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 KANJANA KIATKANON : EVALUATION OF 2 ENTERAL FORMULAS
 ON LIPID STATUS IN PATIENTS WITH CARCINOMA OF THE LARYNX.
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The purpose of this study is to evaluate 2 types of enteral formulas, i.e. Resource[®] and Sandosource HN[®] and their effects on lipid status of 19 patients with carcinoma of larynx. Patients were divided into 2 groups according to the types of tube feeding formulas. Patients in both groups were rather homogenous in terms of gender, age, underlying disease, preoperative-energy status, and type of operation. Group I consisted of 9 patients who received Resource[®] for 5-10 days whereas group II consisted of 10 patients who received Sandosource HN[®] (Novartis Nutrition, USA) for 6-10 days. The mean (\pm SEM) of daily intakes of energy, protein, fat, and carbohydrate in group I were 2003 \pm 28 kcal, 68.43 \pm 0.88 g, 68.43 \pm 0.88 g, and 273.59 \pm 14.42 g, respectively, whereas the corresponding figures in group II were 2075 \pm 33 kcal, 111.34 \pm 1.81 g, 55.67 \pm 0.90 g, and 280.82 \pm 4.74 g.

The results show that the mean (\pm SEM) total fat intakes of 30.79 \pm 0.16% of total calories and 18:2 n-6 intake of 3.46 \pm 0.02% of total calories in group I as well as total fat intakes of 24.14 \pm 0.12% of total calories and 18: n-6 intake of 1.78 \pm 0.01% of total calories were not adequate to normalize patients' serum and RBC 18:2 n-6 levels. Both groups were still in biochemical linoleate deficiency as evidenced by their significantly lower serum and RBC levels of 18:2 n-6 and 20:4 n-6 as well as significantly higher 20:3 n-9/20:4 n-6 ratios than found in healthy adults. Furthermore, 18:3 n-3 intakes of 0.15% of total calories in group I and 0.04% of total calories in group II were adequate to maintain their normal 18:3 n-3 status. Resource[®] contains 32% fat-calories consisting of 11.3, 68.4, and 13.3% of total fatty acids (FAs) as 16:0, 18:1 n-9, and 18:2 n-6 whereas the corresponding figures in Sandosource HN[®] are 25% of total calories, 9.4, 55.3 and 7.6% of total FAs. In addition Sandosource HN[®] also contains 12.2, 6.5, and 14.0 %of total FAs as 8:0, 10:0, and 14:0. The cholesterol contents in Resource[®] and Sandosource HN[®] are \sim 13 and 150 mg/L, respectively. Nutritive properties of Resource[®] are more favorable to lower plasma TC and LDL-C levels than those of Sandosource HN[®]. This explains the significantly higher mean plasma TC, LDL-C and serum S-particle levels in group II at D8-12 than those in group I at D7-12. This is also supported by the fact that none of the patients in group I at D7-12 had elevated plasma LDL-C levels.