

Good health starts young

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Two studies recently confirmed that adopting healthy lifestyle habits during childhood and adolescence drastically diminished the risks of breast cancer and cognitive troubles in adult life.

In our **Western culture**, health is primarily considered from the perspective of healing, whereas prevention receives much less attention. Several reasons explain this reality:

- Prevention is often invisible, less spectacular and requires long periods of time before its success becomes evident.
- Prevention often runs contrary to the financial interests of multinational corporations which try to promote the consumption of their products, whether they sell tobacco, soft drinks or hyper-transformed foods which lack all essential nutrients.
- Prevention generally require modifications to behaviour which go against forces created by the society in which we live, which is much more focussed on consumption and on obtaining short-term benefits than on long-term effects on our health.

This situation is regrettable, because it is now well-established that prevention represents the best weapon at our disposal for fighting the development of the ensemble of chronic diseases which plague our society and which are responsible for 3 deaths out of 4 (cardiovascular diseases, cancer, type 2 diabetes and neurodegenerative diseases). All these diseases develop slowly, over several decades, and many studies have shown that it is possible to slow, or even prevent, their evolution by adopting healthy lifestyle habits.

PRESERVING THE BRAIN

The results of a Finnish study showed that increased adoption of good habits at an early age resulted in better chances of success. It is now clearly established that conditions which are best for the heart are also best for the brain: in effect, several risk factors for cardiovascular diseases (hypertension, inflammation, insulin resistance, elevated cholesterol) also increase the risk of cognitive decline and of dementia, whereas factors known to protect cardiovascular health (physical exercise, Mediterranean diet) are themselves also associated with a significant decrease in the risk of cognitive decline.

To determine if the influence of risk factors for cardiovascular disease on cognitive function occurs early in life, the researchers examined the medical records of 2,026 participants in the Young Finns Study, a project which involved many years measuring the health of a cohort of Finnish volunteers between infancy and adulthood. They observed that the presence of two risk factors at an early age (hypertension and hypercholesterolemia, two



phenomena very often associated with being overweight) were associated with cognitive problems which became measurable once reaching adult age (35-49 years), notably in terms of memory (visual and episodic) and learning¹. The individuals who were most exposed to these two risk factors during their youth exhibited early deterioration in their cognitive functions, rather as if their brain were 6 to 8 years older than in people who had had normal blood pressure and cholesterol levels. Since functions such as memory involve brain structures known to be affected in the first stages of cognitive decline, it is believed that these individuals will be prematurely affected by dementia later in their lives.

PREVENTING BREAST CANCER

Adopting a healthy lifestyle during adolescence, particularly with respect to diet, can also contribute to preventing the development of breast cancer during the adult years². By analyzing the eating habits of 45, 204 women participating in the Nurse Health study, researchers noted that a pro-inflammatory diet (red meats and cured meats, soft drinks, added sugars, products made with refined flour) during adolescence caused a 35% increase in the risk of developing breast cancer during menopause compared to those who had consumed healthier foods (green vegetables and cruciferous vegetables, for example). It seems that the dietary choices made during adolescence can have repercussions many years later on the development of breast cancer.

Several studies have shown that adults who modify their lifestyle, even relatively late in life, can significantly diminish the risk of developing several chronic diseases. However, the results of these two studies presented here clearly show that we can do even better by promoting the adoption of these good lifestyle habits at a younger age. We must thus transmit these values as early as possible to children in order to permit them to live longer in good health and to enrich society by their dynamism and their knowledge.

(1) Rovio SP et al. Cardiovascular risk factors from childhood and midlife cognitive performance: The Young Finns Study. *J. Am. Coll. Cardiol.* 2017;69:2279-2289.

(2) Harris HR et al. An adolescent and early adulthood dietary pattern associated with inflammation and the incidence of breast cancer. *Cancer Res.* 2017;77:1179-1187.