

# PARKINSON'S DISEASE

## CONCEPTS IN DRUG INTERACTIONS AND PAIN MANAGEMENT

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CLINICAL PHARMACIST**

SPONSORED BY  
DRAGONFLY BOTANICA APOTHECARY & TEAS



# Dr. Sal's Credentials



- Doctor Of Pharmacy Columbia University In The City Of New York
- Clinical Practice Residency Lenox Hill Hospital, NY
- Medication Therapy Management Certification
- Certification In Pharmacogenomic Management
- Licensed In New York and Florida
- Faculty Appointments Columbia & Belmont University
- Sr. Science Advisor Men's Health Network, Washington DC
- Chair-Emeritus, American Public Health Assoc. Men's Health Section
- Author/Co-Author > 80 peer-reviewed & general publications on health

**Practicing over 45 years - and counting!**

## *Caveats*

**This presentation is of general information and not to be taken as a professional consultation.**

**Discuss any questions or concerns with your health care provider. Do not stop or start any medications without discussion with a provider.**

**Can not do personal reviews at this program. Can answer general questions. Personal comprehensive reviews can be done by appointment.**

**I don't know all potential interactions by memory!**

**In the US there are marketed:**

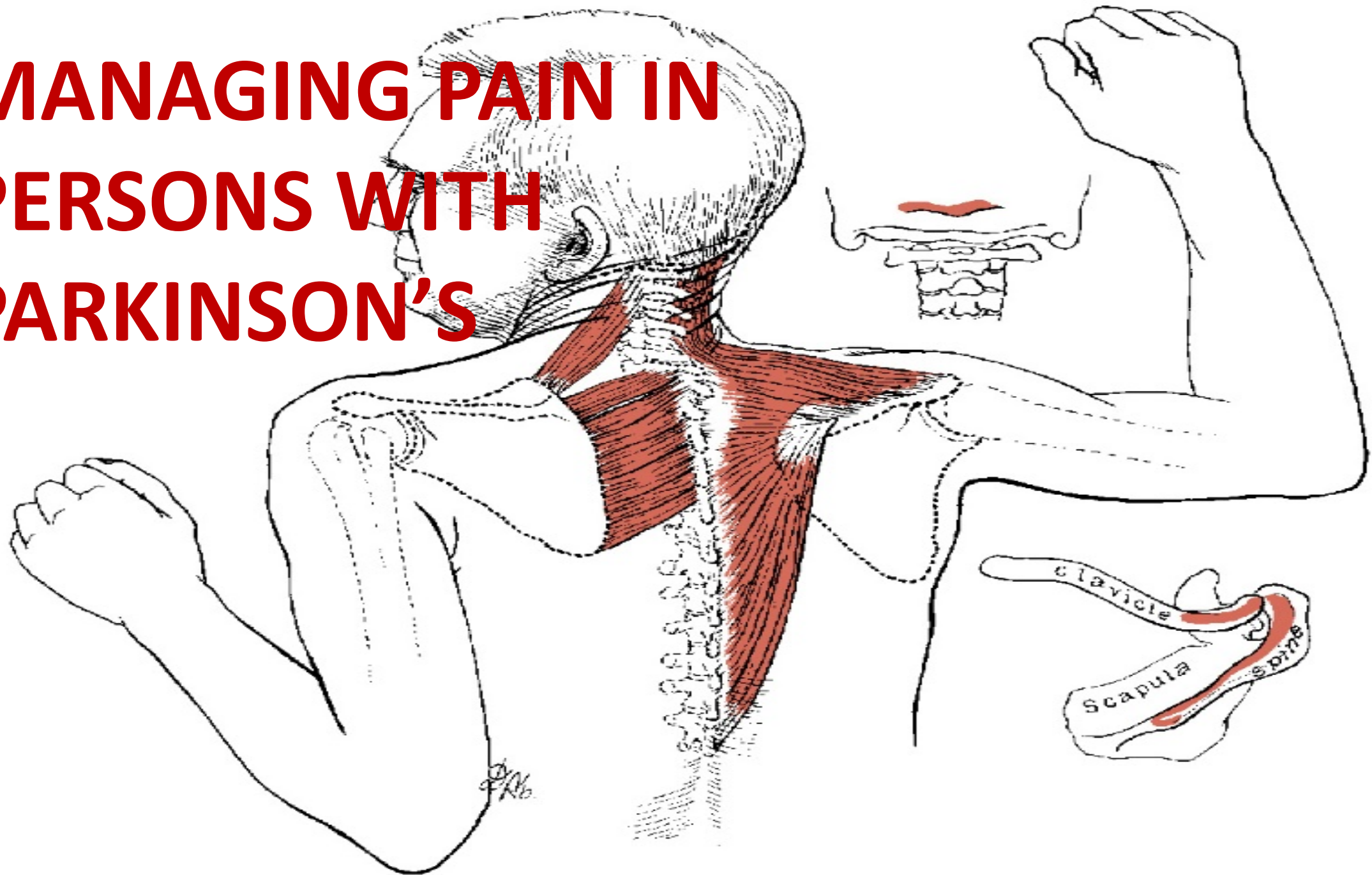
**over 20,000 different prescription medications in the US**

**over 100, 000 different over the counter (OTC) medications & Supplements**

**approximately 300 commonly used herbal products**

**Food - food - food...lots of different things**

# MANAGING PAIN IN PERSONS WITH PARKINSON'S



# CAUSES OF PAIN DUE TO PARKINSON'S

*PRIMARY MECHANISM OF DISEASE IMPACTS ALL OF THE BODY*

- LOCAL MUSCULAR STIFFNESS
  - ABDOMINAL PAIN (*CONSTIPATION*)
  - DYSKINESIA
- DYSTONIA (TOE-POSTURE)  
CENTRAL (BRAIN) PAIN  
*(Diffuse Or Localized – 10%)*

## OTHER CAUSES OF PAIN

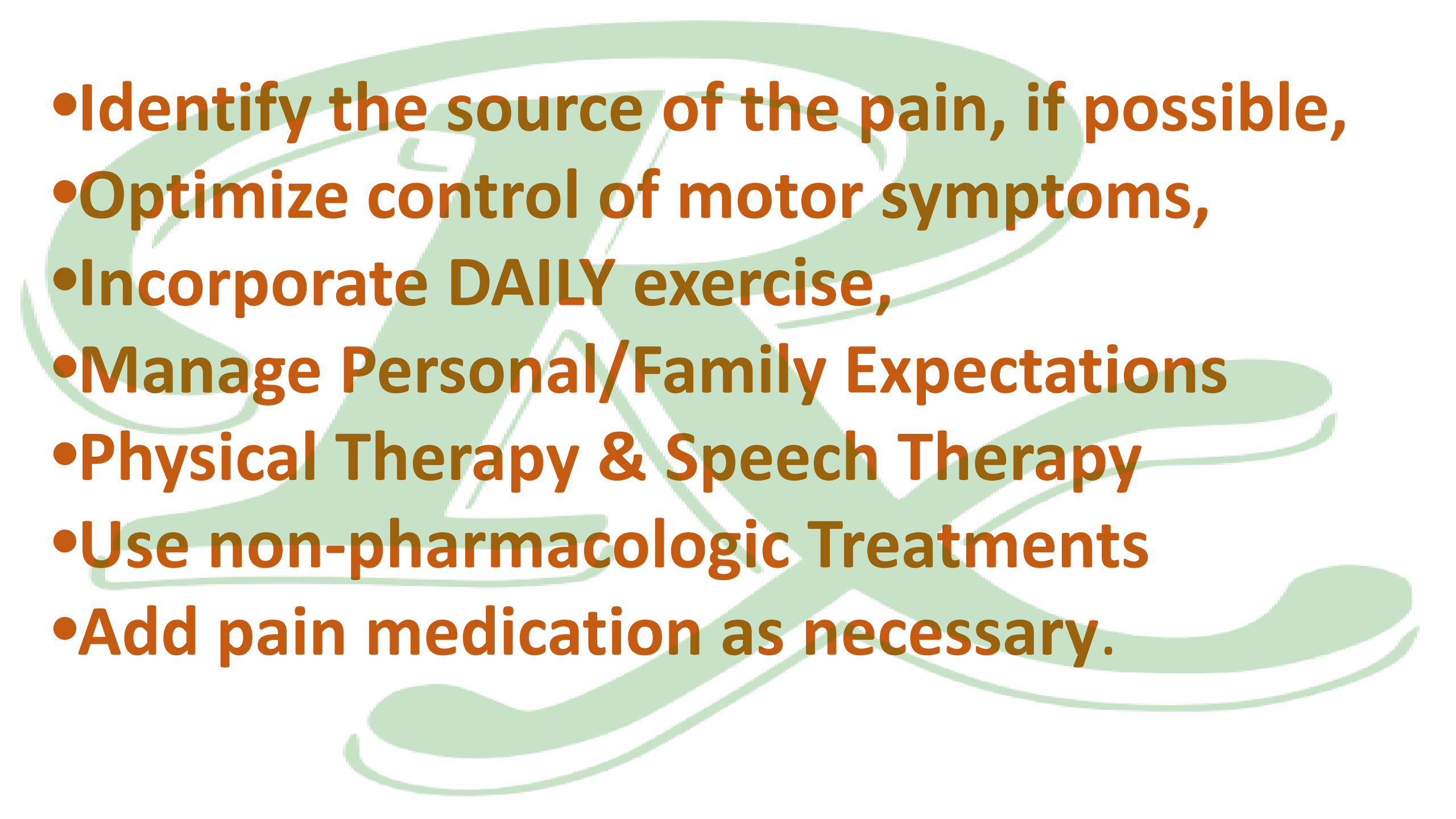
- EVERYDAY STUFF
- ARTRITIC
- SIATICA

SKELETAL MUSCULAR  
NEUROPATHY

*Et Cetera Et Cetera Et Cetera*

**MOST PERSONS WITH CHRONIC PAIN  
ALSO HAVE CHRONIC DEPRESSION**

**DEPRESSION CAN & SHOULD BE  
TREATED.**

- 
- **Identify the source of the pain, if possible,**
  - **Optimize control of motor symptoms,**
  - **Incorporate DAILY exercise,**
  - **Manage Personal/Family Expectations**
  - **Physical Therapy & Speech Therapy**
  - **Use non-pharmacologic Treatments**
  - **Add pain medication as necessary.**

## **WHAT MEDICATIONS CAN BE USED TO TREAT PAIN**

**MOST ANYTHING IN REASONABLE DOSES**

**MUST BE PERSONALIZED**

**ASSUME ALL NORMAL RISKS OF THE MEDICATION**

**WATCH FOR DRUG-INTERACTIONS**



**DR. NICHOLE NIGHTS**  
**AQUATIC HEALTH & REHAB**



**SPECIALIST IN PK REHAB PROGRAM**

**Parkinson's Wellness Recovery *PWR* program**

Movement and Flexibility exercises that uses every muscle in the right way

# TOPICS TODAY



## DRUG INTERACTIONS

GENERAL CONCEPTS

PARKINSON MED COMMON CONCERNS

HOW TO DEAL WITH POTENTIAL INTERACTIONS

## PAIN MANAGEMENT IN PARKINSONONS

SOME WHYS AND HOWS

MANAGEMENT

## QUESTIONS

# What Is A Drug Interaction

*When the anticipated or expected action of a medication is changed by some other substance, circumstance or substrate.*

## *General Types Of Drug Interactions*

### Patient Factors:

Age

Disease Condition

Prior Exposure/Reaction

Idiosyncratic Responses

### Other Medications

### Supplements & Herbals

### Foods & Eating Times

# Why & How Do Drug Interactions Happen

Pharmacodynamic = How A Drug Works To Do That Voodoo That You Do

Antagonism - interferes/negates

Additive/Synergistic - exacerbates response

Pharmacokinetic = How The Body Moves Or Removes A Drug

Absorption Effects (increases/decreases)

Distribution Effects (more or less diffusion into system)

Elimination Effects (increase/decrease)

Genomic Related Metabolic Induction

Disease Related

History of condition (certain cancers, stroke, liver/kidney)

Other

Lab interference

Metabolic Shifts (Potassium Sparing Diuretics and amiloride)

# Facts Graphs and Data Must Be **INTERPURTED** And Taken **IN CONTEXT** Of **INDIVIDUAL PATIENT CIRCUMSTANCES** And **HISTORY**

Most Interactions are “**MAY BE**” a concern  
A Few Interactions are “**ALMOST ALWAYS**” a concern  
Rarely are they “**ALWAYS OCCUR**”

Most Interactions Warrant “**AWARNNESS &  
PERSONAL/CLINICAL MONITORING**”  
A Few Interactions Warrant “**CHANGE AS SOON AS  
PRACTICAL...(timing/dose/type/stop)**”  
Rarely are they “**DANGER WILL ROBINSON! DANGER!**”



## ***Not All Interactions Are Bad***

**Enhance pharmacodynamic or pharmacokinetic properties of drug**

**Take Macrobid With Food**

**Multiple-drug regimens for synergistic effects**

**Carbidopa With Levodopa (Sinamet)**

**Exalon**

**Common in diabetes, Rx ulcers & asthma**

**Prevent Toxicity**

**B-6 with Isoniazid**

**Folic Acid with Methotrexate**

# **MEDICATIONS TO *GENERALLY* AVOID**

## **WITH L-DOPA/SINAMET AND RELATED DOPAMINE AGONISTS**

**OLDER ANTIDEPRESSANTS**

**OLDER ANTIEMETICS (ANTI-VOMITING)**

**OLDER BP-MEDS**

**METHALDOPA**

**RESERPINE**

**AMOXAPINE (ASENDA) ANITDEPRESSANT**

**BLOCK DOPAMINE – INTERFEAR WITH MANY DRUGS  
(INCLUDES COMPAZINE FOR NAUSEA)**

**AVOID WITH SEGELINE ( ELDAPRIL/DEPRANYL ) OR AZILECT**

- **NARCOTIC ANAGESICS (DEMAROL/TRAMADOL/MORPH**
- **CERTAIN ANTIDEPRESSANTS (METRZAPINE**
- **CERTAIN HERBALS (ST. JOHN'S WORT)**
- **CERTAIN MUSCLE RELAXANTS (CYCLOBENZAPRINE)**
- **OTC MEDS – PSEUDOPHEN/PHENYLEPHRINE/  
EPHEDRINE**

**ASK YOUR PHARMACIST TO CHECK**



# How To Self-Care & Guard Against Interaction Problems

- **Keep A List Of EVERYTHING** You Take...Keep It With You
- **With Any New Rx Or New OTC Medication:** Ask Questions Of The Prescriber & Dispensing Pharmacist: “Please Take A Look At What I’m Taking To Make Sure This New Medicine Is OK.”
- Read Up** – Don’t panic, Don’t Self Manage Ask Questions
- Be Alert To Any Change** in How You Feel, Behave Or Look Particularly When Meds Change

Decreased Tremor Control   Sleepiness   Lightheadedness   Anxiousness  
Chest Fluttering  
Trouble Breathing   Rashes/Redness   Bruising   Hyper  
Wobbly   “Weird”

**Consult Your Pharmacist and/or Person Who Prescribed The Medications**

# Pharmacogenomic Screening and Personalized Medication Selection

Using sophisticated Genetic Screening To Map Individual Genetically Determined Ability For Your Body To Respond To and Metabolize Drugs

Proper medication

Proper dosing

Medications to avoid

One test for life (with few exceptions such as radiation poisoning)

## When To Use

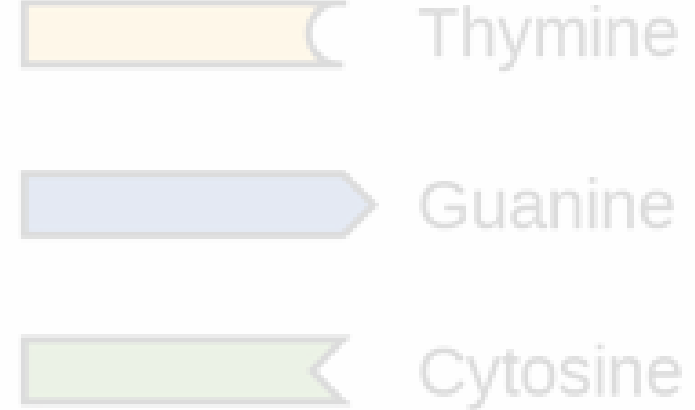
Poor response with multiple trials of similar medications

Unusual responses

Poor metabolic profiles

Other

*Dr. Sal Giorgianni Is Certified In Pharmacogenomic Evaluation And Counseling*



Base pair

