Chronic kidney disease (CKD)

Defined as estimated glomerular filtration rate <60 ml/min, or presence of other data suggestive of kidney dysfunction (urinary or blood electrolytes; proteinuria; hematuria) or of renal imaging alterations, lasting for at least 3 months.

Malnutrition in CKD

10 - 50%
Prevalence depends upon the different populations, and to some extent upon definitions it increases with/affected by:

- Age
- Comorbidities
- Frailty
- Severity of CKD
- Availability, quality and access to kidney care and nutritional care

2 MAIN CAUSES OF MALNUTRITION IN CKD
1. malnutrition induced by uremia-related metabolic derangements and exacerbated by insufficient or too late dialysis in kidney failure; this form is improved by intensive-efficient dialysis
2. malnutrition linked to comorbidity, inflammation, atherosclerosis (optimal nutritional care is the basis of treatment, which may require multimodality with physical activity)

Malnutrition, sarcopenia, or protein energy wasting (PEW) are associated with high mortality, both in dialysis and CKD patients

Nutritional goals in CKD patients

IN A STABLE METABOLIC AND NUTRITIONAL SITUATION
maintain homeostasis and delay progression.
Dietary adaptations

IN MALNUTRITION OR AT NUTRITIONAL RISK
prevent and treat nutritional/catabolic alterations (PEW).
Medical nutritional treatment

Special Considerations for Elderly CKD patients

AGE + CKD
AN "OLDER" PATIENT WHO ALSO HAS CKD risk of malnutrition is the highest; maintaining good nutritional status is a priority; maintain adequate dietary intake

CKD + AGE
A CKD PATIENT WHO IS ALSO "OLD" mortality and morbidity risk on dialysis are highest; being dialysis free is a priority; advantage of wise protein restrictions