The Iodine Global Network, in partnership with the Ministry of Health and the Ministry of Education, Pan American Health Organization (PAHO), and UNICEF has completed the collection of urine samples in the first national iodine survey in Belize. Belize is one of nine Caribbean countries participating in this unique research project entitled the “Caribbean Region Urinary Iodine and Sodium Study 2018” (dubbed “CRUISE”). Other countries, which have also completed sample collection, include Jamaica, Antigua, St. Kitts & Nevis, St. Lucia, Grenada, St. Vincent & The Grenadines, Trinidad & Tobago and Barbados.

Approximately 550 school-age children (aged 6-12 years) were recruited in May 2018 from five primary schools: two in Belize City, one in Dangriga (south), one in the western part of the country and another in Corozal (north). A workshop for teachers, parents, and ministry officials was conducted prior to the study launch by the Ministry of Health, where IGN gave a presentation on the importance of optimal iodine nutrition for healthy brain development. Spot urine samples were collected from all participating children, a repeat urine sample was collected on a subsequent day in a subset, and height and weight were measured. Additionally, students aged 9-12 were given a 24-hour recall food questionnaire to help identify the common dietary sources of iodine in Belize. The study has also collected samples of household salt and local seasoning powders and bouillon cubes.

Dr. Natalia Beer, maternal and child health advisor to the MOH, explained that the study is important because Belize has only had a limited amount of data collected on iodine intake via the 2015 Multi-Indicator Cluster Survey, which reported that one-third of households in Belize was not using iodized salt. The population data in the current survey will serve as a baseline in future monitoring.

The ongoing study is serving to raise awareness of the need and importance of adequate iodine intakes, and encourage people to include iodized salt and more fish and seafood in their diets.

The urine samples will be analyzed at the Human Nutrition Laboratory, Swiss Federal Institute of Technology (ETH) Zurich. The complete results from 9 countries will be available later this year. Lead investigator, Prof. Michael Zimmermann of ETH Zurich and IGN, explained what the next steps will be once the results are in. “The survey [will] provide data on which to base policy or programs. If we do find that children in Belize are iodine deficient, then the MOH will devise a program by which iodine intakes are increased to the normal range. Most likely, there will be more emphasis placed on public campaigns to encourage consumption of iodized salt.”