

# Managing Those Annoying Allergies

## Overview

An allergy is when your body overreacts to things known as allergens. This “overreaction” results in an immune response that can lead to certain annoying symptoms. The most common allergy symptoms include: runny nose, watery eyes, itchy nose, sneezing, stuffy nose, pressure in the nose and cheek, ear fullness and a popping sound, dark circles under the eyes, and/or hives. These symptoms are displeasing and discomforting.

### What are the most common sources of allergies?

- Pollen from trees, grass, and weeds: Allergies in the spring are often due to tree pollen. Those occurring in the summer are often due to grass and weed pollen. Allergies in the fall are often due to ragweed.
- Mold: This is common in areas where water collects such as damp basements, rotting timber, and compost piles. This allergy is usually worse in wet, humid weather.
- Animal dander: This is usually from pets such as cats or dogs. Allergen exposure can occur through direct animal contact or from house dust that contains the dander.
- Dust: Tiny living creatures called dust mites are often found on mattresses, carpeting, and upholstered furniture.

### What are some ways to avoid potential allergens?

#### Pollen

- Check your local TV or radio station for current pollen counts. If counts are high, start taking allergy medications before symptoms start.
- Close doors and/or windows when counts are high.

- Avoid early morning outdoor activities (this is when pollen counts are highest).
- Stay inside on dry windy days – this is when pollen is the highest.
- Remove clothing you have worn outside upon entering the house (you may also want to rinse your skin and hair).
- Don’t hang laundry outside since pollen can stick to the fabric.
- If you must do outside chores, wear a dust mask.
- Run the air conditioning in your house and/or car to keep inside air clean.
- Use allergy-grade air filters in your home.

#### Mold

- Avoid outdoor activities, such as raking leaves, which may disturb decaying matter.
- Lowering household humidity by a dehumidifier, removal of houseplants, and proper ventilation may also be helpful.

#### Animal Dander

- Use allergen-resistant bedding.
- Bathe pets frequently (once a week if tolerable).
- Do not allow pets on furniture or areas with carpet.

#### Dust

- Encase mattresses, box springs, and pillows in allergy-proof covers.
- Wash sheets and blankets in hot water (at least 130°F).
- Washable rugs are preferable to wall-to-wall carpeting.
- Vacuum carpets at least weekly.

## Treatment

A variety of medications are available by prescription or over-the-counter (OTC) that can help with allergy symptoms. If a trial of OTC medications does not help or your symptoms are continual, severe, or particularly bothersome, see your health care provider for advice.

Medication	Actions	Comments
Antihistamines Loratadine (Claritin, Alavert) Cetirizine (Zyrtec) Diphenhydramine (Benadryl)	Helps reduce itching, sneezing, and runny nose	<ul style="list-style-type: none"><li>• Available with or without prescription</li><li>• Loratadine and cetirizine are less likely to cause drowsiness than older antihistamines, although loratadine</li></ul>

Fexofenadine (Allegra)		<p>may cause less drowsiness than cetirizine</p> <ul style="list-style-type: none"> <li>• Prescription antihistamines such as fexofenadine may help if OTCs do not provide adequate relief.</li> </ul>
Decongestants Pseudoephedrine (Sudafed) Phenylephrine (Neo-Synephrine) Oxymetazoline (Afrin)	Used short term to relieve nasal congestion (stuffy nose)	<ul style="list-style-type: none"> <li>• These drugs might worsen blood pressure or prostate problems so check with your physician before using if you have one of these conditions.</li> </ul>
Nasal Corticosteroids Fluticasone (Flonase) Budesonide (Rhinocort) Mometasone (Nasonex)	Used long term to prevent and control allergic symptoms	<ul style="list-style-type: none"> <li>• It may take 2-3 weeks before a full response is experienced.</li> <li>• Available only by prescription for particularly bothersome symptoms</li> </ul>
Leukotriene modifiers Montelukast (Singular) Zafirlukast (Accolate)	Block the action of leukotrienes (chemicals in the body that produce an immune response)	<ul style="list-style-type: none"> <li>• Often used alone or in combination with antihistamines</li> <li>• Available by prescription only</li> </ul>
Cromolyn sodium	Stabilizes the cells that release histamine, a substance that causes allergic symptoms	<ul style="list-style-type: none"> <li>• It is best to use before the occurrence of allergic symptoms (histamine release).</li> <li>• Generally used 3-4 times a day to prevent symptoms</li> </ul>

## References

1. Mayo Clinic Staff. Springtime allergies: Nip them in the bud [updated May 3, 2008]. Mayo Foundation for Medical Education and Research. Available at: <http://www.mayoclinic.com/health/springtime-allergies/AA00060>. Accessed on April 6, 2010.
2. May JR, Smith PH. Allergic Rhinitis. In: DiPiro JT, et al., editors. Pharmacotherapy. Ed. New York: McGraw-Hill; 2008. p.1565-1575.
3. Scolaro KL. Disorders Related to Colds and Allergy. In: Berardi RR, et al., editors. Handbook of Nonprescription Drugs. Washington D.C.: APHA; 2009. p.177-201.

# The Facts about Diabetes

## When to seek immediate medical attention if you have diabetes

Call 911 or go to the emergency room if you have the symptoms below. These may be **signs of ketoacidosis.**

- Abdominal pain
- Deep and rapid breathing
- Increased thirst and urination
- Loss of consciousness
- Nausea
- Sweet-smelling breath

Call 911 or go to the emergency room if you have the symptoms below. These may be **signs of extremely low blood sugar.**

- Confusion
- Convulsions or unconsciousness
- Dizziness
- Double vision
- Drowsiness
- Headache
- Lack of coordination
- Weakness

## What is diabetes?

Diabetes is a disease that affects how your body makes and reacts to insulin. Insulin is a hormone that is made in the pancreas to help lower blood sugar (also called blood glucose). With diabetes the pancreas does not make enough insulin or cells in the body do not respond to insulin like they should. This causes the blood sugar to be high.<sup>1</sup>

## What are the major types of diabetes?

There are 3 major types of diabetes: type 1 diabetes, type 2 diabetes, and gestational diabetes.

- ❖ **Type 1 diabetes** occurs when your body makes little or no insulin. This problem is usually discovered in childhood, but not always. Daily insulin shots are needed to treat type 1 diabetes. The cause is not known exactly, but family history may play a role.<sup>1</sup>
- ❖ **Type 2 diabetes** develops when the pancreas quits making enough insulin to properly control blood sugar. This problem usually starts in adulthood, but some kids are beginning to develop it too. It is becoming more common due to increasing obesity and lack of exercise. Type 2 diabetes is also called diabetes mellitus.<sup>1</sup>
- ❖ **Gestational diabetes** is high blood sugar in women that occurs during pregnancy. This can increase the risk of developing type 2 diabetes and heart disease later in life.<sup>1</sup>

## Am I at risk for diabetes?

Risk factors for type 2 diabetes include increased body weight; not getting enough exercise; age over 45; a parent, brother, or sister with diabetes; heart disease; high cholesterol; gestational diabetes or delivery a baby more than 9 pounds; and polycystic ovary disease.<sup>1</sup>

Pre-diabetes is when blood sugar levels are higher than normal, but not high enough to be considered diabetes. This condition often leads to type 2 diabetes, but it is possibly reversible. Getting enough exercise and eating healthy is very important if told you have pre-diabetes.<sup>2</sup>

## How do I know if I have diabetes?

General **symptoms** of high blood sugar include blurry vision, excessive thirst, tiredness, frequent urination, hunger, and weight

loss.<sup>1,2</sup> Symptoms will vary depending on the type of diabetes you have. Type 2 diabetes develops slowly, so you may not have any symptoms of high blood sugar. Type 1 diabetes usually develops quickly, so you will most likely notice symptoms.<sup>1</sup>

Three different tests may be used to **diagnose diabetes**. One test is the fasting blood sugar test. In this test, your doctor will check your blood sugar after you have been fasting overnight. This test has to be done twice to diagnose diabetes.<sup>2</sup> Another test is the random blood glucose test. In this case, a blood sugar will be checked without fasting. This test must be backed up with a fasting blood sugar test.<sup>1</sup> There is also an oral glucose tolerance test. This test involves drinking a sugary solution and testing your blood sugar afterward. This test is used often to detect gestational diabetes and also needs to be backed up with a fasting blood sugar test.<sup>2</sup> Your doctor may also do a blood test called a hemoglobin A<sub>1</sub>C test. This does not diagnose diabetes, but it can tell if your blood sugar level has been increased over the previous two months.<sup>2</sup>

### **How is diabetes treated?**

Treatment depends on the type of diabetes a person has. It may consist of a special diet, insulin shots, or pills to control your blood sugar.<sup>1</sup> To help prolong life, reduce symptoms, and prevent complications of diabetes, self blood sugar testing, exercise, a healthy diet, proper foot care, and understanding what diabetes is all about is also very important.

### **What are the complications of diabetes?**

Some complications of diabetes will develop quickly, and others develop much later. Some of the early complications include high blood sugar and high ketones in the urine. The complications that develop later can include: heart disease, stroke, nerve damage, kidney damage, eye damage (including blindness), foot damage, skin and mouth problems, and bone and joint problems.<sup>2, 3</sup>

The good news is that there are ways to prevent these complications. Some important ways to prevent complications include maintaining a good blood sugar, normal blood pressure and cholesterol control, and seeing a doctor to monitor your eyes, feet, and kidneys for potential problems.<sup>3</sup> Talk to your doctor or a diabetes educator at least 4 times a year to discuss any problems.<sup>1</sup>

### **Can diabetes be prevented?**

Type 1 diabetes cannot be prevented. There are ways to prevent type 2 diabetes and gestational diabetes. These include eating healthy foods, like fruits, vegetables, and whole grains and increasing physical activity to a goal of at least 30 minutes each day. If you are overweight, losing weight will help. Losing even 5% of your body weight can help reduce your risk for diabetes.<sup>2</sup>

For more detailed information online, visit the following websites:

1. American Diabetes Association at [www.diabetes.org](http://www.diabetes.org)
2. Medline Plus [www.nlm.nih.gov/medlineplus/ency/article/001214.htm](http://www.nlm.nih.gov/medlineplus/ency/article/001214.htm)
3. WebMD <http://diabetes.webmd.com/>

### **References:**

1. Diabetes [updated May 20, 2009]. Medline Plus. Available at: [www.nlm.nih.gov/medlineplus/print/ency/article/001214.htm](http://www.nlm.nih.gov/medlineplus/print/ency/article/001214.htm). Accessed October 15, 2009.
2. Mayo Clinic Staff. Diabetes [updated June 13, 2009]. Mayo Clinic Foundation for Medical Education and Research. Available at: [www.mayoclinic.com/health/diabetes/DS01121](http://www.mayoclinic.com/health/diabetes/DS01121). Accessed October 15, 2009.
3. National Diabetes Fact Sheet [updated 2007]. Available at: [www.cdc.gov/diabetes/pubs/pdf/ndfs\\_2007.pdf](http://www.cdc.gov/diabetes/pubs/pdf/ndfs_2007.pdf). Accessed on October 15, 2009.

## **Getting A New Prescription Can Be A Hard Pill To Swallow**

A lot of people have concerns about taking a new medicine. They wonder if it will work, what side effects might occur, and how long they will need to take it.

Don't be afraid to ask questions – even if you have taken a medicine for a long time.

### **For each of your medicines, you should know:**

#### Name and strength

Keeping a written list of the name and strength (dosage) of each of your medicines can be helpful when seeing your doctor or in an emergency situation.

#### The symptoms, illness or health problems it will treat or prevent

Sometimes it's easy to tell if a medicine is working. But, sometimes it's not. For example, blood pressure medicines can lower your blood pressure without making you feel any different. Only measuring your blood pressure can tell you if the medicine is working. So be sure to ask your doctor or pharmacist, "How will I know if this medicine is working?"

Some medicines can decrease symptoms in days. Others might take several weeks before their full effects are felt. Ask how long it will take before you know if the medicine will work for you.

#### The best time of day to take the medicine

Some medicines are best taken in the morning, some at night, some with food and others on an empty stomach. If you need to take more than one dose of medicine a day, you should know how far apart to space the doses. Deciding on convenient times to take a medicine is a good idea. Find out, too, what you should do if you forget to take a dose.

#### How long it should be taken

Medicines may need to be taken for just a few days or weeks or they may be needed for years. Every time you see your doctor ask, "Do I still need to take this medicine?" and "Is this still the right dose for me to take?"

#### What side effects might occur and how to decrease or prevent them

Every medicine has side effects but many are uncommon. There are often ways to decrease the chance of a side effect occurring.

It's important to know what to do if you think a side effect is occurring. Should you call the doctor, stop the medicine or just keep taking the medicine? Some side effects go away with time; others get worse. Knowing what to do can give you some peace of mind. When in doubt, it is always best to call your doctor or pharmacist.

If it's safe to take with your other prescription medicines, OTC products, vitamins, herbal products and dietary supplements

Yes, drug interactions can occur between prescription medicines and vitamins and herbal supplements! Some medicines even interact with foods. Sometimes you just need to take the doses at different times. In some cases, you should not take medicines with other products. Tell your doctor and pharmacist about all the medicines you are taking and ask them to check for drug interactions.

Where it should be stored

“High and dry” is a good rule of thumb to keep medicines away from children and away from pill-destroying moisture. Some medicines, though, may need to be kept in the refrigerator and all medicines need to be kept out of hot summer heat. Many people choose to keep their medicines in a spot that helps them remember to take them.

How much it will cost

Concerns about medication costs are common. Don't be embarrassed to ask about a medicine's cost. If a medicine is too expensive, ask for a lower-cost alternative. Many times, another just-as-good medicine is available.

**How can you get all the information you need?**

To get the information that best fits your situation, you need to ask.

Check out <http://www.JustAskBlue.com>. Our pharmacists have years of experience and can provide you with information based on what you tell us about your needs. Our answers are in writing so you can refer back to the information as often as you wish.

**Ask questions. Be informed.**

# Tips for Finding Credible Health Information on the Internet

With the enormous amount of information on the internet, how do you know what you can trust? Many sites may seem helpful and informative but can be inaccurate and misleading. Here are some tips to help you sort through the pages and find credible health information.



## Who is the **author**?

- Health professionals and individuals representing health organizations or associations are likely to provide the best information.
- Laypersons writing about their own health experiences may not have a complete understanding of the health issue.

## Is the information **fact or opinion**?

- Credible health information should give more than one point of view on a topic.
- Information presented as facts should include the source of the information.
- Learning about other's opinions can be helpful; just make sure you don't make decisions based on opinions only.

## How **current** is the information?

- Health advice can change as new research findings are reported. Check to see if the website was recently updated.
- If you find conflicting information on different sites, be sure to check the time of the last update. New information is likely to be more accurate.

## How **accurate** is the information?

- Accurate websites will cite the source for the information

- If the information sounds too good to be true, it probably is: watch out for gimmicks and advertisements
- Well known health organizations generally have more accurate information
- Keep in mind that website information is not individualized. The most appropriate health advice considers your medical history, health conditions and medications.
- Information provided by foreign country sites (e.g. co.uk sites) may discuss treatments not available in the U.S.

### Who is **funding** the website?

- Sponsorship should be easy to find. The sponsor's name can usually be found at the top or bottom of the webpage. If you can't find a sponsor than be cautious about the validity of the information.
- Website address endings may indicate the funding source
  - .gov Government sponsored websites
  - .edu Educational websites
  - .org Non-commercial websites
  - .com Commercial websites

### Does the site appear to be **professionally created**?

- Page appearance is important, but don't get caught up in flashy words or design. Content is the most important factor.
- Health websites may have different sections for consumers and health professionals. The health professional section is likely to be written in



technical language. Use the section that is more understandable to you.

- If website links aren't working, this may mean the website has not been updated recently and the information may not reflect the latest research findings.

### **Examples of credible health information sources**

An extensive list of health websites can be found at the Medical Library Association at <http://www.mlanet.org/resources/userguide.html>

You can also ask us to locate credible websites that are specific for your needs. Go to <http://www.JustAskBlue.com> to check out our website to see past news capsules, submit medication questions and get access to up-to-date credible health websites.

## What You Should Know About Herbal Medicines

### What are herbal medicines?

Herbal medicines are also known as “botanical medicines” or “folk medicines.” Herbal medicines involve the use of plants (i.e., botanicals) for medical purposes. Various parts of a plant such as the seeds, berries, roots, leaves, bark, or flowers might be used in the medicine.

Herbal medicines have been available for centuries and are very popular throughout the world. Herbal products are also sometimes referred to as “nutraceuticals,” although nutraceuticals include a much broader range of products than just herbal medicines.

### How are herbal medicines regulated?

Herbal medicines are considered to be **dietary supplements** by the Food and Drug Administration (FDA). Dietary supplements do not have to be reviewed or approved by the FDA for safety and effectiveness before they are marketed. So, there is no government guarantee that herbal products will either benefit you or be safe. If a product is found to be harmful, the FDA is responsible for taking action against that product.

Dietary supplements may not be promoted for the treatment, prevention, or cure of any medical condition. A supplement may state that it can treat a nutrient deficiency, can support health, or help general body function (such as “improve energy”) if the manufacturer has done research to support this claim. The product label must also say, **"This statement has not been evaluated by the U.S. Food and Drug Administration (FDA). This product is not intended to diagnose, treat, cure, or prevent any disease."**

Manufacturers will soon be required to follow FDA guidelines for good manufacturing practices. This means that the product must contain the ingredients listed on the label. The amount of ingredients in the tablet or capsule must also be the same as listed. The product must also be manufactured in a safe way, to help prevent contamination by other impurities. Once fully implemented, the FDA guidelines will help ensure that your herbal medicine has the correct ingredients, proper labeling and packaging, and contains no contamination.

Right now, there is no guarantee that the ingredients on the label are actually in the product in the amounts listed. There may also be safety concerns about the way in which the product was made. Until the FDA guidelines are completely in force, be aware that there may be problems with the quality of some herbal products.

If you see the words “standardized,” “verified,” or “certified” on an herbal product box, it does not necessarily ensure it is a good quality product. Instead, look for a mark on the label that says **“USP VERIFIED.”** The letters “USP” stand for the United States Pharmacopeia. The USP is a professional organization that verifies the quality, purity, and potency of selected herbal products. However, the USP does NOT ensure that these products will work or that they will be safe.

### What medical conditions can be treated with herbal products?

Herbal products have been claimed to be effective for a wide variety of medical conditions. Unfortunately, there is not enough evidence (i.e., scientific studies) for many of these claims to prove that the herbal product is both effective and safe. For certain conditions, an herbal product might have some benefit. However, even in these cases herbal medicines are generally used to supplement and not replace other types of therapy. It is not unusual to have someone take both an herbal product and a prescription medicine for the same condition. Examples of a few herbal products are listed below along with certain medical conditions that they might help. Talk to your doctor or other health care provider before you use any herbal product to find out if it would be effective and safe for you.

Herbal product	Possibly effective for:
Ginkgo (Ginkgo biloba)	Blood circulation problems

Valerian (Valeriana officinalis)	Insomnia
St. John's wort	Depression
Ginger	Nausea, vomiting

### Can herbal medicines cause side effects or interact with food or other medicines?

People may believe that herbal medicines are safe because they are “natural.” But, “natural” does not always mean safe. Herbal medicines can have harmful side effects. For example, the herbs comfrey and kava can cause serious damage to the liver.

Herbal medicines may also interact with foods, medications, other dietary supplements (e.g., vitamins) or medical conditions. These interactions could cause you to become very sick. For example, the herb St. John's wort can interact with several medications. St. John's wort should not be taken with antidepressants, birth control pills, warfarin, and many other medicines. Always check with your doctor or pharmacist before beginning an herbal product to make sure it is safe for you and that it will not interact with your other medicines. If you have any serious side effects from an herbal medicine, report it to the FDA by calling 1-800-FDA-1088.

### Where can you find out more information about herbal medicines?

First, talk to your health care providers to get their advice about whether an herbal product might help you. Pharmacists have special training about herbal products and they can be a good source of information. They can also check to see if there are possible side effects or interactions that could be harmful. If you decide to take an herbal product, your pharmacist can help you locate ones that are USP Verified for purity and quality.

For more information or to get answers to specific questions, go to **JustAskBlue.com**. Other Internet sites with useful information about herbal medicines include:

- Tips For The Savvy Supplement User: Making Informed Decisions And Evaluating Information (FDA); <http://www.fda.gov/Food/DietarySupplements/ConsumerInformation/ucm110567.htm>
- Herbal Medicine (Medline Plus); <http://www.nlm.nih.gov/medlineplus/herbalmedicine.html>

### References:

1. Steven D. Ehrlich, NMD. Herbal medicine Overview: The practice of complementary and alternative medicine [Reviewed last on: 9/27/2009] University of Maryland Medical Center web site: (Home > Medical Reference > Complementary Medicine). Available from: <http://www.umm.edu/altmed/articles/herbal-medicine-000351.htm>
2. FDA.gov [Internet]. Food and drug administration [Updated 2009 June 18; cited 2010 June 17]. Available from: <http://www.fda.gov/Food/DietarySupplements/default.htm>.
3. Lovera J, Bagert B, Smoot K, et al. Ginkgo biloba for the improvement of cognitive performance in multiple sclerosis: a randomized, placebo-controlled trial. *Mult Scler*. 2007;13(3):376-85.
4. Oktem M, Eroglu D, Karahan HB, Taskintuna N, Kuscu E, Zeyneloglu HB. Black cohosh and fluoxetine in the treatment of postmenopausal symptoms: a prospective, randomized trial. *Adv Ther*. 2007;24(2):448-61.
5. Shimazaki M, Martin JL. Do herbal agents have a place in the treatment of sleep problems in long-term care? *J Am Med Dir Assoc*. 2007;8(4):248-52.
6. NCCAM.nih.gov [Internet]. National center for complementary and alternative medicine [updated 2010 May 26; cited 2010 June 17]. Available from: <http://nccam.nih.gov/health/supplements/wiseuse.htm#points>.
7. USP.org [Internet]. The United States Pharmacopeial Convention, Inc.; c2010 [updated 2010 May 6; cited 2010 June 17]. Available from: <http://www.usp.org/>

## **High Blood Pressure Medicines: The Low Down on Wisely Taking These Medicines**

High blood pressure medicines are known to decrease the risk of heart attacks and strokes, but they often are not taken as prescribed. This NewsCapsule seeks to clarify the benefits of high blood pressure medicines and encourage their use by those diagnosed with high blood pressure.

### **Who needs high blood pressure medicines?**

Blood pressure is the force of blood as it moves through blood vessels. When the heart beats, the pressure is called the systolic blood pressure. When the heart is relaxing between beats the force is called the diastolic blood pressure. So blood pressure is recorded as two numbers:

Systolic blood pressure  
Diastolic blood pressure

High blood pressure is defined by having a systolic blood pressure of 140 or higher or a diastolic blood pressure of 90 or higher. The numbers below all show high blood pressure:

<u>156</u>	<u>130</u>	<u>160</u>
86	94	100

Since blood pressure can be affected by activity and stress, a diagnosis of high blood pressure is usually given after three blood pressure readings are high on three different days.

Some people can lower their blood pressure by decreasing salt intake, lowering their weight or exercising more. Many people, however, need medicines to lower their blood pressure to a safe level.

### **What do high blood pressure medicines do?**

Different blood pressure medicines lower blood pressure in different ways. Some get rid of extra sodium and water from the body, others relax blood vessels by affecting hormones or nerve impulses, and others slow the heart rate so the blood passes through blood vessels with less force. Be sure to ask your doctor or pharmacist how *your* medicine works.

Because different blood pressure medicines work in different ways, if one medicine does not work well for you, it's worthwhile to try a different medicine. Use of more than one medicine can work well. It can also lower the risk of side effects that can occur when high doses of a single medicine are used.

### **Which medicine should be prescribed for you?**

Unfortunately, no one can predict which blood pressure medicine will work best for you. Be patient. A medication may need to be taken for at least two weeks before its full benefits are known. During that time, side effects that happened during the first days of treatment may actually lessen or go away as your body adjusts to the medicine.

### **How should blood pressure medicines be taken?**

Blood pressure medicines need to be taken daily at the same time every day. If you are taking multiple blood pressure medicines, it might be a good idea to take some in the morning and others in the evening. This may prevent nausea and dizziness.

Skipping doses or stopping your medicine will cause your blood pressure to increase. Normal blood pressure readings usually mean that your blood pressure medicine is doing its job; not that it is no longer needed.

### **How do I know if my medicine is working?**

The best way to tell if your medicine is working is to have your blood pressure checked. Many pharmacists will help you choose a good home blood pressure monitor and teach you how to use it.

The American Heart Association Blood Pressure Tracker provides instructions about taking your blood pressure at home and includes a form for recording readings. Here is the link to this useful site:

<http://www.americanheart.org/downloadable/heart/1233850982588bphtracker.pdf>

Most of the time there are no symptoms with high blood pressure. You should still take your medicine even if you don't feel like your blood pressure is high.

## What's a good blood pressure reading?

The goal of high blood pressure treatment is to keep the blood pressure below 140/90. Many recommend that the blood pressure should be close to 120/80 for maximum benefits. Diabetes carries a high risk for heart problems, so the blood pressure goal for people with diabetes is less than 130/80. Patients with kidney disease also have a goal of less than 130/80.

## Preventing side effects

Here are some tips on how to prevent or minimize the most common side effects. For each blood pressure medicine you are taking, ask your doctor or pharmacist about its side effects and ways to prevent them.

Nausea or stomach upset    Take the medicine with meals or snacks.

Dizziness                      When getting up from bed, sit for a minute before standing. When getting up from a chair, stand for a minute, then walk.

Tiredness                      Take the medicine before bedtime. Ask for another medicine if tiredness is bothersome.

Dry, consistent cough        Only occurs with some medicines, call your doctor to get a new medicine.

Leg cramps                      Occurs with medicines that lower potassium; ask your doctor if you need a potassium supplement, have your potassium level checked through a blood test.

Irregular heart beats        Occurs with medicines that increase potassium in the blood, avoid salt-substitutes that contain potassium if taking these medicines, have your potassium level checked through a blood test.

If side effects occur, call your doctor before stopping the medicine. He or she can usually prescribe a different medicine that may not cause the same problem.

## Drug interactions with high blood pressure medicines

Some prescription medicines, OTC (non-prescription medicines), herbal products and dietary supplements can cause your blood pressure to increase (or go too low) or can increase the chance for side effects from high blood pressure medicines.

How can you prevent interactions from occurring? Ask your pharmacist about possible interactions with medicines, herbals and foods when you:

- Receive a new blood pressure medicine
- Refill your blood pressure medicine (a good time to check for new scientific information or warnings about blood pressure medicines)
- Select an OTC product
- Consider an herbal product or dietary supplement

Having an up-to-date medication list can also prevent drug interactions. (See the May JustAskBlue News Capsule for more information). Having your list checked when a new medicine is prescribed is important since some high blood pressure medicines have multiple names. For example, Cardizem, Tiazac and Diltiazem are all the same medicine.

### **More questions?**

Here are some good websites that provide information about high blood pressure and its treatment.

The site offers an interactive tutorial about high blood pressure. It defines high blood pressure, discusses its causes and consequences, and treatment.

<http://www.nlm.nih.gov/medlineplus/tutorials/hypertension/htm/index.htm>

Your Guide to Lowering Blood pressure provides information about weight loss, diet and exercise in addition to general information about high blood pressure and its treatment.

[http://www.nhlbi.nih.gov/health/public/heart/hbp/hbp\\_low/hbp\\_low.pdf](http://www.nhlbi.nih.gov/health/public/heart/hbp/hbp_low/hbp_low.pdf)

Blood pressure and Your Health gives an overview of high blood pressure including tips for measuring your blood pressure at home.

[http://www.ash-us.org/patient\\_edu/pdffiles/BloodPressureHealthEnglish.pdf](http://www.ash-us.org/patient_edu/pdffiles/BloodPressureHealthEnglish.pdf)

**Interested in more websites or have a specific questions about your high blood pressure medicine?** Click on <http://www.justaskblue.com> and send us your information request.

## **October is National Pharmacists Month: Get to Know Your Pharmacist!**

October is American Pharmacists Month. It's a good time to learn about all the great services that pharmacists can offer. Here's a list of services available to you.

### **A complete safety check**

Ever have a pharmacy clerk tell you that your prescription will be ready just as soon as the pharmacist checks it? Every prescription that is filled goes through checks for proper dosage, appropriate directions for use, potential drug interactions, and appropriate length of therapy. This check makes sure that you get the safest prescription possible.

### **Making that list**

Pharmacists can help you create a written medication list. This list should include all prescription, OTC (non-prescription) and herbal products that you are taking. It is important to keep this list with you at all times since this list could be life-saving in an emergency.

### **Helping you save money on prescriptions**

Medication costs can be high – even with prescription insurance. Your pharmacist can provide generic medications when they are available or suggest lower-cost medications that may be good alternatives to discuss with your doctor. They may also have discount programs or coupons that you can use to lower costs. Many pharmacies now offer medications at a low cost. Be sure to ask your pharmacist for advice on how to keep your medications affordable.

### **Advice on non-prescription and herbal products**

Pharmacists are the go-to health professionals for information about OTC (non-prescription) and herbal products. Pharmacists receive special education about these products and often have computer databases that provide patient education materials about them. So feel free to ask your pharmacist if an herbal product might work for you and if it might interact with your prescription medicines.

### **Getting those needed shots**

Pharmacists in all 50 states can give vaccinations. Going to a local pharmacy can be a convenient way to get your yearly flu shot. Some pharmacies offer a variety of vaccines including those needed for traveling the world.

### **Community talks**

Did you know that many pharmacists enjoy giving community talks about medications and health topics such as diabetes, high blood pressure, and arthritis? If you're interested in having a pharmacist talk to your local organization, contact a local

pharmacist or the state pharmacy association. A list of state associations can be found at <http://www.ncspae.org>.

### **Sorting out Medicare Part D**

For seniors, choosing a Medicare Part D prescription plan can be stressful. If you need help choosing a Medicare Part D plan, ask your pharmacist for advice. Be sure to have a complete list of medications so the pharmacist can help you determine which medicines would be covered under a certain plan.

### **Help with swallowing those horse pills**

If you need a medicine in a liquid form rather than in solid tablets or capsules pharmacists may be able to help. Most pharmacists can also prepare creams and ointments for you. Special, compounding pharmacies prepare different forms of medicines that are not commercially available for individual patients.

### **Reaching your health goals**

All pharmacists can provide advice on how to take medicines to get the most benefits. Some pharmacists also offer special educational programs in diabetes, high cholesterol, asthma, heart disease and even HIV/AIDS. These medication therapy management programs can help you take your medications the best way possible, give you suggestions on how to improve your health, and work with your doctor to discuss any needed therapy changes.

### **Safeguarding your health in the hospital**

Working with doctors and nurses, hospital pharmacists help ensure the medicines you receive are properly dosed and monitored. They also play a crucial role in selecting the medications used within the hospital and making sure that medication safety is a top priority.

### **Sorting out medications after a hospitalization**

People are often started on new medicines in the hospital. Pharmacists can help you learn about your new medicines and determine whether you should continue to take medicines you have at home. Knowing which medicines to take prevents drug duplications and interactions. Before you leave the hospital, ask for a pharmacist to review your medicines with you.

### **Just ask!**

Above all, pharmacists answer questions about medicines. Ask your pharmacist or check out <http://www.JustAskBlue.com>. Just Ask Blue has experienced pharmacists who provide written advice through e-mail so you can get advice in the privacy of your home. We can also send you links to web sites that provide credible, up-to-date information about your medicines and medical conditions.

**Know Your Medicines, Know Your Pharmacist!**

**[JustAskBlue.com](http://JustAskBlue.com)**

## The Facts about Osteoporosis

### What is Osteoporosis?

- Osteoporosis is a decrease in bone density and strength that increases the risk for bone fractures.
- The most common bone fractures are spine, hip, and wrist fractures.
- Osteoporosis typically occurs in white and Asian older women. However, younger women, men and people of all races can develop osteoporosis.

### How can I prevent osteoporosis?

#### Get Calcium!

Calcium is important for building bones. Calcium can be obtained from food and from supplements.

#### Sources of Calcium

<u>Foods</u>	<u>Calcium supplements</u>
<ul style="list-style-type: none"><li>▪ Dairy: milk, yogurt, cheese</li><li>▪ Dark green vegetables: broccoli, collard greens, bok choy, spinach</li><li>▪ Canned sardines or salmon with bones</li><li>▪ Almonds</li><li>▪ Foods fortified with calcium: orange juice, cereals, and bread</li></ul>	<ul style="list-style-type: none"><li>▪ Calcium carbonate (Caltrate ©, Tums ©)</li><li>▪ Calcium citrate (Citracal©)</li></ul> <p>Daily calcium recommendations:</p> <ul style="list-style-type: none"><li>▪ Adults 19 - 50 years: 1,000 mg</li><li>▪ Adults 51 and over: 1,200 mg</li></ul>

Calcium citrate is preferred if you are taking any of the following medications: Zantac (ranitidine), Tagamet (cimetidine), Pepcid (famotidine), Prilosec (omeprazole), Nexium (esomeprazole), Prevacid (lansoprazole), Protonix (pantoprazole), or Aciphex (rabeprazole).

The maximum amount of calcium absorbed by the body at one time is 500mg. So to get the full amount of calcium needed, take two or three doses at different times of the day. For example, take one dose at breakfast time and another at supper. Remember to count the food sources of calcium!

## Vitamin D

Vitamin D increases calcium absorption and bone health.

Low levels of vitamin D decrease muscle strength and increase the risk of falling. Falls are the leading cause of bone fractures.

- Sunlight is a major source of Vitamin D. Generally, 15 minutes of skin exposure to sun per day during the months of June to mid-September is sufficient. Sunlight is strongest between noon and 2 pm.
- Skin exposure of parts of the body (arms, legs, or head) is sufficient.
- Sunscreen reduces the amount of vitamin D produced in the body.

### Sources of Vitamin D

<u>Foods</u>	<u>Vitamin D supplements:</u>
<ul style="list-style-type: none"> <li>▪ Fish (such as salmon, canned tuna, sardines)</li> <li>▪ Liver</li> <li>▪ Fortified milk,</li> <li>▪ Egg yolks</li> </ul>	Daily Vitamin D requirements <ul style="list-style-type: none"> <li>▪ Age under 50: 400 - 800 IU</li> <li>▪ Age 50 and over: 800-1,000 IU</li> </ul>

## Exercise

Exercise increases bone strength. An inactive lifestyle can weaken bones.

Three types of exercise help increase bone strength and reduce the risk of bone fractures.

Type of Exercise	Weight bearing	Balance	Resistance
<b>Examples</b>	Hiking, jogging, running, stair climbing, walking	Tai Chi, postural activities (example climbing stairs or getting out of a chair)	Elastic exercise bands, weight machines, free weight training, swimming laps
<b>How much?</b>	30 minutes at once or divided throughout the	Daily	2 - 3 times per week with exercises for

	day, every day		major muscle groups with 8 - 12 repetitions
--	----------------	--	---

National Osteoporosis Foundation. Prevention: Exercise for bones. 2009.  
 Available at : <http://www.nof.org/prevention/exercise.htm>

### **Lifestyle Matters**

- Smokers are twice as likely to develop osteoporosis as non-smokers.
- Excessive alcohol consumption (3 or more drinks per day) reduces bone formation and calcium absorption.

### **How Do I Know if I Have Osteoporosis?**

- Osteoporosis can occur without symptoms. Sometimes it can cause back pain, loss of height (especially with stooped posture), and fractures.
- Osteoporosis is diagnosed via a DXA scan, which is a non-invasive scan that measures the bone density of the hip and spine.
- Screening tests measure bone density at the wrist or heel of the foot.

### **Medications that Increase the Risk of Osteoporosis**

Some medications can decrease bone density and increase the risk for osteoporosis.

- Oral corticosteroids (prednisone, methylprednisolone, hydrocortisone) if taken daily or frequently
- Anti-seizure medicines (phenytoin, phenobarbital, carbamazepine, and primidone)
- Chemotherapy
- Certain diuretics (water pills) such as furosemide, bumetanide, torsemide that increase the amount of calcium lost in the urine.

If you are taking these medicines talk to your doctor about what you can do to prevent osteoporosis.

### **How is Osteoporosis Treated?**

- People at risk of osteoporosis should take adequate amounts of calcium and vitamin D.
- There are a number of prescription medications to prevent and treat osteoporosis. Most of these medications are pills. Some need to be taken only once a month. A new once-a-year injection is also available.
- All the medicines are helpful, but they cause different side effects so be sure to talk with your doctor about which one would be best for you.

**For more information, please visit the following websites:**

<http://www.JustAskBlue.com> for specific questions about osteoporosis and answers to personal questions you may have about osteoporosis medicines.

The National Osteoporosis Foundation at [www.nof.org](http://www.nof.org).

References:

Mayo Foundation for Medical Education and Research.

<http://www.mayoclinic.com/health/osteoporosis/DS00128>

National Institute of Arthritis and Musculoskeletal and Skin Diseases.

Osteoporosis. National Institutes of Health, Department of Health and Human

Services. [http://www.niams.nih.gov/Health\\_Info/Bone/Osteoporosis/default.asp](http://www.niams.nih.gov/Health_Info/Bone/Osteoporosis/default.asp)

National Osteoporosis Foundation. Prevention: Exercise for bones.

<http://www.nof.org/prevention/exercise.htm>

## Selecting the Best Prescription Drug Plan

It's that time of year again when many people are selecting their prescription drug plan for the upcoming year.

Selecting a plan can be a confusing process so here are some tips on choosing a plan that meets your needs.

### Learn the Lingo

As you review prescription plan information you are likely to see the following terms. Knowing what they mean can help you figure out what you will pay throughout the year.

**Premium:** monthly or annual payments you make to the insurance company. You pay this amount whether you fill a prescription or not. If you get prescription coverage through your employer this amount is often deducted from your paycheck.

**Deductible:** the amount of money you must pay for your prescriptions before your insurance begins to pay for any prescriptions. Some plans may have no deductible and will begin paying for prescriptions right away.

**Co-payments:** the amount that you must pay each time you get a prescription. This may be a fixed amount (for example, \$15) or it may be a percentage of the total cost of the prescription. Different prescriptions can have different co-payments. For example, generic medicines may have lower co-payments than brand-name medications.

**Formulary:** the list of medicines that the prescription drug plan will cover.

### Understand Drug Formularies

A drug formulary is a list of medications that the prescription plan will cover. Formularies are designed to encourage patients to use medications that are the effective for the general population and are reasonably priced.

Formulary lists typically include generic medications and lower-priced brand name products. These medications are available for the lowest co-payment amount.



# Prescription Drug Plan

RXBIN: 12345

RXGRP: DRUGS

RXPCN: 7777

ISSUER: PLANS4ME

ID NUMBER: 987654321

NAME: JOHN R. DOE

High-priced brand name products may be on the formulary list but require special authorization from the prescriber and/or a higher co-payment amount.

Medications that are not on the formulary list are called “non-formulary medications”. If your medicine is not on the list, ask your pharmacist or doctor if a similar medicine is available. If you really need the non-formulary medicine, the doctor will need to fill out paperwork to make a special request for it to be covered under your prescription plan. It may take several days to weeks to get payment approval. Sometimes, the patient has to file a special request to get the medication approved for payment.

### **Consider What’s Best for You**

A prescription drug plan should meet your needs. Follow the steps below to help find the best plan for you.

**Step 1:** Make a list of all your prescriptions. If you take only a few medications, you may want to select a plan with a low premium.

**Step 2:** Find plans that include your medications on their formulary list. If your medicines are not listed or are only available for a high co-payment ask your pharmacist or doctor if a listed, lower-cost medicine would be suitable for you. Sometimes the plan information you receive does not include the drug formulary. In this case, call the plan information number and ask about coverage for each of your medicines.

**Step 3:** Determine if prescriptions can be filled at your local pharmacy or through a mail-order pharmacy. If you are unsure, call the plan and ask. Some high cost medicines may only be available through specialty pharmacies. These pharmacies offer additional services that can be very helpful.

**Step 4:** Add up the costs of the premium, the deductible and the co-payment for each prescription. While it may be difficult to know exactly what prescriptions you may get filled during the year, this will allow you to compare the plans based on cost.

**Step 5:** Get a second opinion before you sign the dotted line. Asking your pharmacist about his/her experience with a prescription drug plan can be very helpful, especially if you are taking high-cost medications.

## **Medicare Part D Prescription Plans**

Medicare Part D plans are a little different from traditional prescription plans. You may have the option of choosing a medical plan that includes prescription drug coverage or choosing a separate medical plan and prescription plan. Talking with your doctor and pharmacist can help you decide which is best for you.

Many senior centers or Agencies on Aging have information and advisors to help you sort through all your prescription plan options. Most community pharmacies can give you a printout of all your prescription drug plan options. This information lets you know which plans cover your prescriptions.

Medicare has a special website that gives information about Medicare Part D plans. It can take some time to click through all steps, but it will give you a list of all the plans available to you. The Medicare Prescription Drug Plan Finder site is <https://www.medicare.gov/find-a-plan/questions/home.aspx>.

A big concern among seniors is the coverage gap or “donut hole” that happens after prescription costs reach a certain amount. Some plans may cover the costs of generic medicines if you reach the donut hole so be sure to check for this benefit. Starting in January 2011, certain drug manufacturers will give a 50% discount on brand name medicine prices to patients who are in the coverage gap.

### **Ask Your Pharmacist**

Keep in mind that pharmacists are great sources of information about prescription drug plans. Ask your pharmacist if you have questions about choosing a plan.

You can also ask us at <http://www.JustAskBlue.com>. Check out our website to see past News capsules, submit medication questions and get access to up-to-date credible health websites.

## Smoking Cessation – A Goal for 2010

### Why is cigarette smoking a problem?

Cigarette smoking is the number one cause of preventable death in the United States, and it accounts for approximately 438,000 deaths each year.<sup>1</sup> In spite of figures like this,

nearly 45 million Americans continue to smoke, and roughly 1,200 children and teenagers start smoking every day.<sup>2</sup> There are many reasons why people begin smoking cigarettes. However, two primary reasons for why people continue to smoke are: 1) habit and, 2) an addictive substance called nicotine.

### Ways to be smoke free without the use of medication:<sup>3</sup>

- **Keep active** – try to exercise or do other hobbies or activities
- **Drink lots of water and juices**
- Sign up for **smoking cessation classes** or start following a self-help plan
- **Avoid situations** that would **increase** the **urge** to smoke
- **Reduce or avoid alcohol**
- **Consider changing your routine.** Use a different route to work, drink tea instead of coffee, etc.
- **Tell your friends and family** about your Quit Day and goal.
- **Get oral substitutes** such as gum, hard candy, carrots, etc.
- Practice saying, “**No thank you, I don’t smoke.**”
- **Believe that YOU CAN DO THIS!**

### Why is nicotine addictive?

Nicotine acts as a stimulant on the brain. This results in a pleasant feeling and relaxation. A person’s desire to have these feelings may lead to the development of a need for nicotine. As the dependence grows, so does the person’s tolerance of nicotine. Tolerance means that there is a need to smoke more cigarettes to experience the same level of satisfaction. The growing dependence and desire for the pleasant effects of nicotine are the main reasons why a person will continue to smoke for many years.<sup>1</sup>

### How can I quit smoking?

There are several ways for individuals to quit smoking. However, there are a few important steps that can help lead to a successful outcome: making the decision to quit, setting a quit date and choosing a quit plan, dealing with nicotine withdrawal, and remaining smoke-free.<sup>3</sup>

One method for stopping smoking is to overcome the nicotine addiction. This could be accomplished by using nicotine replacement products. Nicotine replacement products include nicotine patches, nicotine lozenges, nicotine gum, nicotine nasal spray, and a nicotine inhaler. These products work by providing a source of nicotine other than cigarettes, decreasing any withdrawal symptoms an individual may experience when they stop smoking. These products also contain a

controlled amount of nicotine, allowing for a gradual decrease in the amount of nicotine the patient receives until they are able to stop completely.<sup>1</sup> The nicotine nasal spray and the nicotine inhaler require a prescription from a doctor, while the other products are available over-the-counter (without a prescription). Each of these forms of nicotine replacement has been shown to be effective in helping people to stop smoking, nearly doubling their chances of success.<sup>4</sup> However, it is important to choose a nicotine replacement product based upon each individual's situation. According to one information source, "Patients who smoke continuously throughout the day might have better success with the nicotine patches, because these provide a sustained, steady release of nicotine."<sup>1</sup> If a patient only smokes here and there during the day, the gum or lozenge may be a better choice.<sup>1</sup> If someone wishes to try one of these products, it is best to speak with a pharmacist or their doctor so they can choose the option that would best meet their needs.<sup>5</sup>

Other medications that are used to help stop smoking include Wellbutrin SR or Chantix. These medications do not contain nicotine. Wellbutrin SR is thought to work for smoking cessation by affecting the same parts of the brain as nicotine.<sup>6,7</sup> Wellbutrin SR is a prescription medication, and it is also available by its generic name, bupropion. Patients taking Wellbutrin SR alone or in combination with a nicotine patch have been shown to have an increased chance of remaining smoke-free.<sup>8</sup> Patients taking Wellbutrin SR may experience suicidal thoughts, agitation, anxiety, or insomnia.<sup>9</sup> Wellbutrin SR may also cause nausea, dizziness, constipation, confusion, or headache.<sup>9</sup> Chantix (generic name – varenicline) is another prescription medication used for smoking cessation. It acts in the same area of the brain as nicotine and helps to decrease both the cravings and withdrawal effects due to nicotine. Chantix is not currently available as a generic medication.<sup>5</sup> Chantix has been shown to increase patients' chances of remaining smoke-free.<sup>10</sup> Patients taking Chantix should watch for possible suicidal thoughts or attempts, depression, vivid dreams, or insomnia.<sup>11</sup> Patients may also experience nausea, vomiting, or constipation.<sup>11</sup>

### **Okay, I want to quit smoking. What should I do now?**

There are several options to consider when selecting a product to help stop smoking. It is important that a person first talk with their doctor when making the decision to quit smoking. Doctors will take many factors into consideration when choosing the best therapy to help a patient help quit successfully, including: 1) daily nicotine intake, 2) other medical conditions that are present, and 3) individual preferences.<sup>8</sup> Don't be afraid to take that first step – talk to your doctor!

#### References:

1. Kroon LA, Hudmon KS, Corelli RL. Smoking Cessation. In: Berardi RR, et al., editors. Handbook of Nonprescription Drugs: An Interactive Approach to Self-Care. 16<sup>th</sup> ed. Washington, DC: American Pharmacists Association; 2009. P. 893-913.

2. Fiore MC, Jaén CR, Baker TB, et al. *Treating Tobacco Use and Dependence: 2008 Update*. Clinical Practice Guideline. Rockville, MD: U.S. Department of Health and Human Services. Public Health Service. May 2008.
3. American Cancer Society Staff. The Great American Health Challenge: How to Quit [updated October 16, 2007]. American Cancer Society. Available at: [http://www.cancer.org/docroot/subsite/greatamericans/content/How\\_to\\_Quit.asp](http://www.cancer.org/docroot/subsite/greatamericans/content/How_to_Quit.asp). Accessed January 20, 2010.
4. Silagy C, Lancaster T, Stead L, Mant D, Fowler G. Nicotine replacement therapy for smoking cessation. *Cochrane Database Syst Rev*. 2004;(3):CD000146.
5. Hurt RD, Ebbert JO, Hays JT, McFadden D. Treating Tobacco Dependence in a Medical Setting. *CA Cancer J Clin*. 2009;59:314-326.
6. Fryer JD, Lukas RJ. Noncompetitive functional inhibition at diverse, human nicotinic acetylcholine receptor subtypes by bupropion, phencyclidine and ibogaine. *J Pharmacol Exp Ther*. 1999;288:88-92.
7. Slemmer JE, Martin BR, Damaj MI. Bupropion is a nicotinic antagonist. *J Pharmacol Exp Ther*. 2000;295:321-327.
8. Jorenby DE, Leischow SJ, Nides M, et al. A controlled trial of sustained-release bupropion, a nicotine patch, or both for smoking cessation. *N Engl J Med*. 1999;340:685-691.
9. Bupropion. In: DRUGDEX® System [Internet database]. Greenwood Village, Colo: Thomson Micromedex. Updated periodically. Accessed January 27, 2010.
10. Jorenby DE, Hays JT, Rigotti NA, Azoulay S, Watsky EJ, Williams KE, et al. Efficacy of Varenicline, an  $\alpha 4\beta 2$  Nicotinic Acetylcholine Receptor Partial Agonist, vs Placebo or Sustained-Release Bupropion for Smoking Cessation. *JAMA*. 2006;296:56-63.
11. Varenicline. In: DRUGDEX® System [Internet database]. Greenwood Village, Colo: Thomson Micromedex. Updated periodically. Accessed January 27, 2010.

# Veterinary Health – How Can You Help Your Pet?



## T.A.L.K Before You Treat

Animals are not just small furry people with four legs. Their bodies work differently and process medication differently than ours. Medicating pets correctly can be tricky.

The FDA's Center for Veterinary Medicine (CVM) has asked that everyone with pets or food-producing animals to "**T.A.L.K. Before You Treat.**"

- T- Talk
  - Talk to your veterinarian before giving an animal any medication.
- A- Ask
  - Ask if the drug has been FDA approved for animals. This ensures the quality of the product and its safety and efficacy for the intended animal.
- L- Look at the Label
  - Always check **four** things before giving a medicine to your pet:
    1. How much? Always check the dose. Double check your math if you must multiply the dose by your pet's weight.
    2. How often? Check to see how often it should be given.
    3. How to give it? Be sure you are giving the medicine by the correct route. For example, by mouth, on the skin, injected in a muscle, or injected under the skin.

4. How long? Check how long you can treat the animal before you must check with your veterinarian or stop the drug.

- K- Keep Good Records
  - Recording your pet's medications is important for your animal's health and for your protection
  - If you have multiple pets, always note which animal was treated and with what medication. Note the dose used and why the treatment was given.

### **Specialty Pet Medication Compounding**

When your pet gets sick, it can be difficult to get them to take their medications.

Specialty pharmacies have several techniques to make things easier for you and your pet.

- Some medications can be made into a [liquid](#) or a chewable for easier administration.
- Your pharmacist can flavor some medications with flavors like beef, chicken, fish, or liver.
- Sometimes multiple medications can be mixed together, so you can give them at the same time.

### **The Top 10 Pet Toxins of 2010**

The poison center at the American Society for the Prevention of Cruelty to Animals (ASPCA) recorded over 167,000 calls about pet poisonings last year. Here are some common causes of poisoning:

#### 1. Human Medications

- Poisoning from human medications made up about 25% of calls. Human medications most frequently associated

with pet poisoning include: ibuprofen, acetaminophen, and some prescription medications.

## 2. Insecticides (chemicals to kill insects)

- Poisonings have occurred when owners treated flea problems in animals with insecticides not meant for animal use. Only use approved medications to treat your pets.

## 3. Rodenticides (chemicals to kill rodents)

- Always place rodenticides where pets cannot get to them.

## 4. People Food

- Grapes and raisins can cause kidney failure in dogs
- Onions and garlic can cause anemia
- Xylitol (an artificial sweetener common in chewing gum and other candy and foods) is toxic to dogs – keep these products away from your pets

## 5. Veterinary Medications

- Just because it's meant for pets, doesn't mean it's safe to eat the whole bottle. Keep these locked away just like human medications.

## 6. Chocolate

- Chocolate can cause agitation, vomiting, diarrhea, increased heart rate, and seizures.
- The darker the chocolate, the more dangerous – even a small amount of dark or baking chocolate can kill

## 7. Household Toxins

- Always keep cleaning supplies, batteries, and liquid potpourri locked away.

## 8. Plants

- Never let your pet eat house plants or flowers.
- Some can cause kidney or liver failure.

## 9. Herbicides

- Keep pets off treated areas until areas are dry.

## 10. Outdoor Toxins

- Keep toxins locked up.

If you suspect your pet has been poisoned, call your veterinarian or Animal Poison Control Center's 24-hour hotline at (888) 426-4435.

### **When Should You Take Your Pet to the Vet?**

Always seek immediate medical attention when a pet:

- Bleeds excessively
- Suddenly collapses
- Has dilated pupils
- Has a seizure
- Demonstrates pain when being touched
- Show signs of shock or toxicity
- Is unconscious

Go to the vet as soon as possible when a pet:

- Has difficulty breathing under normal circumstances
- Tongue turns blue

- Gasp for air
- Has blood in stool and/or urine
- Is vomiting repeatedly

When to schedule an appointment with the vet:

- Behavior suddenly changes or symptoms persist
- Rapid or steady increase or decrease in weight
- Cough that does not go away
- Hair loss or unhealthy looking coat
- Limping, disoriented, or shows signs of pain and aches
- Eyes look yellow, puffy, milky, or cloudy, have excessive discharge, or tear up a lot
- Ears look waxy, swollen, have a foul smelling discharge or pet shakes head a lot or paws at ears

**Our “best friends” can’t talk to us to tell us if there is a problem. We need to keep them happy and healthy!**

## What is Cholesterol?

Cholesterol is a fat-like substance that the body needs to function properly.<sup>1</sup> Your liver makes most of the cholesterol in your body. You also get cholesterol from foods that you eat. However your body does not need the cholesterol from your diet to work properly.<sup>1</sup> The amount of cholesterol in your body is measured and reported as “Total Cholesterol”. However, total cholesterol is made up of three separate components: HDL, LDL, and triglycerides. Most people know HDL cholesterol as “good cholesterol” and LDL cholesterol as “bad cholesterol”. So, the higher your HDL cholesterol levels are and the lower your LDL cholesterol levels are, the better for your health. Triglycerides are another type of cholesterol that mainly come from the amount of fat that we eat in our diets.<sup>1</sup> People who eat a lot of fattening foods tend to have higher levels of triglycerides.

## What is High Cholesterol?

Your total cholesterol is considered borderline high if it is over 200. If your total cholesterol is over 240, then it is considered to be high.<sup>2</sup> Many people have cholesterol levels of over 300-400 and do not realize it until after they suffer a heart attack or stroke. Your doctor may also look at the individual components of your total cholesterol (HDL, LDL, and triglycerides) when determining your degree of “high cholesterol”.

## If Your Body Needs Cholesterol, Why is High Cholesterol Bad?

While your body needs some cholesterol to function properly, too much cholesterol is a bad thing. If your liver makes too much cholesterol, or you eat too many foods high in cholesterol, then the excess cholesterol can form plaques on the walls of your blood vessels called arteries.<sup>1</sup> The plaques can build up and reduce the amount of blood that can flow through the arteries. This results in atherosclerosis or hard arteries.<sup>1</sup> Some arteries provide blood and oxygen to your heart and if these arteries become hard from the cholesterol plaques, then you could experience chest pain called angina.<sup>1</sup> Sometimes these plaques can also break open and form a blood clot and this can result in a heart attack.<sup>1</sup>

## Am I at Risk for High Cholesterol?

There are certain things in our lives that can increase our risk of high cholesterol. Diet, exercise, and weight are some of the things that we can control that affect cholesterol levels.<sup>1</sup> Age, gender, and family history are some things that affect our cholesterol that we cannot control.

## How do I know if I Have High Cholesterol?

Unless you experience chest pain or have a heart attack, you will not know if you have high cholesterol. **Usually, there are no symptoms that go along with high cholesterol.**<sup>3</sup> The only way to know if you have high cholesterol is to have it checked. Your cholesterol can be checked at your doctors office, a health fair, and at some specialty pharmacies.

## How Can I Lower my Cholesterol if it is High?

- Do something active! Any form of exercise can help lower or maintain cholesterol at safe and normal levels. Examples include walking, riding a bike, swimming, or running. The best thing to do is find something you enjoy doing and stick with it.
- Stop smoking/chewing tobacco! This will make you feel better overall and reduce your risk of developing hard arteries.

- If your doctor prescribes cholesterol lowering medication, Take it how you are supposed to! Along with diet and exercise, medications can be very effective at controlling your cholesterol levels. Be sure to talk to your doctor or pharmacist about any side effects you may experience while taking your medications.
- Eat healthy foods! Try to eat foods low in fat and cholesterol. For more on healthy eating habits visit the following website: [www.mypyramid.gov/](http://www.mypyramid.gov/)
- Maintain a healthy body weight!

**Other thoughts to consider about cholesterol:**

- Around 17% of adults have high cholesterol (total cholesterol above 240)
- Over 100 million U.S. adults have cholesterol levels above 200
- More than 12 million Americans take medication to help lower cholesterol

**For More Information About High Cholesterol, Visit the Following Websites:**

- National Institute of Health at: [http://www.nhlbi.nih.gov/health/dci/Diseases/Hbc/HBC\\_WhatIs.html](http://www.nhlbi.nih.gov/health/dci/Diseases/Hbc/HBC_WhatIs.html)
- American Heart Association at: <http://www.americanheart.org/presenter.jhtml?identifier=1516>
- Centers for Disease Control and Prevention at: <http://www.cdc.gov/Cholesterol/about.htm>