

LEGUMES: FRIEND OR FOE?

FOE ARGUMENT:

Anti-nutrients: Proponents for the paleo diet point out that the high *oxalate*, *phytic acid* and *lectin* content of legumes is harmful to our bodies

- **Oxalate acid** can bind minerals and is most known for causing calcium oxalate kidney stones. Other problems related to it's ability to bind minerals are: reduced bone growth, diarrhea/vomiting, and impaired blood clotting.
- **Lectins** bind to sugars-many sugars hang off the edges of all the cells in our body. They can bind to our intestinal cells causing malabsorption. Lectin's ability to bind most cells has lead to studies implicating lectins with causing *leptin* (a signal that stops hunger among many other things) *resistance*, therefore increasing obesity risk. As well connections are being established between lectins and allergic reactions, autoimmunity (the body attacking itself), and inflammation.
- **Phytic Acid** binds minerals and inhibits digestive enzymes thus decreasing protein and carbohydrate absorption. Soy has the highest amount of phytic acid of all foods

Not a good source of protein: legumes do have higher protein levels than other plant foods but in comparison to flesh protein sources it is lacking and should be considered more of a carbohydrate source than a protein source. Also the anti-nutrients listed above decrease their protein content due to poor digestibility!

LEGUMES: FRIEND OR FOE?

FRIEND ARGUMENT:

If prepared/cooked properly the “anti-nutrients described previously are decreased greatly:

- **Lectins:** decrease levels significantly with moist heat (steaming/boiling/poaching)- not dry. You need to use higher heat when cooking so slow cooking is not recommended.
- **Oxalic acid:** actually we CANNOT remove or reduce this with cooking methods. What is interesting here is that spinach and rhubarb have much higher levels of oxalate acid in them, but they are not excluded from the Paleolithic diet...on that note nuts are contain lectins and phytic acid....
- **Phytic acid:** This is fairly heat stable but can be reduced with soaking and fermentation. A positive spin of phytic acid is a theory claiming it's properties of decreasing carbohydrate absorption may be beneficial for blood sugar regulation.

Legumes are BENEFICIAL: They are a low calorie, low fat vegetarian protein source. They are high in fiber and may be helpful to stabilize blood sugar and lower cholesterol.

Legumes are INEXPENSIVE: Legumes are a cheap source of protein and when combined in a 1:3 ratio with grains provides a “complete protein” source for individuals who may otherwise go without due to monetary constraints.