Top Ten Things To Know
Omega-6 Fatty Acids and CVD Risk

1. Current average U.S. intake of LA, based on NHANES 2001-2002 data for adults age 19 and older, is about 6.7% of energy or 14.8g/d, based on a 2000 calorie diet. Primary sources of LA are vegetable oils, but they are also present in salad dressing, nuts, whole wheat bread and chicken.

2. Usual intake of AA (~0.15 g/d) is consumed pre-formed in meat, eggs and some fish.

3. When healthy volunteers were given about 7x the usual intake of AA in a 7-week controlled feeding study, no effects on platelet aggregation, bleeding times, the balance of vasoactive metabolites, serum lipid levels, or immune response were observed.

4. In observational studies, higher omega-6 PUFA consumption was associated with neutral or lower levels of inflammatory markers.

5. The cholesterol-lowering effect of LA is well-established from human trials. Higher plasma PUFA levels are associated with a reduced total:HDL-cholesterol ratio, and epidemiologically, the replacement of 10% of calories from saturated fatty acids (SFA) with omega-6 PUFA is associated with an 18 mg/dL decrease in LDL-C.

6. Higher LA intakes may improve insulin resistance and reduce the incidence of diabetes, and higher serum LA levels are associated with lower blood pressure.

7. A meta-analysis including six randomized control trials indicated that replacing SFA with PUFA lowered risk for CHD events by 24%.

8. The Institute of Medicine’s Food and Nutrition Board, in their Dietary Reference Intake (DRI) Report for Energy and Macronutrients defines an adequate intake of LA as 17 g/d for men and 12 g/day for women (5-6% of energy) 19 to 50 years of age, approximately the current median US intake.

9. The DRI Report and the 2005 Dietary Guidelines for Americans both support an acceptable macronutrient distribution range (AMDR) of 5-10% dietary energy from omega-6 PUFA. (AMDR is the range of intakes of an energy source that is associated with a reduced risk of chronic disease, yet can provide adequate amounts of essential nutrients.)

10. AHA supports an omega-6 PUFA intake of at least 5%-10% of energy in the context of other AHA lifestyle and dietary recommendations.