

MEDICATIONS WITHOUT ALCOHOL

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Hazards posed by alcohol to one's health are well documented^{1 2 3 4}. Acknowledgement of the harmful effects of alcohol has come in the form of sustained opposition to its use from the individuals, institutions, nations and religions^{6 7 8 9 10} all over the world. It is curious to note, however, that all the opposition has been directed at the use and/or abuse of alcohol as a beverage. Its medicinal use had either been condoned or tolerated. Commonly given reasons for this tolerance include "the realization" that the "amount consumed is "insignificant" or the "knowledge" that alcohol is "necessary" for preparations of certain medications.

Our research indicates that the above reasons are based on inaccurate information. The alcohol content of beers may be in the range of three to six percent, that of wines may range from eight to fifteen percent and that of hard liquor may reach up to thirty-five percent or more^{5 11}. Many of the liquid medications have an alcohol content of five to ten percent¹². However, some medications may even contain up to twenty-five percent¹². When this level is considered along with the amount of the medication prescribed, the net amount of alcohol consumed per day or for the duration of treatment does not exactly remain "insignificant." For example, the patient receiving a prescription for Elixophyllin (in therapeutic doses) may each day receive up to eight ounces of the medication which contains alcohol that is twice the level in wine. Even Nyquil, a "cold remedy", has twenty-five percent alcohol and the recommended dosage is two to four ounces a day. We also found that the alcohol, though excellent as a solvent and a preservative, is not necessary for preparation of medications. Water insoluble materials can be made soluble by creating some alteration of the material itself or of the surrounding solution. Such alterations include alteration of the surface tension of the material by using certain emulsifying or surface active agents such as polyethylene glycol, tweens, spans, and others; or alteration of the chemical structure of the material by synthesizing water-soluble salt, which has the same pharmacologic effect; or by changing the character of the substances through freeze-drying or spray-drying process; or modification of the pH of the solution by adding an appropriate buffer. Each of these methods is more suited for use with certain materials than with others. Another way to produce a liquid preparation is the suspension method where

the active ingredient is not made soluble but is maintained in a suspension for a limited period of time. Thus it is possible to prepare alcohol-free, safe and effective medications.

Aside from the fact that the above arguments can be made to convince someone who looks at the issue from a purley health point of view, there remains the question of satisfying the person who does not wish to consume **any** amount of alcohol for religious reasons.

To address the above issues effectively, we have started to compile a non-alcoholic pharmacopoeia. As part of that rather ambitious project, we submit the following partial list of indexed and classified list of alcohol-free preparations available in the United States. We hope to make the physicians and the patients aware of the choices available to them and to update the list periodically.

(A) Alcohol-Free Non-Prescription Drugs

NAME OF PRODUCT	MANUFACTURER
Allergy Relief Products	
Triaminic Syrup	Dorsey
Analgesics	
Liquiprin	Norcliff Thayer
Anti-Motion Sickness, Anti-Nauseants	
Dramamine Liquid	Searle
Dramamine Jr. Liquid	Searle
Cold Preparations (Antihistamines & Combination)	
Ryna Liquid	Wallace
Triaminic Syrup	Dorsey
Tussagesic Suspension	Dorsey
Decongestants	
Triaminicol Decongestant Cough Syrup	Dorsey
Tussagesic Suspension	Dorsey
Antitussives	
Ryna-C Liquid	Wallace
Triaminic DM Cough Formula	Dorsey
Triaminicol Cough Syrup	Dorsey
Tussagesic Suspension	Dorsey

Expectorants		
Fedahist Expectorant & Syrup	Dooner	
Ryna - CX Liquid	Wallace	
Triaminic DM Cough Formula	Dorsey	
Tussagesic Suspension	Dorsey	

Hematinics		
Troph-Iron Liquid	Menley James	

Multivitamins with Minerals		
Tri-Vi-Drops (Pediatric)	Mead-Johnson	
Troph-Iron Liquid	Menley James	

In addition to the above list, liquid Antacids do not contain Alcohol.

(B) Alcohol-Free Prescription Drugs (Liquid Preparations)

NAME OF PRODUCT MANUFACTURER

Analgesics		
Capital with Codine Suspension	Carnick	

Antiarthritics		
Arthropan Liquid	Purdue Frederick	

Antiasthma		
Elixicon Suspension	Berlex	
Slo-Phyllin 80 Syrup	Dooner	
Slo-Phyllin GG Syrup	Dooner	
Theoclear 80 Syrup	Central Pharmacial	

Antibiotics (Broad & Med. Spectrum)

E. E. S. 200 Liquid	Abbott	
E. E. S. 400 Liquid	Abbott	
E-mycin E. Liquid	Upjohn	
Terramycin Syrup	Pfizer	
Wyamycin E. Liquid	Wyeth	
Prostaphlin Oral Solution	Bristol	

Antihistaminics

Anamine Syrup	Mayrand	
Comhist Liquid	Baylor	
Dextrotussin Syrup	Lambla	
Dramamine Liquid & Jr. Liquid	Searle	
Fedahist Expectorant	Dooner	
Triaminic Syrup	Dorsey	

Antihyperammonia		
Cephulac Syrup		Merrell-National

Anti-Inflammatory Agents (Salicylates)		
Arthropan Liquid		Purdue Frederick

Anti-Motion Sickness		
Dramamine Liquid		Searle

Antinauseants		
Dramamine Liquid		Searle

Antipyretics		
Arthropan Liquid		Purdue Frederick

Bronchial Dilators		
Isuprel HCl Solution 1:100 & 1:20		Breon
Aerolate Liquid		Fleming
Slo-Phyllin 80 Syrup		Dooner
Somophyllin Oral Liquid		Fisons
Theoclear 80 Syrup		Central Pharmacial

Cardiovascular		
Antiarrhythmics		
Isuprel HCl Solution		Breon

Antihypertensives		
Diuril Oral Suspension		Merck Sharp & Dohme

Coronary Vasodilators		
Aerolate Liquid		Fleming
Theoclear 80 Syrup		Central Pharmacial

Cold Preparations (Non-Narcotic)

Dextrotussin Syrup		Lambda
Fedahist Expectorant & Syrup		Dooner
Ryna Liquid		Wallace
Triaminic Syrup		Dorsey

Cough Preparations (Non-Narcotic)

Dextrotussin Syrup		Lambda
Triaminic Cough Syrup (Decongest.)		Dorsey
Sorbutuss Sugar-free for Diabetics		Dalin

Cough Preparations (With Narcotics)

Ryna-C Liquid		Wallace
Ryna-CX Liquid		Wallace

Decongestants

Anamine Syrup	Mayrand
Dextrotussin Syrup	Lambda
Ryna Liquid	Wallace
Triaminicol	Dorsey

Decongestants, Expectorants, and Combinations

Dextrotussin Syrup	Lambda
Fedahist Expectorant	Dooner
Ryna-C Liquid	Wallace
Ryna-CX Liquid	Wallace
Triaminic DM Cough Formula	Dorsey
Triaminicol Decongestant	Dorsey

Diuretics (Thiazides)

Diuril Suspension	Merck Sharp & Dohme
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Fluorine Preparations

Luride Drops	Hoyt
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Hematinics (Folic Acid)

Feraplex Liquid	Lambda
Feostat Suspension & Drops	O'Neal, Jones & Feldman

Laxatives

Chronulac Syrup	Merrell-National
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Mucolytics

Pima Syrup	Fleming
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Muscle Relaxants (Smooth)

Theoclear 80 Syrup	Central Pharmcal
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Sympathomimetics & Combinations

Aerolate Liquid	Fleming
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Anamine Syrup	Mayrand
Combist Liquid	Baylor
Isuprel HCl Solution	Breon
Triaminicol	Dorsey

Tranquilizers

Atarax Syrup	Roerig
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Vitamins

Feraplex Liquid	Lambda
Aquasol A Drops	USV Pharmaceutical
KIE Syrup	Laser
LiCitrate Liquid	Philips Roxane

In addition to the above list, liquid Antibiotics and similar preparations which are sold as powders for the preparation of suspensions by mixing with water do not contain alcohol.

References

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