

## Technical Column

### How to maximize milk production at peak of lactation without affecting the cow's health



Bruno Gosselin, agr.

#### Amount of concentrates served before calving

According to NRC 2001 guidelines, the maximum amount of concentrates that can safely be eaten by a cow before calving should be between 0.5 to 0.7% of body weight. For instance, a 640 kg cow can eat between 3.2 and 4.5 kg of dry matter from concentrates per day without problem. In order to stimulate rumen papillae and minimize the energy deficit at the beginning of lactation, it is imperative to provide the cow before calving with enough concentrates to fulfill her needs. As a rule, from the week before calving, the cow should already be fed all the ingredients that will be part of the lactation ration in order to stimulate her appetite.

#### Amount of concentrates after calving

A thorough management of feeding after calving is essential to reach optimal peak milk and get sustained persistency all along the lactation. The increase in concentrates should be about 300 ± 50 g DM per day, higher for protein supplement than for energy supplement. It is recommended to reach the maximum amount of protein supplement between day 12 and day 15 after calving. Also, protein supplement must be of low degradability, because at the beginning of lactation, the amount of microbial protein is insufficient to fulfill the needs for metabolisable protein. This is why the rate of increase of protein supplement must be higher.

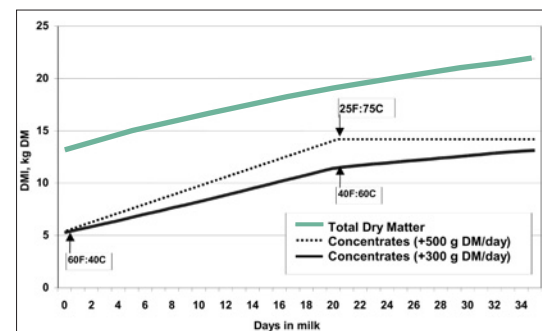
As for energy supplement, the maximum amount should be reached around day 25 to day 30 after calving. The new daily increase recommendation of 300 g DM is notably lower than the traditionally recommended 500 g per day. Figure 1

shows the prediction for dry matter intake according to the number of days in milk (NRC 2001).

Please note the difference between a 300 g and 500 g daily increase on the forage/concentrates ratio about day 20 after calving. With an increase of 300 g per day, the percentage of concentrates reaches but never exceeds 60%, which is optimal. On the other hand, a 500 g per day increase brings the percentage of concentrates at 75%, which will destabilize the rumen microflora. Then comes acidosis problems, displaced abomasums, or simply lower intake, all problems related to consumption of high levels of concentrates or a lack of effective fiber in the rumen. One should aim for an increase in concentrates around 300 g DM per day, in order to create the best conditions to reach optimal peak of lactation and persistency.

For any further information, consult your PATLQ advisor. From now on, you can also benefit from the PATLQ discussion forums on [www.laitoile.com](http://www.laitoile.com). Finally, keep sending your technical questions to [nutrition@patlq.com](mailto:nutrition@patlq.com).

Figure 1  
Variation of the forage/concentrate ratio in dry matter intake versus the rate of increase in concentrates



## Our summer quiz

Answers to Quiz Number 8 will be found either in this issue of PATLQ-Newsletter, in Vision2000 Interpretation Manual or Reports, or by calling upon the expertise of your PATLQ advisor.

### Results from Quiz Number 7

Winners of Quiz Number 7 were drawn on May 6 among several hundred entries. **Magella Dionne** of St-Denis and **Daniel Marchand** of Champlain each won a \$50 credit in advisory services. Correct answers were:

#### Question 1

Agri-Lacta is:

- d) all three answers are correct.
- a) a dairy herd management computer application.
- b) the new software used by PATLQ advisors for data entry and analysis.
- c) available to individual clients.

#### Question 2

Agri-Lacta was designed by PATLQ in partnership with Agri-Gestion inc.

#### Question 3

The Total Performance Index, also known as IPT (Indice de Performance Totale) provides your herd's position for 9 management criteria in relation to the herds of the entire province. **True**

#### Question 4

With a Linear Score (LS) of 4, how much milk per lactation is lost for cows in their second lactation or higher (multiparous cows)? **c) 360 kg**

## Here is Quiz Number 8 !

Two other prizes will be drawn on July 22.  
Each winner will receive a \$50 credit on advisory services.

#### Question 1

PATLQ Laboratories just received accreditation level:

- a) ISO Guide 25
- b) ISO 9001
- c) ISO 9002
- d) ISO 17025

#### Question 2

The rate of urea in milk is usually lower in a primiparous than a multiparous cow.

True = T False = F

#### Question 3

In order to get a representative sample of forages, how many bales should be sampled?

- a) 1
- b) 3
- c) 10
- d) 25

#### Question 4

Good quality forage has an energy value of how many mcal/kg ?

- a) 1.40
- b) 17
- c) 32.5
- d) 60

### Reply Form - Quiz Number 8, June 2002

Answers: 1 : \_\_\_\_\_ 2 : \_\_\_\_\_ 3 : \_\_\_\_\_ 4 : \_\_\_\_\_  
 Name: \_\_\_\_\_ Herd Number: \_\_\_\_\_  
 Address: \_\_\_\_\_  
 Phone: \_\_\_\_\_ Fax : \_\_\_\_\_  
 E-mail: \_\_\_\_\_

Please return prior to July 19, 2002 to the attention of Jennifer Bender, PATLQ, 555 boul. des Anciens-Combattants, Ste-Anne-de-Belleve, Quebec H9X 3R4 -- Fax: 514-398-7963 - E-mail: [jbender@patlq.com](mailto:jbender@patlq.com) (You may enter by E-mail. Just write in the subject box "Quiz - 8", followed by your herd number, and give your answers and full name and address as your message).



# PATLQ

## NEWSLETTER

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 John E. Moxley Building • 555 Des Anciens-Combattants Blvd.  
 Sainte-Anne-de-Belleve, Quebec H9X 3R4

## Congratulations to the Lait'xcellent winners for 2001

Every year, **Lait'xcellent** prizes are awarded to dairy producers whose milk is of exceptional quality. The 2001 winners were announced at the Annual General Meeting of the *Fédération des producteurs de lait du Québec* in April (see photograph).

FPLQ President **Jean Grégoire** declared: "Throughout the year, the **Lait'xcellent** winners have sustained a milk quality level *six to thirteen* times higher than the provincial average." Incidentally, the FPLQ meeting saw the adoption of several resolutions aimed at improving milk quality in Quebec. For instance, a producer fined for high somatic cell count may have to undergo a mandatory *Verification of Milking Equipment and Methods (VMEM)* visit by a PATLQ expert.

In its *Rapport de production 2001*, PATLQ includes a section on milk quality, featuring a statistical portrait of the situation in Quebec, as well as a thought-provoking interview with **Gilles Roy**, from *Ferme LGCR*, in St-Anaclet. After fighting a serious mastitis problem, this producer managed to take exemplary control of his herd's milk quality.

Congratulations to the winning families and to their advisors!



The **Lait'xcellent** winners for 2001 are (left to right):

**Lait'xcellent de bronze** : **Guy Boulanger** and **Line Tardif**, *Ferme Guyline SENC*, Lambton.  
**Lait'xcellent d'or** (Gold): **Chantale** and **John Ableson**, *Ferme John Ableson*, Portneuf.  
**Lait'xcellent d'argent** (Silver): **Nicole Poirier** and **Benoit Jutras**, *Ferme Bourbon inc.*, Plessisville.

All three farms are enrolled with PATLQ's management service. Their advisors are, respectively: **Réjean Fontaine**, **René Brulotte** and **Martin Côté**.

### A word of encouragement to Gilbert Rioux and his family

The PATLQ Board of Directors, Management and staff wish **Gilbert Rioux**, Chairman of the Board, and his family all the courage and support they will need in order to rebuild their family farm, which was destroyed by fire last April.

Our hearts and thoughts are with you.

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## Agri-Lacta is here!



**A**gri-Lacta, the new PATLQ software for data entry and reports at the farm, has been thoroughly tested and fine-tuned by a team of experts with the invaluable support of PATLQ advisors throughout Quebec. This summer your herd will "migrate" toward **Agri-Lacta**, as all PATLQ advisors will work with this new powerful tool at the farm. Meanwhile, **Agri-Lacta** is available for clients to purchase and to have installed on their computers.

### Data exchange interface

One of the main reasons for creating **Agri-Lacta** is to facilitate data exchange between dairy producers, PATLQ advisors and other service providers at the farm. Data exchange means *software interface*. This interface will be available for download on the PATLQ Web site sometimes this summer. It will provide software developers with all the necessary information in order to link their applications to **Agri-Lacta** for data exchange.

**Agri-Lacta** was created through a partnership between PATLQ and *Agri-Gestion inc.* Users of *Agri-Lait* (*Agri-Gestion's* previous dairy management software) were invited to training sessions in order to switch to **Agri-Lacta**. They gave the new software an appreciation rating of 99%!

**Agri-Lacta** answers a long-time PATLQ client request: dairy producers want to work with the same management software as their advisor's. **Agri-Lacta** allows you to build your own data bank at the farm, reducing the time spent on data entry when partners and experts come to visit. This will give clients more time to talk with their experts about the various aspects of herd management. **Agri-Lacta** allows clients to get maximum benefit from their PATLQ advisor's monthly visit.

The interface will be in the XML format, a universal standard in e-commerce. Development is made possible due to the help from MAPAQ's *Programme d'appui à la concertation* and from the *Conseil pour le développement de l'agriculture au Québec (CDAQ)*.



### PATLQ Herd Registry 2002

#### Handy management tool approved by breed associations

**P**ATLQ's *Herd Registry 2002* was recently approved as an official registry by **Hostein Canada** and **Ayrshire Canada**. The *Registry* is very handy for writing down herd management data.

Transferring data from the *Registry* to **Agri-Lacta** is a cinch, since information is displayed in the same clear, efficient fashion.

### PATLQ's Rapport de production 2001

#### The added value of your centre of expertise's data

**A**s you read this, PATLQ's *Rapport de production 2001* will have been delivered to your farm. Published for the third year in partnership with FPLQ, the *Report* is a special issue of *Le producteur de lait québécois*. Take time to go through it with your advisor. You will find in these 100 pages a multitude of highly profitable statistics and information to help improve your management, as well as interviews with four producers among the very best: *Ferme des Mésanges* on improving

management, *Ferme Bergelain*, which ranks among the top 1% of Quebec dairy farms for the 4<sup>th</sup> year in a row, *Ferme C. L. Fortin*, on optimum heifer raising with **PROM-S** and *Ferme LGCR*, on how to get your herd SCC down to 120 000 with the help of **VMEM**.

Many thanks to all contributors, to the publicity team at *Producteur de lait québécois* and to our advertisers for their enthusiastic support.

### Ayrshire 2002 Spring Show

#### Ferme des Chamois gets top honours

**E**xpo-Printemps Ayrshire 2002, the annual Ayrshire Quebec celebration, was a complete success with more than 60 exhibits and 200 animals gathering in St-Hyacinthe in April. In particular, the superb DESCHAMOIS SUGUS, owned by *Ferme des Chamois*, Farnham, won top honours in the mature cow class. Not surprisingly, in PATLQ's

*Rapport de production 2001*, *Ferme des Chamois* stands among the best Ayrshire herds. Congratulations to all participants!



PATLQ was the proud sponsor of the mature cow class at the 2002 edition of the *Ayrshire 2002 Spring Show*. **Guy Boyer**, PATLQ Regional Manager for *Montréal*, presented the plaque to **Loraine Yersin** and other representatives of *Ferme des Chamois*, Farnham.

Photo : PAB - Paul-André Boisvert

### New business portal on the Web

#### Long life to **LaiToile** !

**L**aiToile, "the new business portal of Quebec dairy producers" was launched in April at the Annual General Meeting of FPLQ. On-line since April 22, [www.laitoile.com](http://www.laitoile.com) portal offers a permanent news bulletin and full access to on-line services provided by the four participating dairy industry partners: the *Fédération des producteurs de lait du Québec (FPLQ)*, the *Centre d'insémination artificielle du Québec (CIAQ)*, the *Conseil québécois des races laitières (CQRL)* and PATLQ.

Several discussion forums will be accessible through **LaiToile**. PATLQ's forum will always discuss the current PATLQ article in *Le producteur de lait québécois* and *Quebec Farmer's advocate*. Beginning in June 2002, the author of the PATLQ article will be available to answer questions posted on the forum.



Launching of **laitoile.com** at the General Meeting of *Fédération des producteurs de lait* on April 10, 2002.

Left to right: **Simon Giard**, President of CIAQ for 2001-2002, **Marcellin Therrien**, President of CQRL, **Jean Grégoire**, President of FPLQ and **Gilbert Rioux**, President of PATLQ.

Photo : Alain Désilets

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Tel.: (514) 398-7880 • Fax: (514) 398-7963 • Voice Box: 1-800-BON-LAIT • [www.patlq.com](http://www.patlq.com)

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### PATLQ Laboratories

#### Top accreditation with ISO 17025



ISO 17025 : the best possible accreditation for a laboratory. Part of the personnel of the four PATLQ laboratories, left to right : **Rob Blanchard, Micheline Lamothe, Jim Moriarty, Susan Day** (back), **Rosalind Sheppard, Michael Bell, Robert Hersey** (back), **Sophie Gagnon, Linda Boden, Christa Deacon, Johnny Garino, Daniel Kruijen**. Absent of the picture: **Joanne Bastian, Marilyn Beaudry, Jennifer Bell, Jennifer Bender, Brian Corrigan, Sophie Dyer, Rachid Kouaouci, Tim Mann, Erik Schuddeboom, Jasmine Vincent, Patrice Vincent, Gwen Wulfraat**.

**P**ATLQ laboratories, known as the second most important dairy lab facilities in North America, were recently granted *ISO 17025* accreditation by the *Canadian Standards Council* of Canada. This is the highest certification level for an analysis laboratory. PATLQ laboratories previously held *ISO/CEI Guide 25* accreditation. The new *17025* accreditation validates, among other things, the methods of analysis, the procedures for reference analysis and use of equipment and the high quality of customer service, which is

a basic rule at PATLQ. Hence, PATLQ clients can more than ever rest assured of the reliability of our lab results. The PATLQ Board of Directors sends heartfelt congratulations to all laboratory personnel for their constant striving for quality, which resulted in this well-deserved accreditation.

The four PATLQ laboratories :

- Dairy analysis
- Analysis for milk payment
- Feed analysis
- Reference analysis

### Robotic milking

#### Clients go to Toronto with PATLQ

**A**s a partner in promoting the first *North American Conference on Robotic Milking*, PATLQ had the privilege of bringing along four clients to this important event held in Toronto last March. **Bruno Gosselin**, agr., liaison agent for our R&D team, travelled with **Christian Kaiser**, *Ferme Impériale*, Noyan, **Jean Keurenjes**, *Sessink enr.*, Henryville, **Richard Guerardi**, *Ferme Ginel inc.*, St-Ignace-de-Stanbridge and **Alphonse Pittet**, *Ferme Pittet inc.*, St-Tite.

Nearly 500 people attended this conference about recent progress with automatic milking in Europe and North America. Subjects ranged from cow health to farm economics, from animal comfort to building requirements.

PATLQ provides full services to all herds in Quebec equipped with milking robots. The newly created national *Industry Standards Committee* is currently studying the standards for data publication that should apply to herds using automatic milking devices. Meanwhile, data from supervised herds are publishable according to current standards.