or blue-gray eyes, contained proportionately more men. This group was larger, 1,062 persons, and 504 of them were

The distribution of yellow coloring in the eyes does not seem to follow this scheme of discrimination between the sexes.

Eye color is apparently handed down from parents to children by means of two pairs of hereditary factors. There is one pair of factors for brown color and the absence of brown color which makes for blue eyes. Another pair of factors carries yellow and the absence of yellow. The first of these pairs seems to be linked in some way with sex.

Blue eye color appears to be a racial characteristic which causes the individuals in certain racial groups to have eyes that are blue with a little yellow in them and others with blue eyes. Probably no population has ever existed in which everyone had pure blue eyes, Prof. Frets said.

Science News Letter, June 8, 1935

CLIMATOLOGY

## Great Lakes Act as Giant Air Conditioning System

ANADA and the United States are joint owners of a tremendous and efficient air conditioning system—the Great Lakes. How this system works was described by Dr. John Patterson, director of the Canadian Meteorological Service, to the Royal Society of Canada.

In summer, these huge inland seas act to cool the air and remove excess moisture. In winter they reverse the process: the stored heat they have captured in summer goes back into the cold air, and at the same time they evaporate water to temper winter dryness.

Where in an ordinary drainage basin the amount of water surface is practically negligible when compared to the land area drained, a peculiar feature of the Great Lakes system is that the lakes themselves occupy more than one-third of the entire area from which they derive water. Thus there is a very large amount of evaporation from the water surface, in addition to that from the land, from transpiration of plants, and the many other factors involved.

The average amount of precipitation over the area is about twenty inches per year. Of this, Dr. Patterson and his staff have found that at least nine inches is lost in evaporation, which for the water surface alone this amount would be about three times as great.

Science News Letter, June 8, 1935



METERING THE SUNSHINE

Scientists are examining the new device for measuring the ultraviolet irradiation that puts the sunshine vitamin D into milk. On the left is Dr. H. C. Rentschler, Westinghouse Research Laboratories, and in the background holding the "electric eye" is Dr. G. C. Supplee, Borden Company.

PHYSIOLOGY

## Find Way to Measure Amount Of Sunshine Vitamin in Milk

PARENTS and physicians alike rejoiced when it became possible to put vitamin D into milk. Milk is in many ways an ideal food for infants and children but it is sadly deficient in the sunshine vitamin, as D is often termed.

Now scientists have gone a step further and found a way to measure the amount of sunshine vitamin in the milk when it is put there by the action of ultraviolet light. This is important. Baby specialists and nutrition experts have recently pointed out that lack of such a measure was one serious drawback to relying on vitamin D-enriched milk as sole source of this vitamin.

The method of measuring the sunshine in milk was developed by Dr. H. C. Rentschler of the Westinghouse Research laboratories and tested by Dr. G. C. Supplee in the plant of the Borden Company, the dairy that holds the patent on the irradiation process for milk.

Strictly, Dr. Rentschler's newly-announced method does not measure the

actual amount of the vitamin. Instead it measures, by the photo-electric cell, the amount of ultraviolet light playing on the milk during every minute of the irradiation process.

This is all that it is necessary to measure, Dr. Supplee explained, since scientists have known for years the amount of irradiation needed to impregnate the milk with the required amount of vitamin D. The big thing was to find a way of making sure that this required amount of ultraviolet light was reaching the milk constantly during the process, so that every quart of the irradiated milk delivered to a baby's home would contain the actual amount of vitamin D it was supposed to have.

Other ways of putting vitamin D into milk have been found besides the irradiation method, but Dr. Rentschler's new measure is useful only for determining the vitamin D content of irradiated milk.

Babies and children need this vitamin to make them grow strong and healthy