Why you shoud eat Sourdough bread:

Mmmm-that sourdough. What a great taste. Once you get into it, it becomes “addictive”! And of course there are benefits baking with sourdough: better tasting bread, higher moisture, longer shelf-life and better digestibility. It can even make a nice, light rye bread.

Sourdough is really a misnomer. It refers to the "mother culture" or starter used to ferment the dough, but does not mean the bread tastes sharp or vinegary. It is a symbiotic culture of bacteria (lactobacilli) and airborne fungus (wild yeast) in which each element within the relationship provides something the other elements need.

Brewing and baking were closely connected in early civilizations. People first discovered that soaking grain had nutritional and stimulating effects (beer) before discovering sourdough or the fermentation technique for baking. For all but a fraction of this time, bread was leavened naturally with airborne spores of sourdough culture. With what seemed a divine and invisible hand the sourdough culture miraculously created digestible bread.

Sourdough starter is made from water and grain flour, creating the environment and food for microorganisms to perform their magic. Just how does this symbiotic interaction of airborne wild yeast and bacteria work? Wild yeast turns complex sugars and starches into the food that the bacteria and yeast need to survive and multiply.

Since grains are complex carbohydrates not easily digested by bacteria, imagine a carbohydrate as a solid brick wall. It would be impossible for the bacteria to bite this food. It’s simply too large. The airborne wild yeast creates enzymes needed to break down this wall into manageable bite-sized pieces for the bacteria to eat. This interaction releases carbon dioxide, which is trapped within tiny bubbles, and results in the dough expanding (rising).

The synergism also creates lactic acid, acetic acid and ethanol (alcohol). Lactic acid contributes to better digestibility of the bread and gives it a unique flavor, while acetic acid adds flavor and is a natural preservative, lowering the pH level of the bread product and retarding mold growth. Ethanol is a byproduct of fermentation and creates that wonderful smell of freshly baked bread!

The fermentation of sourdough baking breaks the protein down into amino acids, making the bread more readily digestible. In order to maximize the benefits of sourdough, non-commercially processed high quality ingredients are essential.

Only as Good as the Flour

There is evidence that as long as 2000 years ago in Egypt (perhaps earlier in Persia), milling systems used stone to grind the grain, leaving some undesirable stone chips in the flour. The flour would then be sieved to remove the stone, removing most of the bran and the germ as well, leaving the white flour for the elite and the dark flour for the poor. During the 19th century, iron roller mills made flour milling more economical and efficient by replacing stone milling. Commercial grain processing today strips out bran, germ, B vitamins, vitamin E, chromium,

magnesium, manganese and zinc from flour. In total, about 20 minerals and vitamins are lost to a significant degree. These essential nutrients are the first to be lost in commercial flour processing because they're volatile, especially when stored for a long time.

It was common to store white flour for months to allow oxygen to condition it. Storage costs, spoilage and losses due to insects caused commercial processors to use chemical additives. Chemical oxidizing agents or bleaches were used for two reasons: 1) they produced the same conditioning effects of oxygen in a shorter time; 2) they bleached the flour to a whiter color. Currently the Health Protection Branch in Canada allows the addition of almost 30 different chemicals in commercially produced flours. Consequently, these flours are "enriched," which is doublespeak for the substitution of natural vitamins and minerals with synthetically produced vitamins. Enriched flour doesn't provide substitutes for everything taken out of the original, however. The trace mineral chromium, for example, is commonly forgotten.

Whole-grain stone ground flour doesn't need to be enriched. In addition, there are several other advantages to stone ground whole grains. **The endosperm, bran and germ are in their natural, original proportions, allowing for higher and better nutrient absorption by your body.** Stone grinding is slower, so the germ is not exposed to high temperatures. Heat causes the fat from the germ portion to oxidize and become rancid, destroying many of the vitamins (particularly fat soluble ones such as vitamin E). Stone ground flour is usually coarser, reducing the loss of nutrients due to oxygen exposure. Health conscious people are now returning to milling their own grains with home mills in order to obtain freshly ground flour for home baking.

The nutrients in real sourdough bread are more bio-available and easier to digest and the bread retains natural dietary fibers. If you eat bread (and who doesn't), eat naturally cultured sourdough.