

DAIRY PRODUCERS... ARE THE GREATEST NUTRITIONISTS

What does the tiny shrew have in common with the great blue whale? They



are part of a specific order of animals called mammals distinguished by their unique ability to produce milk. In the animal kingdom, milk production is a successful strategy for survival. With that kind of pressure, it's little wonder that milk is nature's perfect food.

Getting it right

In order for milk to work as a successful delivery system for complete nutrition it has to get more than a few things right. First, it has to be efficient and economical (just like successful dairy producers).

The mother mammal can't invest a lot of excess energy or material into making milk without a solid return on that investment. That means milk has to deliver the basic essential nutrients like amino acids (protein), minerals, vitamins, fat and energy in a way that is digestible.

This milk must also provide the functionality needed by the newborn such as defense mechanisms to protect against nasty bacteria, satiety triggers so it knows when to stop eating, and a host of other inherent needs specific to the neonate. This is amazing stuff.

Complete nourishment

We know that milk, regardless of its source, shares similar traits. Humans figured out early that cow's milk provided a source of complete nourishment and then figured out how to domesticate that

source of nourishment in order to survive and thrive.

That innovative process is not unique – we've applied it to all of our current food sources. Nothing we call food today – animal or vegetable – resembles its original source. The tomatoes we eat now are a far cry from the belladonna-laced first tomato; the corn we use for food and fuel wouldn't recognize its ancestor from centuries ago; and the yields possible with today's rice crops overwhelm those of centuries past. When you consider the advantages of a biological system that converts grass to the most nutritionally complete food in the world, the motivation to domesticate milk becomes pretty obvious.

Needs change

After weaning, our nutritional needs change, so does our ability to digest a greater variety of foods. We start with mother's milk as a baby and move on to commercial milk and dairy products as we grow into adulthood. Young, old, big, small, male or female – each of us bears a unique and very personal physiology.

My nutritional needs are different than your needs; indeed, my nutritional needs

today are different than even 10 or 20 years ago. Whatever those needs might be, milk is part of the solution to bringing

a balanced diet for everyone. Granted, not everyone can consume fluid milk for a number of reasons, but dairy-men have invested in technology that can sort out all the parts of milk and reformulate them to make a product that YOU can use, whoever you might be.

With a natural product like milk that represents such a brilliant strategy for nutritional success, we have a responsibility to understand its secrets to improve nutrition for everyone.

Dairy research

Dairy producers are meeting that responsibility through their support of dairy research. What we learn from this unique product can be applied to other food sources to achieve a balanced diet. Dairy-men have taken on the

responsibility to produce milk and to find a way to bring its natural nutrition to all the world's people – that makes them the world's first and greatest nutritionists. □

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FYI

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Information on the California Dairy Research Foundation can be obtained from the organization's web site at www.cdfrf.org.