

Soy based food and cancer

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In cancer biology, one important aspect to take into consideration is the reasons behind cancer development among individuals. In this sense, the pertaining information regarding cancer development may result in the presence of factors that may be considered as risks and factors which may be regarded to as inhibitory or preventive towards the development of cancer.

In discussing the causes and prevention of cancer, it is always necessary to take into account the diet of an individual as there are numerous factors in which the components of an individual's food intakes that may either act provide beneficial or detrimental results. This is also the reason that it is common to hear about food variants that either lead to increased chances of having cancer, while others are identified to contain substances which help fight the occurrence of cancer.

In this essay, soyfoods which are becoming more and more popular for its properties that prevent cancer, is evaluated through the comparative analysis of three journal articles in terms of its relation to cancer prevention and truthfulness to the claim regarding its potential against cancer. The type of cancer mainly associated with the effects of soy based food products is breast cancer. In relation to this, two studies are utilized for a comparative analysis on the subject.

The first study was conducted in America by Lammersfeld and her colleagues; while the other was done in Japan by Yamamoto and other experts on the field. It is evident at this point that the location wherein these studies were conducted is a main point of difference between the two. Given this, one must take into consideration that eastern or Asian countries are <https://assignbuster.com/soy-based-food-and-cancer/>

indeed more accustomed to constant consumption of soy based goods, and in this sense a more applicable or reliable sample population for the purpose of analysis was derived from the location (Yamamoto et.

al. 906). In contrast to the Asian population, it is rather apparent that Western individuals are just starting to appreciate and acknowledge soy based products. Hence, from the study conducted by Lammerfield and her colleagues, the sample population used was simply based on surveys regarding the intake of soy based products (Lammersfeld et. al. 2). Aside from the differences in location, it is important to consider that the aim of the two studies were rather different as well.

As such, the study conducted in United States was aimed at evaluating the trend of soy-based food intake among women who already have breast cancer; on the other hand, the study conducted in Japan contained an analysis in order to better understand whether the claim of breast cancer risk reduction from soy consumption was in fact reflective of the actual effects to the population. From this, it is indicative that there are varying points of views regarding the intake of soy based food products based on the two studies.

The study conducted by Yamamoto and his colleagues have taken into account mainly the positive effects of soy based food among women; while the study by Lammersfeld and her colleagues focused on the limit of consumption in consideration of the negative effects of soy based food. To expound, there are two main perspectives derived from the articles discussed, one being that the consumption of soy based food products as completely beneficial; while another pertains to the concept that at certain

cases the intake of soy derived food may cause greater risks, and hence should be controlled.

In this sense, the consumption of soy and soy related isoflavones which are mainly through the form of soy sauce, tofu, natto, and soy beans in Japan (Yamamoto et. al. 906) and soy sauce, soy milk, and soy bars in America (Lammersfeld et. al. 4) may have different effects and implications to an individual depending whether cancer has already been developed or not. The results and conclusions presented in the study of Yamamoto was that the intake of soy based food products, especially in the form of the miso soup, had an inverse correlation with the development of breast cancer (Yamamoto et.

al. 911). On the other hand, from the research of Lammersfeld, it was determined that previous beliefs and estimates regarding the intake of soy among western women with breast cancer was lower than what is exhibited in reality, implicating that there is a greater need of clarification and nutrition counseling (Lammersfeld et. al. 1). The difference between the two studies mainly presents the reason as to why there is currently an increased level of concern from western women regarding the positive and negative effects of soy consumption.

In contrast to popular notion, soy is not exclusively linked with the discussion of breast cancer. In fact, the beneficial effects of soy have also been assessed in consideration of endometrial cancer as presented in the study conducted by Xu along with her colleagues. To clarify, endometrial cancer is a specific type of uterine cancer wherein tumor formation or growth begins at the endometrium or the tissue lining of the uterus. As with the other

studies, given that this study is still concerned with soy based food consumption, again taking into consideration the location wherein the study was conducted is of great significance.

The study conducted by Xu and her colleagues which outlined the effects of soy intake to endometrial cancer has been done in the city of Shanghai in China (Xu et. al. 1). Given such a location, it is quite evident that it is, in essence, similar in terms of location with the study of Yamamoto; hence, having a test population which is consistent with having the presence of soy based food products in their diet. In addition, the study also points out that the incidence of cancer has been statistically proven to be greater in western countries than in eastern countries (Xu et. al. 1).

In addition, it is also evident that the food identified in the study such as soy milk, soy beans, and tofu (Xu et. al. 3), was very similar to what was identified in Japan by Yamamoto. As an explanation, the link with soy and endometrial cancer was presented in the study as a result of the estrogen like effects of its isoflavones. Hence in general, across the three studies, it is unanimous that the functions of isoflavones are the vital component of soy which affects cancer in women either positively or negatively. Specific to this study is the focus on the concern regarding the balance of estrogen in the uterus.

Since the balance of estrogen levels is of vital importance to the occurrence of endometrial cancers, then the actions of isoflavones which both initiate the increase and decrease in natural estrogen presence and functions being a competitive homologue is of significance to it as well (Xu et. al. 1). In this aspect, it may be perceived that the roles of isoflavones are of more

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complex nature when being associated with the uterus than in terms of the breast. As for the results of the study by Xu and her colleagues, the results were indeed of similar trend to that of the findings in the study conducted by Yamamoto regarding breast cancer.

In fact, not only was there a reduction in terms of risk of endometrial cancer development associated with the consumption of soy based food products, it was also determined that as the consumption increased, the risk also decreased as a result (Xu et. al. 4). From the comparative discussion of the three studies pertaining to the subject of soy and cancer development, it is rather apparent that there are varying thoughts regarding the nature and effects of soy and the isoflavones that it contains.

Two of the studies assessed the beneficial role of soy in terms of lowering the risk of having cancer, which were both assessed in Asian populations known both as high soy consumption communities and low cancer incidence groups. In contrast, the other study conducted in the United States, considered the possible detrimental effects of increased soy consumption for women that have already developed cancer, specifically in the breast, hence implied that better control in consumption should be done especially since the popularity of soy based products have been increasing in the West.

Therefore, the analysis of all three studies is indicative that although some food sources may be determined to be beneficial through scientific means, it must not be immediately equated with being beneficial at all scenarios; hence, constant research must be maintained to identify such instances.