

## Fatty Liver: Risk Factors and Prevention

Sununta Youngwanichsetha\*

Department of Obstetric-Gynecological Nursing and Midwifery, Faculty of Nursing, Prince of Songkla University, Thailand

### Editorial

Fatty liver is abnormal health condition causes by accumulation of excess fat in liver cells. Firstly, it is no clinical symptoms resulting in unaware and undiagnosed disease. Its pathogenesis is progressive to liver fibrosis, steatohepatitis, cirrhosis and liver cancer. Liver fibrosis and steatohepatitis is reversible conditions but cirrhosis and liver cancer is irreversible disease. Manifestations of fatty liver are abnormal liver function test, pain in liver area, stiffness of liver, and necrosis of hepatocytes [1]. There are two main risk factors: alcoholic and non-alcoholic association. This paper will discuss about risk factors and prevention of non-alcoholic fatty liver disease (NAFLD).

Known risk factors for development of NAFLD are overeating of sugar, fructose and fat. Foods containing high sugar and fructose that include desserts, sweetened drinks and carbonated drinks. Many processed foods contain transfat, butter and margarine. For example, cake, cookie, donut, potato chip and bakery. Additionally, consumption of fatty meats, pork and beef, promote accumulation of abdominal fat, visceral fat and ectopic fat. These unhealthy dietary patterns result in overweight, obesity, and insulin resistance [2,3]. It also shares risk factors with diabetes, metabolic syndrome and cardiovascular diseases.

NAFLD is preventable by modification of eating behavior and regular exercise. Healthy dietary patterns should be advised and promoted during metabolic counseling. Recommended consumption styles are follows:

1. Taking of natural food products including brown-rice, fishes, vegetables and fruits because they are rich in high fiber and bioactive compounds. Research evidences also support consumption of broccoli, cauliflower, cabbage, spinach, carrots, beets, avocado, apples, turmeric and walnuts.
2. Low calorie diet cooking by steaming, boiling, or grilling is suggested. For example, rice soup, hot and sour soup, steamed fish, and grilled fish.
3. Avoid taking foods containing fatty meats such as crispy pork, streaky pork.
4. Reducing sweetened disserts and drinks, particularly carbonated drinks and beverages containing high fructose corn syrup.

5. Avoid consumption of processed foods containing transfats, butter, and margarine such as burger, pizza, cake, cookie, donut, potato chip, French fries, and fried foods.
6. Consumption of foods rich in flavonoids is encouraged in order to detoxify fatty liver disease from steatohepatitis to healthy liver because of its antioxidant benefits. Many fruits and vegetables contain several kinds of flavonoids. Common dietary flavanones, flavanols, flavones, and isoflavones are citrus fruits and juices: oranges, grapefruits, lemons, kale, broccoli, celery, parsley, hot peppers, onions, teas, soybeans, legumes, apples, grapes, and berries.

Moreover, regular physical activities and exercise are recommended for prevention of fatter liver disease. Research evidences show that moderate and vigorous physical activities and exercise can reduce hepatic fat and improve fatty liver indicators. Aerobic and resistance training exercise can reduce serum triglycerides and LDL-cholesterol levels. In addition, reduction in body weight, abdominal visceral fat and insulin resistance are observed [4]. Therefore, all types of physical activities and exercise should be promoted among individuals having risk factors for development of fatty liver disease.

In conclusions, over consumption of unhealthy foods containing fatty meats, transfat, sugar and fructose are known risk factors for development of NAFLD. All types of moderate and vigorous physical activities and exercise should be encouraged among people across life span in order to prevent NAFLD and its complications.

### References

1. Kenji T, Yuko K, Naruki K, Ken U, Tsutomu K, et al. (2016) Impacts of physical activity on nonalcoholic simple fatty liver: a prospective cohort study. *Prev Med* 88: 237-240.
2. Paris T, George ES, Roberts SK, Tiemey AC (2017) The effects of diet and lifestyle interventions on insulin resistance in patients with nonalcoholic fatty liver disease: a systematic review. *Eur J Gastroenterol Hepatol* 29: 876-878.
3. Shamsoddini A, Sobhani V, Chehreh MEG, Alavian SM, Zaree A, et al. (2015) Effect of aerobic and resistance exercise training on liver enzymes and hepatic fat in Iranian men with NAFLD. *Hepat Mon* 15: e31434.
4. Zhang HJ, He J, Pan LL, Ma ZM, Han CK, et al. (2016) Effects of moderate and vigorous exercise on nonalcoholic fatty liver disease: A randomized clinical trial. *JAMA* 176: 1074-1082.

\*Corresponding author: Sununta Youngwanichsetha, Assistant Professor, Department of Obstetric-Gynecological Nursing and Midwifery, Faculty of Nursing, Prince of Songkla University, Hat Yai, Songkhla, 90110, Thailand, Tel: 66074286537; E-mail: [sununta.y@psu.ac.th](mailto:sununta.y@psu.ac.th); [sununta.y@gmail.com](mailto:sununta.y@gmail.com)

Received June 09, 2018; Accepted June 11, 2018; Published June 18, 2018

Citation: Youngwanichsetha S (2018) Fatty Liver: Risk Factors and Prevention. *J Nutr Food Sci* 8: e145. doi: 10.4172/2155-9600.1000e145

Copyright: © 2018 Youngwanichsetha S. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.