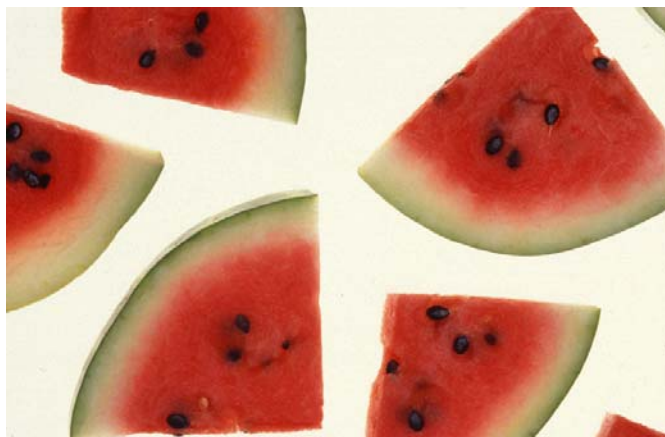


## ACB Watermelon Bioferment



***Citrullis vulgaris***- Watermelon flesh has high water content and is rich in vitamins A and C. The seeds of the watermelon are rich in smoothing proteins and moisturizing fats and fatty acids such as linoleic and oleic acids. Watermelon seed oil is used as an emollient in skin care formulations.

Fermentation is one of the oldest technologies used by different peoples and cultures throughout the world for food preservation. Products such as cheese, bread, and wine have been produced, and consumed, for thousands of years by way of various fermentation techniques. Most fermentation is carried out via lactic acid bacteria (LAB) also known as *lactobacilli*. Fermentation acts as a preservation for foods, enables foods to be more readily digested, as well as increases the production of vitamins, minerals, and various other phyto-chemicals, depending upon the plant being fermented. Often the fermentation process increases the bioavailability of many chemical compounds by freeing them from the food matrix to which they are typically bound.

By subjecting watermelon to *Lactobacillus* fermentation, we are able to complete a more natural extraction method that does not involve the usual heating and solvents used in other extraction methods thereby maintaining the functionality of extracted fractions. Also, there may be additional benefits of the fermentation byproducts including increased bioavailability.