

Casual Friday Series

# How to Build FM Protocols

[BIOGENETIX.COM](http://BIOGENETIX.COM)



# Disclaimer

- *Information in this presentation is not intended to diagnose, treat, reverse, cure, or prevent any disease. While this presentation is based on medical literature, findings, and text, The following statements have not been evaluated by the FDA.*
- *The information provided in this presentation is for your consideration only as a practicing health care provider. Ultimately you are responsible for exercising professional judgment in the care of your own patients.*





(Lifestyle + Genetics) x Time = Chronic Health Condition





**(Lifestyle + Genetics) x Time = Chronic Health IMPROVEMENT**



# Quick Note: FM vs Nutrition Model

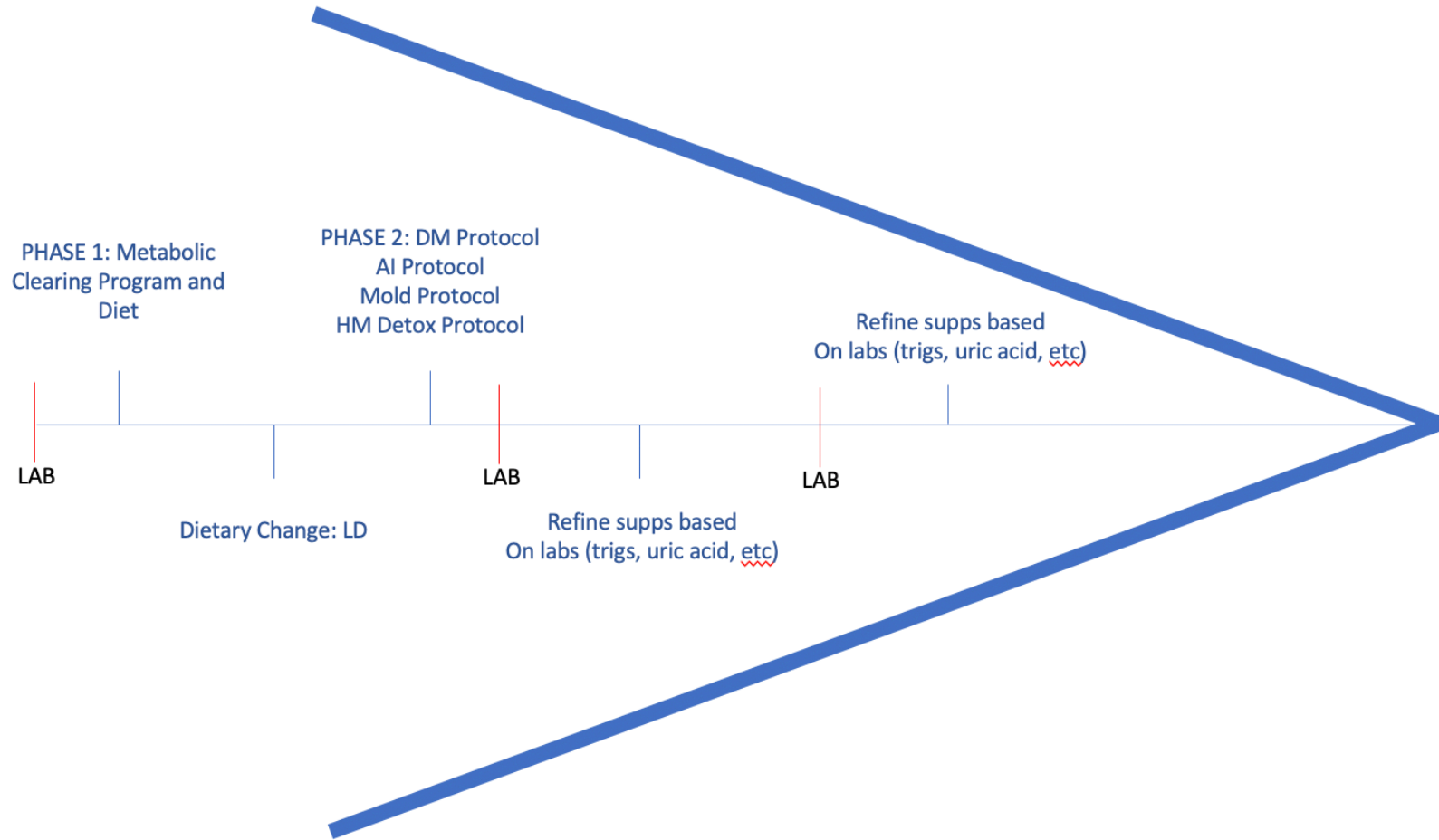


# Quick Note: FM vs Nutrition Model

 Wellness Essentials ([Biogenetix.com](http://Biogenetix.com))



# Supplement and Diet Protocols



Retest a lab at least every 60 days.

85% of patients will improve with basic structures and healthy eating.

% of problem analysis: this is what the cleanse is for.

General  Fine Tune

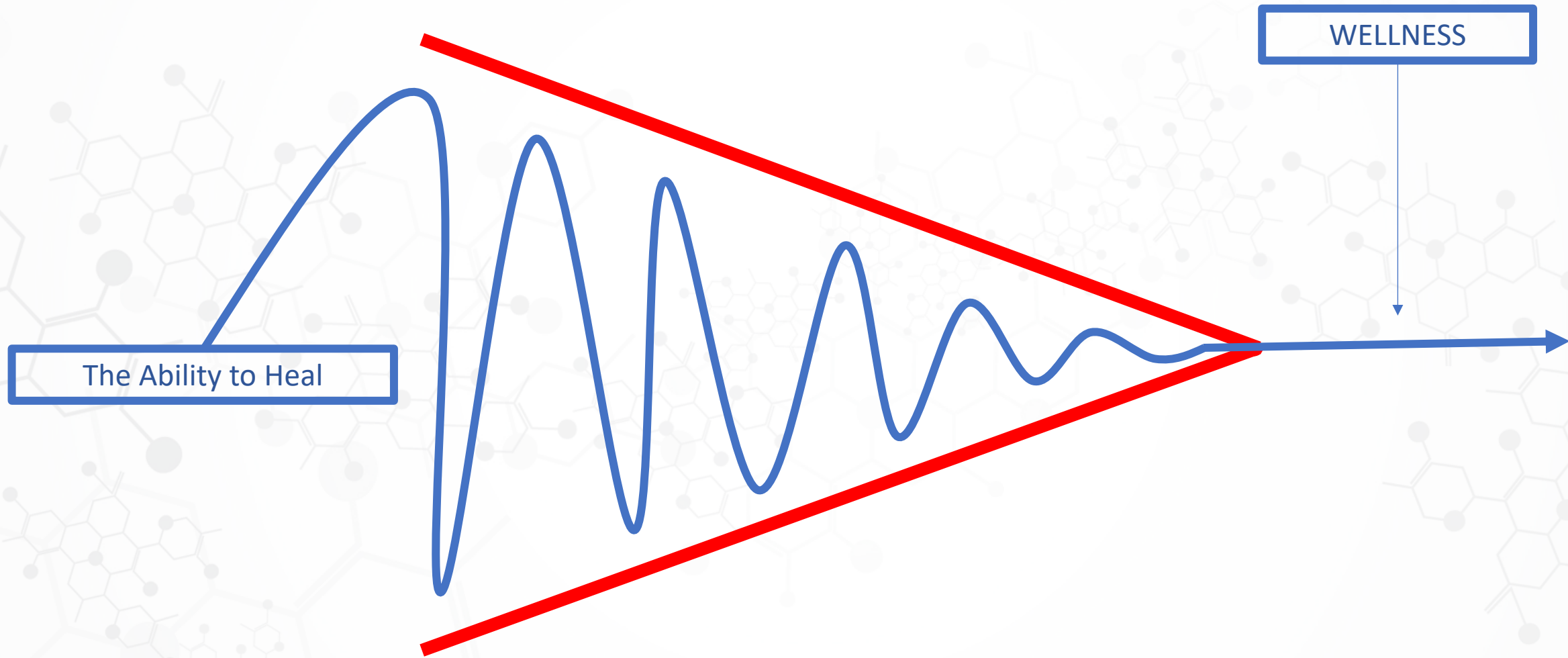


(Lifestyle + Genetics) x Time = Chronic Health Outcomes





# Building Protocols



The Ability to Heal

WELLNESS



## PATTERNS

Anemias  
Blood Sugar Dysregulation  
Infections/Stressors  
Biotoxin  
Net Detoxification  
Thyroid Disorders  
Acid/Base  
Hormone Sequestering  
Genetic SNPs  
Inflammatory Regulation  
Auto Immune Responses  
Trophic Needs  
Sympathetic/Para  
Hormone Dysregulation  
Toxicity  
Organ Dysfunction

## PROTOCOL



## 60 y.o. male, blood sugar concerns.

### Comp. Metabolic Panel (14)

<b>Glucose</b>	<b>104</b>	<b>High</b>	mg/dL	65-99	01
BUN	13		mg/dL	6-24	01
Creatinine	1.19		mg/dL	0.76-1.27	01

### Hgb A1c with eAG Estimation

<b>Hemoglobin A1c</b>	<b>6.4</b>	<b>High</b>	%	4.8-5.6	01
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Please Note:

01

Prediabetes: 5.7 - 6.4

Diabetes: >6.4

Glycemic control for adults with diabetes: <7.0

Estim. Avg Glu (eAG)	137		mg/dL		
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TESTS	RESULT	FLAG	UNITS	REFERENCE INTERVAL	LAB
<b>CBC With Differential/Platelet</b>					
WBC	6.2		x10E3/uL	3.4-10.8	01
RBC	5.04		x10E6/uL	4.14-5.80	01
Hemoglobin	14.1		g/dL	13.0-17.7	01
Hematocrit	43.3		%	37.5-51.0	01
MCV	86		fL	79-97	01
MCH	28.0		pg	26.6-33.0	01
MCHC	32.6		g/dL	31.5-35.7	01
RDW	12.9		%	11.6-15.4	01
Platelets	420		x10E3/uL	150-450	01
Neutrophils	49		%	Not Estab.	01
Lymphs	37		%	Not Estab.	01
Monocytes	9		%	Not Estab.	01
Eos	3		%	Not Estab.	01
Basos	1		%	Not Estab.	01
Neutrophils (Absolute)	3.1		x10E3/uL	1.4-7.0	01
Lymphs (Absolute)	2.3		x10E3/uL	0.7-3.1	01
Monocytes (Absolute)	0.5		x10E3/uL	0.1-0.9	01
Eos (Absolute)	0.2		x10E3/uL	0.0-0.4	01
Baso (Absolute)	0.1		x10E3/uL	0.0-0.2	01
Immature Granulocytes	1		%	Not Estab.	01
Immature Grans (Abs)	0.1		x10E3/uL	0.0-0.1	01



**Vitamin D, 25-Hydroxy**

44.4

ng/mL

30.0-100.0

01

Vitamin D deficiency has been defined by the Institute of Medicine and an Endocrine Society practice guideline as a level of serum 25-OH vitamin D less than 20 ng/mL (1,2). The Endocrine Society went on to further define vitamin D insufficiency as a level between 21 and 29 ng/mL (2).

**LP+Chol/HDL+LDL/HDL+CHD Risk**

## Lipids

01

Cholesterol, Total

132

mg/dL

100-199

01

Triglycerides

125

mg/dL

0-149

01

HDL Cholesterol

41

mg/dL

&gt;39

01

VLDL Cholesterol Cal

25

mg/dL

5-40

LDL Cholesterol Calc

66

mg/dL

0-99

T. Chol/HDL Ratio

3.2

ratio

0.0-5.0



**Iron and TIBC**

Iron Bind.Cap. (TIBC)	268	ug/dL	250-450	
UIBC	189	ug/dL	111-343	01
Iron	79	ug/dL	38-169	01
Iron Saturation	29	%	15-55	

**Ferritin, Serum**

	224	ng/mL	30-400	01
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**Thyroid Panel With TSH**

TSH	2.740	uIU/mL	0.450-4.500	01
Thyroxine (T4)	5.9	ug/dL	4.5-12.0	01
T3 Uptake	27	%	24-39	01
Free Thyroxine Index	1.6		1.2-4.9	



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Organ Dysfunction

## PROTOCOL

Blood Sugar Dysregulation  
  
Inflammatory Regulation  
  
Trophic Needs  
  
Hormone Dysregulation

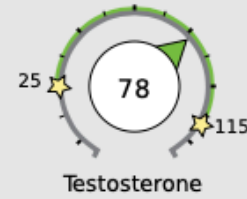


## Hormone Testing Summary

**Key (how to read the results):**



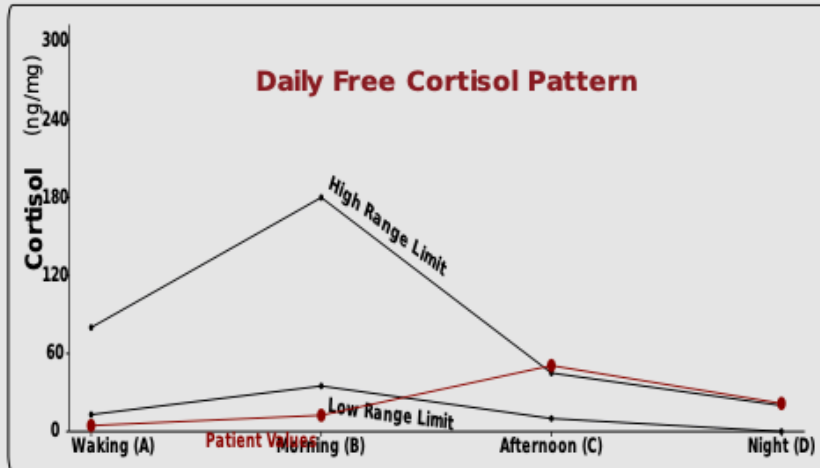
### Sex Hormones



### Testosterone

Age	Range
18-25	50-115
26-40	40-95
41-60	30-80
>60	25-60

**Adrenal Hormones** See pages 4 and 5 for a more complete breakdown of adrenal hormones



Free cortisol best reflects tissue levels. Metabolized cortisol best reflects total cortisol production.

### Total DHEA Production

Age	Range
20-39	3000-5500
40-60	2000-4000
>60	1000-2500



Total DHEA Production  
(DHEAS + Etiocholanolone + Androsterone)



24hr Free Cortisol  
(A+B+C+D)

cortisol  
metabolism

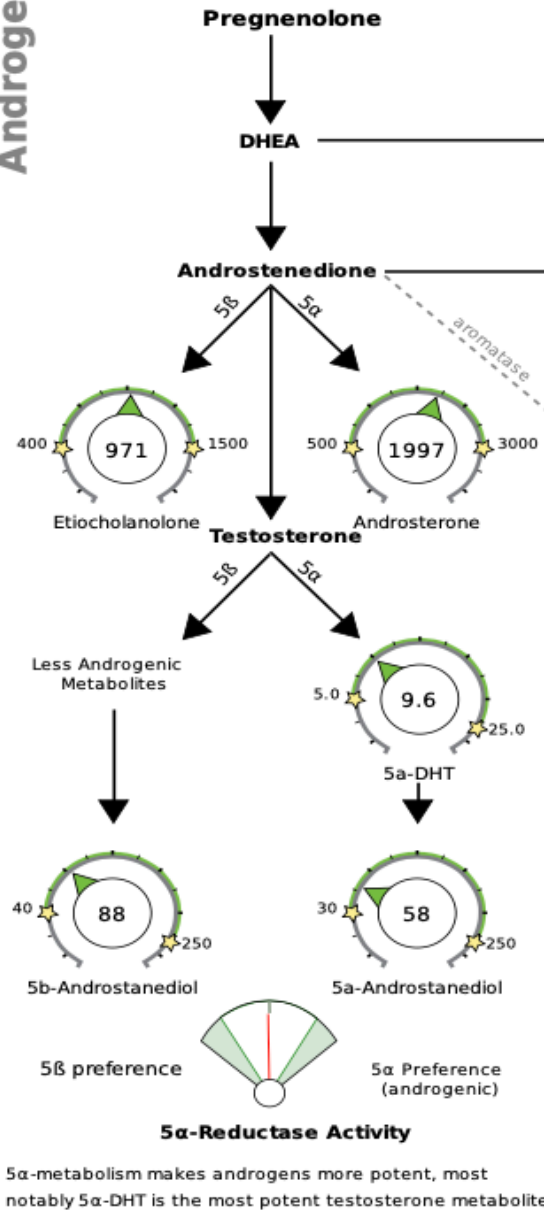


Metabolized Cortisol (THF+THE)  
(Total Cortisol Production)





# Androgens



## Age-Dependent Ranges

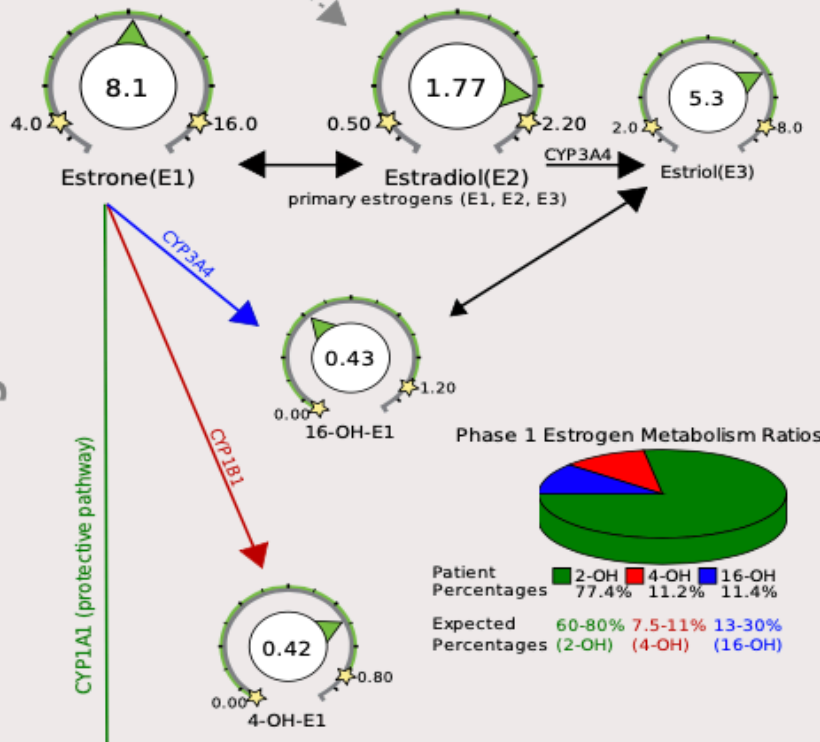
Age	DHEA-S
20-39	150-1500
40-60	60-800
>60	30-300

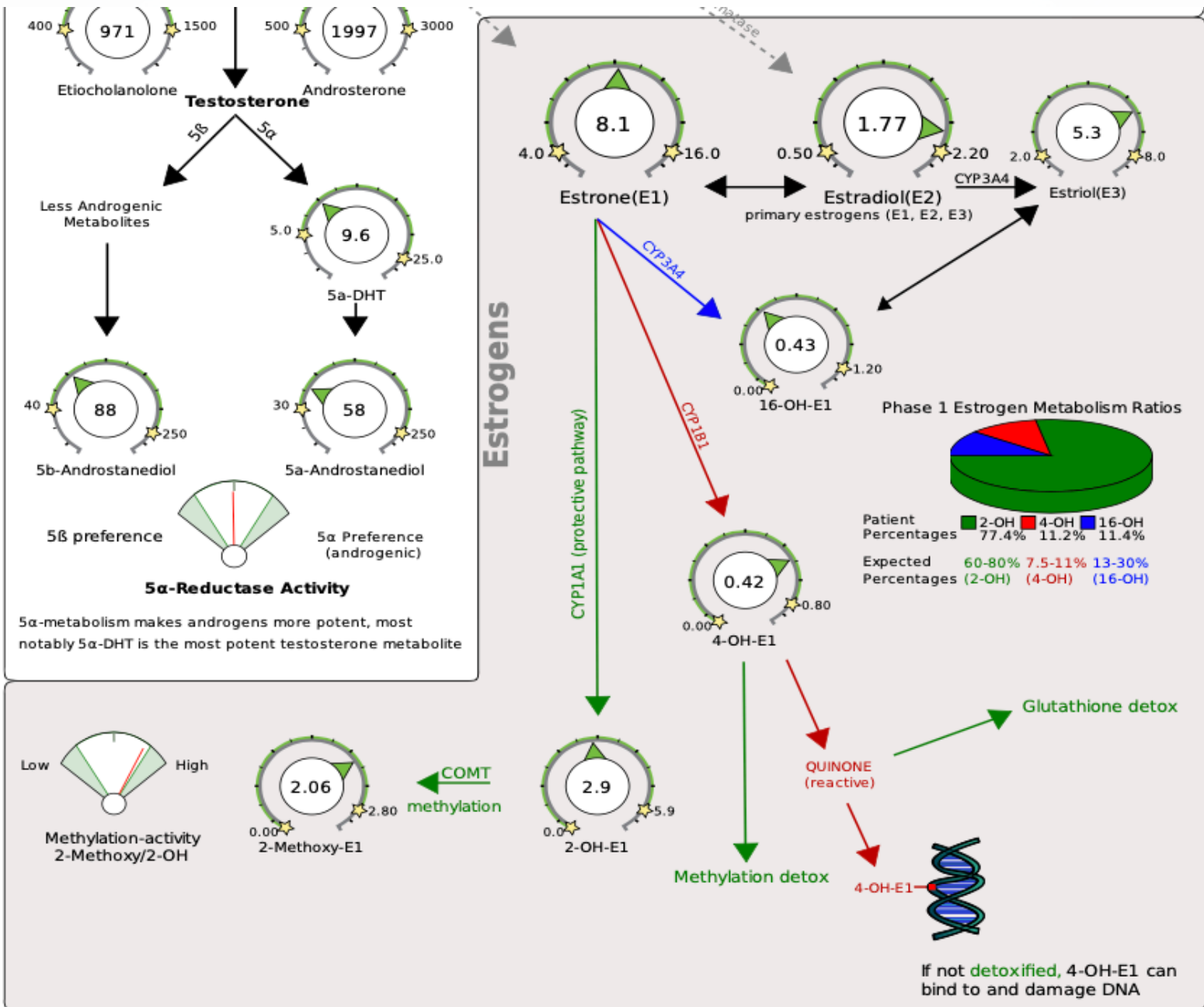
Etiocholanolone		Androsterone	
20-39	800-1500	20-39	1500-3000
40-60	600-1200	40-60	1000-2000
>60	400-1000	>60	500-1000

5β-androstenediol		5α-androstenediol	
20-39	70-250	20-39	60-250
40-60	55-210	40-60	50-180
>60	40-150	>60	30-130

Testosterone		5α-DHT	
18-25	50-115	20-39	9-25
26-40	40-95	40-60	7-20
41-60	30-80	>60	5-16
>60	25-60		

# Estrogens





Category	Test	Result	Units	Normal Range
<b>Nutritional Organic Acids</b>				
Vitamin B12 Marker (may be deficient if high) - (Urine)				
	Methylmalonate (MMA)	Within range	2.1 ug/mg	0 - 3
Vitamin B6 Markers (may be deficient if high) - (Urine)				
	Xanthurenate	Within range	0.6 ug/mg	0 - 2.1
	Kynurenate	Within range	2.8 ug/mg	0 - 9.3
Glutathione Marker (may be deficient if low or high) - (Urine)				
	Pyroglutamate	High end of range	77.9 ug/mg	43 - 85
<b>Neurotransmitter Metabolites</b>				
Dopamine Metabolite - (Urine)				
	Homovanillate (HVA)	Within range	12.1 ug/mg	4.8 - 19
Norepinephrine/Epinephrine Metabolite - (Urine)				
	Vanilmandelate (VMA)	Above range	8.7 ug/mg	2.8 - 8
Melatonin (*measured as 6-OH-Melatonin-Sulfate) - (Urine)				
	Melatonin* (Waking)	Below range	2.4 ng/mg	10 - 85
Oxidative Stress / DNA Damage, measured as 8-Hydroxy-2-deoxyguanosine (8-OHdG) - (Urine)				
	8-OHdG (Waking)	Within range	4.3 ng/mg	0 - 8.8



## PATTERNS

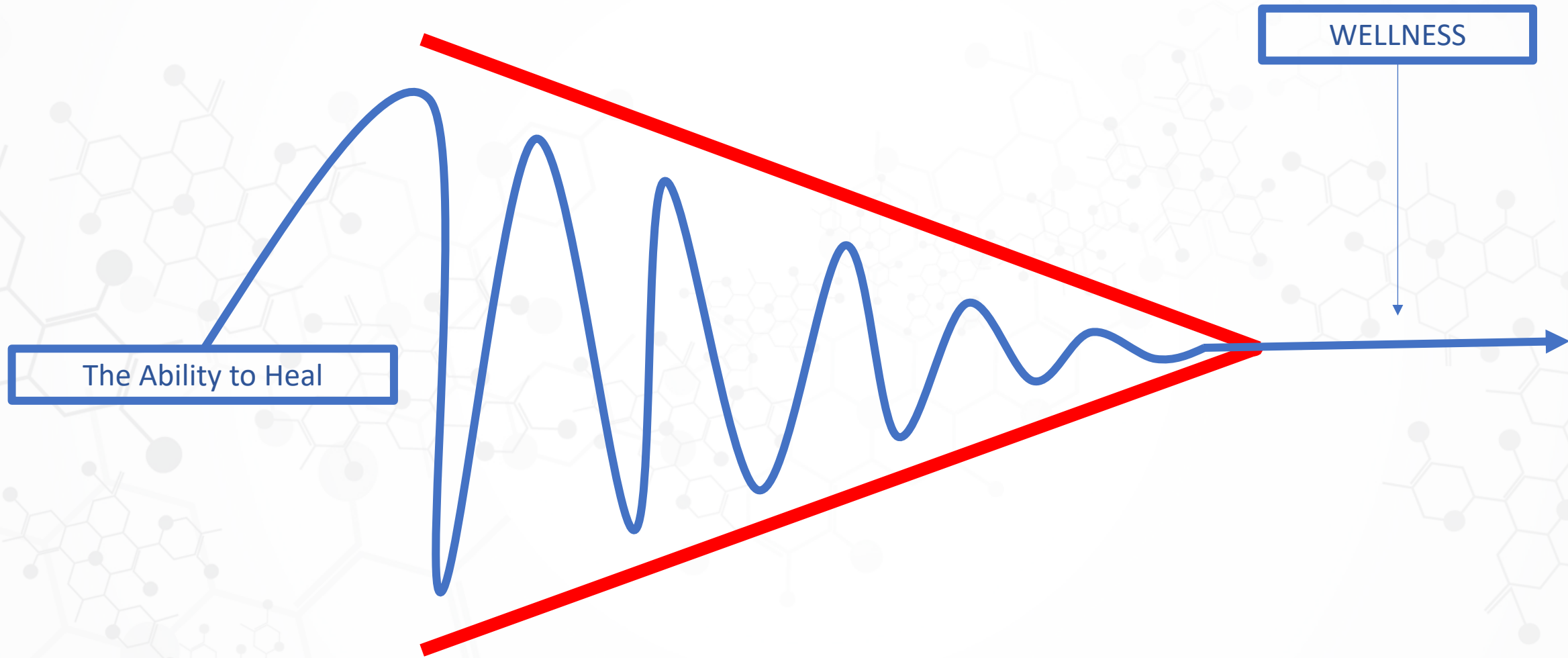
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## PROTOCOL

Blood Sugar Dysregulation  
**Net Detoxification**  
**Hormone Sequestering**  
Inflammatory Regulation  
Trophic Needs  
**Sympathetic/Para**  
Hormone Dysregulation



# Building Protocols



## PROTOCOL

Blood Sugar Dysregulation

Net Detoxification

Hormone Sequestering

Inflammatory Regulation

Trophic Needs

Sympathetic/Para

Hormone Dysregulation

## Building Protocols

The Ability to Heal

WELLNESS



## PROTOCOL

Blood Sugar Dysregulation

Net Detoxification

Hormone Sequestering

Inflammatory Regulation

Trophic Needs

Sympathetic/Para

Hormone Dysregulation

## Hierarchy

### 1. Inflammatory Regulation

- Net Detoxification
- Sympathetic/Para
- Hormone Sequestering

### 2. Blood Sugar Dysregulation

- Hormone Dysregulation
- Trophic Needs



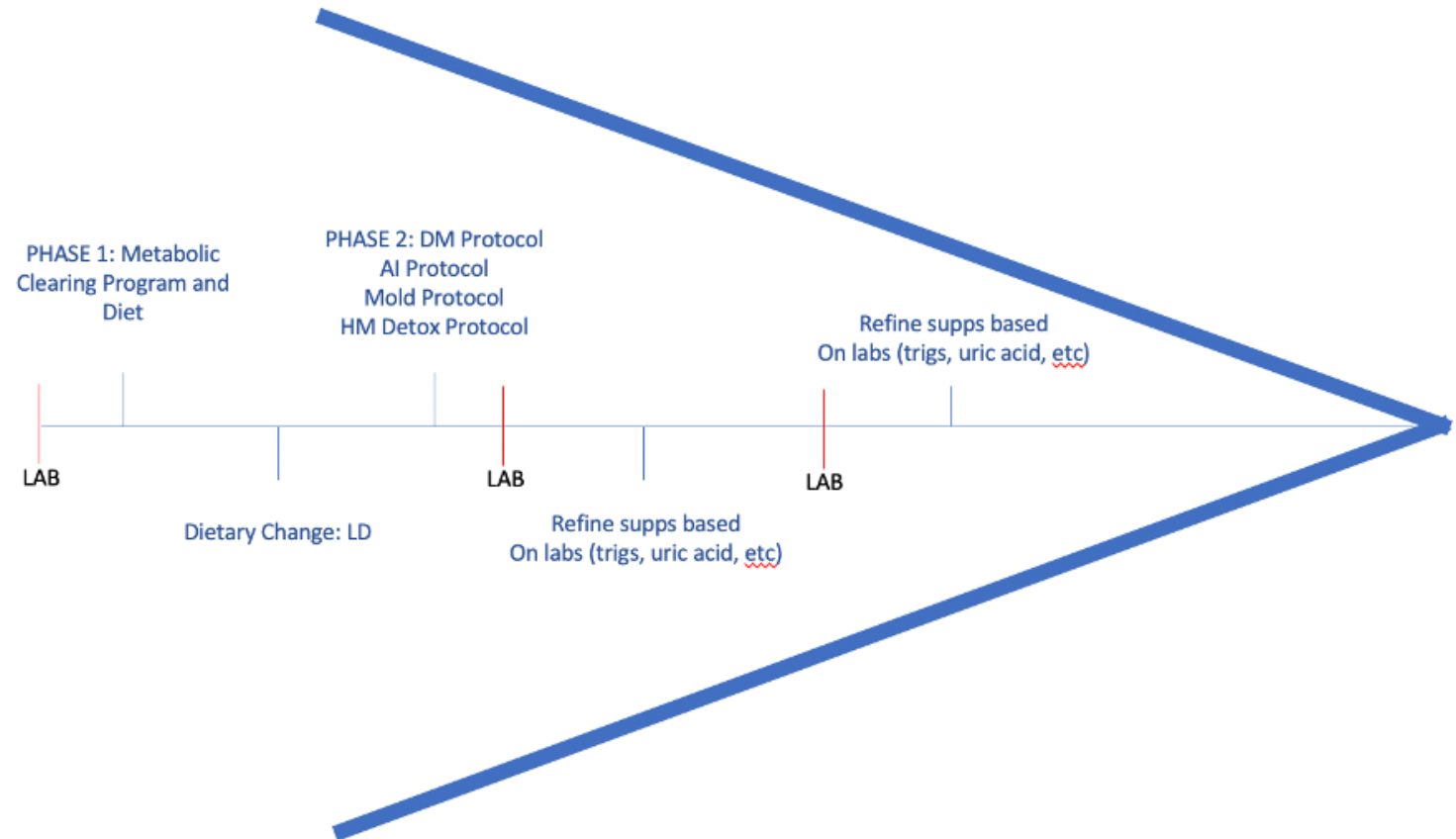
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### 1. Inflammatory Regulation

- Net Detoxification
- Sympathetic/Para
- Hormone Sequestering

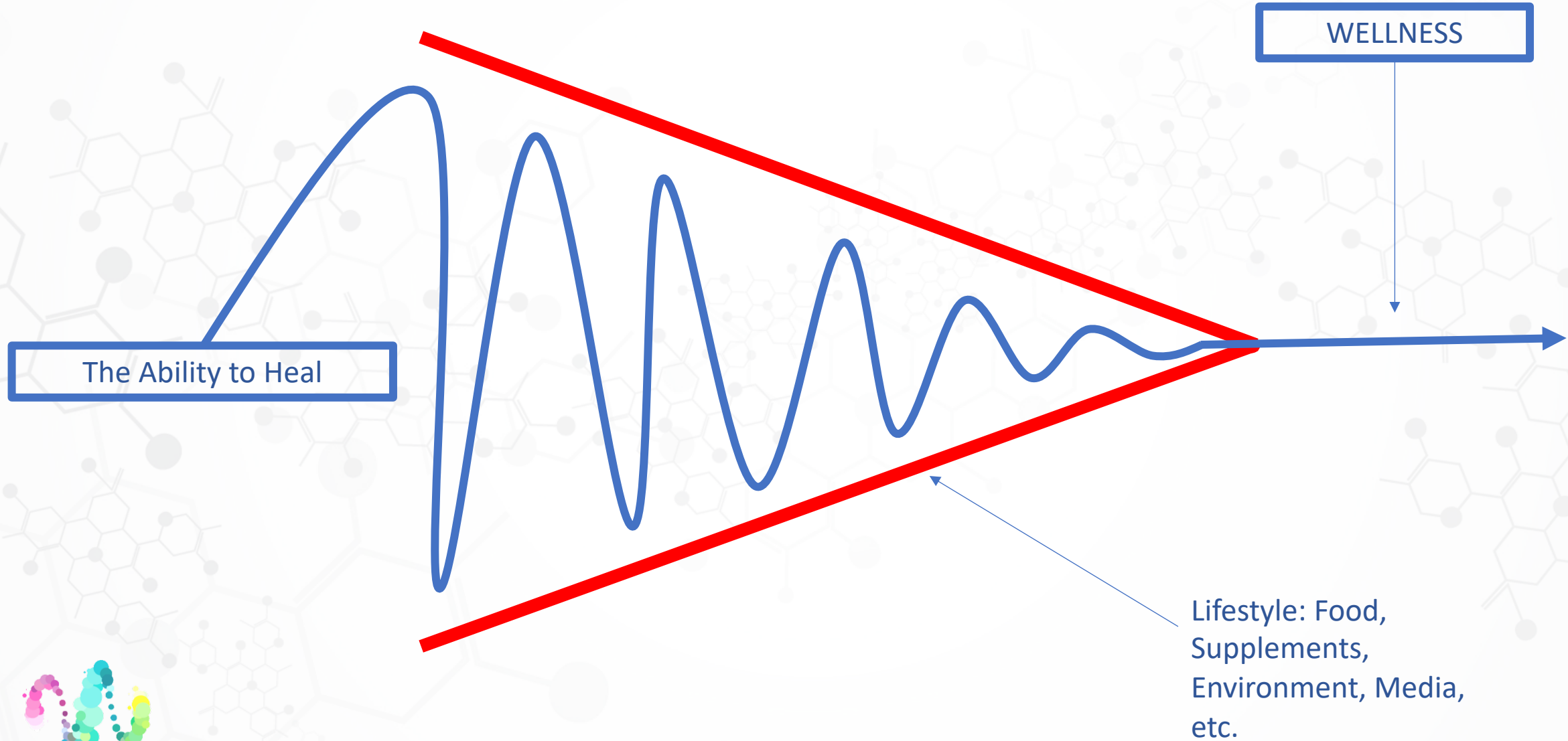
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- Hormone Dysregulation
- Trophic Needs





# Building Protocols



## Hierarchy

1. Inflammatory Regulation
  - Net Detoxification
  - Sympathetic/Para
  - Hormone Sequestering
2. Blood Sugar Dysregulation
  - Hormone Dysregulation
  - Trophic Needs

## Protocol

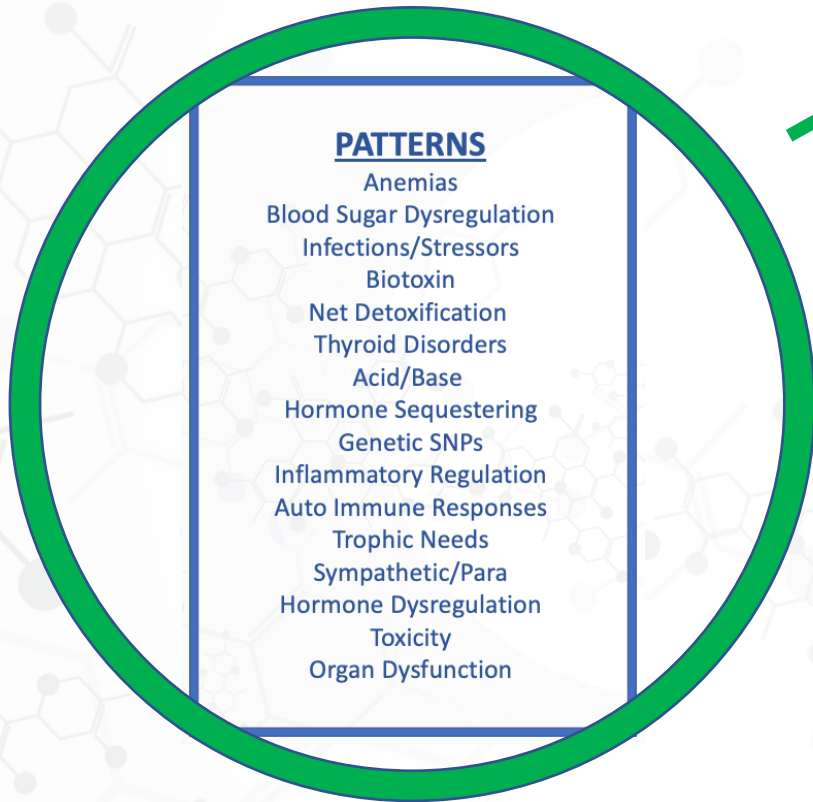
Phase 1:

- 21-Day Metabolic Clearing Program

Phase 2:

- Glucostatic Balance
- Effecsulin
- GSH, PC, Super G, CoQ10
- Omega3 Fish Oil
- Hypaax Balance
- D3K2





Zeb's Offer: Order 21-Day  
Metabolic Clearing Program



**Applied Blood Chemistry**

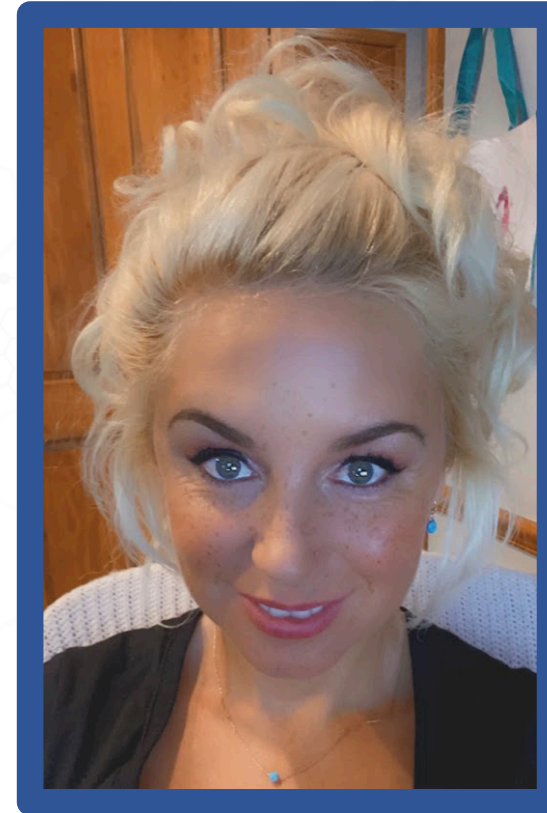
- Through the end of October
- 12 Hour Course
- Learn to ID the patterns
- Get exposed to Functional Analysis
- MSRP \$799
- CE-not available in this format



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