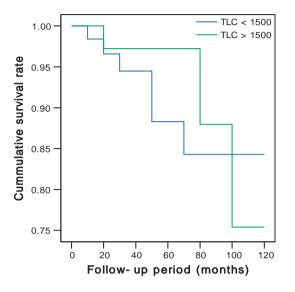
A65

age, sex, presence of type 2 diabetes mellitus, Kt/V, nPCR and TLC. The association of a GNRI  $\geq$  90 with a TLC  $\geq$  1500/mm<sup>3</sup> seemed to exclude the occurring of complications with moderate reliability.

Conclusion: These results demonstrate that the GNRI may be a significant predictor of mortality in Korean hemodialysis patients. However, the use of TLC might improve the evaluation of nutritional risk and the identification of patients at risk of malnutrition. Figure 1. Total lymphocytes count and 120-month survival of hemodialysis patients. In both groups, survival rate during the follow-up period was similar. (life table analysis, P = 0.500).



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# NATURAL CORRECTION OF HYPERURICEMIA, NOT BY ALLOPURINOL, COULD SLOW DOWN THE PROGRESSION OF RENAL DISEASE IN THE PATIENT WITH CHRONIC KIDNEY DISEASE STAGE 3

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*Purpose:* Correction of hyperuricemia can slow down the progression of renal disease in animal study. However, there is limited data regarding the effect of lowering serum uric acid in patients with hyperuricemic chronic kidney disease (CKD) stage 3 (estimated GFR [eGFR] 30-60 mL/min). *Methods:* We retrospectively investigated 100 patients (age 56.1  $\pm$  9.9 years, M:F=79:21) with hyperuricemia (serum uric acid 7.9  $\pm$  0.9 mg/dL) and CKD stage 3 (eGFR 52.0  $\pm$  7.0 mL/min) 10 years ago. First, to evaluate the effect of allopurinol on the progression of renal disease, 23 patients who have taken allopurinol were compared with the randomly selected 23 patients according to the level of serum uric acid and eGFR as a control group among the other 77 patients who have never received allopurinol. Second, to clarify the effect of lowering serum uric acid by diet on renal disease progression, these 77 patients were divided into 2 groups by decreased amount of serum uric acid during 10 years and compared each other (group 1 > 1.0 mg/dL vs. group 2 < 1.0 mg/dL).

*Results:* First, although serum uric acid levels were significantly decreased  $(8.5 \pm 1.0 \text{ to } 6.6 \pm 1.2 \text{ mg/dL}, p < 0.001)$  in subjects treated with allopurinol, the change of eGFR was not significant  $(48.8 \pm 8.6 \text{ to } 44.5 \pm 18.5 \text{ mL/min}, p=0.230)$ . In control group, serum uric acid was also decreased  $(8.2 \pm 1.0 \text{ to } 7.3 \pm 1.6 \text{ mg/dL}, p=0.025)$  but eGFR did not change significantly  $(49.0 \pm 8.7 \text{ to } 50.3 \pm 20.2 \text{ mL/min}, p=0.726)$ . Second, eGFR increased significantly  $(54.0 \pm 6.0 \text{ to } 63.1 \pm 18.0 \text{ mL/min}, p=0.002)$  in the group 1 whereas eGFR decreased  $(51.9 \pm 6.4 \text{ to } 46.1 \pm 15.6 \text{ mL/min}, p=0.008)$  in the group 2 after 10 years. In the multivariate linear regression analysis in the entire cohort (n=100), age (p=0.023), change of serum creatinine (p=0.001), and change of serum uric acid (p < 0.001) were found to be significant factors that influence the change of eGFR during study period.

*Conclusions:* We identified the protective effect of lowering serum uric acid against progression of renal disease in patients with CKD stage 3. However, allopurinol itself did not have such beneficial effect.

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## WHAT TO EAT. THE TERAPEUTIC AND DIETETIC COMPLIANCE OF PATIENTS ON PERITONEAL DIALYSIS.

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Nutrition education is important for patients on peritoneal dialysis. Yet, despite initial nutrition training and monthly reinforcements during follow-up visits, phosphorus control remains unsatisfactory. For this reason a meeting with an external renal dietician open to patients and their relatives was organized. Biographical data and average phosphorus levels for the 3 months prior to the meeting are shown in Table.1

Patients Age (vears)	11 (6 F - 5 M) 63 (47-81)
Time on Dialysis (months)	72 (6-348)
Body Mass Index (kg/m2)	25.8 (22.3-32.4)
Phosphorous mg/dl (average of 3 months)	5.95 (3.9-8.2)

After a lecture delivered by the centre's nephrologist, a questionnaire on phosphorus control was compiled by the participants. The renal dietician then explained how to: control dietary phosphorous intake, properly use chelating agents, reduce phosphorous in cooking and make smart food choices. A trained chef then demonstrated how to cook some regional recipes specifically reworked to reduce their phosphorous content without sacrificing taste. Participants then verified that the recipes were indeed appetizing. At this point, the same questionnaire given at the start of the meeting was re-given. From this, an improvement in the understanding of phosphorus control was seen. For example, in response to the question "Who is responsible for controlling phosphorus?" the percentage of patients correctly answering "the patient" rose from 55% before the meeting to 91% after the meeting. To successfully manage kidney disease patients and their relatives need to understand how to best control for phosphorous and this can only be done through continuous nutrition education. The Authors are waiting on the results of phosphorus levels for the next 3 months. The Authors would like to thank Baxter Healthcare for its organizational support.

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### DOES WEIGHT LOSS ADD VALUE TO BLOOD PRESSURE CONTROL AMONG PATIENTS WITH DIABETIC KIDNEY DISEASE?

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Obesity is an independent risk factor for development and progression of diabetic kidney disease (DKD). Whether weight loss provides any additional benefit beyond blood pressure (BP) control is unclear. To simulate a trial, we used the Archimedes model, a person-specific simulation model including detailed representations of physiology, diseases, and health care systems. Our population-based sample represented individuals diagnosed with type 2 diabetes and DKD drawn from 1999-2006 cohorts of NHANES. Simulations were generated to estimate costs and health outcomes across time for 3 treatment strategies: (1) standard of care (STD); (2) blood pressure control (BP); and (3) BP combined with 5% weight loss (BPWT). BP control represents 3.5% reductions for those with SBP > 130 and SBP > 140, respectively. Over a 20y time horizon, discounted costs for the STD group were \$165,261 with discounted quality adjusted life-years (QALYs) of 5.89. With BP estimated at \$30/month, the incremental cost-effectiveness ratio (ICER) was \$26,626/QALY compared to STD. With BPWT at \$50/month, the ICER was \$31,773 compared to STD. Even with varying intervention costs and durations (Figure), the ICERs remained favorable, especially for the BPWT group. In conclusion, weight loss in addition to BP control appears to provide favorable value, particularly over moderate time horizons.