

Support Your Body Systems for Better Health

# Cardio-Metabolic & Circulatory System



## The System functions:

The cardiovascular system is a closed system that consists of the heart, arteries, veins and approximately 5 liters of blood that the blood vessels transport. Veins carry filtered, oxygenated nutrient-rich blood throughout the body needed for metabolism, repair and removal of carbon dioxide, toxins and other metabolic wastes out through the lungs, digestive system, urinary tract, skin and lymphatic system.

**The circulatory system regulates inflammation.**

**There are five phases of inflammation:**

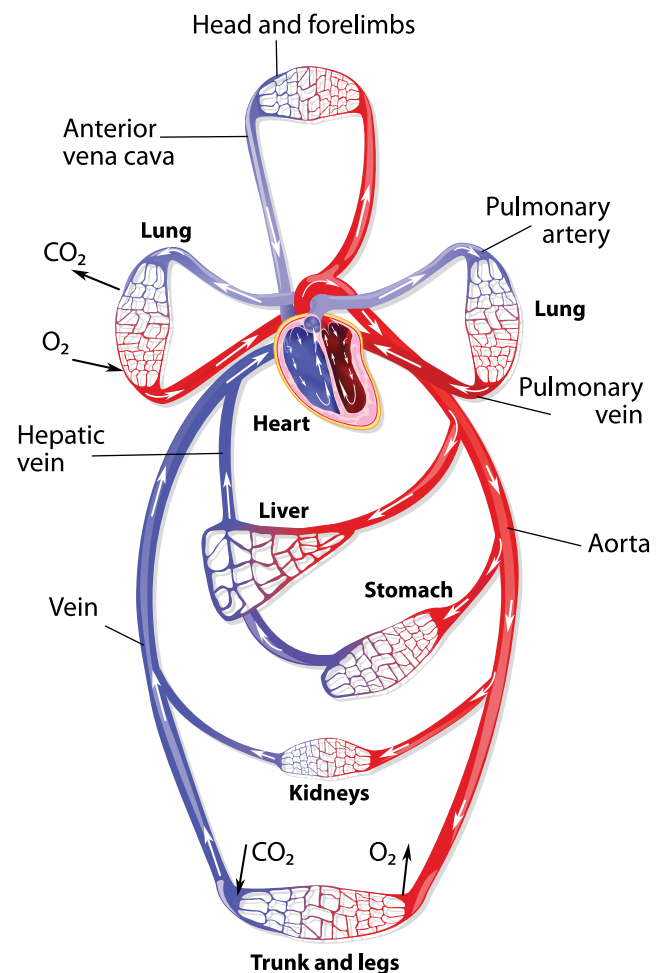
- 1 Rubor** - redness associated with increased blood flow
- 2 Tumor** - swelling associated with increased lymph flow
- 3 Calor** - heat associated with the local fever produced near the injury
- 4 Dolor** - the pain that alerts us to the damage
- 5 Functio laesa** - the loss of function of the injured area, often involving spasms from imbalance

The circulatory system also regulates toxicity. Toxins can be internally produced (endotoxins) or acquired (exotoxins) from our environments: air, water, food, etc. When removing a toxin from the human body, special care is needed to support our normal detoxification processes. Further, attention to the consequences of toxicity is also important. For example, toxins create inflammation, which may spawn allergies or generate infections depending on the type of toxin.

## Associated organs:

Heart, blood vessels, blood and lymphatic

## Circulatory System at a Glance





**What you can do to support a healthy Cardio-Metabolic & Circulatory System:**

**Recommended Dietary Supplements:** Cholestria™, CoEnzyme Q-10, Essential D™, GlucoManage® Formula, HCY Guard®, Nopaleda™, Omega3 Prime™, Slow Dissolve B-12/Super B-12, VitaCal-MagD™ K2, Vital C.™

**Amazon Herb Supplements:** Aqua Algae, Warrior.

**Essential Vitamins & Minerals:** Vitamin B Complex: B1 (Thiamine), B2 (Riboflavin), B3 (Niacin), B5 (Pantothenic Acid), B6 (Pyridoxine), B7 (Biotin), B9 (Folic Acid), B12 (Cyanocobalamin), Vitamin C, Vitamin D3, Vitamin K.

**Foods to Include:**

Fruit	Vegetables	Protein /Dairy	Nut & Seeds	Miscellaneous
Blueberries	Kale	Wild Caught Salmon	Flaxseed	Buckwheat
Cranberries/ Cranberry Juice	Spinach	Fish Roe	Pumpkin Seeds	Apple Cider Vinegar
Tomato	Broccoli	Eggs	Sesame Seeds	Dark Chocolate
Strawberries	Celery		Chia Seeds	Green Tea
Citrus Fruits	Asparagus		Pistachios	

**Note:** Be sure to do your best to shop organic, grass-fed, free-range, unprocessed and low sodium.





## What you can do to support a healthy Cardio-Metabolic & Circulatory System (continued):

**Daily morning cleanse:** 8-12oz of lemon water

### Foods you should avoid or limit:

Do your best to read the labels on packaged food. If the names are too hard to pronounce, they are likely chemical based ingredients and not very good for you.

- Processed and high-sodium foods such as cured ham, bacon, sausage and potato chips
- Foods that contain all-purpose flour such as pizza, bagels, pretzels, white bread, and flour tortillas
- Artificial sweeteners containing Sucralose such as yogurt, cereal, whole grain muffins and breads and microwave popcorn
- Beware of "reduced sugar" labels which are usually loaded with **artificial sweeteners** such as fruit juice, ketchup, jams, jelly, syrup, soda, sports drinks, ice cream and salad dressings. Below is a list of artificial sweeteners you should try to avoid:
 

■ Aspartame	■ Equal	■ NutraSweet	■ Sorbitol
■ Acesulfame potassium	■ Glucin	■ Nutrinova	■ Sucralose
■ Alitame	■ Kaltame	■ Phenylalanine	■ Twinsweet
■ Cyclamate	■ Mogrosides	■ Saccharin	■ Sweet 'N Low
■ Dulcin	■ Neotame	■ Splenda	■ Xylitol

### Recommended Activities:

Physical activity is essential for good health. New studies show even 15 minutes of elevated heart rate from activity has numerous benefits. Find activities you enjoy doing and aim for at least 15 minutes 4 to 5 times per week.

**CARDIO:** Biking, Hiking, Walking, Running, Swimming, Dancing, Zumba

**STRENGTH:** Weight Training, Pilates, Vigorous Yoga, P90X, Crossfit, Barre

**FLEXIBILITY:** Yoga and Stretching





## Additional Information:

**Common Symptoms:** Common signs and symptoms associated with the cardio-metabolic and circulatory system include elevated blood pressure, swelling, cold hands and feet, racing heart, varicose veins, high cholesterol, weight gain, easy bruising, chest tightness and blood disorders.

## Common Disorders:

- **Aneurysm** - Localized enlargement in artery due to weakness in the artery wall.
- **Angina** - Chest pain at rest or exertion due to not enough blood to the heart muscle.
- **Atherosclerosis** - Blockage and stiffness of arteries due to deposition of plaques of fatty material on their inner walls.
- **Atrial Fibrillation** - A quivering or irregular heart-beat affecting the atrial chambers of heart.
- **Blood Clots** - Abnormal clotting of blood causing blockages.
- **Blood Disease** - Any disease in the blood system.
- **Cardiac Dysrhythmia** - Irregular or abnormal heart rate.
- **Cardiomegaly** - Enlarged heart muscle.
- **Cardiomyopathy** - Chronic disease of the heart muscle.
- **Claudication /Leg Cramps** - Pain and cramping in the lower leg while walking or exercising caused by blocked arteries.
- **Cystic Fibrosis** - An inherited disease of the secretory (see-KREH-tor-ee) glands that make mucus and sweat.
- **Diastolic Dysfunction** - Inability for the lower chamber of heart to fill properly.
- **Heart Attack** - Lack of blood flow to heart causing tissue dysfunction or death.
- **Heart Disease** - Any disease that involves heart or blood vessels.
- **Heart Failure** - Heart is unable to pump sufficiently to maintain blood flow.
- **Heart Murmur** - Abnormal opening in heart.
- **Heart Stent** - Stent placed in heart artery to keep open.
- **Heart Valve Disorder** - Heart valves become too narrow and hardened (stenotic) to open fully.
- **Hemophilia** - Condition causes severe reduction in ability for blood to clot.
- **High blood pressure** - Elevated blood pressure.
- **High calcium score** - Elevated levels calcium in the blood.
- **High Cholesterol** - Abnormal blood levels of cholesterol.
- **Human Immunodeficiency Virus (HIV)** - Virus that damages the immune system and makes it more difficult to fight off infections and other diseases.
- **Pacemaker** - Internal machine that creates a heart rate.
- **Raynaud's Phenomenon** - Raynaud's condition causes pain in the extremities in response to cold temperatures.
- **Rheumatic Fever** - Acute fever marked by inflammation and pain in the joints caused by streptococcal infection.
- **Stroke** - Sudden blockage of blood flow to an organ-usually the brain.