

12th International Conferences on **Childhood Obesity and Nutrition**
&
3rd World Congress on **Diabetes and Obesity**

March 18-19, 2019 | Rome, Italy



Angelo Michele Carella

Circulating micro-RNAs in obese and diabetic patients: What meaning?

MicroRNAs (miRNAs) are short noncoding RNA sequences synthesized in the cell nucleus, through a complex multi-step biosynthetic process starting from RNA polymerase II; it is estimated that the human genome contains more than 2500 mature miRNAs. miRNAs regulate a wide range of biological processes as cell differentiation, proliferation and development, cell-to-cell communication, cell metabolism and apoptosis. miRNAs seem also regulate insulin signaling, immune-mediated in aT7(a)9 (n3 (o)12 (iad8 (e IRN)38 (A 4)-3kl)-3 im)19.1 exon, pooiad8 (e IRN)38 ((a)9 (ng)-6 uc)6 (ll8 (e IRN)

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cardiometabolic risk. There are scientific evidences suggesting a potential role of circulating miRNAs detection as useful source of diagnostic, prognostic and therapeutic biomarkers in obese and diabetic patients. Major limits: number, duration and sample size of clinical studies are small; source of circulating miRNAs, extraction procedures, quantities of blood samples and methods of analysis, as well as promiscuous nature of miRNAs targets, difficulties of obtaining tissue specificity and, in particular, high costs required for miRNAs detection may contribute to the uncertainty observed in the literature, highlighting the need for reproducible and well standardized methods. Moreover, low-cost and wide availability assays to detect circulating miRNAs with high sensitivity/specificity should be developed. Large, long-term and randomized controlled clinical studies are needed to determine whether circulating miRNAs could play a role as biomarkers for obesity and diabetes in daily clinical practice.

Biography

Angelo Michele Carella, after graduating in Medicine, obtained specialization in Internal Medicine, attended postgraduate courses on Diabetes and Obesity and obtained university Master in Healthcare Management. Currently, he operates at the Internal Medicine Department of "T. Masselli - Mascalucia" Hospital in San Severo (Foggia), Italy. He teaches at Medical Faculty of Foggia University, degree course in Health Professions. He took part as researcher/co-researcher in some clinical studies, published in international journals, as DAVID Study, ESPORT Study, ATA-AF Study and DIAMOND Study. He is Editorial Board member

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