


ASSOCIATION OF BREAST CANCER TUMOR SIZE AND DETOXIFICATION NUTRITIONAL HABITS

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ABSTRACT

Scientists from a variety of areas, including health care, industry, and pharmacy, have researched probiotics and fermented milk items. In recent years, studies have shown that dietary probiotics like kefir can help prevent and treat cancer. Kefir is a milk fermentation product made by fermenting milk with kefir grains. It is sold as a refreshing, low-alcohol beverage and is widely consumed in many countries. Kefir grains are made up of a symbiotic relationship between yeast and bacteria. Kefir grains, among other things, have antibacterial, antifungal, anti-allergic, and anti-inflammatory properties. Furthermore, some of the bioactive compounds in kefir, such as polysaccharides and peptides, are thought to have a high potential for inhibiting tumor cell proliferation and inducing apoptosis. In studies on colorectal cancer, malignant T lymphocytes, breast cancer, and lung carcinoma, kefir was found to have anti-cancer properties. Moreover, Probiotics can be consumed as part of foods such as vegetables or dietary supplements. Which is in this case detox vegetables water and juices are considered as alternatives to breast cancer chemotherapy with other types of plants meander retain the immune stimulating and anti-tumor present. Generous stigmatization of working phytochemicals such as carotenoids, flavonoids, ligands, polyphenolics, terpenoids, sulfides, lignans and plant sterols has been identified in different types of herbs. These phytochemicals take on different mechanisms of action. They either prompt the parental enzyme to show glutathione transferase or prevent the cell proliferation. This investigation has centered on the biochemical inheritance of *Allium sativum*, *Echinacea*, *Curcuma longa*, *Arctium lappa*, *Camellia sinensis*, *Panax ginseng* and *Flax seed*. The shifting oils and extracts of these herbs and plants on the increase of mevalonate zigzag reduce the tumor growth and cholesterol synthesis.

Keywords: Kefir, Detox, Diet, Cancer, Tumor size

INTRODUCTION

BC breast cancer for short is considered the most prevalent type of tumour among females. Its heterogeneous form with different and discrete features such as phenotypically and morphologically characteristics depend primarily on gene expression outcomes. Thus make it differ greatly in types, hence contributing to an increase in the deleterious factors and the difficulty of treatment (Varghese, 2020). BC is the second foremost cause of death globally, therefore scientists constantly develop new methods and treatment to minimize the effects, tumour growth and resistance to chemotherapy. Herbal remedies have proven its great ability in curing different diseases, therefore,

it is considered as a safe alternative in many cases (Shareef, 2016). Due to its clear advantageous effect in treating health issues, detoxification has been used by many people to help clean up their bodies from toxic materials. This review is spotting the light on the usage of detoxification in order to hinder the growth of the tumour mass Detox protocol

Breast cancer deaths statistics go over rates worldwide almost 10.0 million cancer deaths. Chemotherapy also can be slightly harmful to the patient. Therefore, more research should be done about how gut bacteria interfere with breast cancer treatment through overlap with herbal and vegetable detox juices and water. Which has a great role in activating the gut normal flora. This flora contributes significantly to reducing the size of breast cancer. These different types of plants contain immune-stimulating and anti-tumour properties. Also, the volatile oils and extracts of these herbs and plants that inhibit the synthesis of mevalonate that lessen the tumour growth. Such as carotenoids, flavonoids, ligands, polyphenolics, terpenoids, sulfides, and plant sterols have been identified in different types of herbs. All these types have been proven to either stimulate the protective enzyme-like glutathione transferase or prevent cell proliferation. Drinking detox water and juices at least for 10 days lead to increased gut and colon normal and that will control tumour and enhance the body health. Probiotics play an important role in the health of the host, having effects on the regulation of energy metabolism and maturation of the immune system. Probiotics can be consumed as part of foods such as vegetables or dietary supplements. Probiotic only can grow and survive if there is plenty of prebiotic which is in this case detox vegetables, water and juices. Curcumin (CUR), a part of the spice plant *Curcuma longa* turmeric, is widely used for medicinal purposes and is useful in the treatment of several cancers. It is thought to have originated in South and Southeast Asia. It has anti-inflammatory, anti-tumour, anti-microbial, anti-oxidative, and anticancer properties, and it inhibits the growth of squamous cell carcinomas, as well as lung, breast, pancreatic, brain, head and neck, and colorectal cancers. CUR also inhibits the proliferation of cancer cells, including melanoma and mantle cell lymphoma, as well as hepatic, vaginal, and prostatic carcinomas. CUR inhibits angiogenesis and tumour growth by regulating the expression of many proteins, including inflammatory cytokines and enzymes, transcription factors, and gene products associated with cell survival and growth apoptosis. This polyphenol derivative also aids in the spread of cancer. CUR stops cancer cells from surviving, growing, and migrating by disrupting a

variety of signalling pathways. In addition, unlike most chemotherapeutic medications, CUR has few side effects. As a result, CUR exhibits the characteristics of a promising cancer treatment agent.

MATERIAL AND METHODS

Preparation of juices and water:

The following procedure was administered for ten days in the morning to foster the patient's recovery. 250 ml of fresh juices of green vegetables consist of Spinach (*Spinacia oleracea*), Parsley (*Petroselinum crispum*), Coriander (*Coriandrum Sativum*), Fennel (*Foeniculum vulgare*), Basil (*Ocimum basilicum*), Lemon (*Citrus limetta*), Ginger (*Zingiber*), Cucumber (*Cucumis sativus*) and Celery (*Apium graveolens*) was daily prepared. 250ml of water was sterilized before drinking with DMSO and mms1 to drink daily. 250ml of water with Cayenne Pepper (*Capsicum annum*) and two drops of Lemon (*Citrus limetta*).

Preparation of aqueous shots

Amount of two drops of green, black walnut complex (*Juglans nigra* L.), iodine, Indian Tobacco (*Lobelia inflata* L.) to take in a small quantity.

Green salads

The impact of vegetable utilization on bosom cancer risk is questionable. We inspected the relationship between vegetable admission and bosom disease danger in a Total vegetable admission was discovered to be contrary associated with bosom malignancy hazard.

Consumption of individual vegetable gatherings such as dark green verdant vegetables, cruciferous vegetables, carrots and tomatoes, banana, watermelon/papaya/melon were all inversely and essentially related with bosom malignant growth hazard. An inverse association was additionally noticed for nutrient A, carotene, nutrient C, vitamin E, and fiber consumption. These information show that greater intake of vegetables is related with a diminished risk of bosom malignant growth among ladies .

Special soup

Heat the olive oil (*Olea europaea* L.) over high heat and add the onion (*Allium cepa*), carrots (*Daucus carota* subsp. *sativus*), celery (*Apium graveolens*). Cook for approximately five minutes, or till the greens are tender. Stir the vegetables regularly to prevent them from sticking to the bottom of the pan and to ensure that they cook evenly. Add water. Then add the garlic (*Allium sativum*) without removing the peel and cook for two additional minutes. Add the turmeric (*Curcuma longa*), ginger (*Zingiber officinale*), cayenne pepper (*Capsicum*). Pour within the vegetable broth and convey to a boil. Reduce heat to simmer, about 15 minutes. Serve the soup hot, ladled into bowls. The soup may be saved within the refrigerator for as much as a week.

Preparation of kefir probiotics

Add kefir grains to coconut milk and put a teaspoon of kefir grains per cup (250ml) of coconut milk then store the milk in a clean glass jar, after that cover the jar with a piece of gauze. The jar should be kept at a period of 12-48 hours, at room temperature (25 °C), and then the kefir is ready when the milk becomes slightly thick and it is ready to taste. Remove kefir grains, and these grains can be added to fresh milk to obtain another kefir than coconut milk, and it is poured ready after fermentation. Keeping kefir milk in the refrigerator, and it will be used within one week only.

Consent

Written informed consent that I might report study case was obtained from the patients

RESULTS

Breast cancer In vitro and in vivo study impact of kefir on breast malignancy cells concentrated in various examination. The impact of our 7 days of utilization of kefir and a readied coconut milk base with matured bacterial hatched for 24 hours utilizing yogurt fermenter and afterward refrigerating the yogurt and afterward giving the patient 100 ml day by day with the detox.

DISCUSSION

Many research on diet and breast cancer risk have looked into the function of a high fat intake as a risk factor for the disease, but the findings are mixed.

High fat or energy intake is often associated with a low intake of fruits and vegetables, so the dietary trend may be of particular interest. As a result, it's likely that eating a lot of fruits and vegetables actually means eating less fat. It is possible to make an adjustment for energy consumption to settle the issue of diet composition rather than absolute intake. Energy alteration, on the other hand, seems to have little impact on the estimated relative risks.

Huge amounts of fruits and vegetables in the diet reduce the risk of various cancers by stimulating inflammatory and immune responses. Furthermore, because of its contribution to obesity pathways, diet plays a key role in cancer risk. Obesity has been studied as a factor in the development of many cancers, including breast cancer, especially in postmenopausal women. In addition, it has been hypothesized that overweight or obese women are more vulnerable to the effects of inflammatory stimulants. In this regard, 2 studies found a positive correlation between dietary inflammatory potential and risk of developing breast cancer among overweight and obese women compared to underweight women. Furthermore, several studies have suggested that dietary components may trigger epigenetic changes that improve carcinogenesis, suggesting that such dietary components may be linked to DNA repair and cell-cycle control pathways, such as methylation and histone acetylation changes. As a result, diet can be considered a modifiable risk factor for a variety of diseases, such as cancer. And one of the diets that has proven to have a lot of promise for cancer care and prevention is kefir, kefir has become internationally known as a complex probiotic, which provides many health benefits. These include antimicrobial, immunomodulatory, anti-inflammatory, and metabolic benefits. This study focused on evaluating and exploring the anticancer potential of kefir. Through experiments, we proved that kefir exhibits anti-proliferative and pro-apoptotic properties on colorectal cancer cells, namely Caco-2 and HT-29, and it has also been shown that kefir acts to stop the cell cycle in the G1 phase. The results of our experiments confirm that the beneficial effects of kefir are caused by the products produced by microorganisms during fermentation. Through our data we saw that kefir can affect metastasis because it may show an indirect effect that prevents metastasis in the body by modifying the immune system or the microbial environment of the cells. Another possibility is that kefir may interfere with other processes involved in metastasis besides invasion and movement. The third hypothesis is that the components in kefir may be metabolized in vivo, resulting in the formation of active compounds capable of inhibiting tumor metastasis.

LAB can cause cancer cells to die, via a mechanism that includes apoptosis. There are two primary pathways to programmed cell death. They are the external and internal paths. The first is mediated by activation of the death receptor and caspase 8, while the second pathway includes mitochondria and caspase 9. We have demonstrated that the Bcl-2 family of proteins has an important role in the mitochondrial pathway and in the maintenance of MMP.

The efficacy of kefir water in inhibiting breast cancer metastasis was tested in vivo using mice. After 28 days of treatment, the weight and size of tumors in the treated mice were significantly reduced. Cell growth and reproduction are regulated naturally within the cell cycle. Cancer cells divide rapidly, and thus, reproduce at their own speed. Dividing cells were detected in tumor sections using H&E staining and in Fig.1a, b, & 2: the number of dividing cells was decreased in the tumor section treated with kefir water. Then a TUNEL scan was performed on the tumor tissue to detect DNA damage. Increased DNA fragmentation was seen in kefir water-treated tumor sections. DNA damage is one of the indicators of apoptosis. Therefore, the increase indicates that cancer cells are undergoing apoptosis.

Table 1 & 2 showed the ANOVA and Wilcoxon test comparing the effect of different treatments on number of tumor cells and their reduction

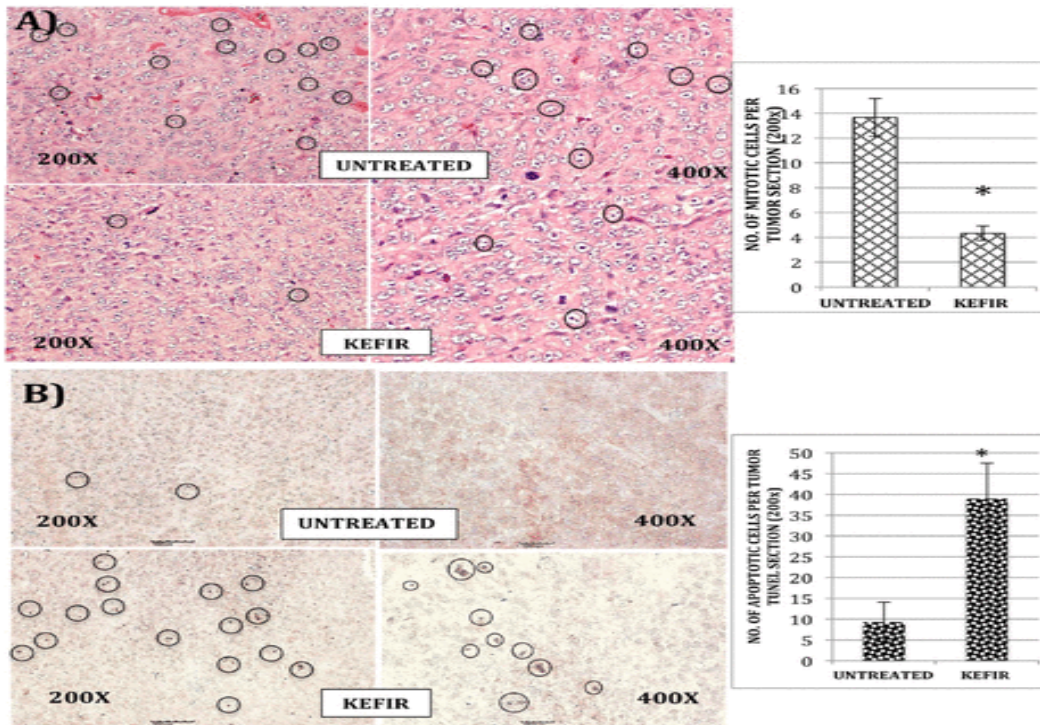


Fig.1: The number of dividing cells was decreased in the tumor section treated with kefir water.

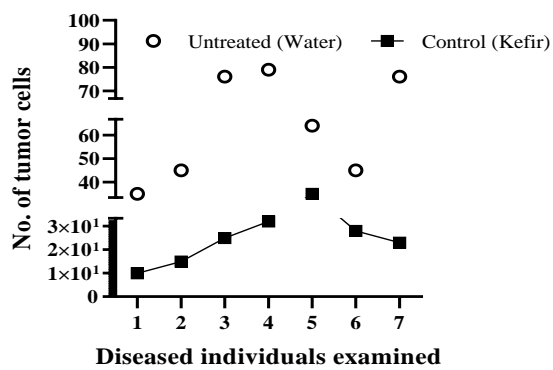


Fig 2: Graphic representation of tumor cells reduction under different treatments

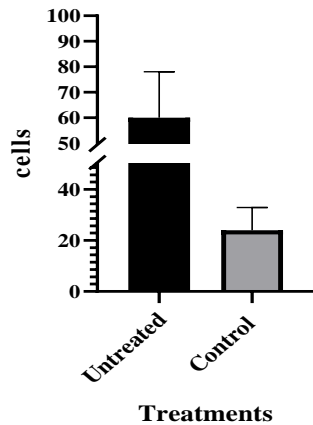


Fig 3: Effect of different treatments on tumor cells

Table 1: ANOVA of effect of different treatments on tumor cells

Mean	R-square value	F / DFn. / Dfd.	P-value	Significant difference
60	0.649	4.092	0.0005	Yes
24		6		
		6		

Table 2: Wilcoxon sign rank test

Sum of ranks -ve ranks +ve ranks	P value	Significance (0.05)
28.0 (both treatments)	0.0156 (both treatments)	Yes (both treatments)
0.00 (both treatments)		
28.0 (both treatments)		

Conclusion

In conclusion, statistical reviews showed a clear correlation between breast cancer and nutrition habits. This review aims to encourage further studies regarding such topics and increase the healthy consumption of advantageous food.

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