Fatty Liver: A Pure Harvest of Sedentary Life or Something Else?

Editorial

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Editorial

Currently nonalcoholic fatty liver disease (NAFLD) is one of the major and rapidly growing public health problems worldwide [1-3]. In recent years, its prevalence has increased continuously [4-7] and it is currently estimated that as high as one billion people be involved with NAFLD [8]. This condition is one of the most common liver diseases among western countries, currently 2 to 3 times more prevalent than hepatitis B, C and or alcohol related liver disorders and consider as the most common reason of disturbed liver function tests [9,10]. Its prevalence has been reported to be about 10 to 24% in general population and up to 75% among obese subjects [11-13]. Recent surveys in eastern countries have also revealed an increasing incidence of fatty liver due to changes in life style, tendency toward sedentary life, low physical activity, central obesity and diabetes Mellitus type 2 and population based studies estimated its prevalence about 15 to 30% of community and comparable to western countries [14-19]. The epidemiologic studies have proved the important role of the sedentary life style in accumulating fat in liver and introducing fatty liver disease [8, 20,21] and based on important role of life style in different stages of fatty liver, the most fundamental step in management of NAFLD is treating the risk factors through life style modification [22-24].

The huge burden of urbanization and reducing physical activity has begun since more than 50 years ago [25,26] and even in recent years, there is more focus on correcting the life style and encouraging general population to maintain some degrees of physical activity [27-29]. So it could be simplification of story to pertain all of the NAFLD pandemic to just sedentary life style and maybe it is the time for a little bit more thinking about it. It could handle a big question that is there any other culprit else?

And we should keep in mind the story of celiac disease and its increasing prevalence in recent years. Researchers reported that the prevalence of undiagnosed celiac disease increased 4-fold during the past half century [30]. Another study found similar results by comparison of 50-year-old frozen serum samples from healthy recruits in the US Air Force with samples collected recently from sex-matched subjects [31]. During the past decades, wheat has gained alterations that increased production, pest resistance, and baking properties. These changes altered the macronutrient profile (particularly of protein and immunogenic peptides), and increased the speed of wheat-flour processing, eliminating fermentation before baking. These changes might have contributed to the increased prevalence of celiac disease in the past few decades. May be the wheat story is also happening for other food products including poultry and meat. If this immunogenic and structural changes prove about these food products, then an allergic and or immunogenic base could be supposable for fatty liver and its rapid spreading. And maybe it's time to revise and think that "are industrial revolution and nutritional advances necessarily useful for human health?"

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