				번호	OP-H-004
제 목	Alpha-linolenic Acid 섭취와 관상동맥질환 및 돌연사 발생 위험과의 관련성 Alpha-linolenic Acid Intake and Risk of Coronary Heart Disease and Sudden Death				
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**Background:** Alpha-linolenic acid, an intermediate chain n-3 fatty acid found primarily in plants, may decrease the risk of fatal coronary heart disease through a reduction in fatal ventricular arrhythmias and sudden cardiac death.

**Methods:** We prospectively examined the association between dietary intake of alpha-linolenic acid assessed via updated food frequency questionnaires and risk of sudden cardiac death, other fatal coronary heart disease, and non-fatal myocardial infarction among 76,763 women participating in the Nurses' Health Study who were free from cancer and completed a dietary questionnaire at baseline in 1984.

Results: Over 18 years of follow-up, we identified 206 sudden cardiac deaths, 641 other coronary heart disease deaths, and 1604 non-fatal myocardial infarctions. After controlling for coronary risk factors and other fatty acids including long-chain n-3 fatty acids, intake of alpha-linolenic acid was inversely associated with risk of sudden cardiac death (P for trend = 0.02), but not with risk of other fatal coronary heart disease or non-fatal myocardial infarction. Compared to women in the lowest quintile of alpha-linolenic intake, those in the highest two quintiles hada 38-40% lower sudden cardiac death risk. This inverse relationship with sudden cardiac death risk was linear and remained significant even among women with high intakes of long-chain n-3 fatty acids.

Conclusion: These prospective data suggest that increasing dietary intake of alpha-linolenic acid may reduce risk of sudden cardiac death but not other types of fatal CHD or non-fatal MI in women. The specificity of the association between alpha-linolenic acid and sudden cardiac death supports the hypothesis that these n-3 fatty acids may have antiarrhythmic properties.