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In a new study, researchers found a strong correlation between a diet high in vegetables and seafood and reduced risk of breast cancer. Lower BMI, high levels of dietary supplement use, and increased physical activity also correlated with reduced breast cancer risk.

HIGH FISH & VEGETABLE INTAKE REDUCES RISK OF BREAST CANCER

After skin cancer, breast cancer is the most common type of cancer in women. In U.S. women, more than 1 in 4 cancers (28%) are breast cancers. Historically, breast cancer has been much more prevalent in Western countries than in Asian countries, although the gap has declined dramatically in recent years. A new study published by researchers at South Korea's National Cancer Center sheds new light on one possible explanation for this effect.

In this study, 357 breast cancer patients between the ages of 25 and 77 were matched with 357 healthy controls. A trained dietitian conducted face-to-face interviews with each study subject, collecting detailed information on lifestyle (including physical activity), demographics, and diet.

410 types of reported food were grouped into 39 food groups based on nutrient profiles and culinary usage. These food groups were then used to calculate two "dietary patterns": one characterized by regular consumption of a variety of vegetables, seafoods, and soybean products, and another characterized by above-average intake of meat (non-fish) and starch-rich foods (bread, noodles, pizza, etc). The "vegetable-seafood" diet is representative of a traditional Korean diet, while the "meat-starch" diet is representative of a traditional Western diet. Statistical analyses were then performed to look for correlations between demographics, lifestyle factors, and these two diet patterns.

Breast cancer occurrence in this study correlated strongly with higher BMI ($p=0.006$), lower levels of dietary supplement use ($p=0.005$), and low levels of physical activity ($p=0.021$). Additionally, a significant inverse association was seen between the vegetable-seafood pattern and breast cancer risk, while no correlation (positive or negative) was seen for the meat-starch group. Additional analyses correlated the vegetable-seafood diet with higher intakes of fiber, vitamin A, carotenes, vitamin C, vitamin E, folate, and calcium ($p < 0.001$ for all).

This study provides strong evidence for a diet high in vegetables and seafood reducing the risk of breast cancer. As the authors note, the increasing Westernization of Korean diets may explain - at least in part - the rising rates of breast cancer in that country.

Cho YA, Kim J, Shin A, Park KS, Ro J. Dietary Patterns and Breast Cancer Risk in Korean Women. 2010. Nutrition and Cancer 62(8):1161-9.