

# Integrative Chinese Medicine

A New System for Diagnosis and Treatment

## Treating Metabolic Syndrome with Western Herbs

Jeremy Ross

# Metabolic Syndrome: Contents

## **1. Introduction**

- a. Conventional medicine
- b. 4 Imbalances & Differential Questions

## **2. Herbs**

- a. Research
- b. ICM

## **3. Herb Combinations**

- a. Combination Comparison Tables

# MetS Part 1

## Introduction

Part 1.a  
Metabolic Syndrome  
**Conventional medicine**

## MetS: Conventional medicine

### Definition

Metabolic syndrome (MetS) refers to a group of metabolic abnormalities which may include:

- central obesity
- insulin resistance
- hypercholesterolemia
- hypertriglyceridemia
- hypertension
- low level of high-density lipoprotein (HDL)-cholesterol
- hyperuricemia

### Associated disorders

MetS is associated with risk of cardiovascular disease, including heart disease and stroke, and diabetes.

Other associated conditions may include:

- kidney disease
- non-alcoholic fatty liver disease
- polycystic ovarian syndrome
- erectile dysfunction in men

### Frequency

25-30% of people in USA.

### Risk factors

The following factors increase risk of MetS:

- age
- obesity
- diabetes
- other diseases:
  - nonalcoholic fatty liver disease
  - sleep apnoea
  - polycystic ovary syndrome

### Drug-induced metabolic syndrome

This topic was reviewed by Wofford MR, et al. in 2006.

"The use of certain medications may increase the risk of the metabolic syndrome by either promoting weight gain or altering lipid or glucose metabolism.

Health providers should recognize and understand the risk associated with certain medications and appropriately monitor for changes related to the metabolic syndrome.

Careful attention to drug choices should be paid in patients who are overweight or have other risk factors for diabetes or cardiovascular disease."

### Potentially inducing drugs

- thiazide diuretics
- beta blockers
- niacin
- thiazolidinedione (TZD) agents
- oral contraceptives (OCS)
- protease inhibitors
- psychiatric/neurologic medications, antipsychotics
- antidepressants

## MetS: Conventional medicine

### Lifestyle changes

The following are recommended:

- at least 30 minutes physical activity most days
- plenty of vegetables, fruits, lean protein and whole grains
- reducing saturated fat
- reducing salt
- keeping a healthy weight
- no smoking

### Medical treatment

This is mainly focused on treating associated disorders, eg. diabetes, hyperglycemia, hypertension, and hyperlipidemia, and may include one or more of the following:

- antidiabetics- eg. metformin (a biguanide)
- lipid-lowering agents- statins
- lipid-lowering agents- non-statin
- ACE inhibitors
- ARBs (angiotensin II receptor blockers)
- antiplatelet agents- cardiovascular



Part 1.b  
Metabolic Syndrome  
4 Imbalances & Differential Questions

# MetS: Integrative Chinese medicine

## Diagnosis and Treatment

### 4 Imbalances

- MetS can be organized in terms of the 4 Imbalances: Deficiency, Stagnation, Disturbance, and Excess

### Chinese organ syndromes

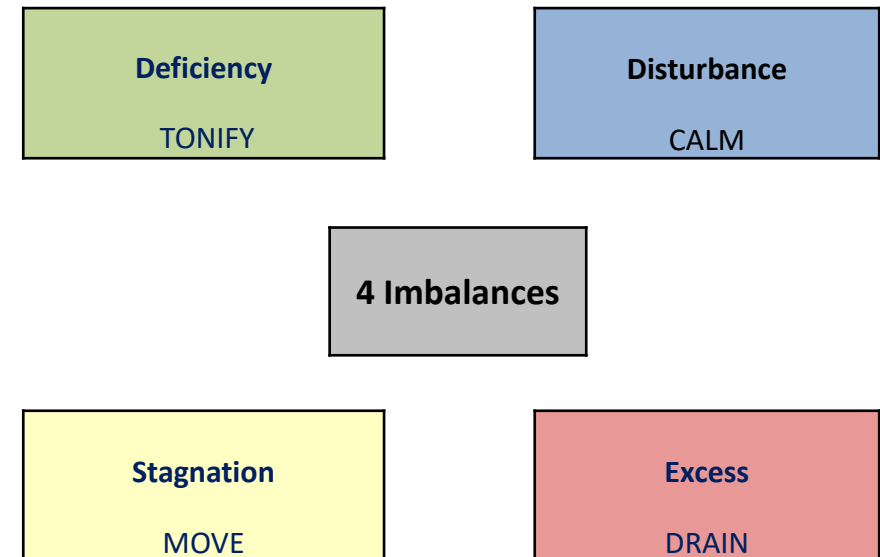
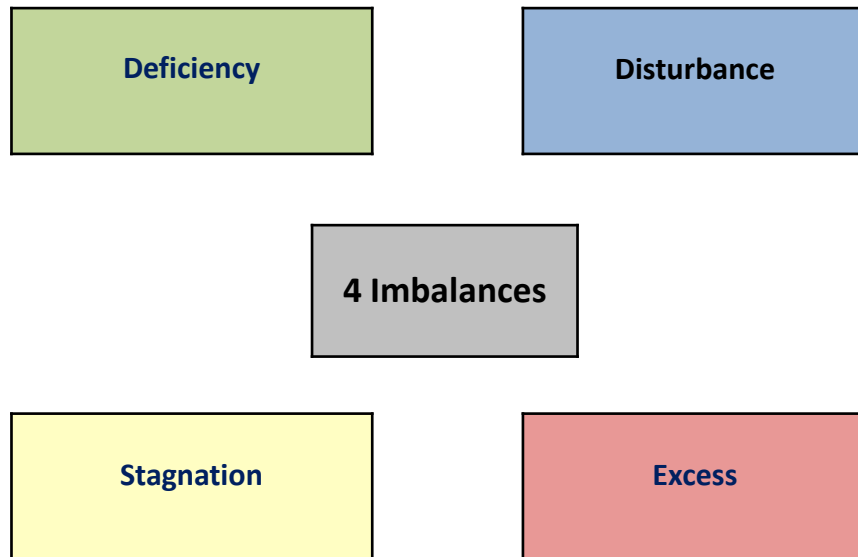
- MetS can then be further organized in terms of the Chinese organ syndromes

### Differential Questions

- a special system of Differential Questions is presented to make it easier and faster to find the Chinese organ syndrome responsible for the disorder

# 4 Imbalance system

We can say that there are four basic things that can go wrong with the energy of the body:



### Deficiency

#### TONIFY

- is exhaustion a problem for you and does it reduce your ability to do physical exercise?
- do you eat junk food because you are too tired to cook?

### Disturbance

#### CALM

- do you have emotional disturbance or disturbed and non-refreshing sleep?
- do you eat more because you are stressed or emotionally upset?

### 4 Imbalances

#### Metabolic Syndrome

### Stagnation

#### MOVE

- is depression or low mood a problem for you, and does it reduce the number of times that you do physical exercise?
- do you eat more because you are depressed?

### Excess

#### DRAIN

- do you have sensations of heaviness and dullness, physically or mentally
- do you have sensations of sensations of fullness or heat?

## MetS: Differential Questions Chinese Organ Syndromes

Kidney	KI Jing Def	• did your weight gain and exhaustion come with age?
	KI Qi & Yang Def	• are you chronically exhausted with heat sensations?
	KI Qi & Yin Def	• are you chronically exhausted with heat sensations, maybe esp. at night?
	KI Yang & Yin Def	• are you chronically exhausted with alternations between heat and cold sensations?
Spleen	SP Qi Def	• do you have reduced appetite or loose stool, or a history of weight gain or hyperglycemia? • do you habitually consume junk food or sweetened drinks?
	SP Qi & Yang Def	• do you have reduced appetite or loose stool, a history of weight gain, or cold sensations?
	SP Yang Def + Cold	• do you habitually eat cold or iced foods or drinks?
	SP Qi Def + Damp	• are you exhausted and do you have sensations of heaviness or dullness?
Liver	LR Qi Stag	• are you depressed, frustrated, or habitually block your anger?
	LR Qi Def	• do you have difficulty with fatty foods, alcohol, or medications?
Heart	HT Qi Stag	• do you have sadness or emotional constraint, esp. with relationship difficulties?
	HT Blood Stag	• do you have pain in the heart region, or diagnosis of heart vessel stenosis?
	HT Spirit Disturbance	• do you have palpitations, anxiety, panic sensations, or sleep disturbance?
	Phlegm Misting Mind	• do you have mentall dullness, forgetfulness or reduced concentration?
Lung	LU Qi Stag	• do you have sensations of grief, following a loss?

# MetS Part 2

## Herbs

Part 2.a  
MetS  
**Herbs: Research**

### 3 basic herbs

The following 3 herbs have a large number of studies on effectiveness for MetS and related disorders:

- Berberis            esp. berberine
- Curcuma            esp. curcumin
- Scutellaria baicaelensis  
    esp. baicalin, baicalein, wogonin

### Active references

We have emailed you a document with about 23 herbs and 50 **active** research references on this topic.

- **click** on any one of the references to open it in PubMed

<https://pubmed.ncbi.nlm.nih.gov>

- then put it through DeepL Translate to translate it into German

<https://www.deepl.com/translator>



Part 2.b  
MetS  
**Herbs: ICM**

### 4 Imbalances

I have divided the herbs that, according to research, can be used for MetS, into four groups, according to the 4 Imbalances.

- Deficiency      tonics
- Stagnation      moving herbs
- Disturbance      calming herbs
- Excess      draining or clearing herbs

Some herbs occur in more than one group, eg. Zingiber.

### Chinese organ syndromes

We are using the Chinese organ syndromes shown on Slide 13, where you can see the Differential Questions for these syndromes.

### Research

All the herbs shown in the following Tables have one or more research articles supporting use for MetS of herb and/or its constituents.

## MetS Herbs Deficiency

Herb	Temperature	KI Jing Def	KI Qi Def	KI Qi & Yang Def	KI Qi & Yin Def	KI Yang & Yin Def	SP Qi Def	SP Qi & Yang Def	SP Yang Def + Cold	SP Qi Def + Damp	LR Qi Def	Yin Def
<b>Sweet stimulant tonics</b>												
Panax gin. red	warm		☐	☐			☐	☐				
Panax gin. white	neutral-warm		☐				☐					
Panax qui.	neutral-cool				☐							
Astragalus	sl. warm						☐			☐		
Glycyrrhiza baked	neutral-warm		☐				☐	☐				
Glycyrrhiza	neutral-cool		☐				☐					
<b>Sweet tonics</b>												
Ophiopogon	cool											☐
Lycium	neutral	☐				☐	☐				☐	
<b>Astringent KI tonic</b>												
Schisandra	warm		☐								☐	☐
<b>Aromatic tonics</b>												
Trigonella	sl. warm			☐				☐				
<b>Circulatory stimulants (hot)</b>												
Cinnamomum bark	hot			☐				☐	☐			
Capsicum	hot			☐				☐	☐			
Zingiber (dried)	hot			☐				☐	☐		☐	
Zanthoxylum	hot							☐	☐	☐	☐	

### MetS Herbs Deficiency

Herb	Temperature	KI Jing Def	KI Qi Def	KI Qi & Yang Def	KI Qi & Yin Def	KI Yang & Yin Def	SP Qi Def	SP Qi & Yang Def	SP Yang Def + Cold	SP Qi Def + Damp	LR Qi Def	Yin Def
Seaweeds												
Ascophyllum nodosum	neutral?						☐				☐	
Fucus vesiculosus	neutral?						☐				☐	

## MetS Herbs Stagnation

Herb	Temperature	HT Qi Stag	HT Blood Stag	HT Phlegm (athero)	LU Qi Stag	LR Qi Stag						
<b>Heart tonics and regulators</b>												
Crataegus	sl. warm		☐	☐								
Curcuma rhizoma	warm		☐	☐		☐						
Curcuma tuber	cold		☐	☐		☐						
Salvia mil.	cool		☐	☐		☐						
<b>Circulatory stimulants (hot)</b>												
Capsicum	hot	☐	☐	☐	☐	☐						
Zingiber (dried)	hot	☐		☐	☐	☐						
Zanthoxylum	hot		☐	☐		☐						
<b>Aromatics</b>												
Rosmarinus	warm					☐						
<b>Bitters</b>												
Berberis	cool			☐		☐						
Gentiana lut.	neutral-cool					☐						
Silybum	neutral					☐						

## MetS Herbs

Herb	Temperature	Disturbance					Excess					
		HT Spirit Dist	LR Yang Hyper (hypert)				HT Heat	HT Phlegm Heat	LR Heat			
<b>Heart tonics and regulators</b>												
Curcuma tuber	cold	☐						☐				
Salvia mil.	cool	☐	☐				☐					
<b>Anti-inflammatories</b>												
Scutellaria baicalensis	cold		☐						☐			
<b>Circulatory stimulants (hot)</b>												
Capsicum	hot	☐	☐	☐	☐	☐						

# MetS Part 3

## Herb Combinations

Part 3.a  
MetS

# Combination Comparison Tables



## MetS Herb Combinations

\* = few or no research articles supporting use for MetS, but relevant, in this case, according to Western and/or Chinese tradition.

General	Age, Exhaustion, Cold, Damp	General + cardiovascular	General + depression	General + anxiety + heat sensations
obesity, diabetes, hyperlipidemia, hypertension	obesity, diabetes, hyperlipidemia + age, exhaustion, cold sensations, heavy sensations	obesity, diabetes, hyperlipidemia, hypertension + chest pain	obesity, diabetes, hyperlipidemia, hypertension + depression	obesity, diabetes, hyperlipidemia, hypertension + anxiety + insomnia + heat sensations
SP Qi Def + KI Qi Def + HT Phlegm + LR Yang Hyper	SP Qi & Yang Def + KI Qi & Yang Def + KI Jing Def + SP Damp + Phlegm Mists Mind	SP Qi Def + KI Qi Def + HT Phlegm + LR Yang Hyper + HT Qi Stag + HT Blood Stag	SP Qi Def + KI Qi Def + HT Phlegm + LR Yang Hyper + HT Qi Stag + HT Blood Stag	SP Qi Def + KI Qi Def + HT Phlegm + LR Yang Hyper + HT Spirit Dist + HT Yin Def + HT Heat
Berberis	Panax gin. red	Berberis	Berberis	Berberis
Curcuma rhizoma	Lycium	Curcuma rhizoma	Curcuma rhizoma	Curcuma tuber
Scutellaria bai.	Trigonella	Scutellaria bai.	Scutellaria bai.	Scutellaria bai.
	Cinnamomum bark			
Panax gin. white		Crataegus	Rosmarinus	Salvia mil.
Ophiopogon	Zanthoxylum	Salvia mil.	Mentha pip.*	Salvia off.
Schisandra	Capsicum	Leonurus*	Zingiber (dried)	
				Panax qui.
Trigonella	Angelica arc.*	Zanthoxylum	Silybum	Ophiopogon
Fucus vesiculosus	Acorus*	Capsicum	Gentiana	Lycium
	Polygala*			

### MetS Herb Combinations

- = few or no research articles supporting use for MetS, but relevant, in this case, according to Western and/or Chinese tradition.

#### General

obesity, diabetes, hyperlipidemia, hypertension

SP Qi Def + KI Qi Def + HT Phlegm + LR Yang Hyper

Berberis

1

Curcuma rhizoma

1

Scutellaria bai.

1

Panax gin. white

1

Ophiopogon

1

Schisandra

1

Trigonella

1

Fucus vesiculosus

1

### MetS Herb Combinations

- = few or no research articles supporting use for MetS, but relevant, in this case, according to Western and/or Chinese tradition.

#### Age, Exhaustion, Cold, Damp

obesity, diabetes, hyperlipidemia

+ age, exhaustion, cold sensations, heavy sensations

SP Qi & Yang Def + KI Qi & Yang Def + KI Jing Def

+ SP Damp + Phlegm Mists Mind

Panax gin. red	1
Lycium	1
Trigonella	1
Cinnamomum bark	1
Zanthoxylum	1
Capsicum	5-20 dr.
Angelica arc.*	1
Acorus*	1
Polygala*	1

### MetS Herb Combinations

- = few or no research articles supporting use for MetS, but relevant, in this case, according to Western and/or Chinese tradition.

#### General + cardiovascular

obesity, diabetes, hyperlipidemia, hypertension  
+ chest pain

SP Qi Def + KI Qi Def + HT Phlegm + LR Yang Hyper  
+ HT Qi Stag + HT Blood Stag

Berberis	1
Curcuma rhizoma	1
Scutellaria bai.	1
Crataegus	1
Salvia mil.	1
Leonurus*	1
Zanthoxylum	1
Capsicum	5-20 dr.

### MetS Herb Combinations

- = few or no research articles supporting use for MetS, but relevant, in this case, according to Western and/or Chinese tradition.

#### General + depression

obesity, diabetes, hyperlipidemia, hypertension  
+ depression

SP Qi Def + KI Qi Def + HT Phlegm + LR Yang Hyper  
+ HT Qi Stag + HT Blood Stag

Berberis	1
Curcuma rhizoma	1
Scutellaria bai.	1
Rosmarinus	1
Mentha pip.*	1
Zingiber (dried)	1
Silybum	1
Gentiana	1

### MetS Herb Combinations

- = few or no research articles supporting use for MetS, but relevant, in this case, according to Western and/or Chinese tradition.

#### General + anxiety + heat sensations

obesity, diabetes, hyperlipidemia, hypertension  
 + anxiety + insomnia + heat sensations

SP Qi Def + KI Qi Def + HT Phlegm + LR Yang Hyper  
 + HT Spirit Dist + HT Yin Def + HT Heat

Berberis	1
Curcuma tuber	1
Scutellaria bai.	1
Salvia mil.	1
Salvia off.	1
Panax qui.	1
Ophiopogon	1
Lycium	1