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Supplement 1

Parenteral Nutrition

Proceedings of a Symposium held in Copenhagen, March 1975

Arranged by S. Jarnum and V. Larsen

Guest Editor: H.D. Cremer, Giessen

32 Alimentary Iodine Deficiency in the Federal Republic of Germany: Current Inefficiency of Goitre Prophylaxis

J. Habermann, K. Horn and P.C. Scriba, Munich, FRG

Iodine deficiency is the most important factor in the etiology of endemic goitre. Recent epidemiologic surveys showed that goitre is endemic in the FRG, with an average incidence of 15 % among recruits, and that the alimentary iodine intake of 30–70 μg iodine/day is less than 30 % of the optimum recommended by the WHO. A successful iodine prophylaxis, as introduced for a long time in Switzerland and Austria, is hitherto not possible in the FRG: the law on dietetic food restricts the iodine content of iodized salt to 5 mg iodine/1 kg. Also, there must be a label on the packing, indicating that the salt is only to be used for 'medically established' iodine deficiency. Therefore, the voluntary prophylaxis is, e.g., only used by less than 20 % of the population of Bavaria. When 10 g of this iodized salt are consumed daily, this will amount to an extra intake of 50 μg iodine. However, we measured the content of iodine in the iodized salts, and found this to vary, generally depending upon conditions of storage, between 2.1 and 4.2 mg iodine/kg (table salt and sea salt below 0.7 mg/kg). The true iodine intake is therefore much lower, and a sufficient prophylaxis of endemic goitre by this salt is hardly possible. The Thyroid Section of the German Society for Endocrinology recently recommended a goitre prevention program by compulsory iodization of salt with 10 mg iodine/kg. Because of its superior stability potassium iodate should be preferred instead of potassium iodine for iodization.