

Avoiding Grains Part 1



As humans, we didn't adapt to eat grains, we also didn't adapt to consume dairy and processed sugars. However looking at our diet they are one of the most consumed foods, with fresh vegetables, fruits, nuts, seeds and meat being far less consumed; and these are the foods which we have been evolved to eat and should be eating. Grains are so cheap to make and are sold in bulk to many billions of people and incidentally, the average person worldwide has become fatter and un-healthier since their overrated introduction to society.

Although grains contain protein, carbohydrates and some vitamins and minerals, which will on the outside, make grains seem like a brilliant food source, grains also contain what are called antinutrients, lectins and gluten, all which have negative traits.

Antinutrients are pretty much how the word sounds, ANTI nutrients. The main antinutrient found in grains is called Phytates, which bind to vitamins, minerals and enzymes to make them unavailable to the body. The main minerals Phytates target include calcium, magnesium, iron, copper and zinc, which interestingly are also the main minerals found in grains itself, preventing full absorption of the nutrients present along with taking them out of the body to later cause, with consistent consumption of grains, possible nutrient deficiency in those areas and/or more.

Phytates will also attack enzymes which are needed for digestion and other bodily functions and will assist in inhibiting protein digestion.

Antinutrients are also found in legumes, nuts and seeds, and even eggs contain an antinutrient called avidin; however you'd need to consume a drastically high amount of raw eggs to get enough avidin to start causing negative effects on the body. Nuts and seeds are a food source that are good for us, as they contain good traces of fatty acids

and protein, so we don't want to stop eating them because they contain antinutrients; what we can do to reduce the amount of antinutrients is to soak them in water, this is quite beneficial as this process will not only reduce the antinutrients, but will also improve the nut/seeds digestibility, so we end up getting more of the good stuff! If you don't have the chance to soak your nuts, just be moderate in the amount that you eat.

The process of soaking grains and legumes is used a lot in traditional societies and cultures, and is one reason why those people don't seem to obtain the same health problems as in the Eastern culture.

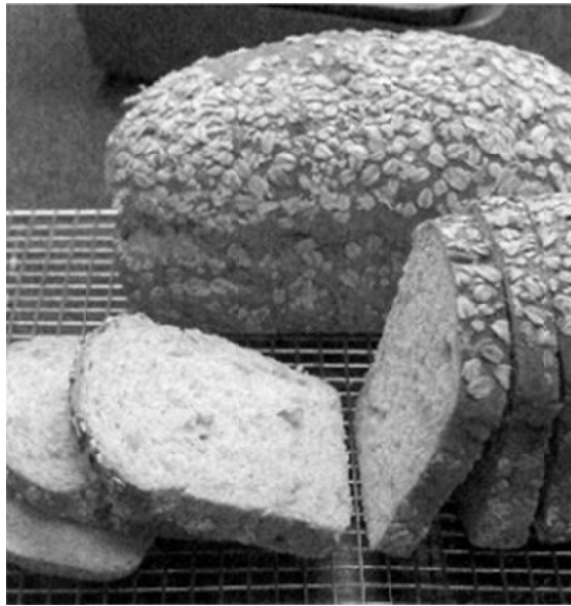
Traditional Indian, African, Ethiopian and Latin American cultures prepare their food with great care by sprouting (consistent soaking until a sprouted stem appears), soaking (in water or sour milk) and/or fermenting their legumes, grains and nuts before eating. They will soak these foods for several days or sometimes up to weeks before they are prepared into a meal, this process dramatically reduces antinutrients and leaves them containing more nutritional value, however there will always still be some antinutrients left in the grain, and there are also other factors of grains we need to take into consideration that cause negative effects in the body, such as lectins and gluten.

Lectins and gluten are both types of protein and can be categorised in the same family. However each has its own dangers.

It's important to know that lectins (which are also found in legumes, peanuts and soy beans) are resistant to cooking and our digestive enzymes, so it's a hard task to try and stop them from doing their nasty work in the body. Lectins have been linked to inflammatory problems as well as digestive diseases; leaky gut syndrome becoming one of the larger problems in society at the moment, which is then linked to autoimmune diseases (in which the body attacks itself). The reason lectins have such an intense effect on our digestive system and cause leaky gut syndrome is because lectins dramatically damage the gut defenses (as well as going on beyond the gut to damage joints and our skin complexion) called microvilli which line the small intestine and help to digest and transport food particles into the blood stream and the lymph system. When leaky gut syndrome has set in, the damage done to the microvilli has become excessive and has made the absorption of fats, vitamins and minerals extremely hard to digest.

Most people have heard of celiac disease; celiac disease is when a person has gluten intolerance. Although not everyone gets celiac, it's important to note that across all species of animals tested (including humans), grains have shown to cause gut irritation. It's also important to note that you may think that the grains you are consuming are doing you little damage, despite the somewhat in-depth information provided above, but the negative side-effects/allergic reaction of grains aren't always something you will notice quickly, the damage done from grains is a slow process that is generally only found out about when it's all too late. The majority of celiac disease sufferers will only find out about their allergy once they have become noticeably sick and decide to get tested.

Avoiding Grains Part 2



And there's more! And there's more! Something which a lot of people don't realise is that the sugars (carbohydrates) in grains feed the bad bacteria in our gut. Unfortunately, most people are walking around with more bad bacteria than good, and this is solely because of dietary choices. Our bodies should always have more good bacteria than bad and eating foods which contain lots of sugars i.e. Grains, sweets and dairy, will damage your digestive system and feed bad bacteria and yeast.

The good bacteria in our gut are essential for good health as they keep our intestinal function healthy, they assist in the digestion of necessary nutrients making them more absorbable, they keep the immune system strong and help prevent disease causing bacteria which if build up, leads to a large number of autoimmune diseases. Too much bad bacteria can lead to a lot of problems; including candidiasis (a systemic fungal infection) which can be left un-noticed (until later in life) or treated through wrong diagnosis.

There are some forms of grains which don't feed bad bacteria and don't have as many health related problems as most grains, these include; Quinoa, Buckwheat, Millet and Amaranth.

And last, but not least, I'll quickly touch on the high Glycemic Index (GI) factor of grains. The Glycemic Index is a scale used to determine the speed that sugar (from foods) breaks down into glucose in the body, creating an insulin release. Foods which are of Low GI status, such as broccoli and spinach, will slowly release sugar into the body over a period of time. Foods which are of High GI will release sugar extremely fast and

cause blood sugars to rise to high levels within a short amount of time. When consuming high GI carbohydrates at the wrong times, it can not only be harmful in promoting fat gain quite easily, but it is also the easiest way to put yourself in the firing line for cardiovascular disease and diabetes.

When blood sugar is raised constantly (think breakfast, lunch, afternoon snack and maybe even dinner), your body gets confused and after time can't control sugar levels; hence diabetes. If grains are a food source you consume often, chances are your blood sugar is being raised often as well, especially if your diet is combined with dairy, starchy foods such as potatoes and sugars. Foods which spike our blood sugar should be consumed on a considered basis, not a consistent one.

Insulin spikes do have benefits though, as mentioned before, if insulin is released during the wrong times, negative results can occur, however an insulin spike provided at the correct times for your body can be beneficial in creating certain performance and body composition goals. An insulin spike for an endurance athlete during an event or training is extremely beneficial to bring up sugar levels for energy and to prevent hypoglycemia. Insulin spikes can also be beneficial in helping build muscle mass as insulin is an anabolic hormone which helps send proteins and carbohydrates into the muscle cells to promote growth.

Unfortunately in society we will always be hearing that grains are good for us, but doing your own solid research can provide you with balanced nutritional information. Prevention is always the best cure; eat nutritious foods and less non-nutritious foods (i.e. grains). Consume lots of fruits, vegetables, nuts, seeds, fish, meat and water and you'll be so much better off, in health, performance and longevity.

Below is a table of comparison of the nutritional value of fruits and vegetables, and that of grains. As you can see, grains provide next to no nutritional value.

Vitamin and Mineral Content of Approximately 10 Calories of Typical Carbohydrates

Vegetables (cooked and drained)

Carb	Amount	Vit. A	Vit. C	Folic Acid	Magnesium	Calcium	Fibre
Asparagus	1 cup	940	19.5	262	18	36	3
Broccoli	3 cups	6,492	348	234	114	210	13.2
Cauliflower	4 cups	88	216	216	48	80	12.8
Green beans	1 cup	832	12	41	31	57	4
Kale	2 cups	16,000	34	36	46	556	5.2

Red pepper	2 cups	10,224	464	48	28	26	3.2
Spinach	3.5 cups	51,600	62	917	546	854	15
Swiss chard	2.5 cups	10,986	63	30	300	203	7.4
Zucchini	2 cups	864	16	60	80	46	5

Fruits

Carb	Amount	Vit. A	Vit. C	Folic Acid	Magnesium	Calcium	Fibre
Cantaloupe	3/4 cup	3,771	49	19.5	12.8	13.2	1.0
Grapes	1/2 cup	46	3.3	1.8	2.3	6.4	0.5
Orange	1/2	12	40	23	7	28	1.8
Nectarine	1/2	500	3.7	2.5	5.4	3.8	1.1
Orange	1/2	12	40	23	7	28	1.8
Peach	1	53	6.5	3.3	6.8	4.9	2
Pear	1/2	17	3.3	6	4.9	9.1	2
Strawberries	1 cup	45	94	29	17	23	3.8
Raspberries	1 cup	159	31	33	22	27	8.3
Blueberries	1/2 cup	72	9.4	4.5	3.5	4.4	1.8

Grains (cooked and drained)

Carb	Amount	Vit. A	Vit. C	Folic Acid	Magnesium	Calcium	Fibre
Rice, brown	1/5 cup	0	0	1.6	21	3.9	0.7
Rice, white	1/5 cup	0	0	1.2	3.8	0	
Spaghetti, whole wheat	1/4 cup	0	0	2.5	6.3	2.0	0.6
Bread, white	1 slice	0	0	3	6	27	0.6
Bagel, small	1/4	0	0	3.9	5	13	0.4