



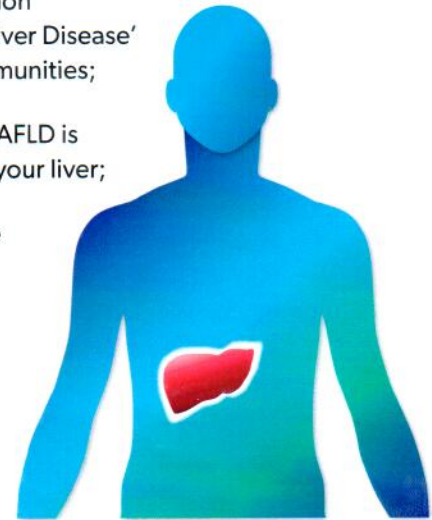
NAFLD STUDY

Purpose of Study

The University of Manitoba, together with Four Arrows Regional Health Authority and W.C. Wiebe Health Centre is conducting a study to determine how common and/or severe the condition called 'non-alcoholic fatty liver disease' (NAFLD) is in Manitoba, and the long-term outcomes for people who have this condition. We are inviting community members like yourself to come to the planned community ultrasound clinic to participate in the study. A total of 2,000 people from five different communities will be invited to take part in this study. We will be recruiting 1,000 participants from the Island Lake First Nation communities of Garden Hill, St. Theresa Point, Wasagamack and Red Sucker Lake, and an additional 1,000 participants from Winkler with mainly Caucasian residents. All members ages 18 years and over will be invited to participate in the study. In order to do the NAFLD study, a liver ultrasound clinic will be set up in each community so no extra travelling out of the community will be required by participants.

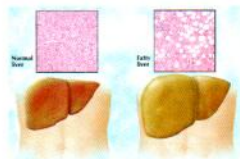
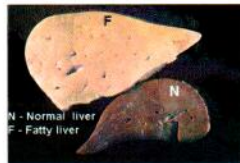
Main objectives of this study are to:

1. Determine how common 'Non-alcoholic Fatty Liver Disease' (NAFLD) is in our communities;
2. Determine whether NAFLD is causing problems for your liver;
3. Identify those who are at risk of developing NAFLD in the next five years.



What is non-alcoholic fatty liver disease (NAFLD)?

NAFLD is a condition where fat builds up in the liver. There is normally a small amount of fat in liver cells, but, when too much fat, liver disease can follow. NAFLD has been increasing in both children and adults and has now become the most common liver disease in Canada and the world. Health professionals are still learning about NAFLD, but do believe that early detection and treatment of this condition is important as serious liver problems can develop. The reason why it is called NAFLD is because the liver can look like it has been exposed to large amounts of alcohol, even though that has not been the case



Risk Factors for Developing NAFLD

Although children and young adults can get liver disease, it is most common in middle age. Some risk factors include;

- Obesity
- Diabetes
- High cholesterol and high blood pressure
- Insulin resistance

Why We Should Be Concerned?

- NAFLD is on the rise among both children & adults – that includes the First Nation population.
- It is believed that as many as 25% of all Canadians may have NAFLD.
- Adults with diabetes and obesity/overweight problems have an increased risk for developing NAFLD.
- NAFLD is associated with an increased risk of harming your liver and other health related problems, while diet and lifestyle changes may help to decrease the risk or improve the condition

Study Procedures

If you agree to take part in this study, you will have the following test and procedures:

PART ONE



Blood pressure is taken

- Short physical exam, measuring your height, weight and blood pressure
- A trained nurse from your community or from the research team will perform the ultrasound exam of your liver with the portable ultrasound machine
- You will get the results of your test immediately

Results:



Potable ultrasound device

- If no fat is detected in your liver, you will be asked to participate in the incidence study (which means you would be asked to come for another ultrasound exam in 5 years).
- If fat is detected in your liver, then you will be referred to a Hepatologist (liver expert) to have diagnosis confirmed and the severity assessed

PART TWO

- Medical history
- Have blood drawn for lab testing
- You will have a Fibroscan assessment of your liver (a Fibroscan tells the doctor if there is scarring in the liver).



Results of fibro scan



Blood test



Fibroscan assessment

PART THREE

- Follow up by a Hepatologist (liver expert) for the next 5 years, usually every 6 months to check on your liver.
- Routine bloodwork and physical examination will be included in the 6-month check-ups, and for the last 6-month check-up, routine blood work, a physical exam, followed by another ultrasound and fibro scan.
- Follow up by a doctor or nurse practitioner, usually every 6 months to check on your liver after the study ends.



Follow up appointment

How can NAFLD be treated?

Treatment of NAFLD involves decreasing the amount of fat in the liver as well as any inflammation or scarring that may also be present. Increasing physical activity, losing weight, and changing your diet to have more nutritional value while avoiding foods that contribute to NAFLD such as fructose (soda, pop), avoiding alcohol are all effective in reversing the buildup of fat in the liver. Though, the results might take months or even years, but it is important in treating the condition.