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and get more out of life - naturally?



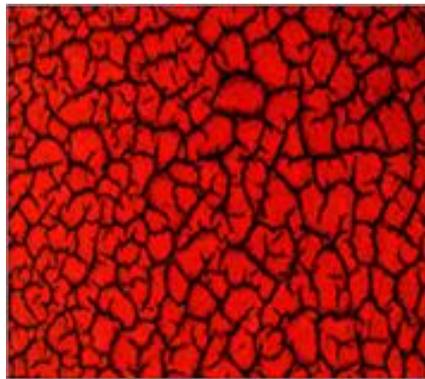
No magic  
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No one size  
fits all



Real science  
Real results



Unleash your Health Potential!  
*Anabolic Imbalance*

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# Anabolic / Catabolic Metabolic Control Mechanism

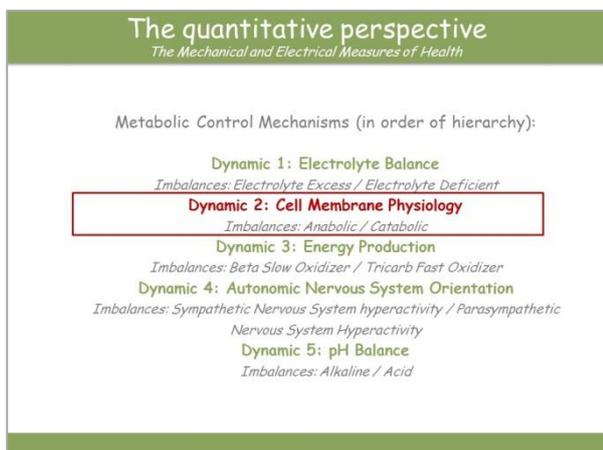
## Anabolic Imbalance

### Anabolic definition

1. Anaerobic oxidative energy metabolism; fermentation
2. Lipids where positive polar groups predominate (sterols, alcohols, amines)

### Diurnal Cycle

1. Most anabolic at 04:00
2. Most catabolic at 08:00 to 21:00
3. Sleep increases sterols
4. Increase in acid pain (anytime a person's symptoms worsen during sleeping hours) is a clue that they have an anabolic imbalance.



### Overview

When there is an Anabolic/Catabolic imbalance, the composition of fats in tissue membranes is out of proportion. There are either excess fatty acids, or excess sterols in the membrane structure, affecting the membrane's ability to control selective permeability.

An anabolic metabolic imbalance represents an insufficiency of oxidative metabolism. The anabolic person, instead of producing energy with oxygen, is relying on fermentation (anaerobic glycolysis) to produce energy, which is very inefficient. The anabolic person can also be thought of as having insufficient fatty acid activity and excess sterol activity. It is this imbalance in lipid metabolism that causes problems both with energy production and with membrane permeability.

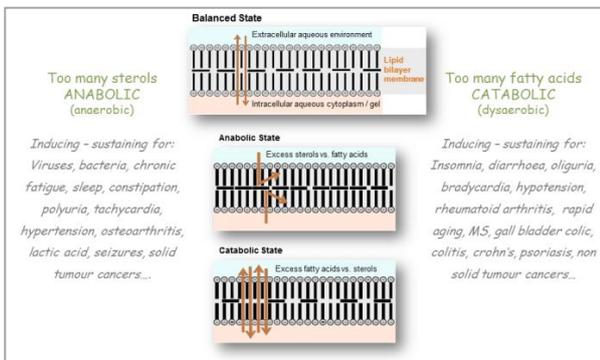
Are we talking about anything important here? When we talk about oxidative energy production and the selective permeability of biological markers we are talking about the essence of life itself.

This is why the Anabolic/Catabolic balance is the second most important in the hierarchy of the five fundamental control mechanisms

At the cellular level, our body is always in an anabolic or catabolic state, or in the process of switching back and forth between the two. Ideally, at night our cells are in an anabolic state where the cell walls become less permeable and during the day, our cell membranes are intended to open up (much like a flower) so nutrition can get in and toxins can get out. This process assists with recovery and repair processes.

Without strength and balance in both anti-anabolic and anti-catabolic forces, you cannot:

- Produce oxidative energy in sufficient quantity to power the essential activities of a high vitality life.
- Prevent the oxidative free radical damage that accelerates tissue degeneration and ageing.
- Maintain glycaemic control.
- Maintain normal fluid and electrolyte dynamics in each of the three body fluid compartments.
- Maintain normal pH in each of the three body fluid compartments.



In other words, Anabolic/Catabolic forces play a part in virtually everything that happens in the human body. Any symptom or condition you can name is likely to have an Anabolic or Catabolic component.

Due to many possible factors, some people can get stuck in one state and their body will not switch back and forth like it is intended to.

If someone is stuck in an anabolic state, their body tends to hold on to some things too much and does not use oxygen to make energy as appropriately as the body is intended to. The anabolic person, instead of producing energy with oxygen, is relying on fermentation (anaerobic glycolysis) to produce energy which is very inefficient.

An anabolic imbalance can cause constipation by sending too much of the body's water to the kidneys and not enough to the bowels,

making the stool harder and more difficult to move. (It will also cause a person to have to pee a lot (due to increased volume) and they will often have to get up in the middle of the night to pee.) Also, if your body isn't getting rid of toxins like it should, many of these toxins will end up being stored in fat cells.

Our cells are made up of different types of fats (fatty acids and sterols). If there are too many sterols in the cell membrane and not enough fatty acids, our body can be predisposed to become stuck in an anabolic state (as described above). With too many fatty acids and not enough sterols, we could be predisposed to getting stuck in a catabolic state. To make the body operate correctly, we need to oscillate back and forth from the anabolic state at night while we sleep to a catabolic state during the day, while we're active. Without this natural oscillation, problems like constipation or weight gain are inevitable.

So, to improve an anabolic imbalance, one could add more fatty acids to help balance out the ratio. Other supplements may eventually prove more effective, but flax seed oil is a great place to start.

If you're stuck in an anabolic state most of the time, it can be very hard to get up in the morning because your body, at the cellular level, is actually still in "sleep" mode. In the same way that most people who suffer from insomnia are stuck in a catabolic state where their body is always awake, an anabolic person can have a hard time getting their body in motion in the morning. The anabolic and catabolic states, at the cellular level, are as obvious a fact as day and night on the earth or tides in the ocean.

## Some common symptoms of an Anabolic Imbalance

- Constipation
- Polyuria (overly frequent urination, with volume)
- Anxiety
- Prolonged cellular youth
- Panic Attacks
- Body pain that gets better 30-60 minutes after drinking a mix of 2 tsp potassium Bi-carb with water.
- Itching
- Vertigo
- Sleeps Deeply / Hard to Wake Up
- Dyspnoea
- Hearing loss
- High Body Temperature
- Somnolence
- Hard to wake up in the morning
- Viral Problems
- Tachycardia

## Some Anabolic biological markers

- Urine pH >6.3
- Saliva pH <6.6
- Saliva mS <4.5 (mS = milliSiemen / a measure of electrical conductivity)
- Resting Pulse > 77
- High blood pressure
- Low Debris (in urine)
- High cellular potassium (low serum potassium)
- Dermographic RED line (make a mark on your skin (arm) with the blunt end of a pen, wait a few seconds to see what colour the line changes to). A red line is an anabolic marker.
- High level of eosinophil's
- Low urine specific gravity < 1.011

- High urine surface tension.

## Steps that could help

1. Increase your fatty acid intake. Good ones like flax seed oil, flax seeds, olive oil, salmon, and other beneficial foods listed under "Foods to implement".
2. Focus on your constipation if you're experiencing any. I know that you've been told your whole life that some people just get constipated and you've probably learned to live with it. It's a major problem and needs your attention.
3. Follow your supplement protocol. Many of your symptoms are likely a result of this imbalance and will most likely improve once it is corrected.

Many people have lived their lives believing that some people are just more constipated than others and it's not such a big deal. However, it can be a big deal and can cause more problems down the road (some of which we'll discuss below), so it really is worth correcting.

## Anabolic & Constipation

Water has two main exit points from the body - our kidneys and our bowels (beyond what leaves our body through our pores when we sweat). In a balanced state, water will be sent to both. In an extreme anabolic state, however, more water is sent to the kidneys and less water goes to the bowels. This can cause our stool to become dry and hard, which makes the stool harder to move and we become constipated. (This will also cause a person to have to pee more often, if they're drinking the proper amount of water, and these individuals will often need to get up to pee in the middle of the night).

With chronic constipation, a major concern can be that toxins are filtered from our body and placed into bile to be sent out of our body through our bowels. If we're constipated, instead of being sent out through the bowels, these toxins can be reabsorbed back into the blood stream, needing to be filtered out once again. If the liver gets overwhelmed by these toxins, the body will often pull them out of the bloodstream and store them in fat cells to keep the delicate chemistry of the bloodstream in check. The body's plan is to go back and remove these toxins, but if we're constipated and enough toxins aren't being removed, this never happens and we gain weight. In an overly anabolic state, where the cell walls become less permeable, these toxins can become stuck in cells for years, making it hard for us to lose weight.

This can be corrected by pushing a person more catabolic, sending more water to the bowel, thereby relieving constipation, and opening up the cell walls so toxins can be removed.

Other factors can contribute to constipation, but an anabolic imbalance is the most common underlying cause that shows up for clients with chronic constipation issues.

## Anabolic & Anxiety/Panic Attacks

To induce a panic attack in someone you could inject them with lactic acid and that can cause a panic attack. There are two main methods your body uses to create energy: For quick energy we use fermented energy from the inner part of the cell wall. This is known as fermentation. For long-term energy, we start to use oxygen and produce energy in the mitochondria of our cells. A resulting product when you make energy with

fermentation is lactic acid. In an anabolic state, the body uses fermentation more than normal and creates more lactic acid than the liver can remove. Usually lactic acid is converted into glucose and used as fuel. But if you're making it more often than you're intended to, the body can't keep up and excess amounts of lactic acid is the result. As it builds up in the body, this can result in higher states of anxiety and eventually panic attacks. If this is the cause of your anxiety, then correcting the anabolic imbalance can change the way your body makes energy and reduce the level of lactic acid in the system.

## Anabolic & Breast Cysts

Because of the effect that the anabolic state has on cellular permeability, an overly anabolic state is often believed to be the terrain where cysts can grow best. Some natural practitioners also believe that there is an overworked liver involved as well but we will be working on that through correcting digestion and improving bile flow already. When one corrects the anabolic imbalance, the cysts often go away on their own. Since iodine can work as a disperser to help disperse toxic accumulation in the body, some natural practitioners will also use iodine, both topically and internally, in cases such as these.

## Foods to Avoid if you're too Anabolic

- Poached or soft-boiled eggs especially at night.
- Clarified Butter (Ghee)
- Butter/Cream
- Coconut Oil
- New Cheeses such as Cottage, Mozzarella, Cream cheese
- Ice Cream

- Tea
- Coffee
- Vinegar
- Soft Drinks

## Foods to implement if you're too Anabolic

- Non-starchy vegetables
- Fish (especially salmon)
- Unheated virgin olive oil
- Flax seed oil (in a pearl-type gel cap is best; do not heat flax seed oil)
- Ground flax seed (fresh ground whole seed)
- Lemon juice
- Citrus fruit
- Sardines
- Fried or omelette-style eggs in the morning (not Egg-Beaters or egg whites). Even in a time crunch, if you make hard-boiled eggs, you can keep them in the fridge and grab one on the run in the morning. When your digestion is working correctly, a hard-boiled or hard-cooked egg can be a powerful anti-anabolic meal and can even reduce your need for anti-anabolic supplements.

## How eggs can hurt and help

If you have an anabolic or catabolic imbalance, eggs can also help. If you're overly anabolic, eating fried or omelette-style eggs in the morning will help push you more catabolic during the day.

If you're overly catabolic, eating poached or soft boiled eggs at night will help push you more anabolic at night so you can sleep better.

So, the anabolic person would want to eat hard cooked eggs in the morning and limit or avoid soft boiled or poached eggs.

The difference occurs in the preparation. When the yolk is cooked hard (hard-boiled, scrambled, omelette, fried) the proteins seize up and have a pro-catabolic effect on most people. When the yolk is left uncooked (Poached, soft-boiled or even raw) they have a pro-anabolic effect on most people.

Eggs literally are just about the most perfect food, but imperfect digestion can still allow any perfect food to become toxic, so correcting any digestive issues is always a priority.

## FAQs

### 1. Why is butter bad for me?

A: You should really avoid butter like the plague until you're balanced. Butter is a sterol and an anabolic imbalance is considered to be a state where the cells are made up of excess sterols and not enough fatty acids. Eating more butter will push you further into an anabolic state.

### 2. Why am I predisposed towards constipation?

A: Odds are, even if you can remember being constipated for decades, you've likely also been overly anabolic during those times. In an anabolic state the body tends to close up and hold on at the cellular level. It also tends to send most of your water to your kidneys and not enough to the bowel.

### 3. Why do I have to get up and pee so much in the middle of the night?

A: In an anabolic state, your body sends most of its water to your kidneys instead of distributing some to the bowel. With everything going to the kidneys, you'll find that you have to pee often, including in the middle of the night.

#### 4. Why can't I lose weight?

A: Many imbalances can contribute to this, but we'll focus on the case of being in an overly anabolic state here. In an anabolic state, often times cells stay too closed up and hold on to toxins and junk that should be getting filtered out. All this excess junk can cause weight gain. Also, if your anabolic state is causing constipation, that's a great way to keep you from losing weight.

### Anabolic Supplement Formulas

Specific supplements to help correct an Anabolic Imbalance:

- **Anabolic** - 2-3 caps with Breakfast and Lunch
- **Flow A** (don't use if diarrhoea is present) – ½ dropper before breakfast and before lunch
- **Vitamin B12** - can also help the body burn fat. (Best taken with breakfast and/or lunch. Avoid at night.)
- **Vitamin A** (Best taken with breakfast and/or lunch. Avoid at night.)
- **L-Tyrosine** - an amino acid. (Avoid at night.)
- **Flax Seed Oil** Pearl form or gel cap is best. (Best taken with breakfast and/or lunch. Avoid at night.)
- **Beet Flow** – 1-5 caps with all meals
- **Magnesium Malate** (3-4 caps with breakfast and lunch)
- **Mito NRG** - 3 caps before breakfast and lunch

- **MSM** – 1-3 tsp twice per day

NOTE: Most of these supplements can be ordered by contacting Mark (when ordering in Australia) or via Naturalreference.com (when ordering in the USA). You will need to enter practitioner code 40551240 to order from NR.

### Avoid With This Imbalance

- L-Glutamine An amino acid.
- L-Arginine An amino acid.
- Vitamin E
- Potassium Citrate

### Contact Mark

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Mark's world-wide testing options:

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