had no effect on incorporation into acid-soluble fraction of both tissues. DNP and PCMB, however, inhibited considerably the incorporation into protein of pancreas.

From the results mentioned above, it was suggested that $^{75}$Se-Met incorporation after very short time was owing to that into acid-soluble fraction of pancreas rather than into protein fraction, and furthermore, the measurement of an incorporation of test compound into the acid-soluble fraction of pancreas might be usefull for the search for new pancreatic scanning agents.

On the accumulation into mouse pancreas of new two tritiated compounds for the development of pancreatic scanning agents

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$^{75}$Se-Selenomethionine ($^{75}$Se-Met) are often utilized as a pancreatic scanning agent. However, it is difficult for doctors to obtain an effective scanning profile with use of $^{75}$Se-Met. From a point of this view, more excellent scanning agents are desired together with the development of better scanning systems or instruments. Hence, there are many reports on the development of new pancreatic scanning agents along with this line.

It is well-known that a certain group of compound cause a experimental Diabetes Mellitus because of a blocking effect against Zinc in the $\alpha$-cells of islets of Langerhans in the pancreatic tissue. Among such a group, 2-methyl-8-hydroxy-quinoline was used for this experiment. The compounds was tritiated by Wilzbach's method, and purified by repeated paperchromatographic method. After per os administration of 10 and 100 $\mu$ gram of the $^3$H-compound a mouse, the pancreas, liver, spleen etc. were taken out at several interval of time, liophilized, subjected to combustion in a flask filled with oxygen, and $^3$H radioactivity in the tissues was measured with use of a liquid scintillation counter.

As another compound to test was tried to use rutin and its diglycerol ether (a water-soluble derivative of it), because the vitamin is detected in pancreatic tissue. This compound also was tritiated, purified, and administered in the same way mentioned above. Finally, the accumulation were determined as radioactivity in the pancreas. In addition to the above experiment, the in vitro incorporation into acid-soluble fraction of these compounds was measured on both pancreatic and liver cells.

As a result, these compounds gave no superior accumulation in the pancreatic tissue in comparison with liver tissue. We are now conducting a study on new derivatives of amino acids.