

August 2016

Volume 169

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# Food and Fitness

## Tell Me How it Works—Lipid Panel

Lab work is something we should all be used to getting done. We might not like the process of getting our blood taken but having blood work done can tell our



doctors and even ourselves more about our bodies. One type of blood test that is commonly taken is a lipid panel. A lipid panel is used to measure the amount of fat or fatty substance. Fats are used for energy but if you have too much or an imbalance occurs, the fat can build up in the walls of the arteries known as plaque. When the plaque builds up, it can create an increase in stroke risk and cardiovascular disease. When getting a basic lipid panel, it usually includes low-density lipoprotein (LDL), high-density lipoprotein (HDL), total cholesterol and triglycerides while a more extensive panel will also include very-low density lipoprotein (VLDL) and ratios.

Lipoproteins are the formation of proteins and lipids uniting. Lipoproteins are needed in order to carry fats and other substances from the intestinal tract and liver to many tissue sites throughout the body. Different types of lipoproteins have different amounts of triglycerides, cholesterol, and protein.

**LDL** is commonly called the “bad” cholesterol. LDL is responsible for carrying cholesterol from the liver to the tissues, keeps cholesterol in circulation, raising total cholesterol levels and

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# Tell Me How it Works—Lipid Panel

(Continued from Page 1)

LDLs are related to inactivity, obesity, and type II diabetes. Levels can also be elevated due to a diet high in refined carbohydrates, sugar, saturated animal fat, and trans fats.

**HDL** is commonly called the “good” cholesterol lipoproteins and we want to have high value for these. HDL carries the excess cholesterol to the liver to be turned into bile or to be excreted out of the body. High values can decrease the risk for plaque buildup and reduce the incidence of coronary heart disease. Low levels in HDL signify a risk for heart disease and are associated with a diet high in saturated fat, refined carbohydrates and sugar in addition to inactivity, obesity, and smoking. High levels can be attributed to genetics, healthy diet, and exercise.

**Cholesterol** is a waxy substance that is required for the synthesis of bile, some hormones, and is important component for cell membranes. If we do not get enough cholesterol from our diet, our liver will make it. Cholesterol is found in animal products such as meat and dairy products.

**Triglycerides** are the absorbed fats. After eating a meal, these fats are absorbed and enter into the blood. Triglyceride can also be made by the liver after eating a meal high in sugars, carbohydrates, or fats. High values in triglycerides can be a product of hypothyroidism, diabetes, liver disease, kidney disease, corticosteroids, or a diet high in carbohydrates, sugar and fat.

**VLDL** is produced in the liver and about half is composed of triglycerides. Its main functions are to transport the triglycerides from the liver through the blood stream to supply the adipose tissue and muscles with fat. VLDLs typically are not mentioned in basic cholesterol screenings because they are not as easily measured. However, if a value is given and is high, a way to lower it is to lower your triglycerides. You can do this by losing weight, exercising, decreasing consumption of sugar, alcohol or sometime medication can be prescribed.

**LDL/HDL Ratio** tells us the predicted risk of cardiovascular disease. If the HDL is high while the LDL is moderately high, it can reduce the potential risk for the development of cardiovascular disease.

Health care professionals often talk about our blood work but how often do we really know what they mean. We hear new terms, abbreviations, values, and more. But many times we do not know what any of it means or what “normal” values are supposed to be. Now when you get a lipid panel, you will have a little more insight on what all this means.

# Cholesterol Level Test (Lipoprotein Panel)

## Lipoprotein panel

The list below shows ranges for total cholesterol, LDL ("bad") cholesterol, and HDL ("good") cholesterol levels after 9 to 12 hours of fasting.

### Total cholesterol

Total Cholesterol Level	Total Cholesterol Category
Less than 200 mg/dL	Desirable
200–239 mg/dL	Borderline high
240 mg/dL and above	High

### LDL cholesterol

LDL Cholesterol Level	LDL Cholesterol Category
Less than 100 mg/dL	Optimal
100–129 mg/dL	Near optimal/above optimal
130–159 mg/dL	Borderline high
160–189 mg/dL	High
190 mg/dL and above	Very high

### HDL cholesterol

HDL Cholesterol Level	HDL Cholesterol Category
Less than 40 mg/dL	A major risk factor for heart disease
40–59 mg/dL	The higher, the better
60 mg/dL and above	Considered protective against heart disease

**Before the test, you'll need to fast (not eat or drink anything but water) for 9 to 12 hours.**

The lipoprotein panel will give your doctor information about your:

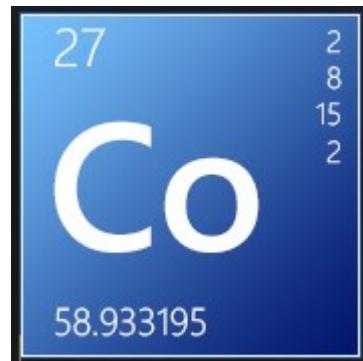
- **Total cholesterol.** Total cholesterol is a measure of the total amount of cholesterol in your blood, including low-density lipoprotein (LDL) cholesterol and high-density lipoprotein (HDL) cholesterol.
- **LDL ("bad") cholesterol.** This is the main source of cholesterol buildup and blockages in the arteries. A high LDL increases one's risk of developing a condition called atherosclerosis.
- **HDL ("good") cholesterol.** This type of cholesterol removes cholesterol from your blood, decreasing one's risk of developing atherosclerosis.
- **Triglycerides.** Triglycerides are a type of fat in your blood. Some studies suggest that a high level of triglycerides in the blood may raise the risk of coronary heart disease, especially in women.

Triglycerides also can raise your risk for heart disease. If your triglyceride level is borderline high (150–199 mg/dL) or high (200 mg/dL or higher), you may need treatment.

# Cobalt

## Functions

Trace mineral



Cobalt is an essential component of vitamin b12. Cobalt is needed for the metabolism of fats and carbohydrates. The body uses cobalt to help with the maturation of blood cells, cells of the bone marrow, nervous system and gastrointestinal system.

## Food Sources

Liver

Kidney

Oysters

Clams

Poultry

Milk

Buckwheat



## Deficiency

Deficiency is typically rare but can be the result of a vitamin B12 deficiency which causes macrocytic anemia and pernicious anemia. May cause a feeling of loss of appetite and weakness.

## Toxicity

Toxicity is also not common. If toxicity does occur can cause damage to both the heart muscles and the thyroid gland.



## Corn and Black Bean Chopped Salad

Makes 6 Servings

### Ingredients

- 3 cups chopped iceberg lettuce
- 2 cans (8-3/4 oz each) whole kernel corn, drained
- 1 can (15 oz each) Whole Black Beans, drained, rinsed
- 1 can (10 oz each) Diced Tomatoes with Lime Juice & Cilantro, undrained
- 2 tablespoons Canola Oil



### Method

- Toss together all ingredients in large bowl until combined.

Recipe Received from: [http://www.readyseteat.com/recipes-Corn-and-Black-Bean-Chopped-Salad-6047.html?utm\\_source=outbrain&utm\\_medium=outbrain&utm\\_campaign=outbrain](http://www.readyseteat.com/recipes-Corn-and-Black-Bean-Chopped-Salad-6047.html?utm_source=outbrain&utm_medium=outbrain&utm_campaign=outbrain)

## Brain Exercise

Don't Just Exercise Your Body, Workout Your Brain



## Badminton Word Scramble



All of the scrambled words below are badminton vocabulary words. Can you put the letters in the right order to spell the different words correctly? Careful! Some of the "words" are made up of two words.

FTNEI	
AHMSS	
ERSEV	
RSEAEEVCIAR	
ILTLOKHS	
CRELA	
ODPRHOST	
SOTODOHW	
AYRLL	
PHUS	
ECATRK	
ENT	
BEDIIR	
LNIEENTCER	
OLB	
URTCO	
ULFAT	
CEA	
AYRRC	
BDNAHCAK	
ELT	
SIELANEAB	
NLE EDIIS	
DEVRI	

Answers on Page 8

## August Monthly Observations

# August 2016

Sun	Mon	Tue	Wed	Thu	Fri	Sat
	1 <i>National Raspberry Cream Pie Day</i>	2 <i>National Ice Cream Sandwich Day</i>	3 <i>National Watermelon Day</i>	4 <i>U.S. Coast Guard Day</i>	5 <i>Work Like A Dog Day</i>	6 <i>National Mustard Day</i>
7 <i>National Light-house Day</i>	8 <i>Sneak Some Zucchini to Your Neighbor</i>	9 <i>Book Lover's Day</i>	10 <i>National S'mores Day</i>	11 <i>Son and Daughter Day</i>	12 <i>Middle Child's Day</i>	13 <i>Left Hander's Day</i>
14 <i>National Creamsicle Day</i>	15 <i>Relaxation Day</i>	16 <i>National Tell a Joke Day</i>	17 <i>National Thrift Shop Day</i>	18 <i>Bad Poetry Day</i>	19 <i>Aviation Day</i>	20 <i>National Radio Day</i>
21 <i>Senior Citizen's Day</i>	22 <i>Be an Angel Day</i>	23 <i>Ride the Wind Day</i>	24 <i>Vesuvius Day</i>	25 <i>Kiss and Makeup Day</i>	26 <i>National Dog Day</i>	27 <i>Global Forgiveness Day</i>
28 <i>Race Your Mouse Day</i>	29 <i>More Herbs, Less Salt Day</i>	30 <i>Toasted Marshmallow Day</i>	31 <i>National Trail Mix Day</i>			

- Admit You're Happy Month

- Family Fun Month

- National Catfish Month

- National Eye Exam Month

- National Golf Month

- Peach Month

- Romance Awareness Month

- Water Quality Month

- National Picnic Month

## Contact Information

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## Badminton Word Scramble

### SOLUTION

### Brain Exercise Answers



FTNEI	FEINT
AHMSS	SMASH
ERSEV	SERVE
RSEAAEVCIAR	SERVICE AREA
ILTLOKHS	KILL SHOT
CRELA	CLEAR
ODPRHOST	DROP SHOT
SOTODOHW	WOOD SHOT
AYRLL	RALLY
PHUS	PUSH
ECATRK	RACKET
ENT	NET
BEDIIR	BIRDIE
LNIEENTCER	CENTER LINE
OLB	LOB
URTCO	COURT
ULFAT	FAULT
CEA	ACE
AYRRC	CARRY
BDNAHCAK	BACKHAND
ELT	LET
SIELANEGB	BASELINE
NLE EDIIS	SIDE LINE
DEVRI	DRIVE