

## Why we distinguish Technical Solution and Valued-Advice

Bertrand Farmer, agr., General Manager

Over the years, the increase in the number of dairy producers enrolled on milk recording allowed us to finance and include advisory services within milk recording. Today, the ongoing decrease in the number of dairy farms and the more specialized requirements of dairy producers regarding advisory services have brought us to distinguish clearly the **Technical Solution** and **Valued-Advice** services.

From now on, any technical service, from milking supervision to data entry, from body score condition evaluation to milk meter verification, etc., is done exclusively by a specially trained technician, entirely dedicated to facilitate your life. Likewise, our advisory services, which are optional, but more than ever profitable, are provided as frequently as you want by an impartial advisor, who has nothing to sell you except ideas to improve your productivity and profits. Already, more than 43% of Valacta clients take advantage of the regular visit of an advisor.

The purpose of this change is to respect you and respond to your actual needs, and also to respect Valacta personnel, who are not anymore in position, as individuals, to provide you with the wide range of skills that you require. We have to put together work teams with complementary skills. This process is well on its way and, in the future, the result will be better on-farm services and more profit in your pocket.



### Value-added management Simply to do things better

Ginette Moreau, Agrologist, Quebec Farm Management Groups



Fédération des  
groupes conseils  
agricoles du Québec

La référence en gestion technico-économique  
agricole au Québec

In the agriculture sector, the concept of added value generally refers to activities aimed at improving an existing product, finding a "new market", differentiate a product from the "competition" in order to increase our "market share". Let's face it, these marketing-flavoured concepts remain rather broad and abstract.

What if we stick to the two words that interest us, namely "value" and "added"? In farm management, this brings us to look for solutions that **increase our business profit margin** or, in short, to get better results. This can of course be achieved by adopting new production methods or work routines, but also through **finding the best solutions to any problem of reduced efficiency at the farm**. This is what we mean by added value at your Agriculture Counsel Group (ACG).

In real life, how do we do that? Through a technical and financial analysis of your business, which is done this way:

- Starting with your management accounting and your data registers, your Farm Management Advisor performs a **technical and financial analysis** of your milk production and draws a global diagnosis on the financial health of your farm. To do so, he uses a high performance analysis tool which is specific to your production, *Agritel Conseil* and a budget planning tool, *Budgitel*, which will project you up to three years into the future!
- Your advisor will then accompany you in searching ways to improve efficiency and performance. From the diagnosis will emerge an **action plan** and recommendations corresponding to your objectives. Just as you would do with your family doctor, it will be more profitable to meet on a regular basis rather than wait and run to the hospital's emergency... Together, you will protect what you have built and focus on the existing opportunities to make your farm grow.
- You will also be invited to compare your farm, anonymously, on a wide variety of technical and financial criteria, with farms similar to your own through a process called **annual denominative group analysis**. You will benefit from exchanges with other producers and advisors and will obtain practical, cutting edge information.

#### Milk production diagnosis with technical and financial criteria: sample of usual criteria

Description	Your farm?	Top farms Average 2003-2007	Farms with high improvement potential
Standard Milk-per-Cow Margin		\$3 724	\$2 949
Variable Costs / hl		\$30.52	\$35.92
Cost of Forages Produced / mt		\$163	\$177
% of Total Costs		47.5 %	61.4 %

From conference « Temps qu'à faire du lait, ça vaut le « coût » de se démarquer » by Dominik Desrosiers, agr. *Gestion Plus 2004* ACG, at the 2008 Dairy Cattle Symposium.

This entire process will bring yet more value to something that you are already doing well. Adding a premium will only help you do better. Contact your regional Agriculture Counsel Group (ACG) or visit [www.fgcaq.com](http://www.fgcaq.com).

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# Dairy Knowledge at your fingertips

valacta

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## Valacta: constantly evolving for your profit

Bertrand Farmer, agr., General Manager

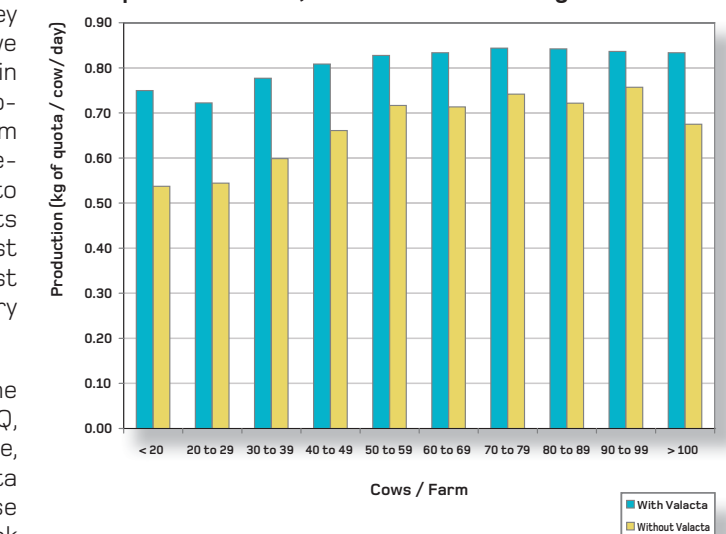
Quebec and Atlantic dairy farmers have always acted with leadership and confidence in the future. Over the years, PATLQ and ADLIC constantly developed, until they became a single organization as Valacta. All along, we have been working hard with all industry partners in order to convince the largest possible number of producers of the benefits of a production analysis program first to improve herd management, but also to generate a powerful data base, the essential ingredient to improve genetics across Canada. At Valacta, the costs of basic technical services to producers are the lowest in Canada, and Quebec has been enjoying the highest enrolment rate in the country, with close to 80% of dairy farms.

This remarkable progression was the result of the long-lasting bond between key actors such as MAPAQ, Universities, Breed Associations, etc., and, of course, producers themselves. The distinctive mark of Valacta was to include advisory services, to help increase revenues for producers enrolled. I invite you to look again at this graph (already published last spring), which shows that Valacta herds enjoy a milk production 10 to 38% above non-Valacta herds. By comparison, the annual cost of the Valacta services represents on average less than 1% of the total production cost. The "Valacta Effect" is profitable indeed.

A large majority of producers are highly satisfied of the services they get from their centre of expertise. However, as at all times, there is always some dissatisfaction. Every time a change is implemented, like the recent separation of technical and advisory services (see page 5), some habits are disturbed. People complain. It is normal and not altogether unhealthy. It might happen that things are done in an ill-advised manner and it is good that people take the time to write or call. After all, there is always room for improvement.

But rest assured that we stay the course. Valacta is this centre of expertise which must identify the issues of the Quebec and Atlantic dairy sector, put forward solutions with other partners and make sure that our dairy industry always remains competitive.

With or Without Valacta :  
production of Quebec cows according to herd size



Source: Quebec agricultural enterprises registration forms 2008. Analysis by Rodrigue Martin, agr., Advisor, Direction du développement et de l'innovation (DDI), MAPAQ.

## Summary

- Silage starch: a source of energy 2-3
- La Sapinière Ayrshire inc. 4
- Homologated Time-Temperature Recorders 4
- Technical Solution and Valued-Advice 5
- Your Valacta Advisor can help you 5
- FGCAQ: Value-added management 6



## Silage starch: a source of energy

Daniel Lefebvre, Ph.D, agr., R&D Manager

Carbohydrates account for close to 70% of the typical ration of a dairy cow. In this portion, 40 to 45% comes from NDF<sup>1</sup> fibre, and 35 to 40% comes from starch. Since starch digestibility is about twice that of fibre, even though fibre represents a larger portion of the dry matter, starch contributes more in terms of energy.

The fibre comes mainly from forages, but by-product feeds with high fibre content can also contribute in a significant way. Starch, on the other hand, comes mainly from cereals (corn, barley, etc.). In plants, starch is stored primarily in the grain. Since forages are mostly harvested at a vegetative stage, they contribute very little starch. It is quite different with corn silage and cereal grains harvested as silage. Since they are harvested at different stages of grain development, they can contain substantial amounts of starch, depending on the stage of maturity when harvested.

For corn silage, the average starch level is about 30% of dry matter. However, with a standard deviation of close to 7%, significant variation can be observed: two-thirds of samples will be within the range of 23-37%. The other one third will be outside of this range! This means that analyzing starch content can indicate a lot about the nutritional value of any corn silage. The impact on feed cost is important: the more starch there is in your corn silage, the less you need to add from concentrates.

Of course, since the starch is inside the corn grain, the amount of grain on the plant is a major factor in determining the starch content of the corn silage. The grain in corn silage accounts for 75% of its energy value. This is why a consortium of experts on corn silage recommends that grain yield be the primary factor in selecting a hybrid for corn silage.

The maturity of the plant at harvesting has a major influence on the starch content, because it is in the last weeks of plant development that the starch is stored in the grain. Starch content can increase by one-third between the time when the milk line is at one quarter of the grain, until the time it reaches three quarters. In the three weeks between the dented stage and the physiological maturity stage (black layer), the starch content climbs from less than 20 to more than 30%. So, an early killing frost has a major impact, since it terminates the starch storage process. Corn frozen before maturity will have a lower starch content and consequently a reduced energy value.

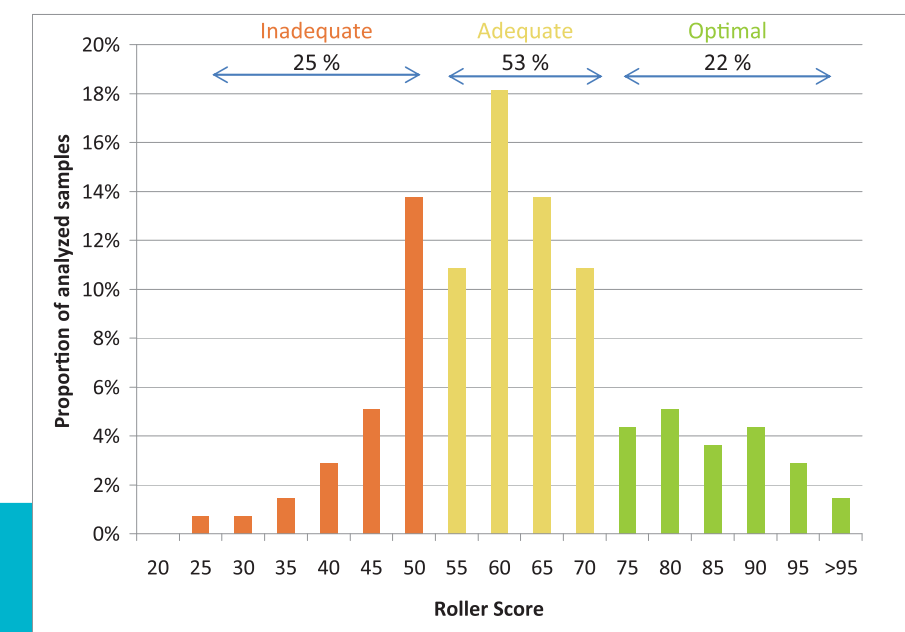
The growing popularity of kernel processors on the harvester allows for a certain expansion of the corn harvesting window, so that starch content can be maximized, while ensuring digestibility. Without a kernel processor, it is advisable to harvest when the grain still contains enough moisture for the texture to be soft, so that the starch will be fragmented by chopping and digested in the rumen. Without the kernel processor, corn grains harvested

at full maturity will be hard, and a significant portion of kernels will remain intact in the silage... and through the cow's digestive tract, so that they end up feeding the birds. On the other hand, a kernel processor will crush even hard grain, as long as the rollers are well adjusted. Indeed, if the space between rollers is too large, grain can get into the silage unbroken. The recommended space is 1 mm (maximum 1.5 mm or 1/16th inch). So, it is very important to adjust the harvester correctly and to check throughout the harvest that the rollers are doing their job well. Whole grain should be very few in number – no more than one or two kernels in a one-litre volume – better yet, none at all.

A standard analysis has also been developed to evaluate the efficiency of kernel processing. In short, the corn silage particles are sorted according to their size and the amount of starch on each sieve is determined. A "score" is thus given as being the proportion of starch content in particles smaller than 4.75 mm. The "passing grade" is 50%. If at least 50% of the starch is located in particles smaller than 4.75 mm, the rollers have done an adequate job. But if you are not the kind of person who is content with the passing grade, the optimal treatment is identified with a result above 70%. This is far from being the norm. The figure below shows the distribution of corn silage samples according to their "roller score". We see that only a little more than 20% of samples received an optimal processing (>70%), although the majority received an adequate treatment. An optimal processing will ensure a higher starch digestibility when the silage is fed.

<sup>1</sup> NDF : neutral detergent fibre. This is the most common method to analyse fibre content in an animal ration. NDF measures most structural components of the plant (lignin, hemi-cellulose and cellulose), but not pectin. The expression NDF refers to the method of analysis at the lab.

Graph 1. Distribution of Corn Samples According to Roller Score



Roller Score: % of starch located in particules smaller than 4.75 mm. Courtesy: Agrifoods Laboratories.

## Erratum

The picture below was mistreated in our production report *Évolution laitière 2008*, published last May. Here it is again, with our apologies to the family.



Best Ayrshire herds according to BCA in 2008

Second rank (ex-aequo with Ferme Thomas-Louis Denis, Saint-Ubalde):

### La Sapinière Ayrshire inc, Saint-Agapit

Owners: Guylaine Lepage and Jean-Marc Daigle

Front: Mirianne, Marili, Maricia et Pierre-Luc. Standing: Audréanne, Guylaine and Jean-Marc.

## Two TTRs approved as milk recording timers

Sylvia Lafontaine, agr., Standards and Data Coordinator, R&D

CDHI<sup>1</sup> just approved *Ecolab's Farm Controller II* time-temperature recorder (TTR) as a milk recording timer. From now on *DairyCheq's Milk Garde* and *Farm Controller II* TTRs can be used as timing devices during AP and pre-scheduled tests.

<sup>1</sup> Canadian Dairy Herd Improvement