

Fuel producers become food producers

By Sarah Hills

17-Jun-2008 - **A new production process that makes the most of every scrap of corn in the face of rising prices could turn biofuel producers into food producers within two years, says its developer.**

Renewable fuels company [ICM](#) has introduced technology to commercially produce protein, oil and bran that can be used for food, alongside the [ethanol](#) it makes from [corn](#).

ICM joined with [LifeLine](#) Foods, a corn processing company based in St Joseph, Missouri, to develop and test this proprietary technology - known as dry fractionation - and is now inviting fuel companies that want to enter the food industry to invest in it.

According to ICM, equipment can be installed by the end of this year to commercially produce both food and fuel in two years time.

The dry fractionation process mechanically separates the corn kernel into its three main components: endosperm (the starchy portion comprising most of the inner kernel), germ (the protein and oil-rich center) and bran (the kernel's fibrous outer layer).

The starch is converted to ethanol during the fermentation process, while also producing carbon dioxide that can be used by the food processing industry in carbonated beverages and flash-freezing applications.

ICM says that as well as producing ethanol, *"optimizing the whole kernel in this way allows for the production of a host of food-grade and feed-grade co-products"*.

Dave Vander Griend, ICM founder, president and CEO, said: *"We can now make food during the ethanol process, we can process ethanol in an efficient and more environmentally-friendly way, and we can help retain more of our energy dollars in the US while creating new markets for diversified global agriculture."*

Vander Griend said dry fractionation is not new to the food processing industry, but it is new to the ethanol industry. He believes that in future ethanol plants could make more money from selling food products than fuel.

He added: *"Fifty years ago, the US fed the world. We will be able to do that again with a food supply brought about by the evolution of ethanol production."*

Biofuels

There is debate over whether biofuels are a major factor in rising food prices as land previously used for food crops is diverted to biofuel crop production at a time when food security is at risk.

The price of corn has soared in the last two years and this was partly blamed on the increased demand for ethanol. In September 2006, corn was \$2.20 compared with corn futures for July which were \$7.32 a bushel today.

Government subsidies have fueled corn-based ethanol production in the US and statistics from the Department of Agriculture (USDA) indicate the country's ethanol capacity in 2006 was 4.4 billion gallons with growth projections of 7 billion gallons for 2010.

LifeLine

ICM, which engineers, builds, and supports renewable fuels biorefineries, purchased a 49 percent stake in LifeLine Foods where it has been testing its technology since October.

LifeLine produces masa flours used in tortillas as well as dry corn ingredients for corn bread, coatings for bread or muffins

and as a filler, binder and thickener in cookie, pastry and meat industries.

Mike Sobetski, vice president and COO, LifeLine Foods, said : *"Prior to partnering with ICM, more than 70 percent of our revenue came from food production. Coproducts such as livestock feed and germ accounted for the remaining nearly 30 percent.*

"Today, two-thirds of our revenue is generated by ethanol and its co-products, and higher quality food products comprise the remaining one-third."

The company is generating more revenue from the 30 percent food production than it was with 70 percent. This was achieved by converting starch streams with limited end uses as food ingredients into ethanol.

However he added: *"We are a food company first and foremost and an ethanol manufacturer second."*

Lifeline does not publicly release its financial figures.