

MDJunction Cirrhosis Support Group Newsletter



Medical Technology News

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FibroScan Probe



A new testing device and procedure has garnered a lot of discussion in our forums. The device, called FibroScan®, uses elastic vibration waves (ultrasound elastography) to measure liver fibrosis. Fibrosis is the beginning of scarring occurring in the liver due to liver diseases that are progressing towards end-stage liver disease—cirrhosis. FibroScan is a technology developed and produced by the French company Echosens® and extensively tested, used and promoted by Princess Grace Hospital in London, England. Echosens® adapted transient elastography to medical application by introducing a variety of new features. The improved technique, called Vibration-Controlled Transient Elastography (VCTE™), also measures hepatic steatosis (fat deposits in the liver).



The test involves positioning the patient on their back (supine) with their right arm extended up and behind the head. An ultrasound transducer with a vibrating unit (probe) is placed over the patient's abdomen at the intercostal space overlying the liver. The vibrating transducer emits an elastic sound wave, an ultrasound receptor in the probe records the density of the signal as it “bounces” back to the unit and the device calculates the speed at which the wave passed through the liver. The velocity of the wave as it spreads is a measure of liver stiffness, or fibrosis. The faster the wave spreads, the stiffer, or harder the liver, which in turns means a greater amount of liver fibrosis.



Results of a FibroScan indicate the stage of fibrosis found in the liver based on the same values used with the [Metavir](#) scoring system.

- F0 = no fibrosis
- F1 = minimal fibrosis
- F2 = fibrosis has occurred and extends outside the areas in the liver that contains blood vessels
- F3 = bridging fibrosis is spreading and connecting to other areas that contain fibrosis
- F4 = cirrhosis or advanced fibrosis of the liver

FibroScan is being marketed as a better alternative to an invasive biopsy for staging how much fibrosis is present in a patient's liver—a “platinum” standard for this purpose. There are no incisions, anesthesia, needle sticks or pain associated with a FibroScan examination. With no restriction on the frequency of use, FibroScan can monitor the progression, stagnation or regression of an individual's liver disease and give an accurate quantitative measure of the success of treatments or lifestyle modification. A FibroScan procedure takes minutes with no after effects.

Currently FibroScan is in FDA phase 3 clinical trial. In Phase 3 (Phase III) clinical trials, the study drug or treatment is given to large groups of people (1,000-3,000) to confirm its effectiveness, monitor side effects, compare it to commonly used treatments, and collect information that will allow the drug or treatment to be used safely. In a response to a request to the Principal Investigator at Beth Israel Deaconess Medical Center (one of the US clinic trial sites), Nezam H Afdhal, M.D., regarding the status of the clinical trial at BIDMC, Doctor Afdhal states “The clinical trials in the US for FibroScan are completed and a tool claim for the use of elastography to measure shear velocity and liver stiffness is being submitted to the FDA US approval is dependent on the FDA but may occur in 2013”.

A very large body of research shows the FibroScan measurement as a reliable measurement device for liver fibrosis and in particular to diagnose or exclude cirrhosis. FibroScan is internationally recognized, as well as acknowledged by leading US hepatologists, for its value, and used extensively worldwide outside of the US.

Patients with ascites, patients who are pregnant or patients under the age of 18 years should not undergo FibroScan examinations.

Disclaimer:

We are **not** doctors! Always consult with your own physicians before making any changes to your treatments.

We are **not** lawyers! Get appropriate legal advice when it is necessary.

We aren't even experts! We are patients and former patients that have been doing our own research on our common disease, trying to help other travelers on the roller coaster of dealing with cirrhosis.

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Related Support Groups on MDJunction:

[Alcoholic Liver Disease Group](#)

[Caregivers Group](#)

[Fatty Liver Group](#)

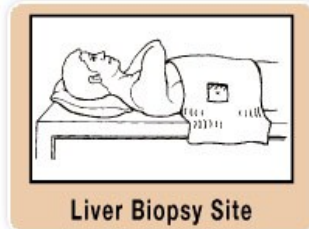
[Hemochromatosis Group](#)

[Hepatitis C Group](#)

Other Tests for Cirrhosis Related Conditions

Biopsy

The liver biopsy is an important diagnostic tool today because it is the most precise procedure for evaluation of the health of the liver by measuring the degree of liver inflammation and staging of fibrosis. These two measurements help predict disease progression and treatment outcome. A biopsy is an invasive procedure carries risks of bleeding, infection and pain/discomfort for the patient. Doctors who specialize in the digestive system or liver will sometimes perform liver biopsies. But in most cases, a radiologist performs the biopsy. There may be risks associated with the administration of anesthesia used during the procedure. Observation of a biopsy patient is important for a period of time after the procedure to ensure no major aftereffects linger.



Procedure: The patient lies quietly on the back or slightly to the left side. That where the biopsy penetrates the skin is carefully cleaned. Then, a local anesthetic agent numbs the skin and tissue below. At this point, the physician will tell the patient how to breathe. The needle advances into and out of the liver. This takes only 1 or 2 seconds. A slender core of tissue is removed with the needle, and is then processed through the laboratory. The entire procedure from start to finish lasts only 15 to 20 minutes.

Recovery: The patient rests for several hours following the exam. Medical personnel check the heart rate and blood pressure during this time. There may be some discomfort in the chest or shoulder however this is usually temporary. Medication is available for this discomfort, if needed. Before discharge, the patient receives instructions about returning to normal activities and about eating. Activity is usually restricted for a day or so after the biopsy. However, the procedure does not require a long recovery period.

Complications: In most instances, a liver biopsy progresses quickly with no problems. As noted, there is occasionally some fleeting discomfort in the right side or shoulder. Internal bleeding can sometimes occur, as can a leak of bile from the liver or gallbladder. These problems are rare and usually handled without the need for surgery.

Types of Biopsy

Percutaneous Biopsy: The most commonly used technique for collecting a liver sample is percutaneous liver biopsy. A percutaneous biopsy is usually performed on an outpatient basis. A mild sedative may be given to the patient prior to the procedure. For this method, a hollow needle enters through the abdomen into the liver to remove a small piece of tissue. To help find the liver and avoid sticking other organs with the biopsy needle, doctors often use ultrasound, computerized tomography (CT), or other imaging techniques.

Transvenous/Transjugular Biopsy: In a transvenous or transjugular liver biopsy, a catheter is inserted into the jugular vein and guided via fluoroscopy (live x-ray) to the portal vein of the liver. The biopsy needle then threads through the catheter and guided into the liver to gather tissue. Any blood lost from the liver simply returns to the bloodstream, resulting in minimal blood loss.

Laparoscopic Biopsy: In a laparoscopic liver biopsy small incisions are made in the abdominal and instruments are introduced through a tube-like surgical implement to obtain the biopsy specimens. The laparoscope is a telescope that magnifies the objects it sees and allows excellent visualization of the liver surface. Ultrasound may help guide this procedure.

MRI

An [MRI](#) of the abdomen is a method to create detailed pictures of the inside of the belly area from many different views. Unlike x-rays and CT scans, which use radiation, MRI uses powerful magnets and radio waves. The MRI scanner contains the magnet. The magnetic field produced by an MRI is about 10 thousand times greater than the earth's. The magnetic field forces hydrogen atoms in the body to line up in a certain way (similar to how the needle on a compass moves when you hold it near a magnet). When radio waves are sent toward the lined-up hydrogen atoms, they bounce back, and a computer records the signal. Different types of tissues send back different signals. MRI can help avoid the dangers of angiography, repeated radiation exposure and/or iodine-related allergic reactions.

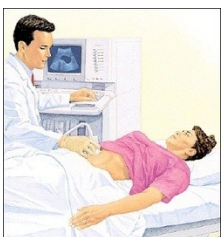
MRI can distinguish tumors from normal tissues and can help the doctor see:

- ◆ Abnormal growths and tumors
- ◆ Blood flow in the abdomen
- ◆ Blood vessels in the abdomen
- ◆ Lymph nodes in the abdomen
- ◆ How certain organs in the abdomen work

Computed Tomography (CT)

CT scans are special x-ray tests that produce cross-sectional images of the body using x-rays and a computer. These images, called "tomograms", allow the radiologist (a medical doctor who specializes in images of the body) to look at the inside of the body just as you would look at the inside of a loaf of bread by slicing it. Enhancement to the picture is through the use of special contrast materials introduced to the body through swallowing as a liquid, injection into a vein or put into the intestines through the rectum as an enema. Because body tissues absorb these materials differently, the CT image will show greater contrast between types of tissues. This allows abnormalities like cirrhosis or tumors to appear more clearly. Abdominal and pelvic CT scans look at the abdominal and pelvic organs (such as the liver, spleen, kidneys, pancreas and adrenal glands) and the gastrointestinal tract. These studies check for the cause of pain or to follow up on an abnormality seen on other tests. A CT scan can whether you have excess fat in your liver (fatty liver).

Ultrasound (US) Imaging



An abdominal ultrasound uses reflected sound waves to produce a picture of the organs and other structures in the upper abdomen. An abdominal ultrasound can:

- ◆ Check the size, shape and position of the liver.
- ◆ Evaluate problems of the liver, including liver masses, cirrhosis, fat deposits or abnormal liver function tests.
- ◆ Detect gallstones, inflammation of the gallbladder (cholecystitis), or blocked bile ducts.
- ◆ Find out the size of an enlarged spleen and look for damage or disease.
- ◆ Detect problems with the pancreas, such as pancreatitis or pancreatic cancer.
- ◆ Find out whether a mass in any of the abdominal organs is a solid tumor or a simple fluid-filled cyst.
- ◆ Look for fluid buildup in the abdominal cavity (ascites).

FibroScan Versus Other Tests

When we examine the "pros & cons" of a FibroScan versus a biopsy we must first look at the ability to reproduce the results at different times to be able the effectiveness of treatment.

Both FibroScan and biopsy have limitations on the information actually provided. Many doctors use FibroScan to determine when a biopsy is necessary.

Both procedures provide a limited "view" of the liver: FibroScan from the single location of the probe but FibroScan delivers a total numerical score derived as the median from many measurements, covering a rather large volume of the liver in this analysis, which makes the results reliable in representing the liver as a whole. Biopsy provides samples for examination only from the spot(s) where the tissue is and the diagnostic accuracy is limited by the specimen size and fragmentation, sampling error, and inter-observer variability.

FibroScan only measures the density of the liver. Biopsy provides liver cells that can indicate what is happening to the liver and potential the cause of liver disease in a patient.

FibroScan and MRI have different purposes. FibroScan measures density of the liver. An MRI can find tumors/lesions and can also show cirrhosis in advanced stage. MRI will not show milder fibrotic changes-stage 1-3 fibrosis. If your liver MRI is normal, you can be stage 1 as well as stage 3 and even stage 4 in some cases. Just like FibroScan, MRI doesn't involve any radioactivity.

CORNER\$



**Gail "mpmom"
Fatty Liver Disease**

I am a wife and mother who wants people to have information available in a simple and understandable format. My quest to find information when I was first diagnosed with cirrhosis led me to create the site that is now "My Sick Liver dot com". I have had numerous health issues over the years and was finally diagnosed with cirrhosis as the result of fatty liver disease I also have diabetes and psoriatic arthritis. "My Liver may control my daily life but I am much more than my liver."

Diabetes & Liver Disease

Those with fatty Liver often have diabetes that can contribute to the development of the disease. However, everyone with Liver disease is at increased risk for Diabetes. As Cirrhosis Progresses the ability to control the glucose level fails, Often causing a new diagnosis of Diabetes. Even after transplant the medications often cause diabetes.

Insulin has long been the treatment of choice for diabetes in Liver Patients. It carries much less risk than oral diabetics do. However there are

some new concerns for diabetic's in general and especially for liver patients dealing with diabetes. Any diabetic that treats with insulin can tell you that it can cause weight gain but were you aware that it could also cause an increase in hypertension and edema? These can be of particular problems for Liver Patients. This doesn't mean **NOT** to use Insulin, but you need to be aware of side effects form any medicine you are using And Perhaps increasing better diet control and exercise when possible.

Below is an article by Dr. Julian Whitaker:

"A while back, I talked to you about the link between insulin use and weight gain. Unfortunately, weight gain isn't the only downside of this commonly prescribed therapy.

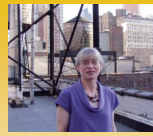
Taiwanese researchers looked at more than 87,000 patients with type 2 diabetes who were treated with either oral drugs or insulin. They found that patients using insulin had a higher prevalence of hypertension (61.3% versus 53.9%) - and the longer they used it, the greater their risk.

This is not surprising when you consider insulin's activities beyond nutrient storage. Injected insulin increases sodium retention and stimulates the sympathetic nervous system. It induces oxidative stress, leading to free-radical damage that impairs the function of the endothelial cells lining the arteries. It also has growth factor - like activity that thickens blood vessels and increases risk of atherosclerosis.

Since people with diabetes are already at dramatically increased risk of hypertension and cardiovascular disease, the last thing they need is a treatment that amplifies this risk. Before accepting your doctor's order to begin taking insulin or to up your dose, talk to him or her about non-drug options. They are safe and effective, and they not only lower blood sugar but also treat underlying causes and protect against diabetic complications."



How Surgeons Are Homeschooled



**Mo "IronCelt"
Hemochromatosis**

Shortly after I got married and moved across country at the age of thirty-eight, I started getting lots of weird nonspecific, invisible symptoms. When my hair starting falling out, I had something to show a doctor. I was soon diagnosed with severe hemochromatosis, at age forty, and cirrhosis six months later. I have now been dealing with these illnesses for ten years.



Snappy Replies/Lame Comebacks: There Should Be an App for That!

No doubt most people with chronic illness face the awkward social dynamics of how to interact with "healthy" people. Wouldn't it be nice if there were a smartphone app for these sticky social situations?

Scenario: An acquaintance sees you out and about and, while chatting, says, "Well, you look great!"

Instinctive response: "So does a cheeseburger, but I can't eat those anymore!"

App response: "Thanks!"

Scenario: An acquaintance is complaining that she can't lose weight and says, "I wish I could be lose x pounds and look as good as you!"

Instinctive response: "You could lose a few of those pounds if you gave me half your liver!"

App response: "Oh, you look fine just the way you are!"

Scenario: You are at a celebration of some sort, and the host, who is a relative, tries to get you to have some Champagne. You politely decline, but the host persists, saying, "Oh, come on, a little bit won't hurt you."

Instinctive response: "What do you still not understand about my cirrhosis diagnosis? I've told you before that I can't drink at all. Are you that forgetful? If so, see a doctor. If you're that cruel, see a shrink."

App response: "No thanks, I'm serious."

Scenario: An insurance company survey taker calls and poses twenty questions regarding how healthy your lifestyle is. Based on your responses, the caller says, "Congratulations on your excellent health!"

Instinctive response: "Then why do I need a liver transplant?"

App response: "Thanks. However, I question the validity of your survey instrument. Have a good day!"

Scenario: An acquaintance calls you and asks if you could volunteer at a community event that would involve merely staffing an information booth for an afternoon.

Instinctive response: "I'd love to, but sitting upright takes a lot of energy when you're living on a different planet where the gravity is stronger, and so I'd need you to provide a couch along with a private restroom facility reserved for me and located only a few steps from the couch."

App response: "I'm sorry, I'm busy that day."

Scenario: An acquaintance ask you how you're feeling.

Instinctive response: "Not a day under ninety."

App response: "Tolerably well. Thanks for asking!"

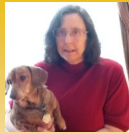
Scenario: You are thrown into a social situation with a complete stranger, who asks, "What do you do?"

Instinctive response: "I used to be a [former occupation], but now I'm unemployed because I was so tired I was dragging like a wet rope on a sinking ship and got the sack around the time I found out I had liver disease."

App response: "Not much! How do you spend your days?"

The list could go on and on. Learn a few app responses, share a few, make the world a brighter place. Credit for this column's inspiration goes to a discussion posted at www.invisibledisabilities.org.

Have as good a day as possible under the circumstances!



Susie "dachsiefan"
Cryptogenic
(Idiopathic) Hepatitis

I am a married woman who was first diagnosed in 1990 with giant cell hepatitis that had now evolved to cirrhosis. In 2008, I developed HE and edema. In 2011, I had the TIPS procedure to remove a portal vein clot and restore blood flow. I am currently on the UNOS waiting list for a liver.

Beating the Fatigue

Continual fatigue has been a constant factor during my life. Even before my official diagnosis of liver disease, I had trouble functioning to my full potential if I did not have a good 8 hours of sleep at night and an occasional afternoon nap on the weekends. Looking back it now seems odd that a twenty something needed so much rest, but I adapted my lifestyle to my body's

needs. In truth, this is what probably saved me from developing more serious problems earlier. I rarely went out late at night to bars with my friends and never developed a taste for alcohol.

In my thirties and forties, the fatigue grew worse. I needed more nightly sleep and I napped more often on the weekends. When I was diagnosed with end-stage liver disease in 2008, I realized I could not physically or mentally work any longer. Not only was my fatigue constant but now I had developed hepatic encephalopathy as well. Some days, I felt I could stay in bed all day and nap off and on. But, what type of life would that be? I decided I had to bring structure back to my life. I needed to try to beat the fatigue before it got the best of me.



How do I try to overcome the fatigue of liver disease?

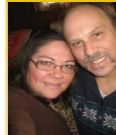
I try to get about 10 hours of sleep per night. My bedtime is 10pm. I rise in the morning before 8 am. If I let myself sleep in, I find I am normally tired for the remainder of the day. I eat a nutritious breakfast including protein. My current favorite is vanilla Greek yogurt with some honey and walnut pieces added. While eating, I will check in MDJunction, my email and Facebook on my iPad.

I exercise 60 minutes every morning. I vary my routine between walking on the treadmill, doing beginner's Pilates and using hand weights. If I find I am tired in the morning after exercise, I take a quick mini-nap of 30-60 minutes.

I do my chores in the late morning/early afternoon. I still am able to make the bed, do laundry, clear breakfast dishes and run the dishwasher, make my lunch, take the dog out as needed and collect the mail. I also use this time to set up doctor appointments, lab draws, scans and updating my medical file. I also usually check out what is going on in the Cirrhosis Group and I might read or play a game on my iPad.

I take a longer nap around 3-5pm. I watch the evening local and national newscasts because it makes me feel connected to the outside world. I have dinner with my husband and stepson. I have found just simple dinnertime conversation helps me avoid becoming depressed about being alone all day. Depression, for me, goes hand in hand with fatigue. The more I am depressed, the more lethargic I become. I watch an hour or two of TV before bedtime.

I have found by returning some sense of structure to my day, I have kept the fatigue of advanced liver disease from overwhelming me. It helps me beat the beast called FATIGUE!



Nina "prayer"
Steve's Caregiver

My name is Nina, I married my best friend Steve over 27 years ago, September 7th 2011 he was diagnosed with cirrhosis of the liver, caused from a genetic disorder called Alpha-1 antitrypsin deficiency, he has lost his Grandfather and his Father to this disease, our prayer is that this stops with Steve. We are blessed with one son, he and his wife have two boys. We are being carried on the wings of prayer.

What a great summer this has been!

We didn't get to go away for vacation but we did small day trips in our state, were able to see some beautiful things along the way and made great memories too! We were told to enjoy this summer.

My husband is in end-stage liver failure and with things progressing the way they are it might be awhile before he feels this good again. I don't even

want to type those words or say them but it is our reality. He was told that when his MELD score got up to 17-18 he wouldn't be allowed to venture away more than an hour and a half from the transplant hospital, we live almost exactly that amount of time away so the only driving trips we take now are north because that is closer to the hospital. When my husband had his blood work done a few weeks ago the doctor said it is a good thing that we went when we did because of his new travel restrictions.



On our last trip in southern Ohio was to a place called "The Wilds", it is a nature preserve that is over 10,000 acres. The animals have a lot of room to roam. They took us around in an open-top bus. Who would have thought that you could go on a safari in Ohio?!

As Steve's caregiver I have had my bad days, my days of doom and gloom, but they don't last long. I put a smile on my face and

tackle the next thing that needs taken care of. My husband doesn't say very much. He tries to be positive but there is a song that one of the groups at church sings and he told me yesterday that the words in it "I am a winner either way, if I go or if I stay" are fitting for him. I know that he feels ready for whatever God's will is. I just want him to be healthy again!

Alpha 1 Antitrypsin Deficiency is a genetic disease that I wish I didn't have to understand or know about but it is here. Alpha 1 is changing our lives! We can sit in the corner and cry, or we can lift our heads up and be thankful for every day we have together.

Old-man winter will be here before we know it, so get out and enjoy these last days of summer with the ones you love!

UNOS Wait List Now Exceeds 115,000!

As of 12:03 ET of August 29th, the total number of people waiting for an available organ now stands at 115,046!!! This is devastating news. We should all be working at trying to increase the available organs by getting everyone we know, and many that we don't know, to register their intent to donate their organs. While the number of people waiting for an organ has been steadily increasing, the percentage of registered donors in the population has remained flat. **Please help!**



**Dennis "dmanflan"
Liver Transplant Recipient**

I am a father, grandfather and husband for more than 38 years who will be eternally grateful to my family for sticking with me during my dark days. I have such a spark in me to try to return as much effort that I can to support many transplant related areas as possible. I love to give my opinion on these topics!

I received a new liver in July of 2008. I destroyed my native liver with alcohol developing cirrhosis with portal vein thrombosis (PVT) and eventually hepatocellular carcinoma (HCC). I had been completely sober for almost 2 years before my transplant.

Where's my Head?

Moving from the world of alcohol addiction to sobriety is more than just physically withdrawing from alcohol. Becoming sober is really more of a mental state of being than physical. The physical withdrawal symptoms vary depending on how much damage the addiction caused the body. Most all alcohol addicts will have initial symptoms that are very much like having a bad case of the flu—they feel feverish, nauseous, loose appetites, have sleep problems, and a whole host of other ailments that are relatively short-lived. Bigger hurdles in the road to

sobriety are the varying emotions that the addict must achieve to truly become sober.

By the time I finally decided that I was tired of "checking out" of daily life, sick of being sick and *needing* to be part of the real world, I had already researched how I was going to get there through SMART Recovery® and some aspects of its precursor program Rational Recovery®. Finally, without consciously planning it, it was the day (November 16, 2006) to "throw the switch". I implemented, with all of my mental and physical capacities, the statement "I will never drink alcohol again and nothing will ever change my mind!"

I had been thru the physical side of withdrawal many, many times so I was not too surprised how I felt over the next few weeks. This time I was going to think my way through withdrawal—the physical is really just not drinking anymore. I wanted to know, being someone who is rooted in many kinds of logic, just where the real truths and falsehoods were in my thinking, where the flaws were in my logic paths.

This time I had a commitment to honor—if I use alcohol in any form, I would break my self-commitment. How could I possibly reach my goal and keep my commitment?!

I felt like my emotions were on a different set of life's rollercoasters! I would have real lows (mentally) when cravings would occur, I would hit a wall in my ability to do, say or think something, I would be bored or some other seemingly big thing would occur. Writing these things now shows me how insignificant each of them are. I'd also had some extreme highs—happiness, even giddiness—when I enjoyed something for the first time in years or ever! I had to carefully think about these highs too because I felt like I could just as easily break my commitment at this end of the spectrum as I could have at the low end.

I didn't have to say goodbye to any friends that could not accept that I wouldn't drink anymore so I didn't have any separation anxiety. Except for immediate family, I had pretty much become a complete loner. I knew I had hurt many of my familiar relationships with my drinking. I knew that if I wanted my family to accept me again, I first had to stay with my commitment, but I knew I had to "walk the walk" of both my commitment and the ideals that I once had before drinking. I had to earn their love and trust all over again.

Unfortunately my physical withdrawal this time was not nearly as "clean" as all the previous disengagements. I received a diagnosis a long time ago of "end-stage liver disease" but for whatever reason never associated that with the true meaning of "cirrhosis". So my withdrawal symptoms merged with my recognition that I had some additional symptoms that I had not experienced during any of my previous attempts at sobriety. I was still having major changes in my sleep patterns, my nausea never abated, I was losing more and more muscle mass and my pillow cover often had blood stains from some sort of nose or mouth bleed that I would notice when I woke up.

Finally, in April 2007, I was no longer able to keep even water down without it coming right back up. I was severely dehydrated. I'm fairly certain my family wasn't aware of my commitment or its status at this point, probably thinking I was still using alcohol. I had some blood tests run on a Friday morning but didn't know about the results until Saturday morning when my wife received a frantic call from my doctor's office that I should go to the local hospital immediately, that I was in imminent heart failure. So we complied and found ourselves on a new rollercoaster called decompensated cirrhosis—an entirely different part of my story for another time.

It has taken a long time to restore the trust that I lost when I used alcohol and that battle will never end. I DO know that as long as I continue to keep my self-commitment that there is little that can stop me from enjoying the rest of my life and family.



Recipe Corner

Creamy Chicken Casserole



Makes: 6 servings

Serving Size: 1 cup

Preparation Time: 20 minutes

Cooking Time: 35 to 40 minutes

Ingredients

- 2 tbsp non-hydrogenated margarine
- 1 tbsp all-purpose flour
- 1¼ cups 1% milk
- ½ tsp each dried sage, marjoram, thyme
- ½ tsp kosher salt
- ¼ tsp freshly ground black pepper
- 1 ½ tbsp olive oil, divided
- ½ cup diced onion
- 1 clove garlic, minced
- 1 cup sliced fresh button mushrooms
- ½ cup diced celery
- 3 cups skinless, cooked, cubed white-meat chicken
- 1½ cups cooked brown rice
- 1 cup reduced-fat, low-sodium chicken broth
- 2/3 cup dry whole wheat bread crumbs
- 1 tbsp fresh grated Parmesan cheese

Preparation

1. Coat a large casserole dish with cooking spray. Preheat the oven to 350 degrees. In a medium saucepan, melt the margarine over medium heat. Add the flour and whisk until it is incorporated. Slowly add the milk, whisking constantly while cooking until the sauce has thickened. Add the sage, marjoram, thyme, salt, and black pepper to the sauce. Set aside.
2. In a large skillet, heat 1/2 tbsp of the olive oil over medium heat. Add the onion and sauté for 5 minutes. Add the garlic, mushrooms, and celery, and sauté for 4 to 5 minutes, just until the mushrooms have released their liquid. Drain any excess liquid.
3. Add the cooked chicken, cooked rice, chicken broth, and reserved sauce to the skillet. Mix well.
4. Pour the mixture into the prepared dish. Bake, uncovered, for 25 minutes.
5. In a small bowl, mix together the remaining olive oil, bread crumbs, and Parmesan cheese. Sprinkle the bread crumb mixture over the casserole, and bake for 10 to 15 minutes more, until the bread crumbs are toasted.

Nutrition Facts	
6 Servings	
Amount Per Serving	
Calories	282
Total Fat	9 g
Saturated	2 g
Polyunsaturated	2 g
Monounsaturated	4 g
Cholesterol	69 mg
Sodium	440 mg
Potassium	482 mg
Total Carbohydrate	18 g
Dietary Fiber	2 g
Sugars	3 g
Protein	31 g
Vitamin A	6.4 %
Vitamin B-12	11.2 %
Vitamin B-6	38.1 %
Vitamin C	6.1 %
Vitamin D	8.8 %
Vitamin E	3.9 %
Calcium	11.2 %
Copper	7.9 %
Folate	5.2 %
Iron	9.1 %
Magnesium	15.9 %
Manganese	27.1 %
Niacin	70.8 %
Pantothenic Acid	14.8 %
Phosphorus	33.9 %
Riboflavin	16.7 %
Selenium	40.2 %
Thiamin	12.0 %
Zinc	10.6 %

*Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs.



LABOR DAY



US Only—September 3

Events
this

Month



US Only—September 11



Phrases of the Month:

- ☛ Arrrrrrrrr!
- ☛ Ahoy matey!
- ☛ Avast, me hearties!
- ☛ Well blow me down!
- ☛ Brwaack! Polly want a cracker? ... Oh, wait. That's for Talk Like a PARROT Day.
- ☛ Shiver me timbers!
- ☛ What's the problem with the way a pirate speaks? - Arrrrtuculation!

SUNDAY 9 SEPTEMBER
(first!)
**international
pbc day
2012**



September 19
<http://www.talklikeapirate.com/piratehome.html>

Please let us know if there is a date that we should be commemorating or celebrating so we can add it to our calendar.



© None Reported



Transplant
Anniversaries

⚗ None Reported

UNOS Waiting List
Livers (Aug 17, 2012)

Status 1A	5
Status 1B	7
Status 7 (Inactive)	3,172
MELD / PELD <10	3,172
MELD / PELD 11-18	5,248
MELD / PELD 19-24	1,752
MELD / PELD 25+	1,225
Total Waiting	15,999

Courtesy OPTN reports

2,574 liver transplants performed
2,856 livers donated/recovered



☛ 5th—“lovinwife” Anne’s husband Jack