

# Blood Type and Nutrition

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# Why is Blood Type Important?

- All organisms are equipped with a system which enables their bodies to identify structures that are part of their organism from structures belonging to other organisms
- Blood type is one of the most fundamental methods the body utilizes to separate self from not self
- This is why donated blood has to be compatible
- This ability to determine what is self and what is not self is at the core of our immune function

# About Blood Typing

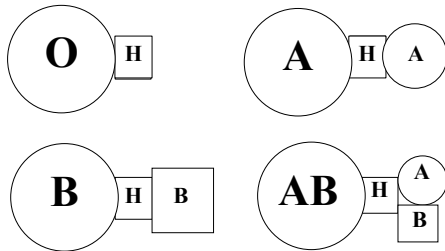
- In 1900, Karl Landsteiner proved that there were four different types of human blood.
- In 1907, Dr. Jan Jansky noted the four blood types that we know today: A, B, O, AB
- Research done by Dr. Peter D'Adamo and his father, Dr. James D'Adamo, has demonstrated there was a strong correlation between a person's blood type (O, A, B or AB) and the foods and supplements they need to consume for optimal health.
- Dr. D'Adamo has widely promoted this concept in several popular books, including *Eat Right for Your Type* and his *Live Right for Your Type*.

# Determining Your Blood Type

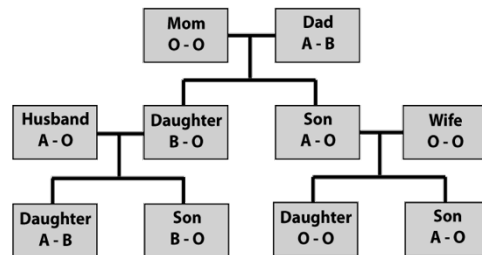
- Simple test kits are available to determine your blood type
- You can also donate blood and ask them what your blood type is when you donate



# Blood Type Structures



# Genetics




**Lectins**

- Chemicals found in all foods
- Lectins that are incompatible with one's blood type create negative biochemical reactions
- For starters, they cause agglutination of the blood, meaning they make red blood cells "sticky" so they clump together. This results in a reduction in oxygen supply in the body and lowered immunity
- Lectins can also interfere with protein digestion, block hormones, trigger immune reactions and impair absorption
- Understanding which foods contain lectins compatible with the body and which foods contain lectins that are not is the basis of the blood type diet

**Food Choices**

- Beneficial—foods/ supplements act like a medicine
- Neutral—foods/ supplements act like a food
- Avoid—foods/ supplements act like a poison



**Secretor/Non-Secretor**

- Secretors
  - 85% of population
  - Express more of your blood type in your body
  - Wall out the bad guys and kill them outside the body
- Non-secretors
  - Allow germs in and kill them within the blood stream
  - Carries a gene which inhibits them from secreting their ABO blood type in their saliva, semen, etc
  - Distinct link between non-secretors and family histories of alcoholism and diabetes


**Dietary Compliance**

- Healthy
  - Over age 55 – 80% compliance
  - Under age 55 – 70%
- Imbalanced or diseased
  - 80-90% compliance
- Desiring weight loss
  - 100% compliance



**Blood Type Supplements**

- In addition to diet each blood type is prone to a unique set of health challenges
- These can be mediated or eliminated through appropriate herbs and supplements



**Blood Type O Basics**

- Universal donor (can donate blood to all types)
- Carnivorous, hunter-gatherer type
- Oldest and most basic blood type
- Tend to be strong and self-reliant, natural leaders
- Hardy digestive tract
- Strong immune system with natural defenses against infection

## Blood Type O

<b>Strengths</b>	<b>Weaknesses</b>
<ul style="list-style-type: none"> <li>• Strong immunity</li> <li>• Strong digestion, break down fats and proteins easily</li> <li>• Handle stress well in the short term</li> <li>• Thinner blood</li> </ul>	<ul style="list-style-type: none"> <li>• Once overtaxed by stress, they require longer recovery</li> <li>• Can be angry or prone to risky behavior</li> <li>• Can be moody and hyperactive</li> <li>• Poor utilization of carbohydrates</li> </ul>

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## Blood Type O Diet

<b>Major Avoids</b>	<b>Major Beneficials</b>
<ul style="list-style-type: none"> <li>• Grains (corn, wheat)</li> <li>• Dairy products (A-1 Beta Casein)</li> <li>• Beans (kidney, navy, pinto, lentils)</li> <li>• Nuts/Seeds (cashews, peanuts, pistachios)</li> <li>• Fats/Oils (soy oil, corn oil, peanut oil, black olives)</li> <li>• Other (cauliflower, red and white potatoes, oranges, tangerines)</li> </ul>	<ul style="list-style-type: none"> <li>• Red Meat (beef (grass-finished), buffalo, lamb, venison)</li> <li>• Fish (sea bass, cod, halibut, snapper, yellowtail)</li> <li>• Beans (adzuki, black-eyed peas)</li> <li>• Nuts/Seeds (flax, pumpkin, walnut)</li> <li>• Fats/Oils (flax, olive)</li> <li>• Other (beet greens, Swiss chard, broccoli, kale, cherries, plums)</li> </ul>

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## Neurotransmitters

- Secrete higher levels of catecholamines (dopamine, ephedrine), which allows them to respond more rapidly to danger
- They also have low levels of MAO, which breaks down catecholamines, which is why they need a longer recovery time from stress
- Issues with these neurotransmitters make them more prone to manic-depressive disorders, bipolar disorder, schizophrenia and ADHD
- L-tyrosine found in red meat (and sprouted wheat) helps balance these neurotransmitters

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## Blood Type O and Stress

<ul style="list-style-type: none"> <li>• Produce the least amount of cortisol in response to stress</li> <li>• Susceptible to prolonged stress - adrenal exhaustion</li> <li>• Cholesterol usually runs higher</li> </ul>	<ul style="list-style-type: none"> <li>• Anger management techniques</li> <li>• Intense physical exercise</li> <li>• Minimize monotony</li> <li>• Add high CLA proteins to diet</li> </ul>
<ul style="list-style-type: none"> <li>• <b>CoQ10</b> <ul style="list-style-type: none"> <li>• Helps lower blood pressure, glucose and triglycerides levels.</li> <li>• Helps with sluggish liver. Helps to improve HDL cholesterol by helping to keep LDL cholesterol oxidation inhibited. Helps reduce high serum LDL cholesterol.</li> <li>• Antioxidant, which helps to reduce the effects of oxidative stress.</li> <li>• Helps with maintenance of optimal cellular function that has been impaired by stress.</li> <li>• Crucial for energy metabolism.</li> </ul> </li> <li>• <b>Licorice Root</b> <ul style="list-style-type: none"> <li>• Provides adaptogens to nourish adrenals and improve prolonged stress response.</li> <li>• Reduces cravings for sugar and carbs (foods that create inflammation and oxidized cholesterol)</li> </ul> </li> </ul>	

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## Blood Type O

<b>Health Issues</b>	<b>Important Supplements</b>
<ul style="list-style-type: none"> <li>• Hyperactive Immune System               <ul style="list-style-type: none"> <li>• Allergies</li> <li>• Inflammatory conditions</li> <li>• Autoimmune diseases</li> </ul> </li> <li>• Hashimoto's thyroiditis</li> <li>• Mood swings               <ul style="list-style-type: none"> <li>• ADHD</li> <li>• Manic-Depressive</li> <li>• Schizophrenia</li> <li>• Parkinson's</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• L-tyrosine</li> <li>• 5-HTP</li> <li>• L-glutamine</li> <li>• B-complex vitamins (especially folic acid)</li> <li>• Trace minerals</li> <li>• Adaptagens</li> <li>• Adrenal Glandular</li> <li>• Larch Tree Bark (arabinogalactin)</li> <li>• Iodine (seaweeds)</li> <li>• Stinging Nettle</li> </ul>

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## Blood Type A Basics

- Agrarian blood type, cultivators, more vegetarian (need the right types of proteins)
- Settled, co-operative and orderly
- Adapt well to environmental changes
- Sensitive digestive tracts
- Have more difficulty digesting protein, especially red meat
- More vulnerable to microbial invasion

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**A Blood Type A**

<b>Strengths</b>	<b>Weaknesses</b>
<ul style="list-style-type: none"> <li>• Adaptive to change</li> <li>• Preserves and metabolizes nutrients</li> <li>• Creative</li> <li>• Co-operative</li> <li>• Domestic</li> <li>• Organized</li> </ul>	<ul style="list-style-type: none"> <li>• Prone to anxiety</li> <li>• Weak digestion</li> <li>• Reduced immunity</li> <li>• Congestion/Stagnation</li> <li>• OCD</li> </ul>

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**A Cortisol and Stress**

- Secrete more cortisol than other blood types giving them a higher base-line stress level
- Also produce more epinephrine in response to stress and has the hardest time breaking it down
- High cortisol contributes to more rapid aging, senility, Alzheimer's and cancer
- This also makes them more prone to anxiety disorders, particularly obsessive-compulsive disorders (OCD). OCD patients show higher levels of cortisol.
- Adaptogens help reduce cortisol levels and can be very beneficial

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**A Blood Type A Diet**

<b>Major Avoids</b>	<b>Major Beneficials</b>
<ul style="list-style-type: none"> <li>• Grain fed Beef</li> <li>• Fish (bass, catfish, grouper, haddock, halibut, oyster, scallop)</li> <li>• Grains (wheat)</li> <li>• Dairy</li> <li>• Nuts/Seeds (Brazil, pistachio)</li> <li>• Other (tomatoes, potatoes, peppers, bananas, oranges)</li> </ul>	<ul style="list-style-type: none"> <li>• Fish (cod, perch, snapper, salmon, sardine, trout)</li> <li>• Grains (amaranth, rye, oat)</li> <li>• Beans (black, pinto, soy, lentils)</li> <li>• Nuts/Seeds (peanut, pumpkin, walnut)</li> <li>• Other (beet greens, broccoli, carrot, onions, Swiss chard, berries, grapefruit, lemon, lime)</li> </ul>

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**A Blood Type A and Stress**

<ul style="list-style-type: none"> <li>• Over responds to minor stress</li> <li>• Has an increased cortisol in blood</li> <li>• LDL Inflammatory response usually higher</li> </ul>	<ul style="list-style-type: none"> <li>• Calming exercises (yoga, tai chi)</li> <li>• Meditation and deep breathing</li> <li>• Avoid sleep deprivation</li> <li>• Solitude replenishes</li> </ul>
<ul style="list-style-type: none"> <li>• <b>Adaptogens</b> <ul style="list-style-type: none"> <li>• Nourishes circulatory system and protects from oxidative damage</li> <li>• Protects the digestive system from the effects of stress</li> <li>• Helps restore energy levels in an over stressed nervous system</li> </ul> </li> <li>• <b>B-Complex</b> <ul style="list-style-type: none"> <li>• Reduces depletion of nutrients due to high cortisol levels and elevated stress response.</li> <li>• Strengthens nervous system and resistance to physical effects of stress.</li> <li>• Controls inflammatory effects of High LDL</li> </ul> </li> </ul>	

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**A Blood Type A Supplements**

<b>Health Issues</b>	<b>Important Supplements</b>
<ul style="list-style-type: none"> <li>• <b>Stress</b> <ul style="list-style-type: none"> <li>• Higher cortisol levels</li> <li>• Difficulty handling stress</li> <li>• Prone to anxiety, OCD</li> </ul> </li> <li>• <b>Weak digestion</b></li> <li>• <b>Immune Issues</b> <ul style="list-style-type: none"> <li>• Asthma and allergies</li> <li>• Ear infections in children</li> <li>• Highest cancer risk</li> </ul> </li> <li>• <b>Thicker blood</b></li> <li>• <b>Insulin resistance</b></li> </ul>	<ul style="list-style-type: none"> <li>• <b>Adaptogens/Adrenals (Eleuthero, licorice, schizandra)</b></li> <li>• <b>B-Complex (B6, B12)</b></li> <li>• <b>Digestive enzymes (HCl)</b></li> <li>• <b>Probiotics</b></li> <li>• <b>Digestive bitters (gentian, goldenseal)</b></li> <li>• <b>Co-Q 10</b></li> </ul>

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**B Blood Type B Basics**

- First appeared in India or the Ural region of Asia among a mix of Caucasian and Mongolian tribes
- Inclined to be nomads
- **Balanced, flexible and creative.**
- **Strong immune systems**
- **Readily adapt to dietary and environmental changes**
- **Omnivore type**

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**B Blood Type B**

<b>Strengths</b>	<b>Weaknesses</b>
<ul style="list-style-type: none"> <li>• Strong immune system</li> <li>• Balanced nervous system</li> <li>• Flexible, outgoing</li> <li>• Versatile to dietary change</li> <li>• Good digestion</li> </ul>	<ul style="list-style-type: none"> <li>• Overreactive to stress (hold stress inside)</li> <li>• Difficulty recovering from stress</li> <li>• Lethargy, lack of motivation</li> <li>• Some immune issues with viruses</li> </ul>

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**B Blood Type B Diet**

<b>Major Avoids</b>	<b>Major Beneficials</b>
<ul style="list-style-type: none"> <li>• Meat (chicken, duck, quail, pork)</li> <li>• Seafood (clam, crab, lobster, mussels, shrimp, yellowtail)</li> <li>• Beans (black, garbanzo, lentils, mung, soy)</li> <li>• Nuts/Seeds (peanuts, cashews, pistachio)</li> <li>• Grains (corn, wheat, rye)</li> <li>• Other (olives, tomato)</li> </ul>	<ul style="list-style-type: none"> <li>• Meat (goat, lamb, venison)</li> <li>• Seafood (caviar, cod, halibut, salmon, sardine)</li> <li>• Dairy (organic cow milk, goat milk, cottage cheese, yogurt, feta)</li> <li>• Beans (kidney, lima)</li> <li>• Walnuts</li> <li>• Grains (oat, rice)</li> <li>• Other (beet, cabbage, carrot, peppers, yams, papaya, pineapple)</li> </ul>

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**B Blood Type B Notes**

- Blood type B (and AB) clear nitric oxide faster than other blood types
- Nitric oxide dilates blood vessels to lower blood pressure
- L-arginine is the precursor to nitric oxide
- Both B and O blood types are more intolerant of carbohydrates and require higher protein intake

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**B Blood Type B and Stress**

<ul style="list-style-type: none"> <li>• More emotionally centered</li> <li>• Sensitive to stress related imbalances</li> <li>• Respond quickly to stress-reducing techniques</li> <li>• Triglycerides tend to run higher</li> </ul>	<ul style="list-style-type: none"> <li>• Visualization and relaxation strategies balanced with exercise</li> <li>• Meditation and deep breathing</li> <li>• Sleep according to light/dark response</li> <li>• Avoid rushing – have a schedule</li> </ul>
<ul style="list-style-type: none"> <li>• <b>Lecithin</b> <ul style="list-style-type: none"> <li>• Helps balance cholesterol and triglyceride combustion</li> <li>• Helps produce healthy bile salts to emulsify fats</li> <li>• Reduces blood insulin levels which can damage arteries and cause clots</li> </ul> </li> <li>• <b>Magnesium</b> <ul style="list-style-type: none"> <li>• Reduces heart stress and lowers homocysteine levels</li> <li>• Reduces inflammatory processes from stress and helps with irregular heartbeat</li> <li>• Enables better glyceride combustion and increases cellular energy and endurance</li> </ul> </li> </ul>	

**B Blood Type B Supplements**

<b>Health Issues</b>	<b>Important Supplements</b>
<ul style="list-style-type: none"> <li>• Immune Issues               <ul style="list-style-type: none"> <li>• Vulnerable to viruses</li> <li>• Autoimmune disorders</li> </ul> </li> <li>• Memory loss (Alzheimer's)</li> <li>• Chronic fatigue</li> <li>• Hyperinsulinemia</li> <li>• High blood pressure</li> <li>• Urinary tract infections</li> </ul>	<ul style="list-style-type: none"> <li>• Ginkgo</li> <li>• Bacopa Leaf</li> <li>• B-Complex</li> <li>• Magnesium</li> <li>• L-arginine</li> <li>• Cranberry/Juniper Berry</li> <li>• Lecithin</li> <li>• Elderberry</li> <li>• Astragalus</li> <li>• Eleuthero</li> <li>• Minerals</li> </ul>

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**AB Blood Type AB Basics**

- Universal Receiver (can receive all other blood types, but can only donate to other ABs)
- Rarest blood type (less than 4% of the population)
- Combines traits of A and B types
- Stronger immune systems
- Tend to be charismatic and mysterious
- Adaptable for modern conditions

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**AB Blood Type AB**

Strengths	Weaknesses
<ul style="list-style-type: none"> <li>Charismatic</li> <li>Mysterious</li> <li>Adaptable to modern conditions</li> </ul>	<ul style="list-style-type: none"> <li>Overly tolerant immune system</li> <li>Digestive issues (intestinal)</li> <li>Tendency to feel alienated from others</li> <li>Introversion</li> <li>Problems digesting protein and fat</li> </ul>

**AB Blood Type AB Diet**

Major Avoids	Major Beneficials
<ul style="list-style-type: none"> <li>Meat (red meat, pork, chicken)</li> <li>Seafood (clam, crab, lobster, shrimp, oyster, yellowtail)</li> <li>Corn</li> <li>Nuts/Seeds (sunflower, pumpkin)</li> <li>Other (banana, orange, peppers)</li> </ul>	<ul style="list-style-type: none"> <li>Meat (turkey)</li> <li>Seafood (cod, mackerel, salmon, snapper, tuna)</li> <li>Grain (amaranth, rice, oat, spelt)</li> <li>Dairy (goat milk, yogurt, cottage cheese, sour cream)</li> <li>Nuts/Seeds (peanut, walnut)</li> <li>Other (grapes, pineapple, beets, kale, eggplant)</li> </ul>

**AB Blood Type AB and Stress**


<ul style="list-style-type: none"> <li>Stress causes more immediate reaction in inflammation</li> <li>Sensitive to stress related imbalances more like the A type</li> <li>Triglycerides tend to run higher</li> </ul>	<ul style="list-style-type: none"> <li>Diet is extremely important in lowering high glycemic index</li> <li>Meditation, visualization &amp; deep breathing</li> <li>Sleep is important to restore balance</li> <li>Minimize surprise and adrenaline rushes</li> </ul>
<ul style="list-style-type: none"> <li><b>Rhodiola</b> <ul style="list-style-type: none"> <li>Helps with blood quality and supports lymphatic system</li> <li>Reduces the cell mutations associated with cancer</li> <li>Helps the body's ability to repair DNA mutations</li> </ul> </li> <li><b>L-Arginine</b> <ul style="list-style-type: none"> <li>Reduces nitric oxide generation</li> <li>Inhibits proinflammatory cytokines</li> <li>Lowers blood sugar, blood pressure and triglycerides</li> <li>Decreases oxidative stress.*</li> <li>Increases blood flow to the extremities</li> </ul> </li> </ul>	

**AB Blood Type AB Supplements**

Health Issues	Important Supplements
<ul style="list-style-type: none"> <li>Overly tolerant immune system</li> <li>Digestive issues               <ul style="list-style-type: none"> <li>Parasites</li> <li>Leaky gut</li> <li>Sensitive digestive systems</li> <li>Prone to colon cancer</li> </ul> </li> <li>Hypertension</li> <li>Blood clots</li> <li>Mood disorders like Os</li> </ul>	<ul style="list-style-type: none"> <li>L-tyrosine</li> <li>L-arginine</li> <li>Kudzu</li> <li>Probiotics</li> <li>Rhodiola</li> <li>B-complex vitamins</li> <li>Alpha lipoic acid</li> <li>Yellow Dock</li> <li>L-glutamine</li> </ul>

**Blood Typing Kits**

- Use to determine a person's blood type
- 1 or more kits - \$16.20
- 6 or more kits - \$12.96 - 20% off
- 12 or more kits - \$9.72 - 40% off
- 10% off for orders placed 2/13-2/29



**Blood Type and Nutrition Charts**

