Need to see the scientific evidence that high protein diet damages kidneys in healthy individuals use only clinical studies published in reputable journals, NO influencers, NO youtube, NO clinics

Most clinical data in people with normal kidneys show that higher protein intakes lead to reversible “hyperfiltration” (higher GFR and urea) but do not demonstrate structural kidney damage or progressive loss of function over the study periods available; long-term (>5–10 year) RCT evidence of actual harm in healthy adults is lacking.[1] [2] [3] [4] [5]

Key human clinical evidence

- A large crossover feeding trial (OmniHeart; 164 adults with normal baseline eGFR ≈92 mL/min/1.73 m²) compared 6-week periods of diets with 25% vs 15% of calories from protein and found that the higher-protein diet increased cystatin-C–based eGFR by ~4 mL/min/1.73 m² (hyperfiltration) without evidence of impaired kidney function or harm during the intervention.[2] [6]
- A 2014 systematic review and meta-analysis of randomized trials in people without CKD (PLOS One, 30+ RCTs) reported that high-protein diets increased GFR, serum urea, urinary calcium and sometimes uric acid, but did not show reduced GFR into the abnormal range or clear evidence of kidney damage over follow-ups up to about 1 year.[3]
- A systematic review focused specifically on healthy adults concluded that RCTs consistently show higher GFR with higher protein, but all values remained within the normal range and no trial reported progression to CKD or clinically significant decline in kidney function.[4]

Longer-term and observational data in healthy kidneys

- An analysis from the Nurses’ Health Study found that higher protein intake was associated with faster decline only in women who already had mildly reduced kidney function at baseline; in women with normal kidney function there was no association between higher protein intake and decline in GFR over time.[7]
- A 2018 meta-analysis examining changes in kidney function with high vs lower protein intakes in healthy adults reported that higher protein did not adversely affect GFR overall, supporting the view that the observed hyperfiltration is an adaptive response rather than established damage in this population.[5]

Reviews on the “high protein damages kidneys” idea

- A 2020 narrative review in a nephrology journal noted mechanistic concerns (intraglomerular hypertension, hyperfiltration) but also emphasized that in human trials without pre-existing CKD the main consistent finding is increased GFR, with insufficient evidence that this translates into long-term kidney disease in healthy people.[8] [1]
- Other expert reviews of renal health and dietary protein similarly state that, in adults with normal kidney function, high-protein diets within studied ranges have not been shown to cause CKD, while highlighting that true very-long-term (decades) RCTs are not available and that people with any degree of CKD are a different risk category.[1] [4]

What this does and does not show

- The existing clinical trial literature supports that high-protein diets acutely raise GFR, urea, and related markers but stay within normal kidney function ranges, without demonstrating structural injury or progressive loss of function over the durations studied in healthy populations.[2] [3] [4] [5]
- There is not, at present, strong clinical trial evidence that a high-protein diet, by itself, causes kidney damage in individuals starting with healthy kidneys, but equally there is limited evidence on very long-term exposure, so most nephrology sources advise caution only for people with known or suspected CKD.[7] [4] [1]

If you want, a follow-up can list specific RCTs and meta-analyses with their protein intakes (g/kg), durations, and main renal outcomes in a table.

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What is considered a high protein diet in these studies in gm/kg of body weight

Across kidney-focused clinical and review papers, “high protein” generally starts around 1.2–1.5 g/kg/day, with many trials going up to about 2.0 g/kg/day, and a few observational cohorts including people eating roughly 2.1 g/kg/day.[18] [19] [20] [21]

Definitions used in kidney papers

- A nephrology review on high-protein diets and kidneys states that most formal definitions set the high-protein threshold between 1.2 and 2.0 g/kg/day, and notes that intakes above about 1.5 g/kg/day are commonly treated as “high protein.”[18]
- Another review on protein and CKD describes high protein intake as usually more than 1.2 g/kg/day.[20]
- A nutrition review focused on renal health defines high-protein diets as more than 25% of total energy or more than 2 g/kg/day.[19]

Intakes in specific high-protein trials/cohorts

- In the OmniHeart trial (Juraschek et al., “Effect of a high-protein diet on kidney function in healthy adults”), the high-protein arm provided about 25% of calories from protein; this corresponds to roughly 1.3–1.6 g/kg/day for a typical adult, compared with ≈0.8–1.0 g/kg/day in the comparison diets.[22] [23] [21]
- A systematic review of renal health in healthy adults (Van Elswyk et al. 2018) considered trials “high protein” when they provided ≥1.2 g/kg/day or ≈20–30% of energy from protein, often in the 1.3–1.8 g/kg/day range.[21] [24]
- Large observational cohorts summarized in a kidney review reported “high” intakes from about 1.4 g/kg/day up to 2.1 g/kg/day in the highest groups.[18]

If you like, a follow-up can lay out a small table listing individual RCTs with their approximate g/kg/day in the high-protein vs control arms.

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are there studies that examine protein intake over 2.0gm/kg in healthy people

Yes. Several clinical studies in healthy, resistance-trained adults have deliberately pushed protein above 2.0 g/kg/day, in some cases over 3.0 g/kg/day, and monitored kidney markers.

Studies with >2 g/kg/day

- A 1-year crossover trial in resistance-trained men used “high protein” phases averaging about 2.5–3.3 g/kg/day; standard blood markers of kidney function (including creatinine and estimated GFR surrogates) did not show harmful changes over the year.[33] [34] [35]
- Another trial in trained men and women provided about 3.4 g/kg/day protein during 8 weeks of heavy resistance training; investigators reported no evidence of deleterious effects on kidney function markers while noting benefits for body composition.[36] [37]
- A 16-week trial in resistance-trained males directly compared 1.6 vs 3.2 g/kg/day protein and found that both intakes were “safely tolerated” with no adverse changes in standard renal or liver function blood tests, though the authors still framed 1.6 g/kg/day as sufficient for performance goals.[38]

What these data represent

- These >2 g/kg/day studies are relatively short- to medium-term (weeks to one year), use mostly young, resistance-trained participants, and assess kidney function through routine clinical chemistry (e.g., creatinine, BUN, estimated GFR, urinalysis), not kidney biopsies.[37] [33] [36] [38]
- Within those limits, they have not shown clinically meaningful kidney damage in healthy participants, but they do not answer whether decades of such intakes would be safe, nor do they apply to people with any degree of CKD.[39] [33] [38]

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1. https://pmc.ncbi.nlm.nih.gov/articles/PMC7460905/
2. https://pmc.ncbi.nlm.nih.gov/articles/PMC3602135/
3. https://journals.plos.org/plosone/article?id=10.1371%2Fjournal.pone.0097656
4. https://www.sciencedirect.com/science/article/pii/S2161831322012388
5. https://pubmed.ncbi.nlm.nih.gov/30383278/
6. https://pubmed.ncbi.nlm.nih.gov/23219108/
7. https://news.harvard.edu/gazette/story/2003/03/too-much-protein-may-cause-reduced-kidney-function/
8. https://pubmed.ncbi.nlm.nih.gov/32669325/
9. https://www.apollo247.com/health-topics/general-medical-consultation/myth-eating-high-protein-diet-kidney-damage
10. https://khni.kerry.com/news/protein-exercise-performance/do-high-protein-diets-impact-kidney-health/
11. https://academic.oup.com/ndt/article/35/1/1/5614387
12. https://journals.mcmaster.ca/ghar/article/view/1083
13. https://www.healthline.com/nutrition/is-too-much-protein-bad-for-you
14. https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2822055
15. https://academic.oup.com/nutritionreviews/advance-article/doi/10.1093/nutrit/nuaf208/8339673?searchresult=1
16. https://www.frontiersin.org/journals/nutrition/articles/10.3389/fnut.2024.1408424/full
17. https://www.mayoclinic.org/healthy-lifestyle/nutrition-and-healthy-eating/expert-answers/high-protein-diets/faq-20058207
18. https://pmc.ncbi.nlm.nih.gov/articles/PMC7460905/
19. https://www.sciencedirect.com/science/article/abs/pii/S1051227614001101
20. https://pmc.ncbi.nlm.nih.gov/articles/PMC5962279/
21. https://pmc.ncbi.nlm.nih.gov/articles/PMC6054213/
22. https://pubmed.ncbi.nlm.nih.gov/23219108/
23. https://pmc.ncbi.nlm.nih.gov/articles/PMC3602135/
24. https://pubmed.ncbi.nlm.nih.gov/30032227/
25. https://journals.plos.org/plosone/article?id=10.1371%2Fjournal.pone.0097656
26. https://www.fisiologiadelejercicio.com/wp-content/uploads/2024/09/High-Protein-Diets-and-Glomerular-Hyperfiltration-in-Athletes.pdf
27. https://www.sciencedirect.com/science/article/pii/S2161831322012388
28. https://pace-cme.org/news/higher-protein-intake-associated-with-rapid-decline-of-kidney-function-in-healthy-adults/2455608/
29. https://www.frontiersin.org/journals/nutrition/articles/10.3389/fnut.2024.1408424/full
30. https://www.kidney.org/kidney-topics/ckd-diet-how-much-protein-right-amount
31. https://academic.oup.com/ndt/article/35/1/1/5614387
32. https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2822055
33. https://pmc.ncbi.nlm.nih.gov/articles/PMC5078648/

34. https://onlinelibrary.wiley.com/doi/10.1155/2016/9104792
35. https://pubmed.ncbi.nlm.nih.gov/27807480/
36. https://www.semanticscholar.org/paper/A-high-protein-diet-(3.4-g-kg-d)-combined-with-a-in-Antonio-Ellerbroek/3e879e6646c9412e69c305668024fc360e2ae398
37. https://pubmed.ncbi.nlm.nih.gov/26500462/
38. https://pmc.ncbi.nlm.nih.gov/articles/PMC10388821/
39. https://www.sciencedirect.com/science/article/pii/S2013251419300768
40. https://bjsm.bmj.com/content/52/6/376
41. https://onlinelibrary.wiley.com/doi/full/10.1002/oby.23815
42. https://outworknutrition.com/blogs/learn/high-protein-diets-and-kidney-health
43. https://journalofexerciseandnutrition.com/index.php/JEN/article/view/35
44. https://www.nature.com/articles/s41598-025-89925-x
45. https://www.frontiersin.org/journals/nutrition/articles/10.3389/fnut.2023.1205310/full
46. https://www.mayoclinichealthsystem.org/hometown-health/speaking-of-health/assessing-protein-needs-for-performance
47. https://pmc.ncbi.nlm.nih.gov/articles/PMC11156191/
48. https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2822055
49. https://pmc.ncbi.nlm.nih.gov/articles/PMC8978023/
50. https://www.sciencedirect.com/science/article/pii/S0261561422000681