

Can diet prevent stroke? No

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Diet is not a single dietary pattern, so it is difficult to establish what really works for stroke prevention – is it specific component or total food/caloric intake. Certainly excess salt intake increases hypertension risk and consequently stroke risk, but so far many specific diet components were inconsistently reported in clinical studies on stroke risk. Relevant clinical data interpretation is challenging as it is not feasible to control for many cofounders, which can affect stroke outcomes much more than just diet. Consequently related epidemiological paradoxes were reported, i.e. obesity paradox which refers to more favorable prognosis for obese stroke survivors. INTERSTROKE study showed relation between diet and stroke risk but it was susceptible to biases and not causal, making the population attributable risk estimates uninterpretable. Moreover diet was the only one risk factor reported conflicting impact on stroke risk for different regions. Randomized data on diet benefits are still limited. The largest PREDIMED trial is neither a pure test of a Mediterranean-style diet nor a pure test of extra-virgin olive oil and nuts and shares with Lyon Diet Heart Study the interpretation challenges. Generalizability of PREDIMED findings is limited as all the study participants lived in a Mediterranean country and were at high cardiovascular risk. Association between diet and stroke risk was substantially smaller in prospective PREDIMED study compared to INTERSTROKE. Individual impact of diet on stroke risk is therefore highly uncertain.