

# INPLASY

## Current Guidelines on Dietary Protein Intake for Patients with Diabetic Kidney Disease: A Scoping Review

INPLASY202460004

doi: 10.37766/inplasy2024.6.0004

Received: 02 June 2024

Published: 02 June 2024

Ravi, S; Fahrner, A; Ruehli, F; Bender, N.

### Corresponding author:

Nicole Bender

nicole.bender@iem.uzh.ch

### Author Affiliation:

Institute of Evolutionary Medicine,  
University of Zurich, Switzerland.

### ADMINISTRATIVE INFORMATION

**Support** - Institute of Evolutionary Medicine, University of Zurich, Switzerland.

**Review Stage at time of this submission** - Completed but not published.

**Conflicts of interest** - None declared.

**INPLASY registration number:** INPLASY202460004

**Amendments** - This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 02 June 2024 and was last updated on 02 June 2024.

### INTRODUCTION

**Review question / Objective** To analyze the protein intake recommendations from worldwide practice guidelines for diabetes type II with special focus on adult patients with diabetic nephropathy.

**Rationale** There is evidence that medical nutritional therapy (MNT) is an effective and essential therapy in the management of diabetes type II. However, former reviews showed that nutritional guidelines can vary in their recommendations, as well as in reporting quality of the underlying evidence, especially also in the field of diabetes type II. An underreported recommendation in nutritional guidelines for people with diabetes type II concerns the optimal protein intake in the case of diabetic kidney disease.

**Condition being studied** Diabetes type II with chronic kidney disease.

### METHODS

**Search strategy** Pubmed, Embase, Cochrane Database of Systematic Reviews. Search terms include diabetes mellitus type 2, guideline, diet (word variations have been searched).

**Participant or population** Adult persons with diabetes type II and chronic kidney disease.

**Intervention** Nutritional therapy.

**Comparator** No comparator.

**Study designs to be included** Practice guidelines from above search plus from dedicated websites.

---

**Eligibility criteria** Inclusion criteria: we included all practice guidelines for the management of type II diabetes that contained specific dietary recommendations for patients with chronic kidney disease. In case of a relevant non-English guideline, we searched for a published English translation and included them.

Exclusion criteria: all guidelines written in any other language than English were excluded. Guidelines were also excluded if they focused on other diseases rather than on diabetes or chronic kidney disease, or if they targeted a healthy population. We also excluded guidelines for pediatric patients or if they were specifically formulated for diabetes type I patients. Study types other than guidelines (i.e. interventional or observational studies, reviews, expert opinions) were also excluded. Guidelines with no dietary management or with exclusively pharmacological treatment recommendations were excluded.

**Information sources** Pubmed, Embase, Cochrane Database of Systematic Reviews.

Additionally we searched websites from institutions that publish practice guidelines for the management of diabetes type II.

**Main outcome(s)** Guidelines quality, assessed by the instruments AGREE II and AGREE REX  
Guidelines source of evidence for the recommendation on protein intake for people with diabetes type II and chronic kidney disease, using level and strength of evidence tables.

**Data management** We compiled and assessed our results in tables.

**Quality assessment / Risk of bias analysis** We assessed the quality of the included guidelines with the instruments AGREE II and AGREE REX.

**Strategy of data synthesis** We synthesized our results in tables and analyzed the guidelines' source of evidence for the recommendation on protein intake for people with diabetes type II and chronic kidney disease using level and strength of evidence tables.

**Subgroup analysis** The second stage of analysis was performed only in guidelines that showed high quality scores in the instruments AGREE II and AGREE REX.

**Sensitivity analysis** We did not perform any sensitivity analyses.

**Language restriction** We only analysed guidelines written in English.

**Country(ies) involved** Switzerland.

**Keywords** Guideline; Diabetes type II; chronic kidney disease; diet; protein intake.

**Dissemination plans** Publication in a dedicated scientific journal.

#### **Contributions of each author**

Author 1 - Siyanga Ravi - Data collection, data analysis, data synthesis, first draft of manuscript.

Email: ravi.siyanga@gmail.com

Author 2 - Alexandra Fahrner - Data collection, data analysis.

Email: alexandra.fahrner@gmail.com

Author 3 - Frank Rühli - Concept of the study, comments on the manuscript, funding of the study.

Email: frank.ruehli@iem.uzh.ch

Author 4 - Nicole Bender - Concept of the study, data synthesis, comments on the first draft of manuscript.

Email: nicole.bender@iem.uzh.ch