

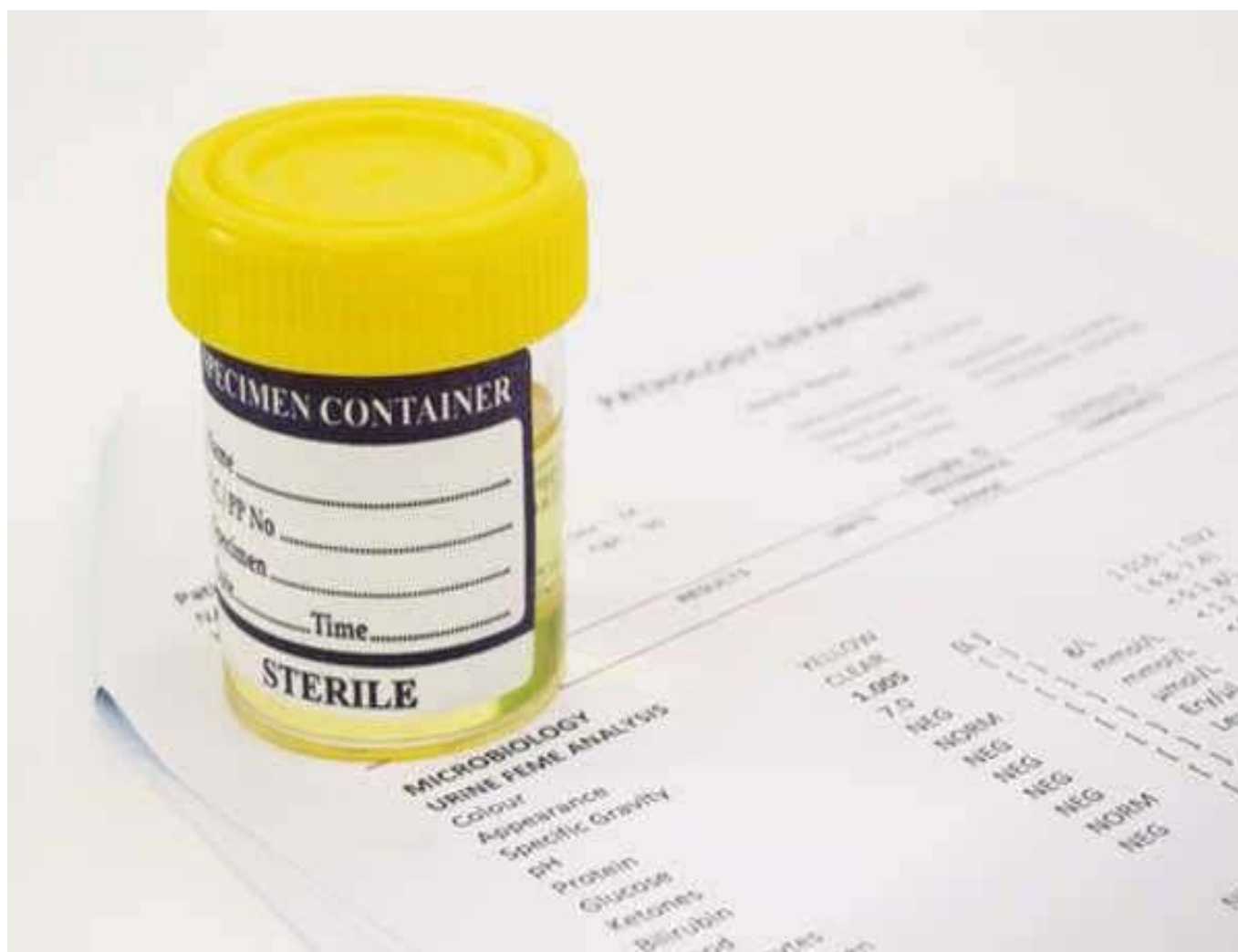
# Chemicals, Drugs and Disease Induced Urine Discoloration

04/29/2019

Executive Officers

Drug Information Center

Gujarat State Pharmacy Council



# Concerned about your urine color? Know its meaning

## Urine color and its shades, says lot about your body and overall health.

Color of urine and its shades may indicate various conditions ranging from “need not to worry” to “something really serious”. Observing and noting the color of the urine may help you to spot disease conditions ahead of time and get preventative treatments. For a pharmacist, this knowledge is crucial and may help in patient counseling.

This article features the drugs, chemicals or disease condition responsible for the discoloration of urine.

Keywords:

**DMCR**= Disease & Medical condition related, **DR**= Drug Related, **AC** = acid urine, **AL** = alkaline, **F** = fluorescent, **H** = hematuria, **M** = metabolite, **OS** = on standing, **C** = contact with hypochlorite solution from prior use of chlorine toilet bowl cleaner



<p><b>DMCR</b> Acute hemolytic anemia (H) Malaria (H) Extensive burns (H) Hemoglobinuria Tyrosinosis (OS, AL) Alcaptonuria (OS) Malignant melanoma (OS)</p>	<p><b>DR</b> Cascara (AL) Cotrimazine Cotrimoxazole Cresols (OS) Fava bean (H) Ferrous salts Iron Dextran (OS) Levodopa (OS) Melanin (OS) Methocarbamol (OS)</p>	<p>Methyldopa Naphthalene (H) Pamaquine (H) Phenacetin (OS) Phenols (OS) Pyrogallol (OS) Quinine (H) Rhubarb (AL) Sulfonamides (H) Thymol (OS)</p>
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<p><b>DMCR</b> Blue diaper syndrome</p> <p><b>DR</b> Anthraquinone laxatives Arbutin Azuresin Bile pigments</p>	<p>Carbolic acid Evans blue Indigo blue Indigo carmine Methocarbamol (OS) Methylene blue Mitoxantrone Nitrofurans</p>	<p>Pseudomonas bacteriuria Resorcinol Tetrahydronaphthalene Thymol Tolonium Triamterene (pale, F)</p>
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Blue-  
Green

<p><b>DMCR</b> Chronic obstructive jaundice</p> <p><b>DR</b> Anthraquinone laxatives Arbutin Azuresin Bile pigments</p>	<p>Blutene Boric acid Carbolic acid Dithiazanine iodide Indigo blue Indigo carmine Indigotin sulfonate Magnesium salicylate</p>	<p>Methylene blue Pseudomonas bacteriuria Resorcinol Tetrahydronaphthalene Thymol Tolonium Typhus</p>
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Brown

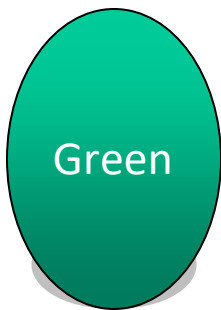
<p><b>DMCR</b> Acute febrile disease Alcaptonuria Black water fever Hemoglobinuria</p> <p><b>DR</b> Aminopyrine Aniline Anthraquinone dyes (AL) Blood Cascara (AL) Chloroquine Cinchophen Cresols (OS)</p>	<p>Eosin dyes Danthron Dipyron Furazolidone Furoxone Hydroquinone Levodopa (OS) Methocarbamol (OS) Methyldopa Metronidazole (H) Naphthalene (H) Nitrofurans Nitrofurantoin Pamaquine (H) Phenacetin (OS)</p>	<p>Phenols (OS) Phenylhydrazine Primaquine (H) Pyrogallol (OS) Quinine (H) Rhubarb (AL) Rifabutin Rifampin Senna (AL) Sodium diatrizoate Sulfonamides (H) Tannins Thymol (OS) Tiopronin Tyrosinosis (OS, AL)</p>
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Brownish  
Black

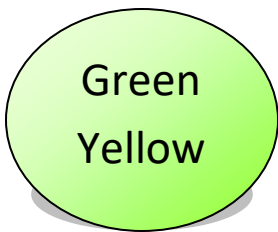
<p><b>DR</b> Erythryl tetranitrate Isosorbide mono- or dinitrate Methocarbamol</p>	<p>Methyldopa Metronidazole Nitrates Nitrofurans Phenacetin</p>	<p>Povidone iodine Quinine (H) Senna (AL) Tyrosinosis (AL)</p>
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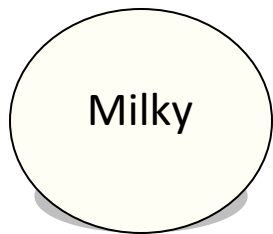
<p><b>DMCR</b></p> <p>Alcaptonuria (homogentisic acid)</p> <p>Dehydration</p> <p><b>DR</b></p> <p>Aniline dyes</p> <p>Cadmium</p> <p>Cascara (AL)</p> <p>Chlorobenzenes</p> <p>Chloronaphthalene</p> <p>Dacium</p> <p>Furazolidone</p> <p>Furoxone</p>	<p>Hydroquinone</p> <p>Iron sorbitex Levodopa (OS)</p> <p>Melanin (OS)</p> <p>Metronidazole</p> <p>Naphthol</p> <p>Niridazole</p> <p>Nitrites</p> <p>Nitrobenzene (OS)</p> <p>P-aminosalicylic acid</p> <p>Phenacetin (OS)</p> <p>Phenol (OS)</p> <p>Phenyl salicylate</p>	<p>Primaquine</p> <p>Pyrogallol (OS)</p> <p>Quinine (H)</p> <p>Resorcinol</p> <p>Rhubarb (AL)</p> <p>Riboflavin</p> <p>Santonin</p> <p>Senna</p> <p>Thymol (OS)</p> <p>Tolcapone</p> <p>Trinitrotoluene</p> <p>Trinitrophenol</p> <p>Tyrosinosis (OS, AL)</p>
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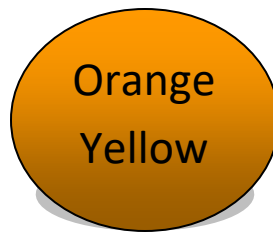
<p><b>DMCR</b></p> <p>Chronic obstructive jaundice</p> <p>Jaundice</p> <p><b>DR</b></p> <p>Acriflavine (F)</p> <p>Amitriptyline</p> <p>Anthraquinone</p> <p>Arbutin</p> <p>Azuresin</p> <p>Bile pigments</p> <p>Bromoform</p>	<p>Carbolic acid</p> <p>Chlorophyll, water soluble</p> <p>Creosote</p> <p>Gadolinium texaphyrin</p> <p>Guaiacol</p> <p>Hydroquinone</p> <p>Indigo blue</p> <p>Indigo carmine</p> <p>Indomethacin (hepatotoxicity)</p>	<p>Methocarbamol (OS)</p> <p>Methylene blue</p> <p>Nitrofurans</p> <p>Phenols (OS)</p> <p>Phenyl salicylate</p> <p>Propofol</p> <p>Pyrogallol (OS)</p> <p>Resorcinol (OS)</p> <p>Santonin</p> <p>Suprofen</p> <p>Tetrahydronaphthalene</p> <p>Thymol (OS)</p>
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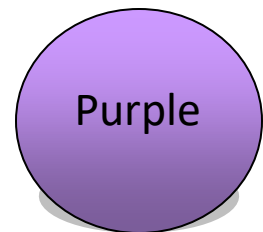
**DR**-Bromoform  
DeWitts Pills  
Methylene Blue  
Nitazoxanide



**DMCR** -Diffuse glomerulonephritis, Bacteria  
**DR**- Chloroguanide  
Phosphates, Urates



**DR**-Fluorescein sodium,  
Rifampin  
Sulfasalazine



**DMCR** -Indwelling urinary catheters (long-term),  
**DR** -Phenolphthalein

Orange

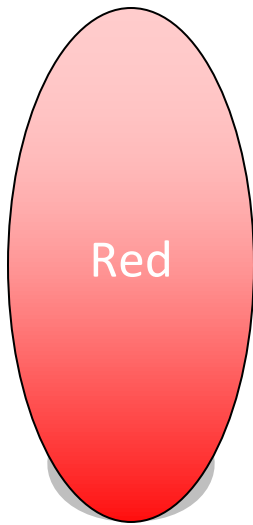
<b>DMCR</b> Dehydration in children	Dihydroergotamine mesylate Entacapone Ethoxazene	Rhubarb (AL) Rifabutin Rifampin
<b>DR</b> Anisindione (AL) Canthaxanthines Chlorzoxazone Chrysophanic acid	Heparin sodium Mannose Paprika Phenindione Phenzaopyridine (AL)	Salicylazosulfapyridine Sulfasalazine Warfarin

Pink

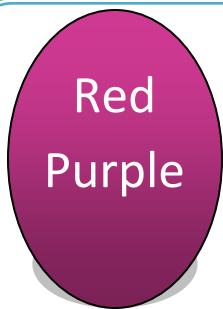
<b>DR</b> Aminopyrine Anisindione Anthraquinone dyes (AL) Aspirin Benorilate Cascara Chrysophanic acid Cinchophen Danthron (AL) Deferoxamine	Dipyrrone Emodin (H) Eosin dyes (H) Ethoxazine Merbromin (F) Methyldopa Phenazopyridine (AC) Phenindione Phenolphthalein (A) Phenothiazines Phensuximide Phenytoin	Porphyrins Propofol Rhodamine Salicylates (H) Santonin (AL) Senna Serenium Thiazolsulfone Urates 1,8-Dihydroxyanthraquinone
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Red-Orange-Brown

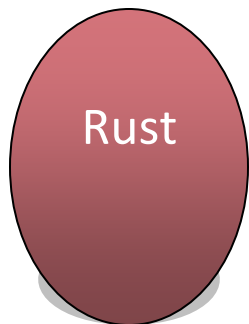
<b>DMCR - Bile</b> <b>DR</b> Anisindione (AL) Chlorzoxazone Congo red (AL)	Doxidan with PSP Ethoxazene Furazolidone Phenazopyridine	Phenindione (AL) Rifampin Rifapentine Warfarin
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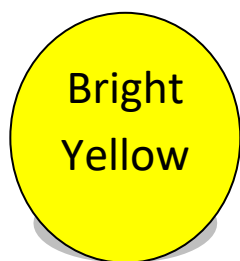
<b>DMCR</b>	Dimethylsulfoxide	Oxamniquine
Beets	Danthone (AL)	Oxyphenbutazone
Blackberries	Daunorubicin	Phenacetin (M, H)
Bile pigments	Deferiprone	Phenazopyridine (AC)
Blood	Deferoxamine	Phenolphthalein (AL)
Diffuse – glomerulonephritis	Dihydroergotamine mesylate	Phenolsulfonphthalein (AL)
Hematuria	Dipyron	Phenothiazines
Hemoglobinuria	DMSO	Phensuximide
Infectious - mononucleosis	Doxorubicine	Phenylbutazone
Myoglobinuria	Emodin (AL)	Phenytoin
<b>DR</b>	Eosin dyes (H)	Propyphenazone
Acetanilid	Ethoxazene	Porphyryns
Acetophenazine	Fava bean (H)	Rhodamine
Aminopyrine	Fuscin	Rifampin
Aniline	Heparin	Santonin
Aniline dyes	Homogenistic acid	Senna (AL)
Anthraquinone (AL)	Ibuprofen	Serenium
Antipyrine	Iron sorbitol	Sulfonal
Azo dye	Logwood	Tolcapone
Cardiografin	Madder	Thiazolsulfone
Cascara (AL)	Melanin	Trional
Chloroquine	Methemoglobin	Tyrosinosis
Chlorpromazine	Methyldopa (OS, in the presence of hypochlorite)	Urates
Chrysarobin (AL)	Naphthalene (H)	Uro-Erythrin
Chrysophanic acid	Nitrofurantoin	1, 8- Dihydroxyanthraquinone
Cinchophen		



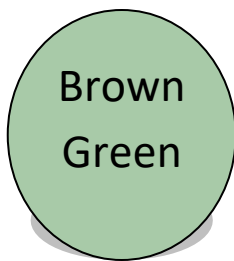
<b>DR</b>	Methemoglobin	Porphyryns
Chlorzoxazone	Phenacetin	Senna (AL)
Ibuprofen	Phenolsulfonphthalein	



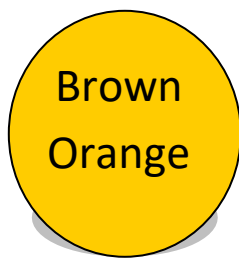
<b>DMCR</b> Acute febrile disease Dehydration	Chloroquine Furazolidone Furoxone Metronidazole Nitrofurantoin Pamaquine (H) Phenacetin (OS) Picric acid Primaquine Pyrogallol (OS)	Quinacrine (AC) Rhubarb (AC) Riboflavin Santoin Senna (AC) Sulfonal Sulfonamides (H) Trinitrophenol Trional Urates
<b>DR</b> Acetanilid Acetophenazine Acriflavine Aloin Bromoform Carrots Cascara (AC, AL)		



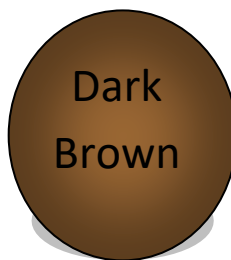
Flavin



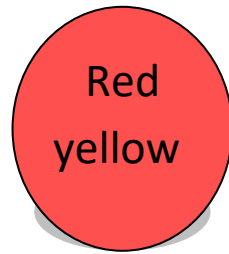
Hydroquinone



Entacapone



Acute febrile disease



Urates