

THE RELATIONSHIP BETWEEN THE RISK OF FATTY LIVER AND B VITAMINS DEFICIENCY IN IRANIAN ADULTS



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ABSTRACT

The fatty liver is related to many chronic diseases. Studies show that fatty liver is associated with some nutrition deficiencies such as water and fat soluble vitamin deficiencies. The study is to survey relationship between the risk of fatty liver and vitamin B deficiency among Iranian adults.

The results show that B vitamin deficiencies are very high prevalence in participants with risk of fatty liver. Moreover refined carbohydrate consumption is related to B vitamin deficiency among participants with the risk of fatty liver.

METHODS

The study was a cross sectional study. The participants were 189 (149 female, 40 male) who lived in Tehran / Iran. The age of participants was 16-80. The sample method was random sample.

MRA (Magnetic Resonance Analyser) was the assessment method to detect persons with risk of fatty liver. Moreover, medical history of participants with high risk of fatty liver was checked.



(Liver Function) Analysis Report Card

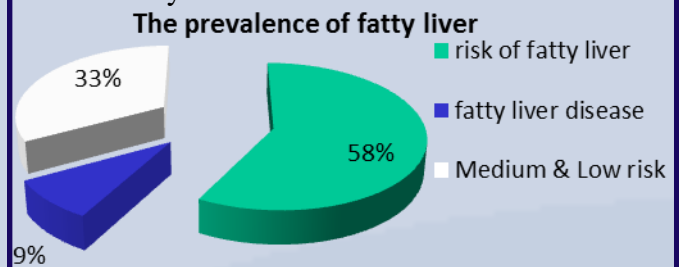
Name: davodi Sex: Female Age: 33
Figure: Severe partial fat(150cm,110kg) Testing Time: 2017-01-23 10:27

Testing Item	Normal Range	Actual Measurement Value	Testing Result
Protein Metabolism	110.34-220.621	114.745	Normal
Energy Production Function	0.713-0.992	0.746	Mildly Abnormal
Detoxification Function	0.202-0.991	0.755	Mildly Abnormal
Bile Secretion Function	0.432-0.820	0.513	Mildly Abnormal
Liver Fat Content	0.007-0.419	0.665	Severely Abnormal

Reference Standard: Normal(-) Mildly Abnormal(+)
Moderately Abnormal(++) Severely Abnormal(++++)

RESULTS

- The results show that 58% of participants are the risk of fatty liver and 9% of them exactly have fatty liver disease. The liver disorder are cause Low energy metabolism and low protein metabolism in 6 percent participant with fatty liver.



- B vitamin deficiencies are very high prevalence in participants with risk of fatty liver.
- 41.7 percent of participants have vitamin B1 deficiency.
- 38.5 percent of participants with risk of fatty liver have vitamin B2 deficiency.
- 30.7 percent of them have vitamin B6 deficiency.

24 food record survey of participants show that refined carbohydrate consumption is related to B vitamin deficiency among participants with the risk of fatty liver.

CONCLUSIONS

High refined carbohydrate consumption in long time can be related to fatty liver. Therefore, nutritionists and dieticians recommend that high fibre diet, whole bread and brown rice in diet can be as anti fatty liver compounds. In fact, the high fibre diet include high B vitamins and the high level of B vitamins in body can fight fatty liver.

REFERENCES

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