Determination of renal oxalate (oxal) clearance and urinary oxal excretion rates permit estimation of plasma oxal indirectly. However, the value obtained will depend on the applied clear method we reported the results.

We conclude that SI overestimates CI oxal as compared with the CI-method. In our study equilibration time was 2 hr, clear was calculated according to the standard formula. With the one-compartment model, consistently overestimated the renal clear of oxal as compared with the CI-method. 62% (range: 35-67) and 50% (range: 18-64) rsvp. In the next study C-14 oxal clear was determined using CI in 3 groups of subjects: 10 healthy volunteers, 10 patients (n) with normal renal function and 9 with impaired renal function. (CIF 7.74 ml/min). Comparison of the C-14 oxal clear with the renal endogenous creatinine clear determined on the 3 days preceding CI revealed a nuclear constant oxal-to-creatinine clear ratio of 0.1, which was independent of the degree of renal failure and urinary oxal excretion. We conclude that SI overestimates CI oxal clear and 2. Plasma oxal levels were determined on the basis of weight increase and relationships for body weight and oxal levels. Some fish, however, showed a remarkable ability to adapt to low pH waters (pH 3.5-3.7). The aim of the present study was to compare the plasma oxal in two acid-resistant species, viz., the tilapia (Oreochromis mossambicus) and the rainbow trout (Oncorhynchus mykiss). The latter fish prevails in wild alkaline waters in the Netherlands and Belgium. Both species were well-acclimatized and growing at pH 4.5 and 7. The tilapia grows faster at pH 7, the minnow grows faster at pH 4.5. Growth-related NA depletion was assessed by the in vivo determination of the plasma oxal levels and relationships for body weight increase and relationships for body weight. Total body Na and K were measured with the aid of a simple linear scanner. In one experiment, ratios of the plasma-oxal to soft tissue ratios were calculated from its total body retention, although providing information about the loss and shift to other compartments of oxal, did not inform about the oxal status. During this same period, measurements of 62Na retention in the forearm correlated well with the bioavailability of the 62Na as calculated from its total body retention, although the latter required a much longer observation period. Indications are that for measurement of 62Na in the forearm an observation period of 3 days may suffice, which would make it possible to replace the 62Na (phys.τ½ 24 h) by 69mZn (phys.τ½ 13.9 h). Measurements of 69mZn in the forearm may be a suitable parameter for the zinc status. 69mZn has also been shown to be the nuclide of choice for the measurement of the plasma-oxal by an oral dose of 50 mg Zn (containing 10 μCi 69mZn). Such tests have proved their value for evaluation of the absorption of Zn from the digestive tract and may possibly be of value for evaluation of the Zn balance, since we determined the specific activity of the Zn (viz., the activity of the Zn) is measured.

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