

TITLE

**Unhealthy Diet
Intake during the
Peri-Natal and Adult
Periods: Detrimental
Neuroendocrine and
Metabolic Effects**

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Consumption of unhealthy diets ("modern diets") during early/late in life, might play a key role in the development of obesity, metabolic syndrome and type 2 diabetes (T2DM). Due to the epidemic growth profile of these diseases with their negative socioeconomic impact, this unhealthy habit becomes a relevant preventive-target factor to improve human longevity/life quality and to reduce the current economic load for the public health system worldwide. The present studies were devoted to address the impact of the intake of an iso-caloric fructose rich diet (FRD) by either lactating mothers or adult individuals, on metabolic and endocrine adipose tissue functions. Because one of the most important derangements caused by the intake of an excess of fructose is an overall enhancement in oxidative stress (OS) rate, the studies have explored both, its indirect and direct consequences upon body weight, food intake, hypothalamic function, adipo-insular axis activity, and on the sensitivity of various tissues to insulin and leptin stimuli. The data clearly indicate that the intake of this diet negatively affects several of the above mentioned functions, regardless of whether this interventional diet is applied directly or indirectly and earlier or later to an organism over development. Finally, we have also explored whether therapeutic approaches directed to either inhibit OS or enhance insulin-sensitivity could ameliorate the FRD-induced metabolic-endocrine dysfunctions. These evidences must help health policy makers to develop/implement suitable strategies to promote healthy dietary habits in the general population to prevent the development of chronic diseases such as obesity and T2DM.

Biography

Eduardo Spinedi completed his Ph. D. degree in Argentina (UNSL), after pre-doctoral trainings at the Department of Physiology of the Southwestern Medical School (UTHSCD, Dallas, Tx) and the National Institute of Environmental Health Sciences (NIH, Research Triangle Park, NC). He performed postdoctoral studies at the Geneva University School of Medicine (Switzerland). He held a Head-Director position in Neuroendocrinology at his home institution between 1992 and 2009. His research area of interest is the interaction between neuroendocrine and adiposity functions. He has published more than 80 scientific works in high-qualified international journals, and is serving as member for several editorial boards.