



Expert and Consumer Evaluation of Consumer Medication Information (CMI)

Carole L. Kimberlin, PhD
Almut G. Winterstein, PhD

RESEARCH QUESTIONS

- What percentage of shoppers filling prescriptions were given *any* written CMI beyond label directions?
- What percentage of CMI adhered to quality criteria as determined by a national panel of pharmacy experts?
- What percentage of CMI adhered to criteria consumers were asked to use to evaluate quality of the leaflets?
- How did expert and consumer evaluations of the quality of CMI differ in the 2001 and 2008 studies?



METHODS OVERVIEW

- Two study medications – lisinopril and metformin
- National Association of Boards of Pharmacy purchased electronic list of retail pharmacies
- Sample of 420 pharmacies selected using random selection procedure
- Subcontractor (Second to None) hired professional shoppers to pose as patients and present 2 prescriptions



METHODS (CONT.)

- Shoppers trained to use standard protocol for playing patient role and answering questions in pharmacies
- Physicians recruited by FDA and located near sampled pharmacies wrote prescriptions
- All written material dispensed in pharmacies sent to UF
- UF conducted expert and consumer evaluations of CMI



EXPERT EVALUATION FORM (EEF)

- Four clinical experts from UF and Shands Hospital formed Development Expert Panel
- Reviewed Standards/Criteria from 2001 evaluation and 2006 FDA Guidance document on useful CMI
- Examined FDA approved labeling for study drugs and monographs (and if available patient information monographs) in all other standard drug compendia
- Developed explicit criteria to operationally define CMI standards for the 2 drugs



STANDARDS FOR USEFUL CMI

1. Include drug names and indications
2. Include contraindications and what to do if applicable
3. Include specific directions about how to use, monitor, and get most benefit
4. Include specific precautions and how to avoid harm while using it
5. Include symptoms of serious or frequent adverse reactions and what to do
6. Include general information and encouragement to ask questions
7. Be scientifically accurate, unbiased, and up-to-date
8. Be readily comprehensible and legible

Content

Format

NATIONAL EXPERT PANEL

- Eight pharmacy experts
- Reviewed and modified EEF
- 40 CMI rated independently by pairs to determine inter-rater reliability and modify content as needed
- Inter-rater reliability checks continued during data collection



SCORING PROCEDURES

- Criteria 1-6: Raters indicated whether each item of information identified for each subcriterion was present or not
- Criterion 7: Raters evaluated scientific accuracy
- Criterion 8: Format
 - ✎ Expert panel assessed four of the readability criteria
 - ✎ Staff assessed explicit measures such as font size, amount of white space around text, line length, use of bullets, reading level



SCORING PROCEDURES (CONT.)

- Adherence of CMI to criteria reported as a percent of total possible points obtained for:
 - ⌘ Overall aggregate score
 - ⌘ For each individual general criterion (1-8)
 - ⌘ For each individual subcriterion
- Means and standard deviations / 95% confidence intervals for aggregate and general criteria reported



SCORING PROCEDURES (CONT.)

- Frequency distributions reflecting six levels of adherence (used to compare to 2001 findings)
 - ⌘ Level 0: no written information provided
 - ⌘ Level 1: information included 0-19% of subcriteria
 - ⌘ Level 2: information included 20-39% of subcriteria
 - ⌘ Level 3: information included 40-59% of subcriteria
 - ⌘ Level 4: information included 60-79% of subcriteria
 - ⌘ Level 5: information included 80-100% of subcriteria



CONSUMER EVALUATION FORM

- Developed by Svarstad and Mount and used in 2001 study.
- 5 point semantic differential scale – low scores = low quality
- First 9 items ask how consumer would feel about leaflet if taking medicine for 1st time
- Remaining three items – overall opinion about readability, comprehensibility and usefulness of leaflet
- Responses for all items summated and reported as average percent and standard deviation of possible points along with 5-level frequency distributions obtained to compare to 2001



RECRUITMENT OF CONSUMER EVALUATORS

- 14 site coordinators in 13 states
- Recruited 12-20 consumers each
- All materials approved by UF IRB and local IRBs for site coordinators
- Snowball recruitment from clinics, churches, apartments, organizations
- Consumers had to
 - ⌘ Read CMI in English
 - ⌘ Have no training as health professional
 - ⌘ Not have diabetes or hypertension or have taken medications in same class as study drugs



RESULTS

- 365 pharmacies dispensed prescriptions for study drugs (1 pharmacy only dispensed for lisinopril)
- 22 (6%) – no CMI for either lisinopril or metformin
- CMI ranged from 33 words to 2,482 words
- Publishers of content
 - ⌘ No publisher identified – 43%
 - ⌘ Of remainder:
 - 56% First Databank
 - 42% Wolters Kluwer Health
 - 2% Other



RESULTS – OVERALL QUALITY OF CMI

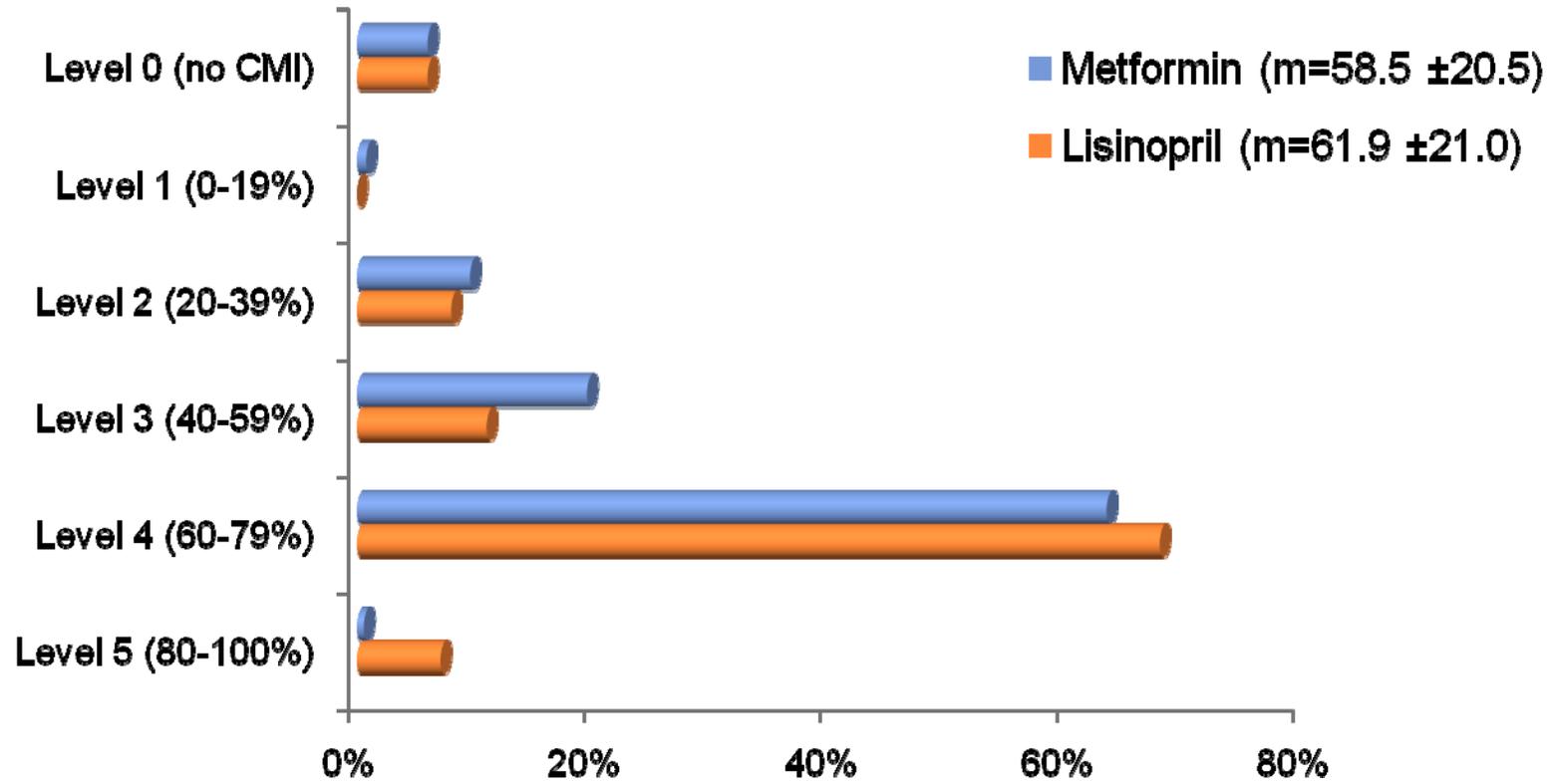


Figure: Frequency of CMI Quality for Lisinopril (n=365) and Metformin (n=364)

RESULTS –QUALITY OF CMI PER CRITERION

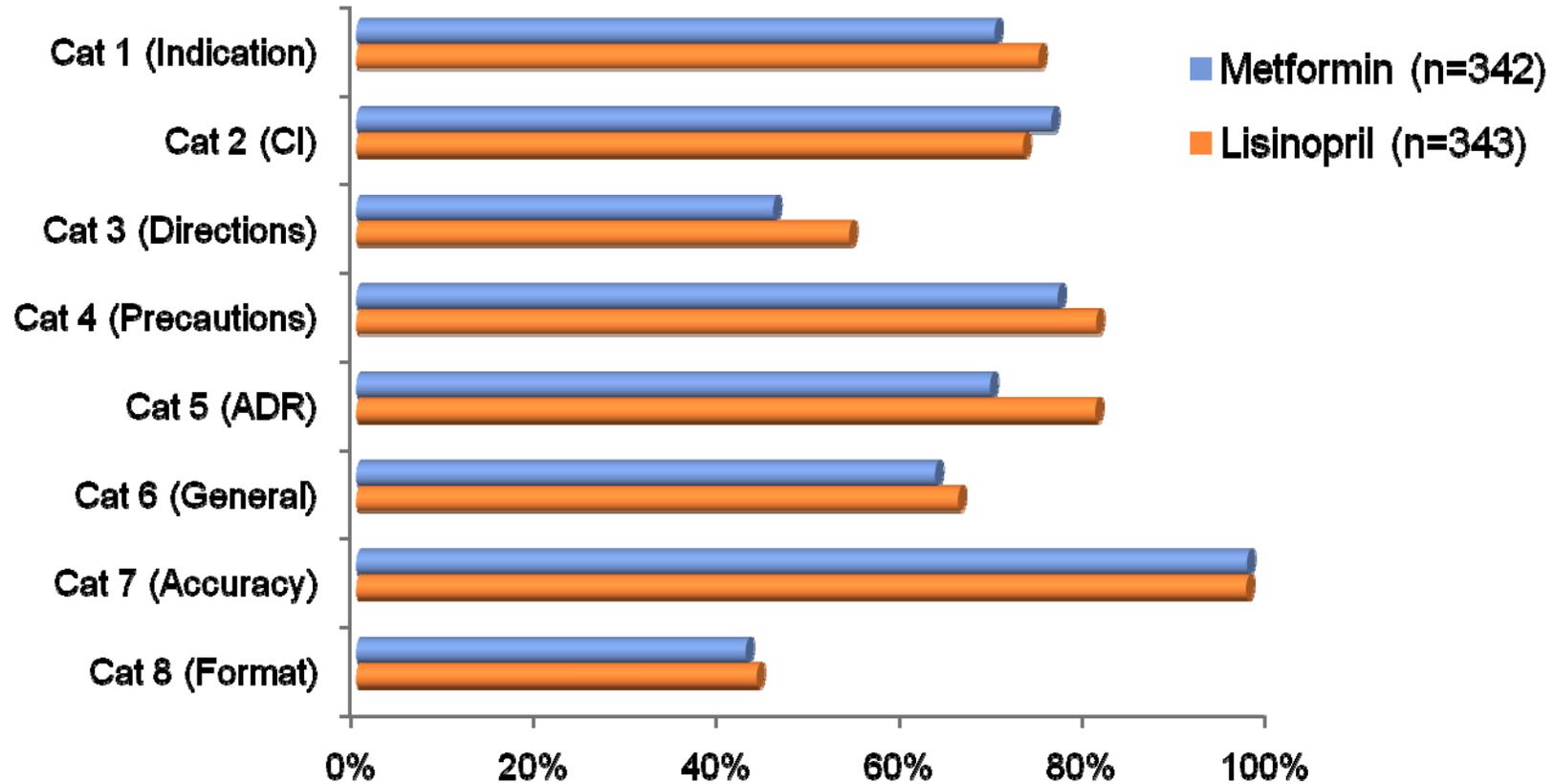


Figure: Mean Quality of Dispensed CMI

COMPARISON TO 2001

Percent dispensed CMI that met $\geq 60\%$ of Expert Quality Criteria

	2001	2006
Cat 1 (Indication)	43%	68%
Cat 2 (CI)	33%	82%
Cat 3 (Directions)	67%	31%
Cat 4 (Precautions)	21%	80%
Cat 5 (ADRs)	27%	84%
Cat 6 (General)	18%	61%
Cat 7 (Accuracy)	98%	97%
Cat 8 (Format)	18%	8%



HIGHS AND LOWS IN CATEGORY 3: "DIRECTIONS"

	Lisinopril
Action: ask about lab tests	8%
Frequency of tests	13%
Action: ask about BP readings / self-monitor	18%
Overdose symptoms	32%
Phone number of poison control center	32%
Administration with our without food	91%

	Metformin
Action: ask about lab tests	0%
Vitamin B12 monitoring	1%
Frequency of lab tests	5%
Monitoring schedule for HbA1c	9%
Phone number of poison control center	17%
Administration with food	91%



HIGHS AND LOWS IN CATEGORY 8: "FORMAT"

	Lisinopril
Black box warning in bold or box	3%
Bolded text used for emphasis	5%
Bullets used to enhance readability	7%
Written at $\leq 8^{\text{th}}$ grade reading level	10%
Space between lines ≥ 2.2 mm	15%
Upper and lower case lettering	99%
Minimal use of italics or ornate typeface	99%
Good ink-paper contrast	97%
Limited use of medical / technical terms	94%



OTHER LOW SCORES

	Lisinopril	Metformin
Angioedema can be fatal	2%	
Action for serious side effect: don't take	3%	18%
Physical description of drug or imprint code	45%	39%
Other precautions: leucopenia, neutropenia	41%	
Date of publication	51%	48%
Brand names	39%	37%
Contraindicated: contrast agent		40%
Usual dosing	38%	34%



RESULTS – PHARMACY OWNERSHIP AND EXPERT-RATED QUALITY

Lisinopril	Independent	Chain
Overall Quality*	55.1 ±20.3	70.0 ±9.3
Content*	53.0 ±28.7	75.1 ±12.4
Format*	49.6 ±10.1	41.8 ±10.8
Word Count*	856 ±546	1314 ±316

Metformin	Independent	Chain
Overall Quality*	52.1 ±20.1	65.8 ±9.9
Content*	49.0 ±28.1	70.1 ±12.8
Format*	49.5 ±10.5	40.2 ±10.5
Word Count*	978 ±677	1553 ±401

* p<0.05



RESULTS – CONSUMER-RATED QUALITY OF CMI

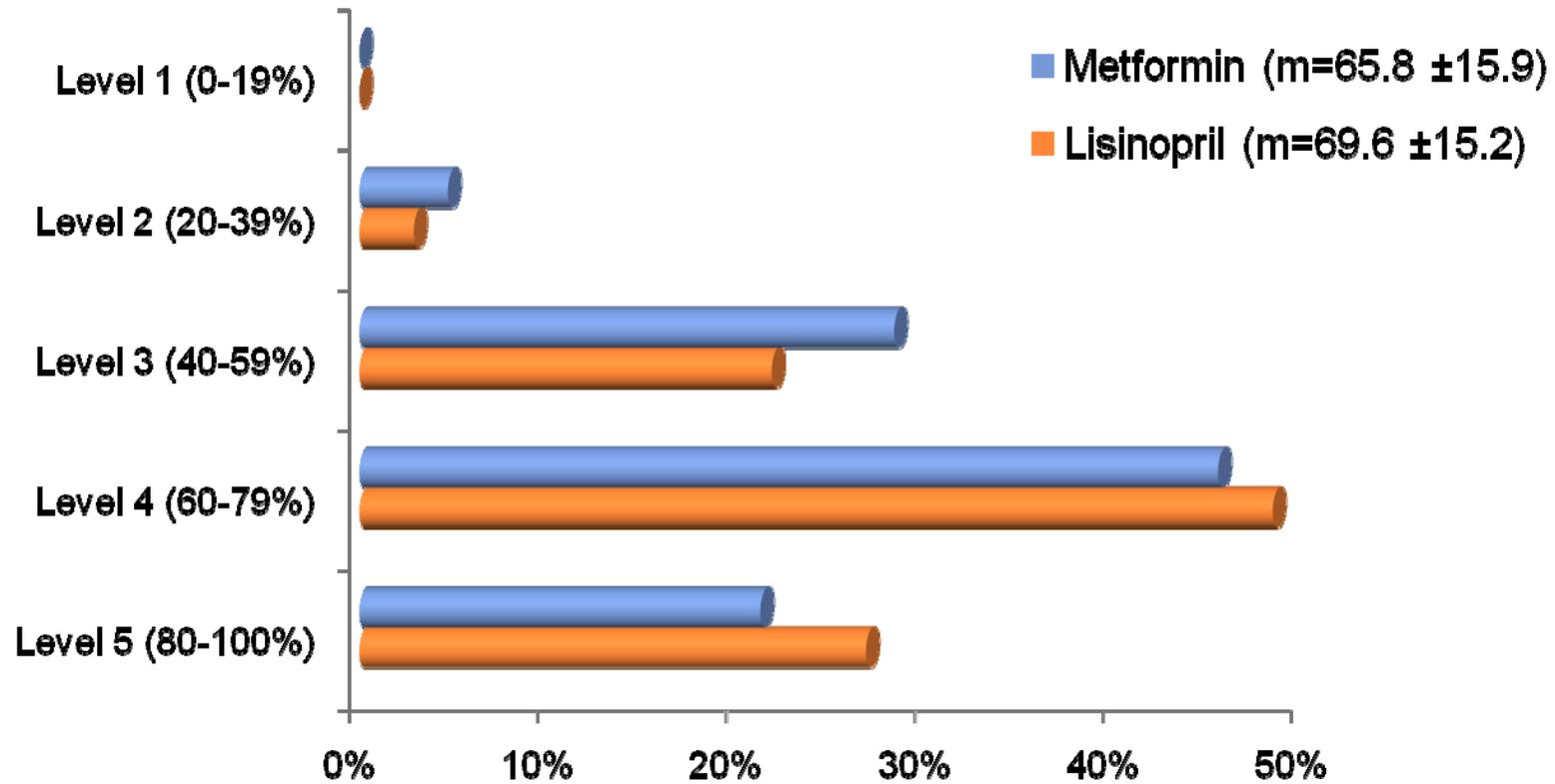


Figure: Frequency of CMI Quality for Lisinopril (n=343) and Metformin (n=342)

COMPARISON OF CONSUMER-RATED QUALITY TO 2001

	Level 1 (<20%)	Level 2 (<40%)	Level 3 (<60%)	Level 4 (<80%)	Level 5 (<100%)
2001 (n=1,236)	7.9	14.8	21.0	30.9	25.4
2008 (n=685)	0	3.8	25.1	47.0	24.1



ARE SOME PUBLISHERS BETTER?

- No noteworthy difference in overall quality, content or format quality
- Significant variability of leaflets within one publisher



FIRST DATA BANK I

Questions? Ask yo

MEDICATION
METFORMIN HCL 500 MG TABLET

DIRECTION
TAKE 1 TABLET BY MOUTH TWICE A DAY

IMPORTANT NOTE
THIS IS A SUMMARY AND DOES NOT CONTAIN ALL POSSIBLE INFORMATION ABOUT THIS PRODUCT. FOR COMPLETE INFORMATION ABOUT THIS PRODUCT OR YOUR SPECIFIC HEALTH NEEDS, ASK YOUR HEALTH CARE PROFESSIONAL. ALWAYS SEE THE ADVICE OF YOUR HEALTH CARE PROFESSIONAL IF YOU HAVE ANY QUESTIONS ABOUT THIS PRODUCT OR YOUR MEDICAL CONDITION. THIS INFORMATION IS NOT INTENDED AS INDIVIDUAL MEDICAL ADVICE AND DOES NOT SUBSTITUTE FOR THE KNOWLEDGE AND JUDGMENT OF YOUR HEALTH CARE PROFESSIONAL. THIS INFORMATION DOES NOT CONTAIN ANY ASSURANCES THAT THIS PRODUCT IS SAFE, EFFECTIVE, OR APPROPRIATE FOR YOU. METFORMIN - ORAL (MET-FOR-MIN)

COMMON BRAND NAME(S)
Glucophage

WARNING
Metformin can rarely cause a serious (sometimes fatal) condition called lactic acidosis. Stop taking metformin and seek immediate medical attention if you develop any of the following symptoms of lactic acidosis: unusual tiredness, severe drowsiness, chills, blue/colored skin, muscle pain, fast/irregular heartbeat, unusually slow/irregular heartbeat. Lactic acidosis is more likely to occur in patients who have certain medical conditions, including kidney or liver disease, conditions that may cause a low oxygen blood level or poor circulation (e.g., severe congestive heart failure, recent heart attack, recent stroke), heavy alcohol use, a severe loss of body fluids (dehydration), X-ray or scanning procedures that require an injectable contrast drug, recent surgery, or a serious infection. Tell your doctor immediately if any of these conditions occur or if you notice a big change in your overall health. You may need to stop taking metformin temporarily. The elderly are also at higher risk, especially those older than 80 years who have not had kidney tests. (See also Side Effects and Precautions sections.)

USES
Metformin is used with a proper diet and exercise program to control high blood sugar in people with type 2 diabetes (non-insulin-dependent diabetes). Controlling high blood sugar helps prevent heart disease, strokes, kidney disease, blindness, circulation problems, and decreased sexual ability. Metformin belongs to the class of drugs known as biguanides. It works by helping to restore your body's proper response to the insulin you naturally produce, and by decreasing the amount of sugar that your liver makes and that your stomach/intestines absorb.

OTHER USES
This section contains uses of this drug that are not listed in the approved professional labeling for the drug but that may be prescribed by your health care professional. Use this drug for a condition that is listed in this section only if it has been so prescribed by your health care professional. Metformin may be used with lifestyle changes such as diet and exercise to prevent diabetes in people who are at high risk for becoming diabetic. It is also used in women with a certain disease of the ovaries (polycystic ovarian syndrome). By helping your body to respond better to insulin, metformin may decrease the risk of diabetes, make menstrual cycles more regular, and increase fertility.

HOW TO USE
Read the Patient Information Leaflet if available from your pharmacist before you start using metformin and each time you get a refill. If you have any questions, consult your doctor or your pharmacist. Take this medication by mouth, usually twice a day with meals or as directed by your doctor. The dosage is based on your medical condition and response to therapy. Your doctor may direct you to take a low dose at first, gradually increasing the dose to lower the chance of side effects such as upset stomach. Your doctor will adjust your dose based on your blood sugar levels to find the best dose for you. Follow your doctor's directions carefully. The usual maximum dose for adults is 2550 milligrams each day. If you are already taking another anti-diabetic drug (e.g., chlorzotapride), follow your doctor's directions carefully for stopping/continuing the old drug and starting metformin. Use this medication regularly in order to get the most benefit from it. Remember to use it at the same times each day. Inform your doctor if your condition persists or worsens (e.g., blood sugar levels are high). It may take up to 2 weeks before the full benefit of this drug takes effect.

SIDE EFFECTS
See also Warning section. Nausea, stomach upset, diarrhea, or a metallic taste in the mouth may occur at first as your body adjusts to the medication. If any of these effects persist or worsen, tell your doctor or pharmacist promptly. If stomach symptoms return later (after you are on the same dose for several days or weeks), tell your doctor immediately. Stomach symptoms that occur after the first days of your treatment may be a sign of lactic acidosis. Remember that your doctor has prescribed this medication because he or she has judged that the benefit to you is greater than the risk of side effects. Many people using this medication do not have serious side effects. This medication does not usually cause low blood sugar (hypoglycemia). However, low blood sugar may occur, especially if you take other medications for diabetes, drink large amounts of alcohol, do unusual or heavy exercise, or do not consume enough calories from food. Symptoms include cold sweat, blurred vision, dizziness, drowsiness, shaking, fast heartbeat, headache, fainting, tingling of the hands/feet, and hunger. It is a good habit to carry glucose tablets or gel to treat low blood sugar. If you don't have these reliable forms of glucose, rapidly raise your blood sugar by eating a quick source of sugar such as table sugar, honey, or candy, or drink fruit juice or non-diet soda. Tell your doctor about the reaction immediately. To help prevent low blood sugar, eat meals on a regular schedule, and do not skip meals. Check out what you should do if you miss a meal. Symptoms include thirst, increased urination, confusion, drowsiness, breath odor. If these symptoms occur, tell your doctor to be increased. A very serious allergic reaction to a side effect. If you notice other effects not listed above, tell your doctor or pharmacist about them immediately.

PRECAUTIONS
Before taking metformin, tell your doctor or pharmacist about all the medicines, vitamins, and supplements you are taking, including over-the-counter medicines. Before using this medicine, consult your doctor, nurse, or pharmacist about all your medical conditions, liver disease, kidney disease, and conditions that may cause a low oxygen blood level or poor circulation (e.g., severe congestive heart failure, recent heart attack, recent stroke).

Questions? Ask yo

MEDICATION WARNINGS

Do not share this medication with others. You should attend a diabetes education program to learn more about diabetes and all the important aspects of its treatment, including meal/portion control, personal hygiene, medications, and getting regular eye/foot/medical exams. Keep tests, testing blood glucose, hemoglobin A1c, complete blood counts) should be performed periodically to check for side effects and monitor your response to therapy. Check your blood sugar levels regularly as directed.

OVERDOSE
If overdose is suspected, contact your local poison control center or emergency room immediately. US residents can call the US National Poison Hotline at 1-800-222-1222. Canada residents can call a provincial poison control center. Overdose can cause lactic acidosis and slow/irregular heartbeat.

NOTES
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MISSED DOSE
If you miss a dose, take it as soon as you remember. If it is near the time of the next dose, skip the missed dose and resume your usual dosing schedule. Do not double the dose to catch up.

STORAGE
Store the US product between 68-77 degrees F (20-25 degrees C) away from light and moisture. Store the Canadian product between 59-86 degrees F (15-30 degrees C) away from light and moisture. Do not store in the bathroom. Keep all medicines away from children and pets. Properly discard this product when it is expired or no longer needed. Consult your pharmacist or local waste disposal company for more details about how to safely discard your product.

MEDICAL ALERT
Your condition can cause complications in a medical emergency. For information about enrolling in MedAlert, call 1-800-824-1168 (USA) or 1-800-566-1907 (Canada). The information in this leaflet may be used as an educational aid. This information does not cover all possible uses, actions, precautions, side effects, or interactions of this medicine. This information is not intended as medical advice for individuals patients.

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You can refill your prescription when it's convenient for you. Refills by Phone. Call the number on the prescription bottle and follow the automated instructions. Internet Refills. Order online at [www.fdb.com](#)

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FIRST DATA BANK II

PHARMACY ANSWERS™
Medication: **METFORMIN HCL 500MG TABLET**

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USES:
Metformin is used with a proper diet and exercise program to control high blood sugar in people with type 2 diabetes (non-insulin-dependent diabetes). Controlling high blood sugar helps prevent heart disease, stroke, kidney disease, blindness, circulation problems, and decreased sexual ability. Metformin belongs to the class of drugs known as biguanides. It works by helping to restore your body's proper response to the insulin you naturally produce, and by decreasing the amount of sugar that your liver makes and that your stomach/intestines absorb.

OTHER USES:
Metformin is also used in women with a certain disease of the ovaries (polycystic ovarian syndrome). By helping your body to respond better to insulin, metformin may decrease the risk of diabetes, make menstrual cycles more regular, and increase fertility.

HOW TO USE:
Read the Patient Information Leaflet if available from your pharmacist before you start using metformin and each time you get a refill. If you have any questions, consult your doctor or pharmacist. Take this medication by mouth, usually twice a day with meals or as directed by your doctor. Drink plenty of fluids while taking this medication unless otherwise directed by your doctor. The dosage is based on your medical condition and response to therapy. Your doctor may direct you to take a low dose at first, gradually increasing the dose to lower the chance of side effects such as upset stomach. Your doctor will adjust your dose based on your blood sugar levels to find the best dose for you. Follow your doctor's directions carefully. The usual maximum dose for adults is 2550 milligrams each day. If you are already taking another anti-diabetic drug (e.g., chlorpropamide), follow your doctor's directions carefully for stopping/continuing the old drug and starting metformin. Use this medication regularly in order to get the most benefit from it. Remember to use it at the same times each day. Inform your doctor if your condition persists or worsens (e.g., blood sugar levels are high). It may take up to 2 weeks for your body to adjust to the medication. If any of these symptoms persist or worsen, tell your doctor or pharmacist immediately. Stomach symptoms that occur while taking this medication because he or she has judged that the benefits of the medication outweigh the risks. This medication does not usually cause low blood sugar. However, if you drink large amounts of alcohol, do unusually heavy exercise, or do not consume enough calories from food. Symptoms include cold sweat, blurred vision, dizziness, drowsiness, shaking, fast heartbeat, headache, fainting, tingling of the hands/feet, and hunger. It is a good habit to carry glucose tablets or get to treat low blood sugar. If you don't have these reliable forms of glucose, rapidly raise your blood sugar by eating a quick source of sugar such as table sugar, honey, or candy, or drink fruit juice or non-diet soda. Tell your doctor about the reaction immediately. To help prevent low blood sugar, eat meals on a regular schedule, and do not skip meals. Check with your doctor or pharmacist to find out what you should do if you miss a meal. Symptoms of high blood sugar (hyperglycemia) include thirst, increased urination, confusion, drowsiness, flushing, rapid breathing, and fruity breath odor. If these symptoms occur, tell your doctor immediately. Your dosage may need to be increased. A very serious allergic reaction to this drug is rare. However, seek immediate medical attention if you notice any symptoms of a serious allergic reaction, including: rash, itching, swelling, severe dizziness, trouble breathing. This is not a complete list of possible side effects. If you notice other effects not listed above, contact your doctor or pharmacist.

*** To receive more printed drug information please see your pharmacist ***

The information in this monograph is not intended to cover all possible uses, directions, precautions, drug interactions, or adverse effects. This information is generalized and is not intended as specific medical advice. If you have questions about the medicines you are taking or would like more information, check with your doctor, pharmacist, or nurse.



PHARMACY ANSWERS™

SIDE EFFECTS:

See also Warning section. Nausea, stomach upset, and other side effects persist or worsen, tell your doctor or pharmacist.

find the best dose for you. Follow your doctor's directions carefully. The usual maximum dose for adults is 2550 milligrams each day, if you are already taking another anti-diabetic drug (e.g., chlorpropamide), follow your doctor's directions carefully for stopping/continuing the old drug and starting metformin. Use this medication regularly in order to get the most benefit from it. Remember to take it at the same times each day. Inform your doctor if your condition persists or worsens (e.g., blood sugar levels are high). It may take up to 2 weeks for the full benefit of this drug to take effect.

SIDE EFFECTS:

See also Warning section. Nausea, stomach upset, and other side effects persist or worsen, tell your doctor or pharmacist.

doctor immediately. Inform your doctor if you experience any of the following symptoms:

medication because he or she has judged that the benefits of continuing this medication outweigh the risks.

effects. This medication does not usually cause drowsiness, but you should not drink large amounts of alcohol, do unusually heavy exercise, or do not consume enough calories from food. Symptoms include cold sweat, blurred vision, dizziness, drowsiness, shaking, fast heartbeat, headache, lightheadedness, tingling of the hands/feet, and hunger. It is a good habit to carry glucose tablets or gel to treat low blood sugar. If you don't have these reliable forms of glucose, rapidly raise your blood sugar by eating a quick source of sugar such as table sugar, honey, or candy, or drink fruit juice or non-diet soda. Tell your doctor about the reaction immediately. To help prevent low blood sugar, eat meals on a regular schedule, and do not skip meals. Check with your doctor or pharmacist to find out what you should do if you miss a meal. Symptoms of high blood sugar (hyperglycemia) include thirst, increased urination, confusion, drowsiness, flushing, rapid breathing, and fruity breath odor. If these symptoms occur, tell your doctor immediately. Your dosage may need to be increased. A very serious allergic reaction to this drug is rare. However, seek immediate medical attention if you notice any symptoms of a serious allergic reaction, including: rash, itching, swelling, severe dizziness, trouble breathing. This is not a complete list of possible side effects. If you notice other effects not listed above, contact your doctor or pharmacist.

adjusts to the medication. If any of these side effects persist or worsen, tell your doctor or pharmacist. If you are taking this medication for several days or weeks, tell your doctor that you have been taking this medication so that he or she can check your blood sugar levels. Tell your doctor if you take other medications for diabetes, especially if you take other medications for diabetes, such as insulin, oral hypoglycemics, or oral contraceptives.

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WOLTERS I

Rx#: 8827030 Filled Date: 02/12/2008

METFORMIN HCL 500MG TAB APOT
FOR-min) 31
TAKE ONE TABLET BY MOUTH TWICE DAILY

COMMON USES: This medicine is a biguanide antidiabetic used along with a diet and exercise program to control high blood sugar in patients with type 2 diabetes. It may be used alone or with other antidiabetic medicines.

BEFORE USING THIS MEDICINE: **WARNING: THIS MEDICINE MAY RARELY CAUSE A SERIOUS AND SOMETIMES FATAL CONDITION CALLED LACTIC ACIDOSIS.** The risk of lactic acidosis may be greater if you have liver problems, kidney problems, or heart failure. The risk may also be greater in patients who are elderly or who drink alcohol. **DO NOT BEGIN TO TAKE THIS MEDICINE IF YOU ARE MORE THAN 80 YEARS OLD UNLESS LAB TESTS SHOW THAT YOU DO NOT HAVE DECREASED KIDNEY FUNCTION. CONTACT YOUR DOCTOR RIGHT AWAY IF YOU NOTICE SYMPTOMS SUCH AS muscle pain or tenderness, unusual drowsiness, dizziness or lightheadedness, slow or irregular heartbeat, fast or difficult breathing, unusual stomach discomfort, unusual weakness or tiredness, feeling of being unusually cold, or general feeling of being unwell.** Some medicines or medical conditions may interact with this medicine. **INFORM YOUR DOCTOR OR PHARMACIST** of all prescription and over-the-counter medicine that you are taking. **ADDITIONAL MONITORING OF YOUR DOSE OR CONDITION** may be needed if you are taking amiloride; beta-blockers (such as propranolol); cimetidine; digoxin; morphine; procainamide; quinidine; quinine; ranitidine; triamterene; trimethoprim; vancomycin; calcium channel blockers (such as nifedipine); corticosteroids (such as prednisone); diuretics (such as furosemide, hydrochlorothiazide); estrogen; hormonal contraceptives (such as birth control pills); insulin; isoniazid; nicotinic acid; phenothiazines (such as chlorpromazine); phenytoin; sulfonureas (such as glipizide); sympathomimetics (such as albuterol, pseudoephedrine); or thyroid hormones (such as levothyroxine). **DO NOT START OR STOP** any medicine without doctor or pharmacist approval. Inform your doctor if you drink alcohol or have a history of heart problems (such as heart failure), lung or breathing problems, thyroid problems, stomach or bowel problems (such as paralysis, blockage), adrenal or pituitary problems, lactic acidosis, or alcohol abuse. Inform your doctor of any other medical conditions including vomiting, diarrhea, poor health or nutrition, low blood calcium or vitamin B12 levels, anemia, dehydration, infection, fever, recent injury, moderate to severe burns, upcoming surgery or certain lab procedures, allergies, pregnancy, or breast-feeding. **USE OF THIS MEDICINE IS NOT RECOMMENDED** if you have congestive heart failure that is treated by medicine, a severe infection, low blood oxygen levels, kidney or liver problems, high blood ketone or acid levels (such as diabetic ketoacidosis), severe dehydration, previous stroke, a recent heart attack, or if you are in shock. **USE OF THIS MEDICINE IS NOT RECOMMENDED** if you are 80 years old or more and have not had a kidney function test, or if you will be having surgery or certain lab procedures. Contact your doctor or pharmacist if you have any questions or concerns about taking this medicine. Use of this medicine in children under age 10 is not recommended. Discuss with your doctor the risks and benefits of giving this medicine to your child.

HOW TO USE THIS MEDICINE: Follow the directions for using this medicine provided by your doctor. This medicine may come with a patient information leaflet. Read it carefully. Ask your doctor, nurse, or pharmacist any questions that you may have about this medicine. **TAKE THIS MEDICINE** with food. **DRINK PLENTY OF FLUIDS** while taking this medicine. **STORE THIS MEDICINE** at room temperature between 58 and 77 degrees F (20 and 25 degrees C), in a tightly-closed container, away from heat, moisture, and light. Brief storage between 59 and 86 degrees F (15 and 30 degrees C) is permitted. Take this medicine regularly to receive the most benefit from it. Taking this medicine at the same times each day will help you to remember. **CONTINUE TO TAKE THIS MEDICINE** even if you feel well. Do not miss any doses. **IF YOU MISS A DOSE OF THIS MEDICINE,** take it as soon as possible. If it is almost time for your next dose, skip the missed dose and go back to your regular dosing schedule. **DO NOT** take 2 doses at once.

CAUTIONS: **DO NOT TAKE THIS MEDICINE** if you have had an allergic reaction to it or are allergic to any ingredient in this product. **THIS MEDICINE MAY COMMONLY CAUSE STOMACH UPSET, INDIGESTION, NAUSEA, VOMITING, OR DIARRHEA AT THE BEGINNING OF TREATMENT.** If you develop unusual or unexpected stomach problems, or if you develop stomach problems later during treatment, contact your doctor at once. This may be a sign of lactic acidosis. **IF VOMITING OR DIARRHEA OCCURS,** you will need to take care not to become dehydrated. Contact your doctor for instructions. **THIS MEDICINE DOES NOT USUALLY CAUSE LOW BLOOD SUGAR (hypoglycemia).** However, hypoglycemia may be more likely to occur if you take this medicine along with certain other medicines for diabetes (eg, sulfonureas, insulin). It may also be more likely to occur if you skip a meal, exercise heavily, or drink alcohol. Signs of hypoglycemia include increased heartbeat, headache, chills, sweating, tremor, increased hunger, changes in vision, nervousness, weakness, dizziness, drowsiness, or fainting. It is a good habit to carry glucose tablets or gel to treat hypoglycemia. If you do not have a reliable source of glucose available, eat a quick source of sugar such as table sugar, honey, or candy, or drink a glass of orange juice or non-diet soda to quickly raise your blood sugar level. To prevent hypoglycemia, eat meals on a regular schedule and do not skip meals. **DO NOT DRIVE OR PERFORM OTHER POSSIBLY UNSAFE TASKS IF YOU HAVE SYMPTOMS OF LOW BLOOD SUGAR.** If you experience low blood sugar, tell your doctor. **KEEP ALL DOCTOR AND LABORATORY APPOINTMENTS** while you are using this medicine. Laboratory and/or medical tests such as kidney function tests, fasting blood glucose, hemoglobin A1C, or blood counts, should be done to monitor your progress or to check for side effects. **IF YOUR BLOOD SUGARS HAVE BEEN UNDER CONTROL AND ARE SUDDENLY DIFFICULT TO MANAGE,** contact your doctor as soon as possible. **BEFORE YOU HAVE ANY MEDICAL OR DENTAL TREATMENTS, EMERGENCY CARE, LABORATORY TESTS, OR SURGERY,** tell the doctor or dentist that you are using this medicine. During times of stress such as fever, infection, injury, or surgery, it may be more difficult to control your blood sugar. Consult your doctor, as a change in your medicine may be required. **DO NOT** drink large amounts of alcohol while you are taking this medicine. **TALK** to your doctor, as a change in your medicine may be required. **DO NOT** drink large amounts of alcohol while you are taking this medicine. **TALK** to your doctor, as a change in your medicine may be required.

Product Description
This medicine is a white oblong scored tablet imprinted with the following information: WOLTERS I and M1 on the other side.

1 Take with meals
2 Follow any special diet instructions very closely
3 Take medication exactly as prescribed by Dr.
4 Do not suddenly stop drug

BEFORE YOU DRINK ALCOHOL while you use this medicine. **BEFORE YOU BEGIN TAKING ANY NEW MEDICINE,** either prescription or over-the-counter, check with your doctor or pharmacist. **CAUTION IS ADVISED WHEN USING THIS MEDICINE IN THE ELDERLY** because they may be more sensitive to the effects of the medicine. Low blood sugar levels may be more difficult to recognize in the elderly. **FOR WOMEN:** **IF YOU PLAN ON BECOMING PREGNANT,** discuss with your doctor the benefits and risks of using this medicine during pregnancy. **IT IS UNKNOWN IF THIS MEDICINE IS EXCRETED** in breast milk. **DO NOT BREAST-FEED** while taking this medicine.

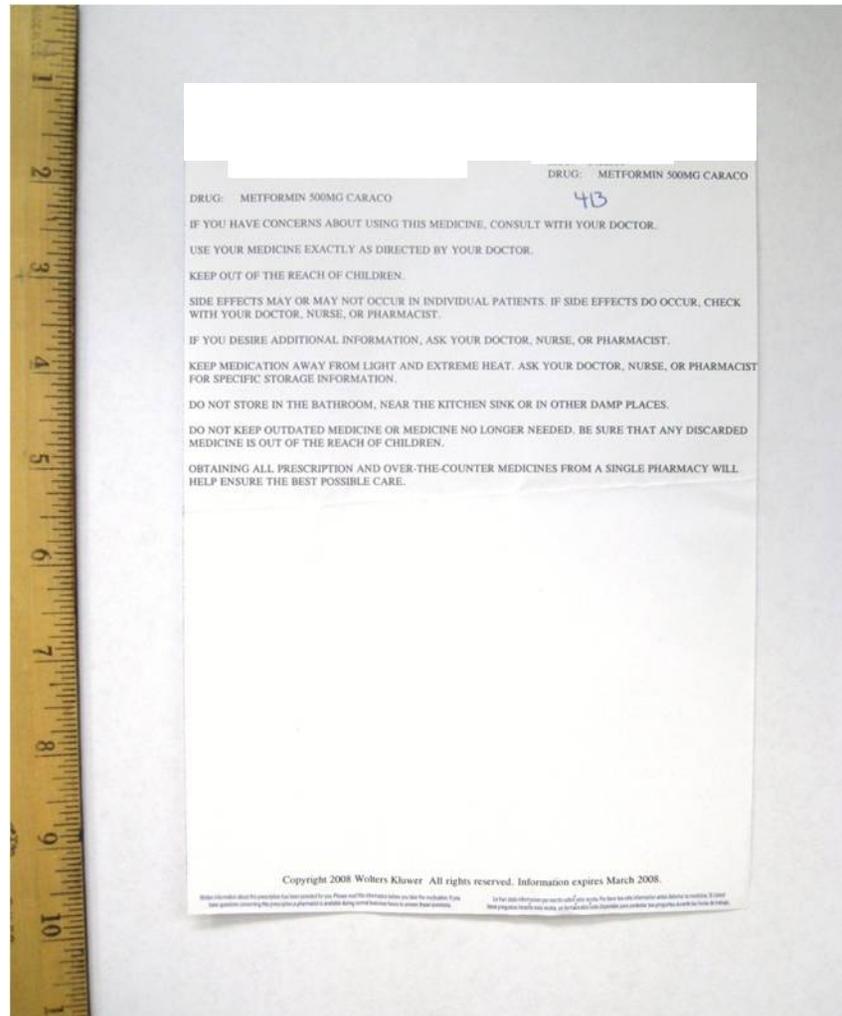
POSSIBLE SIDE EFFECTS: **SIDE EFFECTS** that may occur while taking this medicine include diarrhea, gas, headache, indigestion, nausea, stomach upset, temporary metallic taste, or vomiting. If they continue or are bothersome, check with your doctor. **CONTACT YOUR DOCTOR IMMEDIATELY** if you experience chest pain or discomfort; dizziness or lightheadedness; fast or difficult breathing; fever, chills, or persistent sore throat; feeling of being unusually cold; general feeling of being unwell; muscle pain or weakness; slow or irregular heartbeat; unusual or persistent stomach pain or discomfort; unusual drowsiness; unusual tiredness or weakness. An allergic reaction to this medicine is unlikely, but seek immediate medical attention if it occurs. Symptoms of an allergic reaction include rash, itching, swelling, severe dizziness, or trouble breathing. If you notice other effects not listed above, contact your doctor, nurse, or pharmacist.

OVERDOSE: If overdose is suspected, contact your local poison control center or emergency room immediately. Symptoms of overdose may include rapid or trouble breathing, severe drowsiness, and slow or irregular heartbeat.

ADDITIONAL INFORMATION: This medicine is not a substitute for proper diet and regular exercise. It is recommended you attend a diabetes education program to better understand diabetes, prevention of complications, and all the important aspects of its treatment. These include meals/diet, exercise, weight loss, personal hygiene, medicine and blood glucose monitoring, and the need for regular eye, foot, and medical exams. Follow your doctor's instructions carefully. **FOLLOW THE DIET AND EXERCISE PLAN** provided by your doctor. Carry an identification card at all times that says you are diabetic. Monitor your blood sugar levels regularly according to your doctor's directions. If your blood sugar level is often higher or lower than it should be prescribed. **KEEP THIS MEDICINE** out of the reach of children and pets. **IF USING THIS MEDICINE FOR AN EXTENDED PERIOD OF TIME,** obtain refills before your supply runs out.

The information in this monograph is not intended to cover all possible uses, directions, precautions, drug interactions, or adverse effects. This information is generalized and is not intended as specific medical advice. If you have questions about the medicines you are taking or would like more information, check with your doctor, pharmacist, or nurse. Copyright 2008 Wolters Kluwer Health, Inc. All rights reserved. Database Edition 08.1 Information Expires February 27, 2008

WOLTERS II



HOW DO PUBLISHERS SELECT INFORMATION FOR CMI?

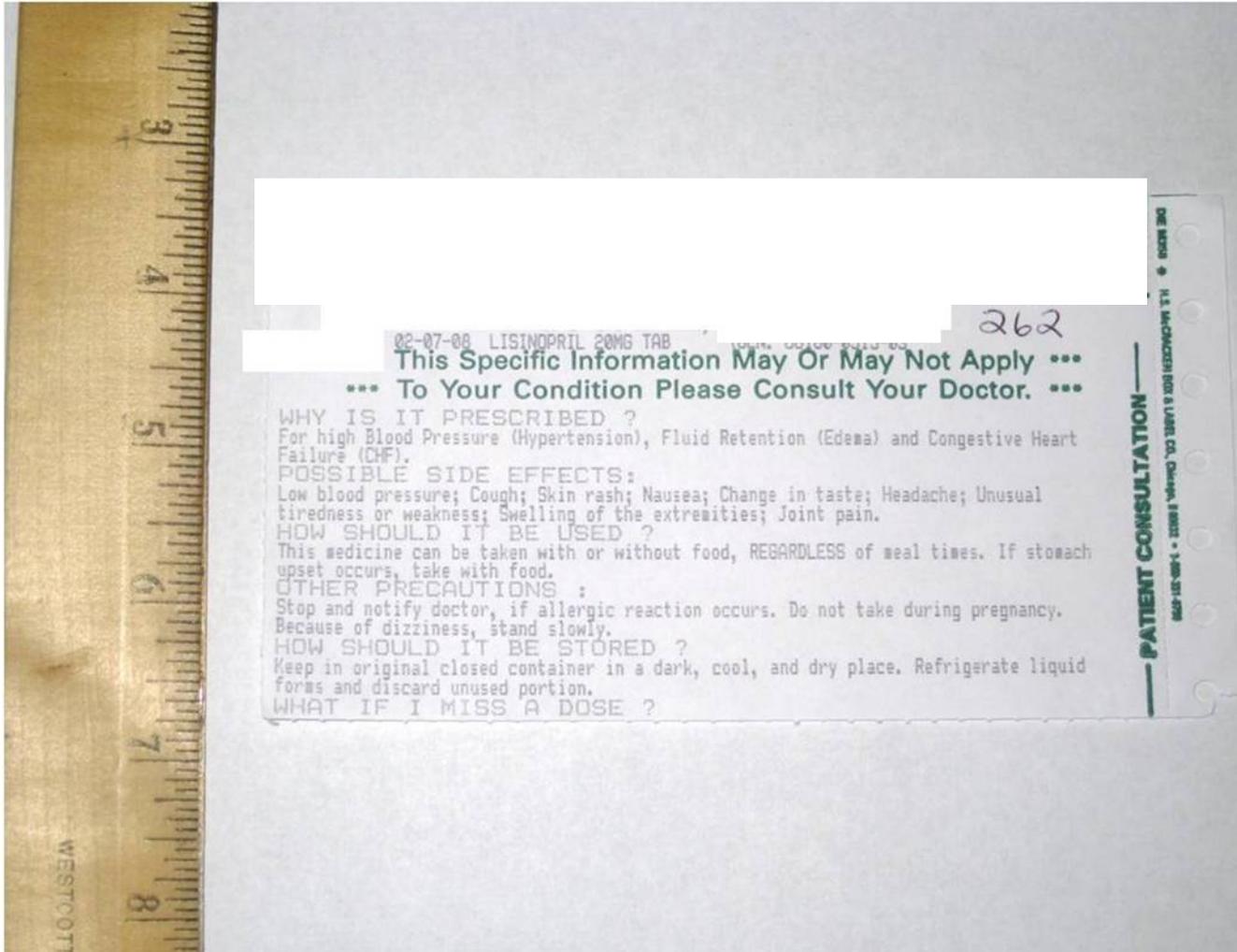
*Macrovascular Outcomes—There have been no clinical studies establishing conclusive evidence of macrovascular risk reduction with GLUCOPHAGE or GLUCOPHAGE XR or any other anti-diabetic drug. Monitoring of renal function—Metformin is known to be substantially excreted by the kidney, and the risk of metformin accumulation and lactic acidosis increases with the degree of impairment of renal function. Thus, patients with serum creatinine levels above the upper limit of normal for their age should not receive GLUCOPHAGE or GLUCOPHAGE XR. In patients with advanced age, GLUCOPHAGE and GLUCOPHAGE XR should be carefully titrated to establish the minimum dose for adequate glycemic effect, because aging is associated with reduced renal function. In elderly patients, particularly those ≥80 years of age, renal function should be monitored regularly and, generally, GLUCOPHAGE and GLUCOPHAGE XR should not be titrated to the maximum dose (see **WARNINGS and DOSAGE AND ADMINISTRATION**). Before initiation of GLUCOPHAGE or GLUCOPHAGE XR therapy and at least annually thereafter, renal function should be assessed and verified as normal. In patients in whom development of renal dysfunction is anticipated, renal function should be assessed more frequently and GLUCOPHAGE or GLUCOPHAGE XR discontinued if evidence of renal impairment is present. Use of concomitant medications that may affect renal function or metformin disposition—Concomitant medication(s) that may affect renal function or result in significant hemodynamic change or may interfere with the disposition of metformin, such as cationic drugs that are eliminated by renal tubular secretion (see **PRECAUTIONS: Drug Interactions**), should be used with caution. 21 Radiologic studies involving the use of intravascular iodinated contrast materials (for example, intravenous urogram, intravenous cholangiography, angiography, and computed tomography (CT) scans with intravascular contrast materials)—Intravascular contrast studies with iodinated materials can lead to acute alteration of renal function and have been associated with lactic acidosis in patients receiving metformin (see **CONTRAINDICATIONS**). Therefore, in patients in whom any such study is planned, GLUCOPHAGE or GLUCOPHAGE XR should be temporarily discontinued at the time of or prior to the procedure, and withheld for 48 hours subsequent to the procedure and reinstated only after renal function has been re-evaluated and found to be normal. Hypoxic states—Cardiovascular collapse (shock) from whatever cause, acute congestive heart failure, acute myocardial infarction and other conditions characterized by hypoxemia have been associated with lactic acidosis and may also cause prerenal azotemia. When such events occur in patients on GLUCOPHAGE or GLUCOPHAGE XR therapy, the drug should be promptly discontinued. Surgical procedures—GLUCOPHAGE or GLUCOPHAGE XR therapy should be temporarily suspended for any surgical procedure (except minor procedures not associated with restricted intake of food and fluids) and should not be restarted until the patient’s oral intake has resumed and renal function has been evaluated as normal. Alcohol intake—Alcohol is known to potentiate the effect of metformin on lactate metabolism. Patients, therefore, should be warned against excessive alcohol intake, acute or chronic, while receiving GLUCOPHAGE or GLUCOPHAGE XR. Impaired hepatic function—Since impaired hepatic function has been associated with some cases of lactic acidosis, GLUCOPHAGE and GLUCOPHAGE XR should generally be avoided in patients with clinical or laboratory evidence of hepatic disease. Vitamin B12 levels—In controlled clinical trials of GLUCOPHAGE of 29 weeks duration, a decrease to subnormal levels of previously normal serum vitamin B12 levels, without clinical manifestations, was observed in approximately 7% of patients. Such decrease, possibly due to interference with B12 absorption from the B12-intrinsic factor complex, is, however, very rarely associated with anemia and appears to be rapidly reversible with discontinuation of GLUCOPHAGE or vitamin B12 supplementation. Measurement of hematologic parameters on an annual basis is advised in patients on GLUCOPHAGE or GLUCOPHAGE XR and any apparent abnormalities should be appropriately investigated and managed (see **PRECAUTIONS: Laboratory Tests**). 22 Certain individuals (those with inadequate vitamin B12 or calcium intake or absorption) appear to be predisposed to developing subnormal vitamin B12 levels. In these patients, routine serum vitamin B12 measurements at two- to three-year intervals may be useful. Change in clinical status of patients with previously controlled type 2 diabetes—A patient with type 2 diabetes previously well controlled on GLUCOPHAGE or GLUCOPHAGE XR who develops laboratory abnormalities or clinical illness (especially vague and poorly defined illness) should be evaluated promptly for evidence of ketoacidosis or lactic acidosis. Evaluation should include serum electrolytes and ketones, blood glucose and, if indicated, blood pH, lactate, pyruvate, and metformin levels. If acidosis of either form occurs, GLUCOPHAGE or GLUCOPHAGE XR must be stopped immediately and other appropriate corrective measures initiated (see also **WARNINGS**). Hypoglycemia—Hypoglycemia does not occur in patients receiving GLUCOPHAGE or GLUCOPHAGE XR alone under usual circumstances of use, but could occur when caloric intake is deficient, when strenuous exercise is not compensated by caloric supplementation, or during concomitant use with other glucose-lowering agents (such as sulfonylureas and insulin) or ethanol. Elderly, debilitated, or malnourished patients, and those with adrenal or pituitary insufficiency or alcohol intoxication are particularly susceptible to hypoglycemic effects. Hypoglycemia may be difficult to recognize in the elderly, and in people who are taking beta-adrenergic blocking drugs. Loss of control of blood glucose—When a patient stabilized on any diabetic regimen is exposed to stress such as fever, trauma, infection, or surgery, a temporary loss of glycemic control may occur. At such times, it may be necessary to withhold GLUCOPHAGE or GLUCOPHAGE XR and temporarily administer insulin. GLUCOPHAGE or GLUCOPHAGE XR may be reinstated after the acute episode is resolved. The effectiveness of oral antidiabetic drugs in lowering blood glucose to a targeted level decreases in many patients over a period of time. This phenomenon, which may be due to progression of the underlying disease or to diminished responsiveness to the drug, is known as secondary failure, to distinguish it from primary failure in which the drug is ineffective during initial therapy. Should secondary failure occur with either GLUCOPHAGE or GLUCOPHAGE XR or sulfonylurea monotherapy, combined therapy with GLUCOPHAGE or GLUCOPHAGE XR and sulfonylurea may result in a 23 response. Should secondary failure occur with combined GLUCOPHAGE/sulfonylurea therapy or GLUCOPHAGE XR/sulfonylurea therapy, it may be necessary to consider therapeutic alternatives including initiation of insulin therapy.*

- Volume – what is the right amount?

- ⌘ Leaflets were rated based on presence of information, not efficiency or prioritizing of information

- ⌘ The more the better





02-07-08 LISINAPRIL 20MG TAB

262

This Specific Information May Or May Not Apply ***

***** To Your Condition Please Consult Your Doctor. *****

WHY IS IT PRESCRIBED ?

For high Blood Pressure (Hypertension), Fluid Retention (Edema) and Congestive Heart Failure (CHF).

POSSIBLE SIDE EFFECTS:

Low blood pressure; Cough; Skin rash; Nausea; Change in taste; Headache; Unusual tiredness or weakness; Swelling of the extremities; Joint pain.

HOW SHOULD IT BE USED ?

This medicine can be taken with or without food, REGARDLESS of meal times. If stomach upset occurs, take with food.

OTHER PRECAUTIONS :

Stop and notify doctor, if allergic reaction occurs. Do not take during pregnancy. Because of dizziness, stand slowly.

HOW SHOULD IT BE STORED ?

Keep in original closed container in a dark, cool, and dry place. Refrigerate liquid forms and discard unused portion.

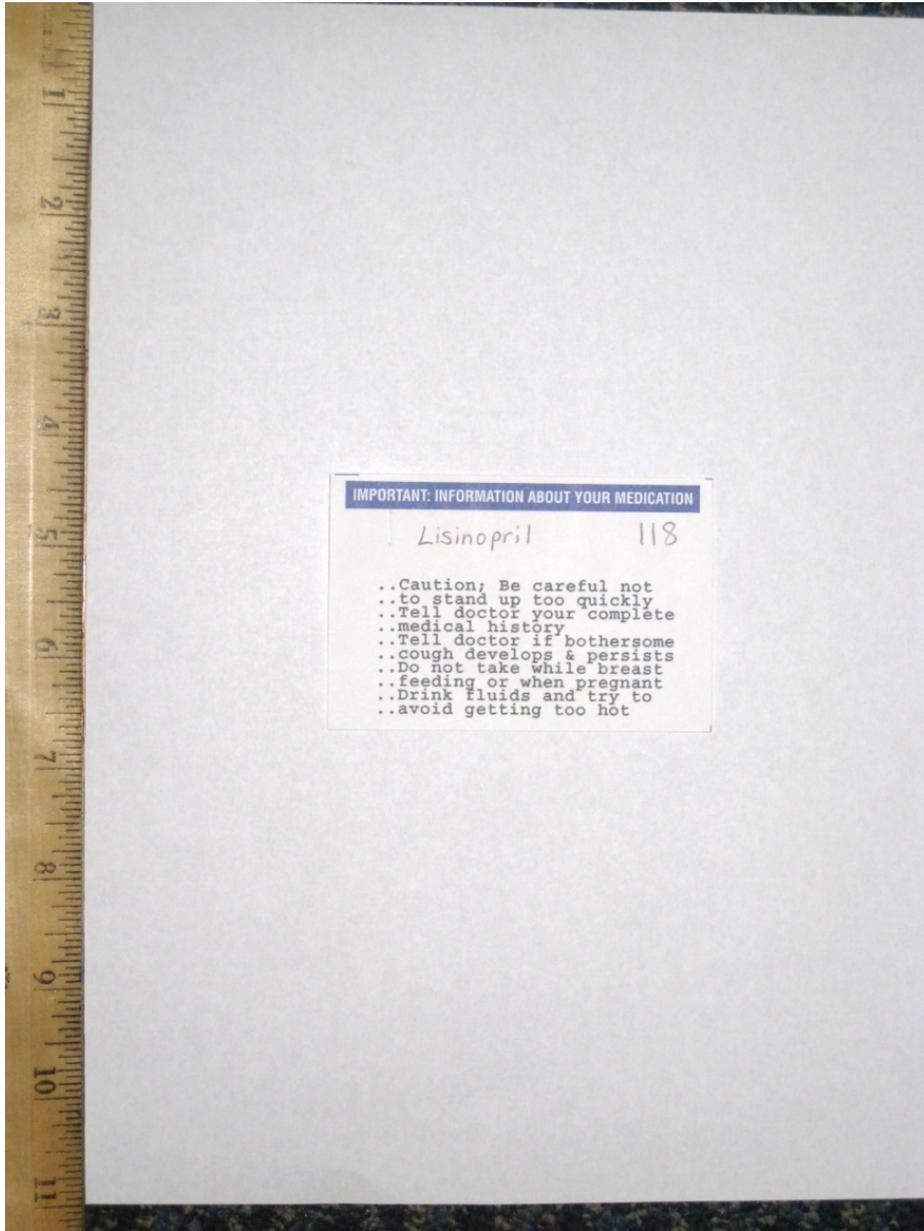
WHAT IF I MISS A DOSE ?

PATIENT CONSULTATION

800-45-0884 • 123881 WARD • 303 337-1111 • 303 337-1111

• 800M 390





IMPORTANT: INFORMATION ABOUT YOUR MEDICATION

Lisinopril 118

- ..Caution; Be careful not to stand up too quickly
- ..Tell doctor your complete medical history
- ..Tell doctor if bothersome cough develops & persists
- ..Do not take while breast feeding or when pregnant
- ..Drink fluids and try to avoid getting too hot



For: AMY SMITH

Information About ...

METFORMIN HCL 500 MG TABLET

(c) 2008 First DataBank

A Service of R020 Pharmacy Computers

OTHER NAMES

METFORMIN - ORAL, METFORMIN HCL

WARNING

Metformin can rarely cause a serious (sometimes fatal) condition called lactic acidosis. Stop taking metformin and seek immediate medical attention if you develop any of the following symptoms of lactic acidosis: unusual tiredness, severe drowsiness, chills, blue/cold skin, muscle pain, fast/difficult breathing, unusually slow/irregular heartbeat. Lactic acidosis is more likely to occur in patients who have certain medical conditions, including kidney or liver disease, conditions that may cause a low oxygen blood level or poor circulation (e.g., severe congestive heart failure, recent heart attack, recent stroke), heavy alcohol use, a severe loss of body fluids (dehydration), X-ray or scanning procedures that require an injectable iodinated contrast drug, recent surgery, or a serious infection. Tell your doctor immediately if any of these conditions occur or if you notice a big change in your overall health. You may need to stop taking metformin temporarily. The elderly are also at higher risk, especially those older than 80 years who have not had kidney tests. (See also Side Effects and Precautions sections.)

USES

Metformin is used with a proper diet and exercise program to control high blood sugar in people with type 2 diabetes (non-insulin-dependent diabetes). Controlling high blood sugar helps prevent heart disease, strokes, kidney disease, blindness, circulation problems, and decreased sexual ability. Metformin belongs to the class of drugs known as biguanides. It works by helping to restore your body's proper response to the insulin you naturally produce, and by decreasing the amount of sugar that your liver makes and that your stomach/intestines absorb.

OTHER USES

Metformin is also used in women with a certain disease of the ovaries (polycystic ovarian syndrome). By helping your body to respond better to insulin, metformin may decrease the risk of diabetes, make menstrual cycles more regular, and increase fertility.

HOW TO USE

Read the Patient Information Leaflet if available from your pharmacist before you start using metformin and each time you get a refill. If you have any questions, consult your doctor or pharmacist. Take this medication by mouth, usually twice a day with meals or as directed by your doctor. Drink plenty of fluids while taking this medication unless otherwise directed by your doctor. The dosage is based on your medical condition and response to therapy. Your doctor may direct you to take a low dose at first, gradually increasing the dose to lower the chance of side effects such as upset stomach. Your doctor will adjust your dose based on your blood sugar levels to find the best dose for you. Follow your doctor's directions carefully. The usual maximum dose for adults is 2550 milligrams each day. If you are already taking another anti-diabetic drug (e.g., chlorpropamide), follow your doctor's directions carefully for stopping/continuing the old drug and starting metformin. Use this medication regularly in order to get the most benefit from it. Remember to use it at the same times each day. Inform your doctor if your condition persists or worsens (e.g., blood sugar levels are high). It may take up to 2 weeks before the full benefit of this drug takes effect.

SIDE EFFECTS

See also Warning section. Nausea, stomach upset, diarrhea, or a metallic taste in the mouth may occur at first as your body adjusts to the medication. If any of these effects persist or worsen, tell your doctor or pharmacist promptly. If stomach symptoms return later (after you are on the same dose for several days or weeks), tell your doctor immediately. Stomach symptoms that occur after the first days of your treatment may be a sign of lactic acidosis. Remember that your doctor has prescribed this medication because he or she has judged that the benefit to you is greater than the risk of side effects. Many people using this medication do not have serious side effects. This medication does not usually cause low blood sugar (hypoglycemia). However, low blood sugar may occur, especially if you take other medications for diabetes, drink large amounts of alcohol, do unusually heavy exercise, or do not consume enough calories from food. Symptoms include cold sweat, blurred vision, dizziness, drowsiness, shaking, fast heartbeat, headache, fainting, tingling of the hands/feet, and hunger. It is a good habit to carry glucose tablets or gel to treat low blood sugar. If you don't have these reliable forms of glucose, rapidly raise your blood sugar by eating a quick source of sugar such as table sugar, honey, or candy, or drink fruit juice or non-diet soda. Tell your doctor about the reaction immediately. To help prevent low blood sugar, eat meals on a regular schedule, and do not skip meals. Check with your doctor or pharmacist to find out what you should do if you miss a meal. Symptoms of high blood sugar (hyperglycemia) include thirst, increased urination, confusion, drowsiness, flushing, rapid breathing, and a fruity breath odor. If these symptoms occur, tell your doctor immediately. Your dosage may need to be increased. A very serious allergic reaction to this drug is rare. However, seek immediate medical attention if you notice any symptoms of a serious allergic reaction, including: rash, itching, swelling, severe dizziness, trouble breathing. This is not a complete list of possible side effects. If you notice other effects not listed above, contact your doctor or pharmacist.

PRECAUTIONS

Before taking metformin, tell your doctor or pharmacist if you are allergic to it, or if you have any other allergies. This medication should not be used if you have certain medical conditions. Before using this medicine, consult your doctor or pharmacist if you have kidney disease, liver disease, conditions that may cause a low level of oxygen in the blood or poor circulation (e.g., severe congestive heart failure, recent heart attack, recent stroke), metabolic acidosis (e.g., diabetic ketoacidosis), serious infection, severe loss of body fluids (dehydration). Before using this medication, tell your doctor or pharmacist your medical history, especially of: adrenal/pituitary gland problems, severe breathing problems (e.g., obstructive lung disease, severe asthma), blood problems (e.g., anemia, vitamin B12 deficiency), fertility problems (e.g., ovulation problems), alcohol use. Before having surgery or any X-ray/scanning procedure using injectable iodinated contrast material, tell your doctor that you are taking this medication. You will need to temporarily stop this medication before the time of your surgery/procedure. Consult your doctor for further instructions. You may experience blurred vision, dizziness, or drowsiness due to extremely low or high blood sugar levels. Use caution while driving, using machinery, or taking part in any other activity that requires clear vision and alertness. Limit alcohol while using this medication to lower your risk of lactic acidosis. It may be harder to control your blood sugar when your body is stressed (e.g., due to fever, infection, injury, or surgery). Consult your doctor because this may require a change in your treatment plan, medications, or blood sugar testing. Kidney function declines as you grow older. This medication is removed by the kidneys. Therefore, elderly people may be a greater risk for side effects such as lactic acidosis or low blood sugar while using this drug. During pregnancy, this medication should be used only when clearly needed. Discuss the risks and benefits with your doctor. Your doctor may substitute insulin for this drug during your pregnancy. Follow your doctor's instructions carefully. This medication can cause changes in the menstrual cycle (promote ovulation) and increase the risk of becoming pregnant. Consult your doctor or pharmacist about the use of reliable birth control while using this medication. It is not known whether this drug passes into breast milk. This drug could have undesirable effects on a nursing infant. Therefore, breast-feeding is not recommended while using this drug. Consult your doctor before breast-feeding.

DRUG INTERACTIONS

Your doctor or pharmacist may already be aware of any possible drug interactions and may be monitoring you for them. Do not start, stop, or change the dosage of any medicine before checking with them first. Before using this medication, tell your doctor or pharmacist of all prescription and nonprescription/herbal products you may use, especially of: drugs that may affect the kidneys' ability to remove metformin from the body (e.g., cimetidine, cephalosporins, "water pills"/diuretics (e.g., furosemide, thiazide diuretics such as hydrochlorothiazide). Many drugs can affect your blood sugar levels, making it more difficult to control your blood sugar. Before you start, stop, or change any medication, talk with your doctor or pharmacist about how the medication may affect your blood sugar. Check your blood sugar levels regularly as directed by your doctor. Tell your doctor about the results and of any symptoms of high or low blood sugar. (See also Side Effects section.) Your doctor may need to adjust your anti-diabetic medication, exercise program, or diet. Some medications (e.g., beta blockers such as propranolol) may mask the high/pounding heartbeat you would usually feel when your blood sugar level falls too low (hypoglycemia). Other symptoms of low blood sugar such as dizziness, hunger, or sweating are unaffected by these drugs. Check the labels on nonprescription/herbal products carefully. Some products may contain sugar/alcohol and may affect blood sugars. Ask your doctor or pharmacist about using these products safely. Cimetidine is a nonprescription drug that is commonly used to treat extra stomach acid. Because it may interact with metformin, ask your pharmacist about other products to treat stomach acid. This document does not contain all possible interactions. Therefore, before using this product, tell your doctor or pharmacist of all the products you use. Keep a list of all your medications with you, and share the list with your doctor and pharmacist.

OVERDOSE

If overdose is suspected, contact your local poison control center or emergency room immediately. US residents can call the US National Poison Hotline at 1-800-222-1222. Canada residents can call a provincial poison control center. Overdose can cause lactic acidosis and low blood sugar. Symptoms of overdose may include: rapid breathing, severe drowsiness, slow/irregular heartbeat.

NOTES

Do not share this medication with others. You should attend a diabetes education program to learn more about diabetes and all the important aspects of its treatment, including meal/diet, exercise, personal hygiene, medications, and getting regular eye/foot/medical exams. Keep all medical appointments. Laboratory and/or medical tests (e.g., liver and kidney function tests, fasting blood glucose, hemoglobin A1c, complete blood counts) should be performed periodically to check for side effects and monitor your response to therapy. Check your blood sugar levels regularly as directed.

MISSED DOSE

If you miss a dose, take it as soon as you remember. If it is near the time of the next dose, skip the missed dose and resume your usual dosing schedule. Do not double the dose to catch up.

STORAGE

Store the US product between 68-77 degrees F (20-25 degrees C) away from light and moisture. Brief storage from 59-86 degrees F (15-30 degrees C) is permitted. Do not store in the bathroom. Store the Canadian product between 59-86 degrees F (15-30 degrees C) away from light and moisture. Do not store in the bathroom. Keep all medicines away from children and pets. Properly discard this product when it is expired or no longer needed. Consult your pharmacist or local waste disposal company for more details about how to safely discard your product.

INFORMATION LAST REVISED JANUARY 2008

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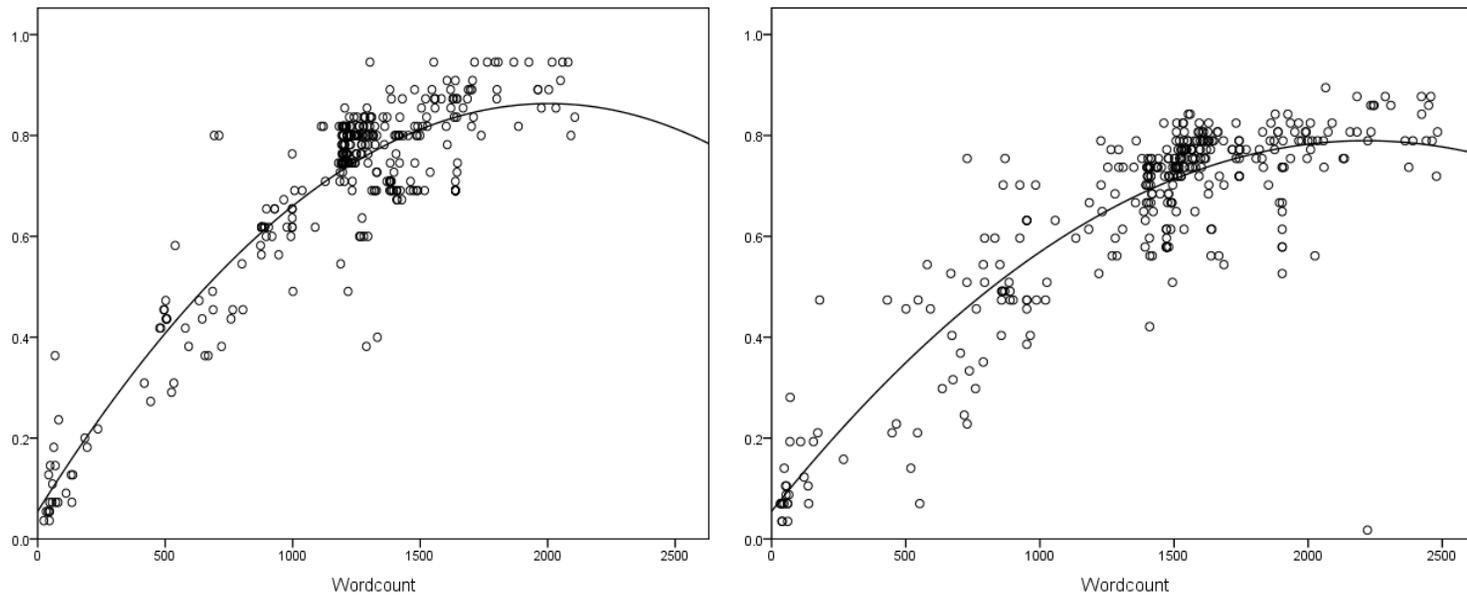
WORD EFFICIENCY

Word count distribution of leaflets with content quality >80%

	Lisinopril	Metformin
Average	1523	1918
Minimum	1112	1462
Maximum	2106	2482



CONTENT QUALITY AND WORD COUNT



Regression of word count on content quality for lisinopril and metformin (for quadratic relationship $R^2 > 0.75$)



- Format – how to organize and present the information



YOUR PERSONAL PRESCRIPTION INFORMATION

388

	MEDICATION	PATIENT ALLERGIES	DRUG DESCRIPTION
QUANTITY	METFORMIN 500MG TABLETS 20		
DIRECTIONS	TAKE 1 TABLET BY MOUTH TWICE DAILY		WHITE AND WHITE FRONT: 4331 BACK: 500
INGREDIENT NAME: METFORMIN (met-FOR-min)			
COMMON USES: This medicine is a biguanide antidiabetic used along with a diet and exercise program to control high blood sugar in patients with type 2 diabetes. It may be used alone or with other antidiabetic medicines.			
BEFORE USING THIS MEDICINE: WARNING: THIS MEDICINE MAY CAUSE A SERIOUS AND SOMETIMES FATAL CONDITION CALLED LACTIC ACIDOSIS. This is a buildup of lactic acid in your body. It is more likely to occur if you skip a meal, exercise heavily, or drink alcohol. Signs of hypoglycemia include increased heartbeat, headache, chills, sweating, tremor, increased hunger, changes in vision, nervousness, weakness, dizziness, drowsiness, or fainting. If you do not have a reliable source of glucose available, eat a quick snack or drink. Do not eat or drink until you feel better. If you do not have a reliable source of glucose available, eat a quick snack or drink. Do not eat or drink until you feel better. If you do not have a reliable source of glucose available, eat a quick snack or drink. Do not eat or drink until you feel better.			
HOW TO USE THIS MEDICINE: Follow the directions for using this medicine provided by your doctor. This medicine may come with a patient information leaflet. Read it carefully. Ask your doctor, nurse, or pharmacist any questions that you may have about this medicine. TAKE THIS MEDICINE WITH FOOD. DRINK PLenty OF FLUIDS while taking this medicine. STORE THIS MEDICINE at room temperature between 68 and 77 degrees F (and 20 degrees C), in a tightly-closed container, away from heat, moisture, and light, and away from children. Do not use this medicine if the seal is broken or if the container is damaged. Take this medicine regularly to receive the most benefit from it. Take this medicine every day, even if you do not feel better. Do not miss any doses. If you miss a dose of this medicine, take it as soon as possible. If it is almost time for your next dose, skip the missed dose and go back to your regular dosing schedule. DO NOT take 2 doses at once.			
CAUTIONS: DO NOT TAKE THIS MEDICINE if you have had an allergic reaction to it or an allergy to any component in the medicine. THIS MEDICINE MAY COMMONLY CAUSE STOMACH UPSET, NAUSEA, VOMITING, OR DIARRHEA AT THE BEGINNING OF TREATMENT. If you develop unusual or unexpected stomach problems, or if you develop stomach problems later during treatment, contact your doctor at once. This may be a sign of lactic acidosis. If VOMITING OR DIARRHEA OCCURS, you will need to take care not to become dehydrated. Contact your doctor for help. THIS MEDICINE DOES NOT USUALLY CAUSE LOW BLOOD SUGAR (hypoglycemia). However, hypoglycemia may be more likely to occur if you take this medicine along with certain other medicines for diabetes (eg, sulfonylureas, insulin). It may also be more likely to occur if you skip a meal, exercise heavily, or drink alcohol. Signs of hypoglycemia include increased heartbeat, headache, chills, sweating, tremor, increased hunger, changes in vision, nervousness, weakness, dizziness, drowsiness, or fainting. If you do not have a reliable source of glucose available, eat a quick snack or drink. Do not eat or drink until you feel better. If you do not have a reliable source of glucose available, eat a quick snack or drink. Do not eat or drink until you feel better.			



Questions? Ask yo

MEDICATION LISINAPRIL 20 MG TABLET

DIRECTION
TAKE 1 TABLET BY MOUTH EVERY MORNING

IMPORTANT NOTE
THIS IS A SUMMARY AND DOES NOT CONTAIN ALL POSSIBLE INFORMATION ABOUT THIS PRODUCT. FOR COMPLETE INFORMATION ABOUT THIS PRODUCT OR YOUR SPECIFIC HEALTH NEEDS, ASK YOUR HEALTH CARE PROFESSIONAL. ALWAYS SEEK THE ADVICE OF YOUR HEALTH CARE PROFESSIONAL IF YOU HAVE ANY QUESTIONS ABOUT THIS PRODUCT OR YOUR MEDICAL CONDITION. THIS INFORMATION IS NOT INTENDED AS INDIVIDUAL MEDICAL ADVICE AND DOES NOT SUBSTITUTE FOR THE KNOWLEDGE AND JUDGMENT OF YOUR HEALTH CARE PROFESSIONAL. THIS INFORMATION DOES NOT CONTAIN ANY ASSURANCES THAT THIS PRODUCT IS SAFE, EFFECTIVE, OR APPROPRIATE FOR YOU. LISINAPRIL - ORAL (lyse-IN-oh-pri)

COMMON BRAND NAME(S)
Prinivil, Zestril

WARNING
This drug can cause serious (possibly fatal) harm to an unborn baby if used during pregnancy. Therefore, it is important to prevent pregnancy while taking this medication. Consult your doctor for more details and to discuss the use of reliable forms of birth control while taking this medication. If you are planning pregnancy, become pregnant, or think you may be pregnant, contact your doctor immediately.

USES
This drug belongs to a group of medications called ACE inhibitors. It is used to treat high blood pressure (hypertension) in adults and in children 6 years of age and older. It works by relaxing blood vessels, causing them to widen. High blood pressure reduction helps prevent strokes, heart attacks and kidney problems. This medication is also used after an acute heart attack to improve survival, and is used with other drugs (e.g., "water pills"/diuretics, digoxin) to treat congestive heart failure.

OTHER USES
This section contains uses of this drug that are not listed in the approved professional labeling for the drug but that may be prescribed by your health care professional. Use this drug for a condition that is listed in this section only if it has been so prescribed by your health care professional. This medication may also be used to help protect the kidneys from damage due to diabetes.

HOW TO USE
Take this medication by mouth, usually once a day or as directed by your doctor. You may take this drug with or without food. Use this medication regularly in order to get the most benefit from it. To help you remember, use it at the same time each day. If you are taking this drug in the liquid suspension form, shake the bottle well before each use. Measure the dose out carefully. Do not take potassium supplements or

salt substitutes containing potassium without talking to your doctor or pharmacist first. This medicine can raise your potassium levels, which rarely can cause serious side effects such as muscle weakness or very slow heartbeats. Tell your doctor immediately if these effects occur. The dosage is based on your medical condition and response to therapy. For the treatment of high blood pressure, it may take 2 to 4 weeks before the full benefit of this drug occurs. It may take several weeks or months to see the full benefit when this drug is used for congestive heart failure. It is important to continue taking this medication even if you feel well. Most people with high blood pressure do not feel sick.

SIDE EFFECTS
You may experience headache, dizziness, lightheadedness, fatigue, nausea, diarrhea, dry cough or blurred vision as your body adjusts to the medication. If any of these effects persist or worsen, notify your doctor or pharmacist promptly. Remember that your doctor has prescribed this medication because he or she has judged that the benefit to you is greater than the risk of side effects. Many people using this medication do not have serious side effects. Tell your doctor immediately if any of these unlikely but serious side effects occur: fainting, decreased sexual ability, chest pain. Tell your doctor immediately if any of these highly unlikely but very serious side effects occur: change in the amount of urine, vision changes, signs of infection (e.g., fever, chills, persistent sore throat). This drug may rarely cause serious (possibly fatal) liver problems. If you notice any of the following highly unlikely but very serious side effects, seek immediate medical attention: yellowing of the eyes or skin, dark urine, stomach/abdominal pain, persistent fatigue, persistent nausea. A very serious allergic reaction to this drug is rare. However, seek immediate medical attention if you notice any symptoms of a serious allergic reaction, including: rash, itching, swelling (especially of the face, lips, tongue, or throat), severe dizziness, trouble breathing. This is not a complete list of possible side effects. If you notice other effects not listed above, contact your doctor or pharmacist.

PRECAUTIONS
Before taking lisinopril, tell your doctor or pharmacist if you are allergic to it; or to other ACE inhibitors (e.g., captopril, benazepril); or if you have any other allergies (including an allergic reaction after exposure to certain membranes used for blood filtering). This medication should not be used if you have certain medical conditions. Before using this medicine, consult your doctor or pharmacist if you have: history of an allergic reaction which included swelling of the face/lips/tongue/throat (angioedema). Before using this medication, tell your doctor or pharmacist your medical history, especially of: kidney disease, liver disease, high blood levels of potassium, heart problems, severe dehydration (and loss of electrolytes such as sodium), diabetes (poorly controlled), strokes, blood vessel disease (e.g., collagen vascular diseases such as lupus, scleroderma). This drug may make you dizzy; use caution engaging in activities requiring alertness such as driving or using machinery. Limit alcoholic beverages. To minimize dizziness and lightheadedness due to lowering of your blood pressure, get up slowly when rising from a seated or lying position. Serious loss of body water can also lower your blood pressure and worsen dizziness. Drink adequate fluids to prevent from becoming dehydrated. If you are on restricted fluid intake, consult your doctor for further instructions. Be careful not to become too overheated during exercise which can lead to excessive sweating. Consult your doctor if you experience severe vomiting or diarrhea. Before having surgery, tell your doctor or dentist that you are taking this medication. Caution is advised when using this drug in the elderly because they may be more sensitive to the effects of the drug, especially the dizziness effect. This medication is not recommended for use during pregnancy due to the risk for harm to an unborn baby. Consult your doctor for more details. (See also Warning section.) It is not known if this drug passes into breast milk. Breast-feeding is not recommended due to the potential harm to the nursing infant. Consult your doctor before breast-feeding.

You can refill your prescription when it's convenient for you. Refills by Phone. Call the number on prescription bottle and follow the automated instructions. Internet Refills. Order online. Call your doctor for medical advice about side effects. You may report side effects to FDA at 1-800-FDA-1088.

LISINAPRIL 20 MG TABLET DAW: 0
NDC: 00378-2075-01 QTY: 10 DAYS SUPPLY: 10

PHARMACY
PAY: \$10.99

MEDICATION WARNINGS

MAY CAUSE DIZZINESS IT IS VERY IMPORTANT THAT YOU USE THIS EXACTLY AS DIRECTED. DO NOT STOP DOSES OR DISCONTINUE UNLESS DIRECTED BY YOUR DOCTOR.

THIS DRUG MAY IMPAIR THE ABILITY TO DRIVE OR OPERATE MACHINERY. USE CARE UNTIL YOU BECOME FAMILIAR WITH ITS EFFECTS. SOME NON-PRESCRIPTION DRUGS MAY INTERACT WITH YOUR CONDITION. READ ALL PACKAGE WARNINGS. CONTACT YOUR DOCTOR IF NEEDED.

DO NOT TAKE THIS DRUG IF YOU BECOME PREGNANT

MAY CAUSE A DRY COUGH IF THE DRY COUGH PERSISTS OR BECOMES DISTRESSING. REPORT TO YOUR DOCTOR

THIS MEDICINE MAY BE TAKEN WITH OR WITHOUT FOOD




236

DRUG NAME: LISINAPRIL 20MG TAB LUPIN

APPEARANCE

PATIENT EDUCATION

GENERIC NAME: LISINAPRIL (lyse-IN-oh-pril)

COMMON USES: This medicine is an angiotensin converting enzyme (ACE) inhibitor used to treat high blood pressure. It may also be used with other medicine to treat congestive heart disease or to improve survival in some patients after a heart attack. This medicine may be used to treat other conditions as determined by your doctor.

BEFORE USING THIS MEDICINE. WARNING: This drug can cause serious fetal harm if used during the last six months of pregnancy. If pregnancy occurs, stop using this drug and immediately contact your physician. Some medicines or medical conditions may interact with this medicine. **INFORM YOUR DOCTOR OR PHARMACIST** of all prescription and over-the-counter medicine that you are taking, aspirin, phenothiazines (such as thioridazine or chlorpromazine), diuretics (such as hydrochlorothiazide, furosemide, aprinolactone, or triamterene), certain medicines for diabetes (such as glyburide, glipizide, tolbutamide, or insulin), pergolide, clozapine, eplerenone, indomethacin, lithium, potassium, azathioprine, or trimethoprim. Inform your doctor of any other medical conditions including a recent heart attack or other heart problems; blood vessel problems (such as aortic stenosis or stroke); kidney problems; hemodialysis; liver problems; electrolyte problems; a salt-restricted diet; lupus or scleroderma; diabetes; blood or bone marrow problems; allergies; pregnancy; or breast-feeding. **USE OF THIS MEDICINE IS NOT RECOMMENDED** if you have a history of unusual swelling of your face, neck, throat, tongue, lips, or trunk (angioedema). Use of this medicine in children who have severe kidney problems or are under age 6 is not recommended. Discuss with your doctor the risks and benefits of giving this medicine to your child. Contact your doctor or pharmacist if you have any questions or concerns about taking this medicine.

HOW TO USE THIS MEDICINE: Follow the directions for using this medicine provided by your doctor. This medicine may be taken on an empty stomach or with food. **STORE THIS MEDICINE** at room temperature in a tightly-closed container away from heat, moisture, and light. Do not freeze. Take this medicine regularly, to receive the most benefit from it. Taking this medicine at the same times each day will help you to remember. **CONTINUE TO TAKE THIS MEDICINE** even if you feel well. Do not miss any doses. **IF YOU MISS A DOSE OF THIS MEDICINE** and you are taking 1 dose daily, take the missed dose if you remember the same day. Skip the missed dose if you do not remember until the next day. **DO NOT** take 2 doses at once.

CAUTIONS: DO NOT TAKE THIS MEDICINE if you have had an allergic reaction to it, to other ACE inhibitors, or if you are allergic to any ingredient in this product. **DO NOT EXCEED THE RECOMMENDED DOSE** without checking with your doctor. **IT MAY TAKE 2 TO 4 WEEKS** for this medicine to work. Do not stop using this medicine without checking with your doctor. Laboratory and/or medical tests including liver function, kidney function, blood pressure, blood counts, and blood electrolytes may be performed to monitor your progress or to check for side effects. **KEEP ALL DOCTOR AND LABORATORY APPOINTMENTS** while you are taking this medicine. **BEFORE YOU HAVE ANY MEDICAL OR DENTAL TREATMENTS, EMERGENCY CARE, OR SURGERY,** tell the doctor or dentist that you are using this medicine. **THIS MEDICINE MAY CAUSE dizziness, lightheadedness, or fainting, especially when you begin taking this medicine. DO NOT DRIVE, OPERATE MACHINERY, OR DO ANY OTHER POTENTIALLY DANGEROUS TASKS.** If dizziness occurs, sit up or stand slowly. **DRINK PLENTY OF FLUIDS** during exercise or other activities where excessive sweating may occur. **THIS MEDICINE MAY CAUSE increased sensitivity to the sun.** Avoid exposure to the sun, sunlamps, or tanning booths until you know how you react to this medicine. Use a sunscreen or protective clothing if you must be outside for a prolonged period. **IF YOU EXPERIENCE difficulty breathing, tightness of chest; swelling of eyelids, face, or lips; or if you develop a rash or hives, tell your doctor immediately.** Do not take any more of this medicine unless your doctor tells you to do so. **RARELY, THIS MEDICINE MAY LOWER YOUR RESISTANCE TO INFECTION.** This risk may be increased if you have certain other health problems (such as kidney problems or collagen vascular disease). Prevent infection by avoiding contact with people with colds or other infections. Do not touch your eyes or the inside of your nose unless you have thoroughly washed your hands first. **DO NOT USE A SALT SUBSTITUTE** or other potassium supplement without checking with your doctor. **BEFORE YOU BEGIN TAKING ANY NEW MEDICINE,** either prescription or over-the-counter, check with your doctor or pharmacist. **CAUTION IS ADVISED WHEN USING THIS MEDICINE IN THE ELDERLY** because they may be more sensitive to the effects of the medicine. **FOR WOMEN: USE OF THIS MEDICINE DURING PREGNANCY** has resulted in fetal and newborn death. If you think you may be pregnant, contact your doctor immediately. **IT IS UNKNOWN** if this medicine is excreted in breast milk. **DO NOT BREAST-FEED** while taking this medicine. **IF YOU HAVE DIABETES** and you take insulin or other medicine to treat diabetes (such as glyburide or metformin), this medicine may affect your blood sugar. This is most likely to occur within the first month after you start this medicine. Check blood sugar levels closely and ask your doctor before adjusting the dose of your diabetes medicine. **MONITOR BLOOD GLUCOSE** on a regular basis, as directed by your doctor.

POSSIBLE SIDE EFFECTS: SIDE EFFECTS, that may occur while taking this medicine include headache, drowsiness, dizziness or lightheadedness, tiredness, weakness, and cough. If they continue or are bothersome, check with your doctor. **CHECK WITH YOUR DOCTOR AS SOON AS POSSIBLE** if you experience fast or irregular heartbeat; prolonged nausea, vomiting, or diarrhea; a change in the amount of your urine; unusual joint pain; or unusual muscle pain, cramps, or weakness. **CONTACT YOUR DOCTOR IMMEDIATELY** if you experience swelling of hands, legs, face, lips, eyes, throat, tongue, or trunk; difficulty swallowing or breathing; severe dizziness; lightheadedness; fainting; hoarseness; chest pain; unusual stomach pain; yellowing of the skin or eyes; darkening of your urine; sore throat; or fever. **AN ALLERGIC REACTION** to this medicine is unlikely, but seek immediate medical attention if it occurs. Symptoms of an allergic reaction include rash, itching, swelling, severe dizziness, or trouble breathing. If you notice other effects not listed above, contact your doctor, nurse, or pharmacist.

OVERDOSE: If overdose is suspected, contact your local poison control center or emergency room immediately.

ADDITIONAL INFORMATION: DO NOT SHARE THIS MEDICINE with others for whom it was not prescribed. **DO NOT USE THIS MEDICINE** for other health conditions. **KEEP THIS MEDICINE** out of the reach of children. **IF YOU WILL BE TAKING THIS MEDICINE FOR AN EXTENDED PERIOD OF TIME,** be sure to obtain necessary refills before your supply runs out.

The information in this monograph is not intended to cover all possible uses, directions, precautions, drug interactions, or adverse effects. This information is generalized and is not intended as specific medical advice. If you have questions about the medicines you are taking or would like more information, check with your doctor, pharmacist, or nurse. Copyright 2008 Wolters Kluwer Health, Inc. All rights reserved. Database Edition 08.1 Information Expires February 27, 2008



- Distractors – how to maintain focus on critical information



PATIENT INFORMATION

Medication Name: METFORMIN 500MG TAB AURO

This medicine is used as an adjunct to diet and exercise to improve glycemic (blood sugar) control in patients with type 2 diabetes.

- Read the patient information provided by the manufacturer before you start taking this medicine, and each time you get your prescription filled.
- Tell your doctor if you have kidney disease or metabolic acidosis.
- Tell your doctor if you have ever had an allergic reaction to metformin or any other component of this medicine.
- Follow your doctor's advice on diet, exercise, sleep, personal hygiene, and how to monitor your blood sugar.
- The manufacturer states that periodic laboratory testing is important with this medicine. Be sure to make all testing appointments.
- Avoid drinking excessive alcoholic beverages.
- Tell your doctor about all other prescription and nonprescription (OTC) medicines, vitamin/mineral supplements, natural products and herbal remedies you are taking.
- Some OTC medicines (decongestants, aspirin) have a warning on their label advising persons with diabetes not to take them unless directed by a doctor. If you see such a warning on the label of an OTC medicine, ask your doctor or pharmacist if it is okay for you to take the OTC product.
- **WOMEN:** Notify your doctor if you become or intend to become pregnant or nurse a child while taking this medicine.

Keep this medicine out of the reach of children.

How to take this medicine:

Take this medicine as instructed by your doctor. The manufacturer recommends that this medicine be taken with meals. If you forget to take a dose, take it as soon as possible unless it is almost time for your next dose. Do not double your dose unless directed by your doctor. Store this medicine at room temperature in a tightly closed container protected from light and heat.

Side Effects

Side effects are possible with any medicine, but they are usually not severe enough to cause the patient to interrupt or stop taking the medicine. Nausea, vomiting, diarrhea, gas, upset stomach, indigestion and headache may occur. Stop taking this medicine and contact your doctor right away if you develop symptoms of lactic acidosis such as feeling weak, tired or uncomfortable, unusual muscle pain, trouble breathing, unusual or unexpected stomach discomfort, feeling cold, dizzy or lightheaded, or slow or irregular heartbeat. Hypoglycemia may also occur, not from the medicine, but from your condition. Hypoglycemia may cause sweating, dizziness, irregular heartbeat, tremor, restlessness, headache, and anxiety. If these symptoms occur, you should eat or drink a quick source of sugar such as candy or orange juice. It is best to always carry a source of sugar with you. Hypoglycemia may cause drowsiness, thirst, flushed face, loss of appetite, and a fruity odor on your breath. If these occur contact your doctor right away. If you have any other bothersome side effects, tell your doctor.

This information is an educational aid for the use of this medicine. It is not medical advice for individual patients and does not list all possible uses, side effects, interactions or cautions about this medicine. If you have any questions or concerns with your medicine or condition, discuss them with your doctor or pharmacist. Call your doctor for medical advice about side effects. You may report side effects to FDA at 1-800-FDA-1088.

943,9470, 02/26/2004, Supplement 17, H-5826, AML, DR-02/20/2004, NDC: 4484200001, 1484, 14712

NUTRIENT NEWS

Helpful Information to Keep Your Body in Balance

The type of medicine you are taking is called a **biguanide**. It's important that you continue to take your prescribed medicine exactly as directed by your doctor. But sometimes taking biguanides can decrease certain nutrients in your body that are necessary to keep your body healthy and in balance.

If you're taking any of these prescription medicines:

- Glucophage (Metformin)



Vitamin B9 (Folic Acid)

Aids metabolism of proteins and is necessary for growth and division of body cells.

Vitamin B12

Helps maintain a healthy nervous system and is necessary for carbohydrate, fat, and protein metabolism.

These supplements are available at this pharmacy.
Ask your pharmacist about these supplements.

This information is brought to you by your pharmacist and is not to be used to prevent, treat, diagnose or cure any disease. Always talk to your doctor before using this or any other health information.

Source: www.wbmd.com

Why you should take your METFORMIN

**On time,
Every time.**

You and your doctor have decided to treat your type 2 diabetes with METFORMIN. It's important to take your medicine exactly as directed by your doctor. It helps your body utilize insulin more effectively. By taking METFORMIN "on time, every time" and trying never to miss a dose, you can receive the full benefit of your medicine.

Getting started with METFORMIN

- It is best to take METFORMIN at about the same time every

you take

all scheduled appointments for this testing.

- Taking your medicine is important, but your treatment plan should also include eating healthy foods and proper exercise. Talk to your doctor about the best plan for you.
- Limit your consumption of alcohol while on this medication as directed by your doctor.

To learn more about METFORMIN,
read the information provided by your
pharmacist or contact your doctor.



Make your bedroom an ideal place to sleep

Your bedroom should be quiet and relaxing. Unwelcome noise or light, an uncomfortable or worn-out mattress, or a room that is too warm or too cool can prevent you from getting the sleep you need. There's no reason to settle for anything less than a good night's sleep.

Make your bedroom a sleep sanctuary.

Is your bedroom conducive to a good night's sleep? These four factors can make a difference:

- Mattress and Foundation** ☉ Be sure your mattress and foundation meet your needs for both comfort and support. If you sleep with a partner, your mattress should also allow you both enough space to move easily.
- Light** ☉ Light is one of the body's most powerful time cues. The rising sun can wake up the brain long before the alarm goes off. A dark room is the most conducive for sleep – day or night.
- Noise** ☉ Sudden, loud noises from inside or outside the home can disrupt sleep. Steady, low sounds, such as the whirl of a fan or air conditioner, are soothing because they help block out distracting noises.
- Temperature** ☉ The ideal bedroom temperature is 60 to 65 degrees Fahrenheit (16 to 18 degrees Celsius). A room that's too warm or too cool can disrupt comfortable sleep.

For more information, visit the Better Sleep Council's Web site at www.bettersleep.org.

Source: www.bettersleep.org

This information is for your general interest and may not be directly related to your condition or medication

SKIN, HAIR & NAIL TIPS FOR BUSY PEOPLE



Include these basic guidelines in your daily routine to enjoy better skin, hair, and nail health all year.

- **Practice sun defense.** It is possible to get a sunburn on cloudy or snowy days. Pack sunscreen if you plan on skiing, hiking, or doing other outdoor activities.
- **Moisturize.** Choose a moisturizer with sunscreen that has a Skin Protection Factor (SPF) of at least 15. Apply it to your face, neck, and the top of your hands and arms every day. The best time to moisturize your body is right after you shower. This is because the extra moisture makes it easier to apply and adds protection.
- **Take care of dry skin.** This can be one of the biggest challenges in the winter. To keep your skin healthy, avoid harsh soaps, excessive bathing, and low humidity. When you go outside, cover your skin with gloves, scarves, and a hat. Use lip balm to prevent chapped lips.
- **Never neglect your nails.** You should apply moisturizer to your nails to protect them from the sun and cold weather. Nails should be kept at a reasonable length. Do not share nail clippers and make sure your shoes fit properly. If you have your nails manicured professionally, make sure they use sterile instruments.
- **Have good hair days.** If possible, wear a hat when you go outside to protect your hair and scalp. Use leave-in conditioners that contain blockers that act as a sunscreen.
- **Know your skin.** Examine your skin once a month. It only takes ten minutes to do a self-examination and check for any changes on the skin. See a dermatologist for any skin problems that develop, such as a rash, itch, or growth. Always check with your dermatologist when in doubt about specific products.
- **Pay attention to excessive sweating.** Dermatologists can help people who sweat too much. If medical antiperspirants fail, doctors can perform procedures that reduce sweat glands and sweating.

For more information, visit www.aad.org.

Source: American Academy of Dermatology

We'll match any local prescription price you find.

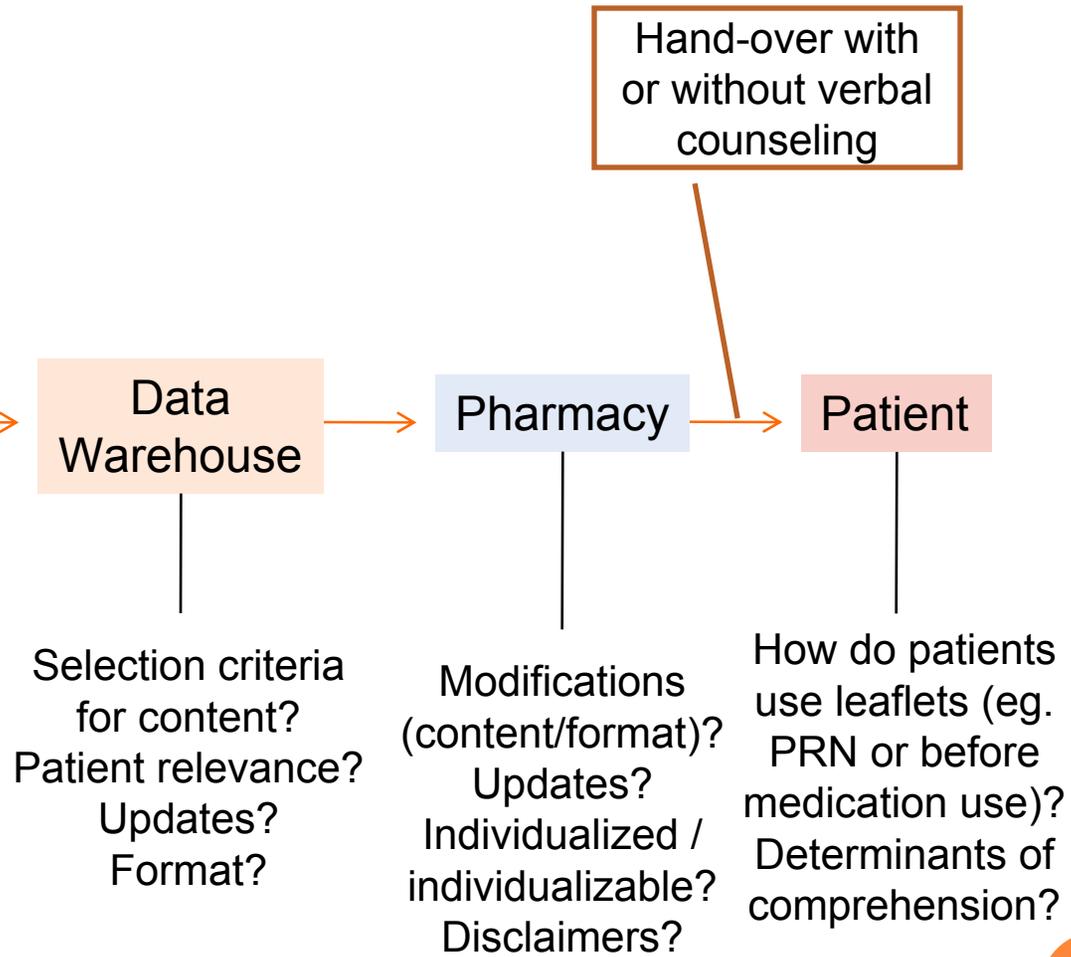
Some restrictions apply.



DISCUSSION – RESEARCH AGENDA SURROUNDING CMI



What is the evidence base for labeling information?



PROPOSED FUTURE RESEARCH QUESTIONS

- What information in the label is clinically significant?
- What criteria for CMI content selection should be used?
 - ⌘ Clinical significance/severity
 - ⌘ Prevalence
 - ⌘ Importance for self management
 - ⌘ Relevance to individual patient
 - ⌘ Legal protection
- Are there better media than a leaflet?
- How does verbal counseling during dispensing change the usefulness of CMI?
- How does any of the above affect comprehension and patient ability to make informed decisions regarding medication use?

