

## **A Look at “Malnutrition Matters”**

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For the past few years, I have enjoyed being associated in a very small way, on a volunteer basis, with “Malnutrition Matters”. This is a Canadian-registered, non-profit organization located in Ottawa. Its goal is to provide sustainable, low-cost, food technology solutions for malnutrition around the world.

Much of their work is focussed on the use of soya. Their electric-powered “SoyCow” unit is designed to produce soymilk as well as products derived from it. These include various beverages, tofu, soy yogurt, and products which can be made from “okara” (the fibrous residue left from the soymilk process).

For areas without electricity, the “VitaGoat” provides a complete food processing system for the production of high-quality, nutritious soy-based products. This is a truly ingenious set-up that cannot be adequately described in words. You really need to see it in action.

Malnutrition Matters has produced several YouTube videos which can be accessed through their website at [www.malnutrition.org](http://www.malnutrition.org). You can also type “Malnutrition Matters” into your search engine and access the website that way. Once you are on the website, simply click the “VitaGoat” tab at the top right of the screen and you will be provided with links to the videos. Be sure to check out the versatility of the “PedalPro Cycle Grinder” which uses pedal-power for grinding fruits and vegetables as well as soybeans. There is also a tab for the “SoyCow”, which you may also want to view.

As you watch these videos, try to keep in mind just how important a sustainable supply of high-quality food really is to the development of an area. The United Nations Millennium Development Goals have identified the reduction of poverty and hunger as key factors, along with gender equality. The “VitaGoat” video shows how this system provides nutrition to school children and others, while employing women in a value-added micro-enterprise within their communities.

Having a long-standing interest in food dehydration and drying, it’s the “SolarFlex Dryer” that really turns my crank. Using energy from the sun to dry foods is really not a new concept. It has been around since pre-historic times when naturally sun-dried berries were a food source. However, the “SolarFlex Dryer” overcomes several significant pitfalls that challenge many other solar dryers that are in common use in developing countries. First, it delivers an adequate supply of sufficiently warm air at an appropriate velocity into the drying chamber. Then, it efficiently removes the moist air from the drying chamber once the moisture has been evaporated from the surface of the food being dried.

For the past two summers, we've had one of these units in our backyard. I get to play with it on weekends to check out its operation and assess various design modifications. Its performance is most impressive. Malnutrition Matters has placed these dryers in a number of countries in Africa, South Asia, and the Caribbean with very encouraging results.

This is a great example of how a small Canadian organization is contributing to the reduction of hunger and malnutrition in places which are literally on the other side of the world.



The "SolarFlex Dryer" with its heat collector on top to warm the incoming air. A solar panel for power is on the front. Product to be dried is placed on racks in the black drying chamber and the heated air is blown over it.