plasma.

The radioactivity labelled on triglyceride in commercial radioiodinated triolein were found to be only 40 to 60% by thin layer chromatography. When commercial radioiodinated triolein was administered into the stomach or duodenum, radioactivity in the plasma of portal and femoral blood was examined chromatographically. The distribution of the radioactivity was found to exist in triglycerides, fatty acids and even phospholipids.

When purified triolein by chromatographic method were administered intraduodenally, radioactivity appeared only in thoracic duct, 99% of which was precipitated by TCA and radioactivity of portal and femoral vein were negligible. 95% of thoracic lymph activity existed in fatty acid and triglyceride.

As a conclusion our animal experiments indicate the strong necessity of the purification of commercial radioiodinated triolein when we performed triolein absorption test, because of the possibility of the false negative result when we use impure materials.

Absorption Test by Iodine-131 Labeled Triolein and Oleic Acid

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In 1960 D. Berkowitz performed the absorption test estimating concentration of $^{131}$I-Triolein and Oleic Acid in blood. In 1961 B. D. Pimparka advocated total collection method, but the results were not satisfactory.

N. Tuna in 1963 showed by the thin-layer chromatogram it was because of impure products of $^{131}$I-Triolein and Oleic Acid. The purpose of this paper is to report cases examined by the D. Berkowitz’s method using the pure products.

Method:
1) The thin-layer chromatogram was performed on each commercial product to estimate its purity.

2) 100 $\mu$Ci and 25 $\mu$Ci of $^{131}$I-Triolein and Oleic Acid was administered and the blood was obtained at 1, 2, 4, 6, 8, 12 and 24 hours.

Results:
1) $^{131}$I-Triolein consisted of chiefly esterized cholesterol, but had very few R.I. on the thin-layer chromatogram.

2) $^{131}$I-Oleic Acid had Triolein but had very few R.I.

3) Maximal absorption of 10~15% of Triolein was found at 2~6 hours in normal adults.

There was a case which showed maximal absorption was more than 15% of Oleic Acid.