

DIETARY ASSESSMENT IN DIALYSIS PATIENTS SHOWS ENERGY AND PROTEIN INTAKE TO BE TOO LOW

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INTRODUCTION

Protein malnutrition is common in dialysis patients and results in bad prognosis and reduced quality of life. Loss of appetite, depression and exercise deprivation are additional factors which influence rehabilitation results in dialysis patients group. Protein malnutrition depends on many factors and is a complex process with bad prognosis. Multidisciplinary approach with dietitians could result in improved nutrition status in dialysis patients.

RESULTS

The average results from the patients interviewed are, Caloric (kcal) it is 1177 kcal, protein it is 48,11g, fat it is 42,20g, carbohydrate (CHO) it is 125,79 g, sodium (Na+) it is 1547,25 mmol/l, potassium (K+) it is 1537,29 mmol/l, and phosphorus (P) it is 641,18 mmol/l, intake in 24 hours was monitored. 30 patients were analyzed. Caloric and protein intake values were lower than recommended for dialysis patients. Values of sodium, potassium and phosphorus were surprisingly in normal range.

METHODS

30 patients without clinical signs of malnutrition were randomly selected in Dialysis Center of University Clinical Center of Ljubljana. A food propensity questionnaire has been carried out with two unannounced 24-hour dietary recalls per participant through a web-based application "Open platform for clinical nutrition".

Patient representation 5, period: (one day)

#	Type	Quantity	Unit	Synonym/Text	Code	Food	g/U	[g]
1				Monday, 6 ...				
2		200	gram	Polenta (bake...	X986143	Polenta (ba...	1	200,0
3		150	gram	YOGHURT M...	B0101	YOGHURT ...	1	150,0
4		100	gram	Veal goulash (2)	Y241023	Veal goulas...	1	100,0
5		75	gram	Potato mash (4)	X635043	Potato mas...	1	75,0
6		30	gram	Solata z oljem...		Solata z olje...	1	30,0
7		50	gram	Grapes raw	F310100	Grapes raw	1	50,0
8		30	gram	White wheate...	B311000	White whea...	1	30,0
9		10	gram	Butter	Q610000	Butter	1	10,0
10		15	gram	Apricot jam	F201800	Apricot jam	1	15,0

Overview Ingredients: (one day)

	kJ	kcal	Prot (g)	F (g)	CH (g)	Na (mg)	K (mg)	P (mg)
06/11/2017	3469	829	23,7	42	84	810	928	359
Polenta (baked maize mush) (4)	1422	340	4,4	22	30	178	104	54
YOGHURT MIN. 3.5 % FAT CONTENT	440	105	5,7	6	7	72	236	138
Veal goulash (2)	312	75	8,5	3	3	222	111	81
Potato mash (4)	299	71	1,7	2	12	125	247	34
Solata z oljem in kisom	66	16	0,4	1	0	49	80	13
Grapes raw	152	36	0,3	0	8	1	99	10
White wheaten bread	312	74	2,5	0	15	162	40	26
Butter	310	74	0,1	8	0	1	2	2
Apricot jam	158	38	0,0	0	9	1	11	2
Total	3469	829	23,7	42	84	810	928	359

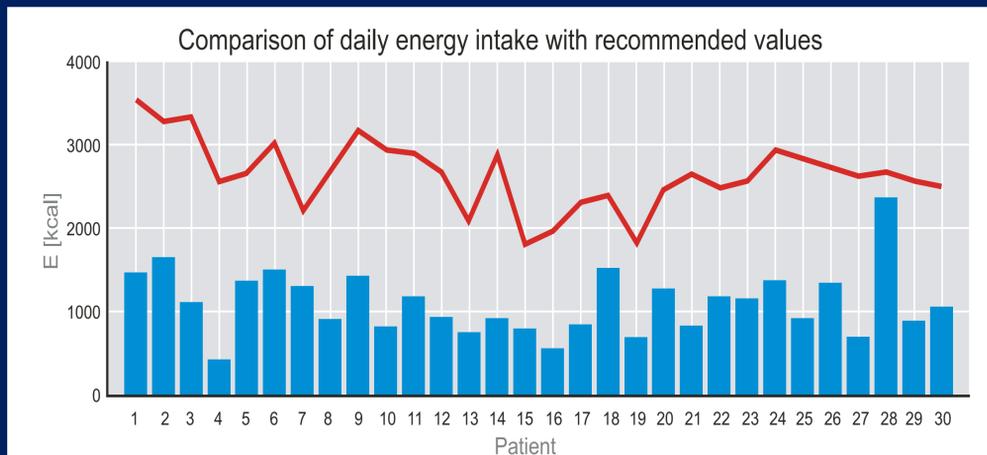


Figure 1: The columns show the average energy input graphically for 5 days for each patient under study. The red line shows what the energy input should be based on their daily individual energy needs.

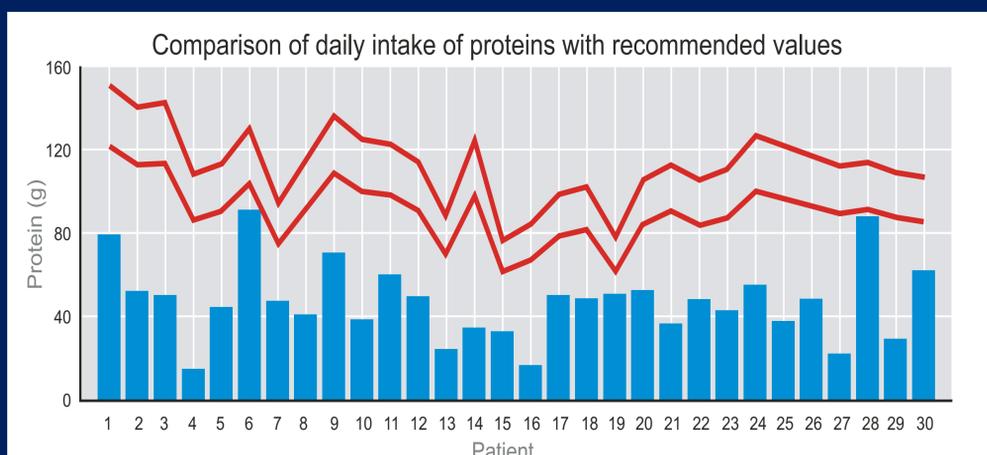
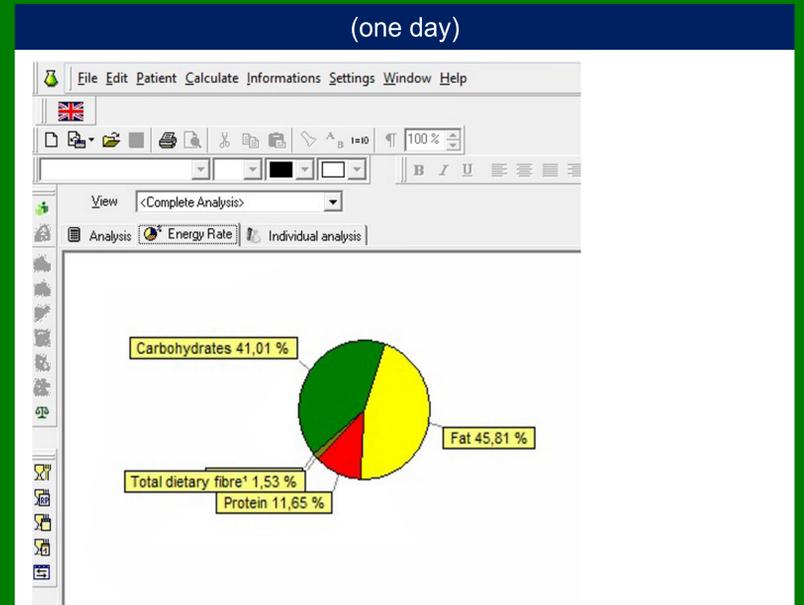


Figure 2: The columns show graphically the average protein intake for 5 days for each patient under study. Red lines indicate the recommended protein intake according to the needs of each individual patient.



Proportion of nutrients

Variety and diversity
There are 13 foods used from 9 food groups.
additives / allergens
Milk and milk products (including lactose) (13),
Cereals containing gluten and products thereof (1),
Wheat (15)

CONCLUSION

Dietary assessment is an important tool for nutritional intervention and in prevention of malnutrition in dialysis patients. Protein and energy intake were found to be lower in dialysis patients than recommended. Dietitian and patient relationship is crucial for objective results of diet recall.