



SOY BEVERAGE, BUT NOT MILK, AFFECTS OMEGA-3 FATS PRODUCTION



RATIONALE OF THE PROJECT

- Milk and soy beverage provide a broad range of nutrients important for human health, however consumption habits have changed in recent years:

MILK CONSUMPTION



HAS DECREASED OVER THE PAST DECADE

IN CONTRAST

PLANT-BASED BEVERAGES CONSUMPTION



HAS GROWN

- According to studies in animals, soy protein suppresses the production of omega-3 fats compared to milk protein.
- Omega-3 fats are a type of polyunsaturated fat (PUFA) involved in many biologically important processes. Some examples of omega-3 PUFA are EPA and DHA.
- Low levels of EPA and DHA in the body are associated with an increased risk of cardiovascular disease, mental health disorders and COVID-19 illness.

METHODS USED

- Data from the Toronto Nutrigenomics and Health Study were analyzed:

1,083
YOUNG
ADULTS



WE ANALYZED

FOOD RECORDS



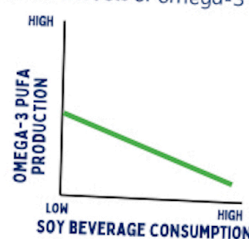
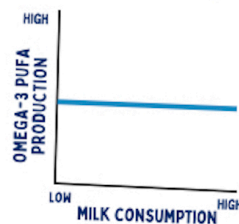
FAT LEVELS IN BLOOD



- Participants were grouped into 4 different categories depending on their soy beverage and milk consumption habits.

KEY STUDY RESULTS

- A **neutral effect** on omega-3 PUFA production was observed in subjects who consumed **milk**.
- Those who consumed **soy beverage** had **lower** levels of omega-3 PUFA.



POTENTIAL CLINICAL IMPACT

- A reduction in omega-3 PUFA production in individuals consuming a diet deficient in omega-3 PUFA could be detrimental. This is important because:

LESS THAN
20%



CONSUMES SUFFICIENT
EPA AND DHA

- If you consume soy beverage regularly, consult with your dietitian about how to get enough omega-3 PUFA in your diet.

RELATED PUBLICATIONS

- Gonzalez-Soto M, Abdelmagid SA, Ma DWL, El-Soheiry A, Mutch DM. Soy Consumption, but Not Dairy Consumption, Is Inversely Associated with Fatty Acid Desaturase Activity in Young Adults. *Nutrients* 2021;13(8):2817.

