BIRTH WEIGHT AND GENETICS

In 2002, the group of Icelander Kari Stefansson published a very large human recombination map using 5,136 microsatellites (Nature Genetics, 2002). To do this, the authors took advantage of the cooperative attitude of the Iceland population. Since then, they have published several articles based on this cooperation. In the latest, which appeared in Nature Genetics 53, 1135–1142, 2021, they performed genome-wide association studies of 142,447 Icelandic trios (baby and parents) looking for genes that affect birth weight and length. The main conclusions are that "the maternal genome contributes to increased birth weight through blood-glucose-raising alleles while blood-pressure-raising alleles reduce birth weight largely through the fetal genome".