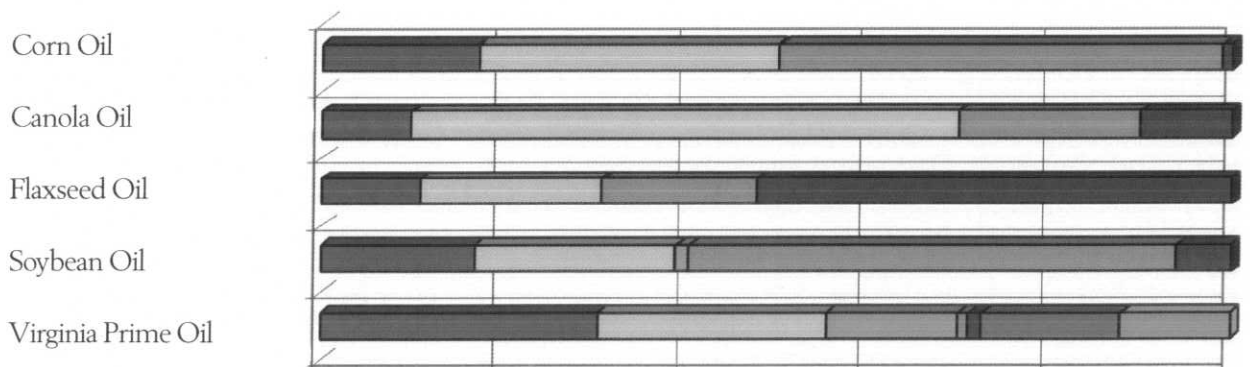


Benefits of Menhaden Oil over Flax

- Menhaden oil contains long-chain omega-3 fatty acids EPA & DHA as well as short-chain omega-3, while flax only contains short-chain omega-3 -linolenic (ALA).
- The ALA found in flax has to be modified in the body to form EPA and DHA, which is a very inefficient process. The conversion factor of flax ALA into useable EPA and DHA that is utilized by the body is around 5% -10% into EPA and 0.1% - 1% for DHA.
- To be converted into EPA and DHA, ALA goes through a complicated process in the body to increase the carbon chain length from 18 to 20 and 22 carbons (elongate), remove hydrogen and then add 2 and 3 more double bonds (desaturate).
- This inefficient conversion means one will have to add AT LEAST ten to twenty times the amount of ALA found in flax as compared to the EPA and DHA already found in menhaden oil.
- Due to the high concentration of omega-3 in menhaden oil (30% - 40%) and its high concentration of EPA (11% -15%) and DHA (11% - 15%), the cost per unit of long chain omega-3 is far less using menhaden oil as opposed to flax.
- The majority of studied and accepted health benefits from omega-3 have come from using long-chain EPA and DHA.

Typical Fatty Acid Content of Virginia Prime Gold and Vegetable Oils



■ SFA ■ MUFA ■ Other ■ Linoleic ■ A-Linolenic ■ DHA ■ EPA