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Editorial

How Food Industries Can Help in Preventing Childhood Obesity and Metabolic Syndrome?

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The role of food industries in prevention and control of childhood obesity and the related consequences including metabolic syndrome (MetS) should be highlighted. Childhood obesity is considered as an underlying cause for the development of non-communicable diseases in adulthood. Therefore, primordial and primary prevention of such chronic diseases should be taken as a health priority. Dietary habits have an important role in the prevention and development of childhood obesity and its consequences. Different nutrients and foods might affect this process; however, the dietary pattern plays a more central role in this regard.

Given that most chronic non-communicable diseases origin from the early life, and as the dietary habits are formed in the early years of life, establishing healthy dietary habits for children and adolescents is of special concern. Food industries and providing healthy products have a crucial role in the dietary content of these vulnerable age groups. Different dietary patterns are considered to increase or decrease the risk of excess weight and related complications (1-7).

The balance between energy intake and energy expenditure is very important; therefore, by reducing the energy intake, low-calorie foods can be beneficial (8-10).

Carbohydrates, as the principal part of the diet, produce the highest daily energy requirement. Moreover, because of satiety responses, carbohydrate composition including the glycemic index (GI) affects calorie intake. Consumption of simple carbohydrates particularly sweets and sugar-sweetened beverages has an essential role in the escalating trend of obesity in children and adolescents. Among the macronutrients, fat has the highest energy density; therefore, decreasing its consumption is considered as a global target for reducing the energy content. Low-fat diet consumption by overweight adolescents would decrease their body weight and serum insulin and leptin levels; on the other hand, it would increase serum adiponectin levels.

In addition to the fat content of foods, the type of fat, i.e. saturated and unsaturated fats, has many health effects for children and adolescents (8-11).

Salt intake has many adverse health effects, not only on blood pressure but also on weight gain. Processed foods and many snacks used by children and adolescents have high salt content (12).

Fiber intake has many beneficial effects, and it is documented that higher intake of fiber might reduce the risk of obesity and Mets. Some studies proposed that only dietary soluble fiber has such beneficial effects. It is well-documented that increasing the fiber intake in children and adolescents is associated with lower risk of future obesity and Mets (13,14).

Appropriate health policies and improvement in products developed by food industries are necessary for increasing the availability and affordability of nutrient-rich foods and beverages for children and adolescents.

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