

The Importance of Medical Nutrition Therapy in Chronic Kidney Disease Management

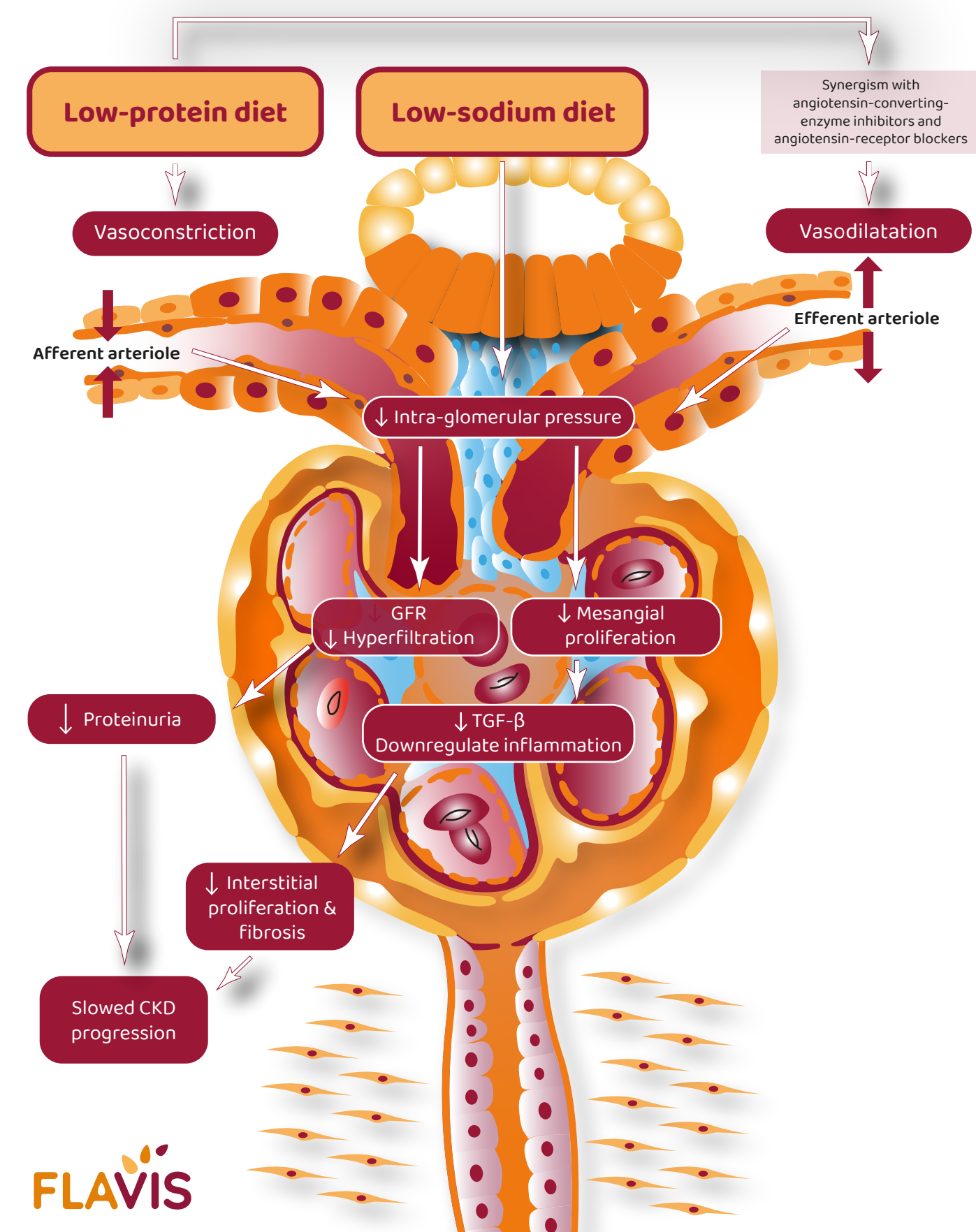
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Why should we consider MNT in CKD management?

Current evidence confirms the positive impact of restricted dietary protein on:

- Favourable metabolic surrogates of kidney function, including azotemia, bone and mineral disorder, and acidosis.
- Slowing kidney function loss and the progression of CKD resulted in the delayed commencement of dialysis and prevention of malnutrition.
- Lowering rates of ESRD and death.



Current Nutritional Recommendations in CKD Management

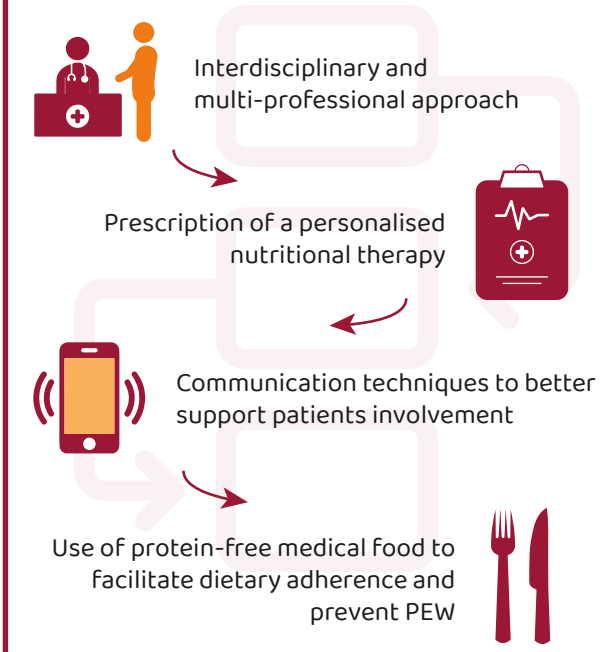
Adults with Stage 3–5 CKD (not on dialysis) who are metabolically stable:
KDOQI 2020 recommends, under close clinical supervision, protein restriction with or without keto acid analogs to reduce risk for ESKD/death (1A) and improve QoL (1C).

A low-protein diet providing **0.55–0.60g** protein/kg body weight/day **OR** A very low-protein diet providing **0.28–0.43g** dietary protein/kg body weight/day with additional keto acid/amino acid analogs to meet protein requirements (0.55–0.60g/kg body weight/day)

Adults with Stage 3–5 CKD (not on dialysis) who have diabetes:
KDOQI 2020 recommends that it is reasonable to prescribe, under close clinical supervision, a dietary protein intake of **0.6–0.8g**/kg body weight/day to maintain a stable nutritional status and optimise glycaemic control (OPINION).

How can we implement MNT successfully and safely?

Strategies to prevent and treat PEW and increase patient adherence:



Best Practice in Italy

- Italian nephrologists have a long-standing practice of implementing LPDs in the treatment of patients with CKD.
- The aim is to reduce uraemic symptoms by reducing toxins derived from excess protein intake.
- The Italian experience demonstrates flexibility and innovation in the MNT field, in treating non-dialysis CKD patients, and in using LPDs as a bridge between conservative treatment and the start of chronic dialysis therapy.
- The main goal of this flexible approach is to favour patient compliance, which is a crucial factor in the successful implementation of an LPD programme.

Conclusions

- MNT represents a major feature of CKD management, with the goal to delay kidney failure and improve patient QoL.
- The 2020 KDOQI recommends protein restriction to patients affected by CKD in Stages 3–5 (not on dialysis) and in CKD 3–5 who have diabetes (not on dialysis).
- MNT is not an 'option' in the management of patients with CKD; it is a core element of care similar to drug prescription.
- LPDs need to be tailored and patient-centred to ensure adherence, efficiency, and safety.

References:

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Abbreviations:

CKD: Chronic kidney disease; ESKD: end-stage kidney disease; KDOQI: kidney disease outcomes quality initiative; LPD: low-protein diet; MNT: medical nutritional therapy; PEW: protein energy wasting; QoL: quality of life; TGF-β: transforming growth factor beta.

