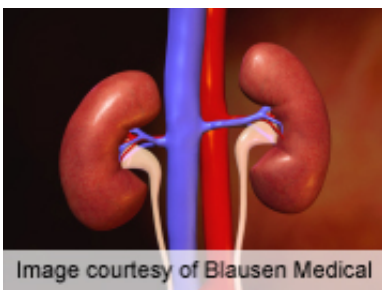


## n-3 PUFA may reduce markers of kidney disease in T2DM

February 8 2013

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In patients with type 2 diabetes and evidence of kidney injury, supplementation with n-3 long-chain polyunsaturated fatty acids does not reduce urine albumin excretion but is associated with a reduction in certain markers of kidney injury, according to research published online Dec. 28 in *Diabetes Care*.

(HealthDay)—In patients with type 2 diabetes and evidence of kidney injury, supplementation with n-3 long-chain polyunsaturated fatty acids (PUFA) does not reduce urine albumin excretion but is associated with a reduction in certain markers of kidney injury, according to research published online Dec. 28 in *Diabetes Care*.

To examine the effect of n-3 PUFA supplementation on urine albumin excretion and markers of kidney injury, Edgar R. Miller III, M.D., Ph.D., of the Johns Hopkins School of Medicine in Baltimore, and colleagues conducted a randomized, placebo-controlled, two-period crossover trial involving 29 participants with type 2 diabetes and evidence of kidney disease who were given 4 g/day of n-3 PUFA

supplements for six weeks.

The researchers found that n-3 PUFA supplementation resulted in non-significant reductions in urine albumin excretion compared with placebo, and correlated with significant reductions in urine neutrophil gelatinase-associated lipocalin (NGAL) excretion. There was no significant effect for n-3 PUFA on [serum markers](#) of [kidney function](#) or estimated [glomerular filtration rate](#). In the subgroup of participants taking medications that block the renin-angiotensin-aldosterone system, significant decreases were observed in 24-hour urinary albumin excretion, NGAL, liver fatty acid-binding protein, and *N*-acetyl  $\beta$ -D-glucosaminidase.

"n-3 PUFA failed to reduce the primary outcome of urine albumin excretion," the authors write. "However, there was a consistent trend of benefit for all urine biomarkers and a significant reduction in NGAL."

Lovaza (n-3 PUFA) and placebo used in the study were provided by GlaxoSmithKline.

**More information:** [Abstract](#)  
[Full Text \(subscription or payment may be required\)](#)

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