

but ordinary cooking seems to have no effect.

Hitherto nothing has been known concerning its chemical structure and very little about its properties. The Japanese chemists, however, have analyzed the substance they obtained. Whether or not it is vitamin A remains a question for further verification.

They isolated it from cod liver oil, butter and egg yolk. After an involved chemical process a semi-crystalline substance was obtained, constituting about one tenth of one per cent. of the original material. This was found to be composed of carbon, hydrogen and oxygen, with no nitrogen.

A mouse at the point of death because of lack of vitamin A was given minute quantities of the substance daily and in ten days was restored to complete health.

Vitamin A has been considered in the nature of a catalyst, an agent with the power of bringing about extensive chemical changes without being itself altered in the process.

BIG OCEAN SURVEY TO START IN GULF

Definite plans for the beginning of the greatest scientific survey of the ocean ever undertaken are contained in recommendations adopted by a Committee of the Conference on Oceanography, consisting of representatives from various technical bureaus of the Government and allied institutions, in session at the Hydrographic Office of the Navy Department. Reconnaissance of the Gulf of Mexico-Caribbean Sea region and neighboring parts of the North Atlantic and south through the Panama Canal to the Galapagos Islands is proposed, with later more comprehensive and intensive work in both the North Pacific and North Atlantic oceans.

These expeditions in a specially equipped ship, fitted up with laboratories for the examination of specimens taken at sea, are expected to yield information of the highest scientific and practical economic value to fisheries along our coast and farmers in the interior of our country.

Conditions of the western part of the Gulf of Mexico and Caribbean Sea are believed to have a definite bearing on the climate of the southern, middle western and eastern states, while geological exploration on the sea bottom around the Antillean chain may yield important knowledge about earthquakes and volcanic activity.

An inventory of the life in the sea upon which future generations will have to draw more and more for food is contemplated while important fishing banks of immediate commercial value may be located.

The exploring ship will be equipped with the sonic depth finder by which continuous sounding and accurate charting of the bottom may be rapidly carried forward. The scientific staff will be under the direction of three scientists of highest caliber; one an oceanographer, one a geologist, and one a biologist, according to the plans outlined by the committee.
