

WINE CONSUMPTION AND HEART DISEASE

9. Final Comments

As we stressed it earlier, this is an observational study, so no causation can be inferred. We cannot claim that wine has a protective effect against heart disease. We can only state that there is strong evidence of a negative association between heart disease mortality and wine consumption. One cannot rule out the possibility that confounding variables are responsible for the observed differences among the death rates in the 18 countries. The 18 countries differ in many aspects, social, environmental, and cultural. These differences, not the level of wine consumption might be responsible for the observed differences in death rates of heart disease. For example, as wine drinking is said to be related to a relaxed way of living, it is possible that this attitude, very common in some of these countries, reduces the risk of heart disease.

Further, the countries were not randomly selected. The statistical results apply only to the participating countries. Any extrapolation of the pattern to other countries comes from the assumption that the relationship between wine consumption and heart disease is similar for others. The best wording of results would emphasize that the association could not have arisen from a random assignment of mortality numbers to wine consumption values.

The study was conducted only on men, so we cannot say for sure whether a similar association holds for women.

The research discussed in the case study was conducted between 1978 and 1979. Since then, several well-publicized research studies have been conducted to examine the nature of the relationship between wine (alcohol) consumption and heart disease mortality. In particular, the researchers have been looking for an evidence of a direct effect of wine on blood-lipids and other blood components. The researchers have found that people who drink moderately reduce their risk of dying from heart disease by about 40%.