# Self-Assessment of Frequency and Severity of Symptoms with Chronic Inflammatory Conditions Following a Patient-Specific Elimination Diet and Food Reintroduction Plan

#### ABSTRACT

**BACKGROUND:** There is a growing body of evidence that suggests diet can play an important symptom-provoking role in inflammatory conditions. These conditions are often refractory to standard therapies. This retrospective study, conducted by a Registered Dietitian who is a Certified LEAP Therapist, analyzed total changes in the frequency and severity of symptoms using data collected from a self-administered 62-item global symptom survey tool to document patient responses to implementation of the LEAP protocol.

**MATERIALS & METHODS**: Data from the records of 119 previously refractory patients (16 males, 103 females; mean age 48; range 10-82 y) were analyzed. Patient selection criteria included only those cases with valid complete data for all variables in the surveys for the intervals of initial, 10 days, and 30 days, with self-assessed diet compliance of at least 50%. Patients were tested, using Mediator Release Testing (MRT) to determine food and food-chemical sensitivities for 120 common foods and 30 chemicals. They were referred to a Registered Dietitian with advanced Lifestyle, Eating, and Performance (LEAP) training for implementation of the Immunocalm Diet protocol. A repeated-measures ANOVA test was performed using PASW Version 18 software.

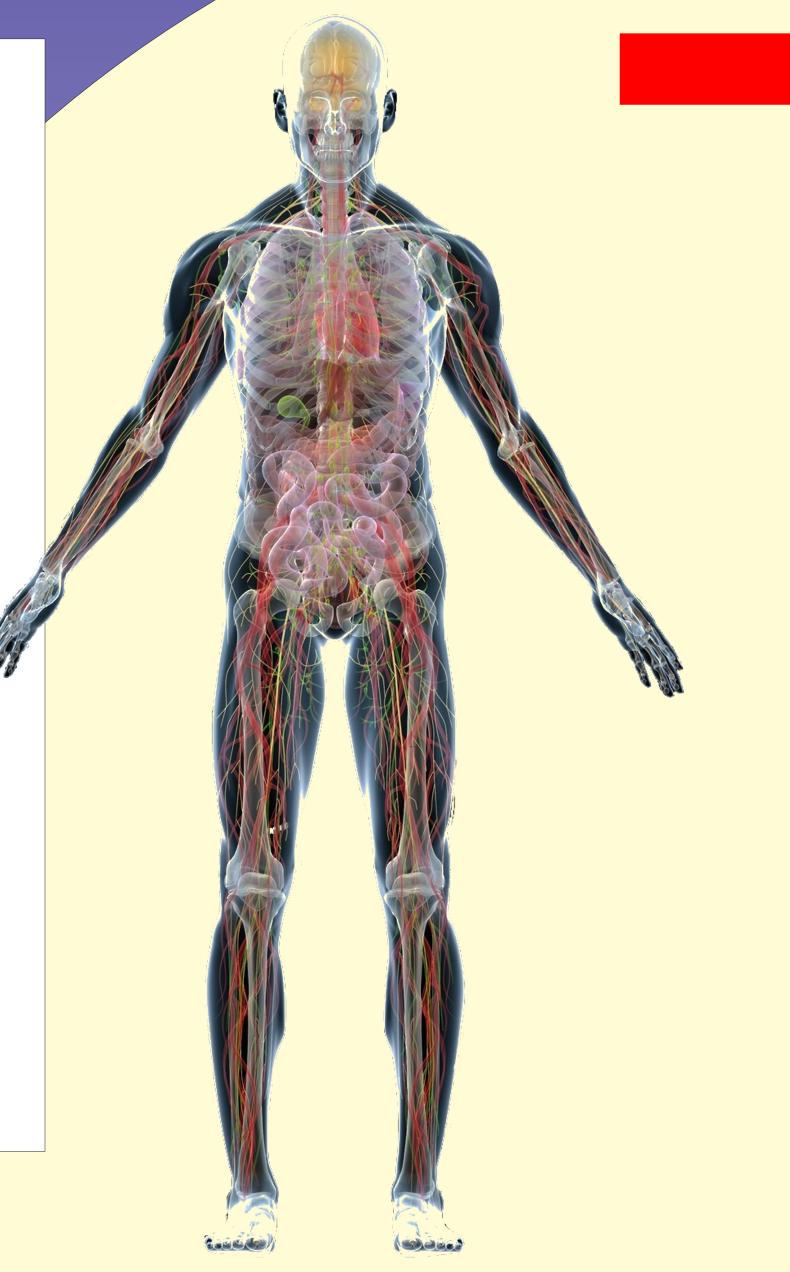
**RESULTS:** Significant improvement in the frequency and severity of symptoms was reported by these previously refractory patients. Compared to baseline (mean symptom score = 72; range 11-195; maximum 248 points), there was a significant (p<0.001) reduction in symptom scores at 10 days (mean score = 41; range 5-131) and 30 days (mean score = 32; range 0-110) post-intervention. The average number of moderate, high, and total food and chemical reactivities based on MRT results were 24 (range 6-41), 10 (range 1-34), and 34 (range 14-75), respectively. It was evident that food and chemical sensitivities were individual-specific, since there were no identical MRT responses.

**CONCLUSIONS:** Results showed that patient-specific elimination diets are extremely effective in reducing the frequency and severity of symptoms. Data support the clinical effectiveness of dietitian-guided patient-specific elimination diets and food reintroduction plans, based on MRT results, to improve symptoms in patients with chronic inflammatory-related conditions. This retrospective study showed highly statistically significant clinical responses, and suggests the need for additional studies, including those that are double-blind randomized control trials to determine placebo effect. Future work will include analysis of other data collected.

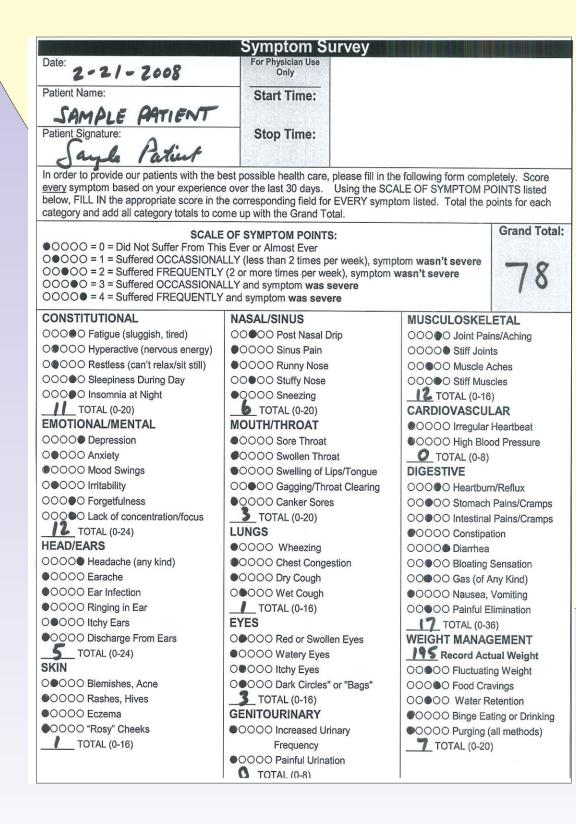
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## 1. Select Appropriate Patient

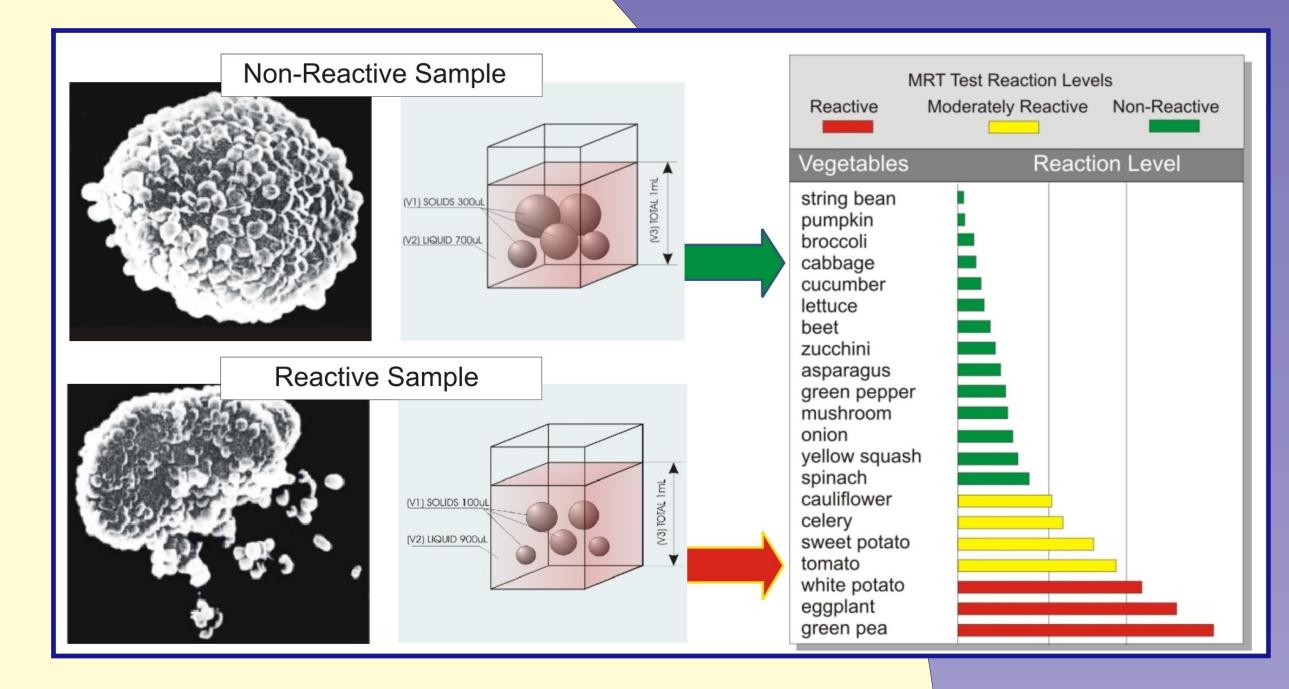
ADD/ADHD Arthritis (Inflammatory) Asthma Atopic Dermatitis Autism Spectrum Disorder Crohn's Disease Cyclic Vomiting Syndrome Depression Eosinophilic Esophagitis Eosinophilic Gastroenteritis Epilepsy Fibromyalgia Interstitial Cystitis Irritable Bowel Syndrome Metabolic Syndrome Migraine Otitis Media Sinusitis Ulcerative Colitis Urticaria (Chronic)



#### 4. Track Outcomes Using Symptom Surveys at Days 0, 10, 30



### 2. Identify Non-IgE Inflammatory Food & Chemical Reactions with Mediator Release Test





Lifestyle Eating And Performance	Patient name: SAMPLE PATIENT		<sup>cian:</sup> LNESS, MARK MD	Identifier: S7000-0	Test date: 04/20/200
	<b>Phase 1</b> DAYS 1 - 7	Phase 2 DAYS 8 - 12	Phase 3 DAYS 13 - 17	Phase 4 DAYS 18 - 22	Phase 5 DAYS 23 - 27
Pr	oteins				
	EGG LENTIL LAMB SCALLOP	SOLE BEEF TUNA SALMON	SHRIMP TURKEY CHICKEN SOYBEAN	CLAM TILAPIA GARBANZO BEAN PORK	CRAB
St	arches				
	BUCKWHEAT SWEET POTATO KAMUT	SPELT CORN MILLET	OAT RICE QUINOA	WHEAT TAPIOCA AMARANTH (GRAIN)	
Ve	getables				
	STRING BEAN BROCCOLI CABBAGE CUCUMBER	LETTUCE BEET ZUCCHINI YELLOW SQUASH	ONION ASPARAGUS CAULIFLOWER GREEN PEA	CELERY CARROT GREEN PEPPER TOMATO	
Fr	uits				
O/P	GRAPE OLIVE AVOCADO	ORANGE PLUM STRAWBERRY	CHERRY HONEYDEW MELON PEAR	WATERMELON BANANA PEACH	MANGO CANTALOUPE PAPAYA
Da	iry / Miscel	laneous			
	WHEY COCOA	CHEDDAR CHEESE AMERICAN CHEESE	YOGURT GOAT'S MILK	COFFEE	
Νι	its / Seeds /	Oils			
	OLIVE ALMOND SUNFLOWER SEED	CORN HAZELNUT PECAN	SOYBEAN PISTACHIO SESAME	WALNUT CASHEW	
Fla	avor Enhand	ers			
The sale	MAPLE BLACK PEPPER CAROB	VANILLA CINNAMON CANE SUGAR	DILL CAYENNE PEPPER MINT	PARSLEY LEMON OREGANO	MUSTARD

#### Results: Every Symptom Category Improved on the LEAP Diet

