. Yan J, Katz A. Source Department of Urology, Columbia University Medical Center, 1130 St. Nicholas Ave., New York, NY 10032, USA. jy2326@columbia.edu. BMC Complement Altern Med. 2011 Aug 4;11:59. doi: 10.1186/1472-6882-11-59.

Activation of human T-helper/inducer cell, T-cytotoxic cell, B-cell, and natural killer (NK)-cells and induction of natural killer cell activity against K562 chronic myeloid leukemia cells with modified citrus pectin. Ramachandran C, Wilk BJ, Hotchkiss A, Chau H, Eliaz I, Melnick SJ. Source: Dharma Biomedical LLC, Miami, FL, 33156, USA. cheppail.ramachandran@mch.com