SURVEYS ON MILK AND MILK PRODUCTS

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Legal aspects

Currently, the statistical surveys of milk sector are two:

- Monthly survey of milk and milk products
- Annual survey of milk and milk products

In force legislation:

- Council Directive 96/16/EC of 19 March 1996 on statistical surveys of milk and milk products amended by 2003/107/EC.
- Commission Decision 97/80/EC and subsequent modification of 6 October 2004.



Legal aspects

Council Directive 96/16/EC represents the legal basis for the two surveys (it defines the units and the products).

Commission Decision 97/80/EC lays down provisions for the implementation of Council Directive 96/16/EC.

According to the european legislation the results of the annual and monthly survey are given to the European Commission through special tables (Edamis System).



Legal aspects: European legislation purposes

• Have statistical figures of the European countries, concerning the milk sector, for the Common Market Organisation (CMO).

• Establish common criteria in the European countries for the surveys of milk production and utilization (definition of the area, variables to be included, etc.).

Units and observation field

- A) Milk enterprises that only collect milk and cream without processing (i.e. producers cooperatives, producers associations, etc.)
- B) Milk enterprises that collect and/or transform milk and cream in products (i.e. dairies etc..)

The farms that produce milk and don't transform it in products inside their farms and all the other structures (warehouses, stores, shops, etc.) that are in the sector but are not milk enterprises are excluded from the observation field.



Monthly survey and sampling

The sample used is simple random, stratified, one stage (total units in the sample for each year is about 400 units).

It represents about the 16% of the universe of the active enterprises.

The sampling units are classified into seven strata. The 7-th includes all the big enterprises of the frame.



Monthly survey

Material for the enterprises

Before the interview, are sent:

- a letter with the aim to inform about the survey purposes, the information that will be asked, the legislation concerning the obligation to answer and the data confidentiality,
- a questionnaire and the instructions for the filling,
- a table of the cheeses



Monthly survey

Material for the company charged of data collection:

- Instructions;
- Questionnaire;
- Legislation concerning the obligation to answer and the data confidentiality;
- List of the enterprises to be interviewed;
- Records definition (ISTAT→Company and Company →ISTAT);
- Check of mistakes and inconsistencies;
- Table of the cheeses.



Monthly survey

Data collection is carried out every month by a private company, through CATI interview (*Computer Assisted Telephone Interview*), referring to the month previous the interview.

CATI technique enables to have mistakes signals during the data recording phase; it's possible to act and to ask to the unit for a data confirmation or correction.

Data editing is carried out by means of AGAIN tool and comparisons of time series of the same enterprises.

Total non-responses:

for the estimation of the variables, the processing of total nonresponses implies a modification on the population weights that change according to the response rate.



Monthly survey: Questionnaire

The questionnaire consists of two sections.

Sec. 1 – RAW MATERIALS COLLECTED and EXIT: milk, cream and others.

Sec. 2 – PRODUCTS OBTAINED Drinking milk, Cream, Acidified milk, Concentrated milk, Cream milk powder, whole milk powder and partly skimmed-milk powder, Skimmed-milk powder, Butter, Cheese (total and made from cow's milk only), Processed cheese and Ricotta cheese.





Monthly survey: Questionnaire

For the raw materials the quantities are collected in quintals while for the Fat content and Protein content in percentage.

In particular for cow's milk (whole, semi-skimmed and skimmed) it is obtained:

- the quantity collected or bought at the farms;
- the quantity received or bought from other enterprises;
- the quantity of milk imported.

Also for "cream" the quantities collected or received are asked.





Annual survey

The **annual survey** is carried out for the whole frame; the frame is periodically updated. For 2016 it was constituted of about 2.200 units.

Data collection is carried out by CATI technique.



Annual survey: Questionnaire

The questionnaire consists of two sections.

Sec. 1 – RAW MATERIALS COLLECTED and EXIT: Cow's milk, Ewe's milk, Goats' milk, Buffalo milk, cream and other products.

Sez. 2 – PRODUCTS OBTAINED: (Fresh and Manufactured Products).

For both sections the quantities (in quintals) and the Fat content and Protein content are asked.

In particular for milk (of all kinds), cream and other raw materials, it is obtained:

- the quantity collected or bought at the farms;
- the quantity received or bought from other enterprises;
- the quantity of milk imported.



Annual survey: Questionnaire

In the Section "Products obtained" there are:

A) Fresh products:

- Drinking milk (whole, semi-skimmed and skimmed and classified for duration)
- Cream of fat content not exceeding 29 % or over 29 %;
- Acidified milk (Yoghurts), divided in "with additives" (fruit etc.) and "without additives";
- Drinks with a milk base;
- Other fresh products (Milk jelly and others);
- Buttermilk.

B) Manufactured products:

- Concentrated milk (unsweetened and sweetened).
- Powdered dairy products (cream milk powder, milk powder (whole partly skimmed and skimmed), buttermilk, other powder products).



Annual survey: Questionnaire

B) Manufactured products:

- Butter (*normal* with milk fat content≥80%, rendered and butteroil with milk fat content>85%, *light* with milk fat content<80%, *from whey* obtained from milk whey (resulting from a previous product) manufacturing.
- Other yellow fat dairy products.
- Cheese
 - -Cheese from cows' milk (pure)
 - -Cheese from ewes' milk (pure)
 - -Cheese from goats' milk (pure)
 - -Cheese from buffalo milk (pure)
 - -Others (mixed)
- Processed cheese
- Ricotta cheese
- Casein and caseinates
- Whey



Annual survey

Data processing with AGAIN tool and computerized procedures: automatic, deterministic and interactive, on the basis of "historical knowledge" of the enterprises.

Correction for total non-responses: monthly and annual regression.

Monthly integration: through the units that have answered to the monthly survey of the same year, with possible completion of the 12 months.

Annual integration: through the units that have answered to the annual survey until 3 years previous the reference year.



Monthly and annual survey: Dissemination

The results of the surveys are given to the European Commission with special tables (Edamis System Web Forms):

Table A - Monthly

Table B - Annual

Table D-G - Annual

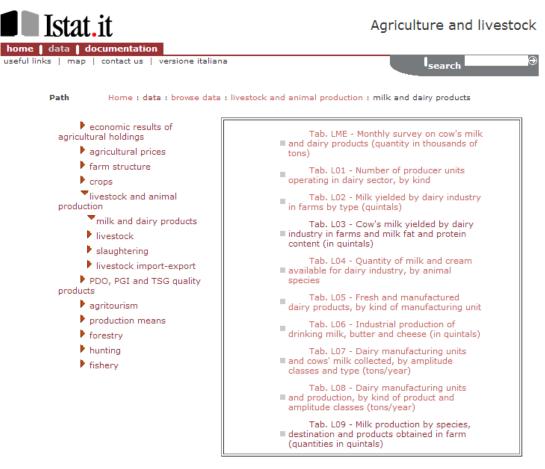
Table H - Annual



Monthly and annual survey: Dissemination

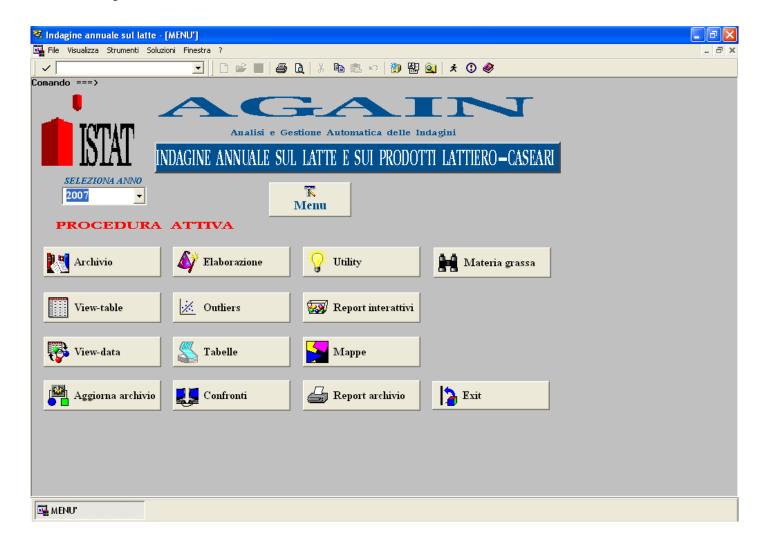
Published in ISTAT Web Site:

http://agri.istat.it



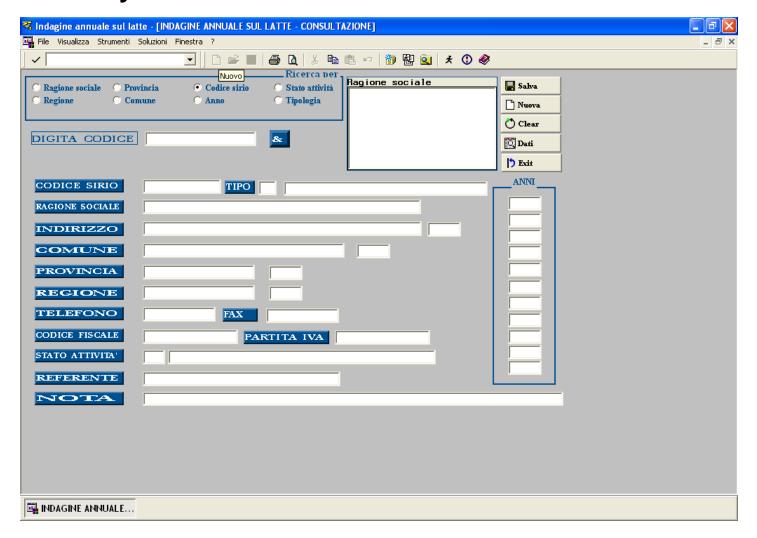


AGAIN System: Main screen



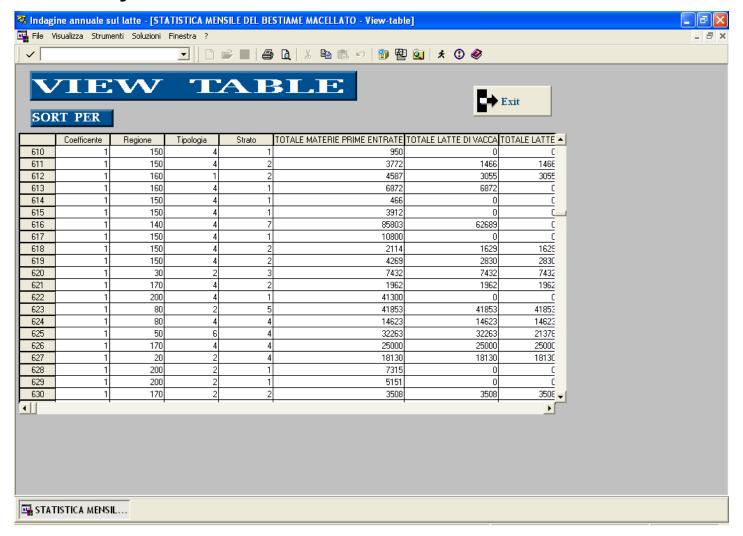


AGAIN System: Frame screen



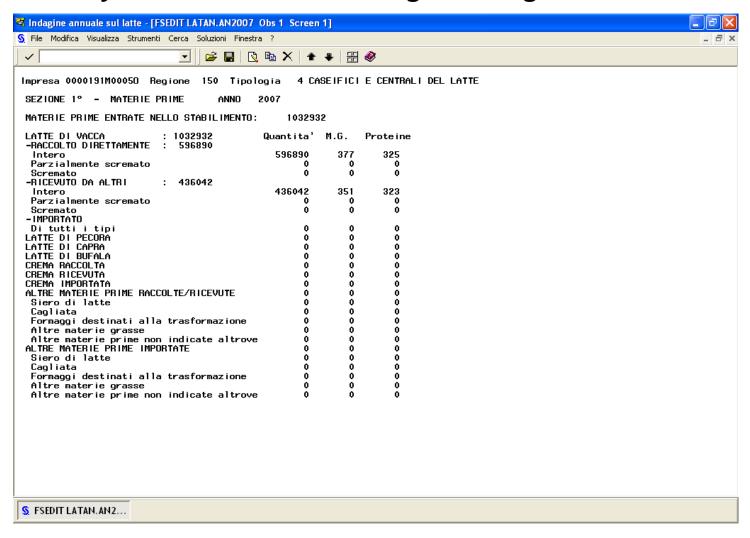


AGAIN System: View table



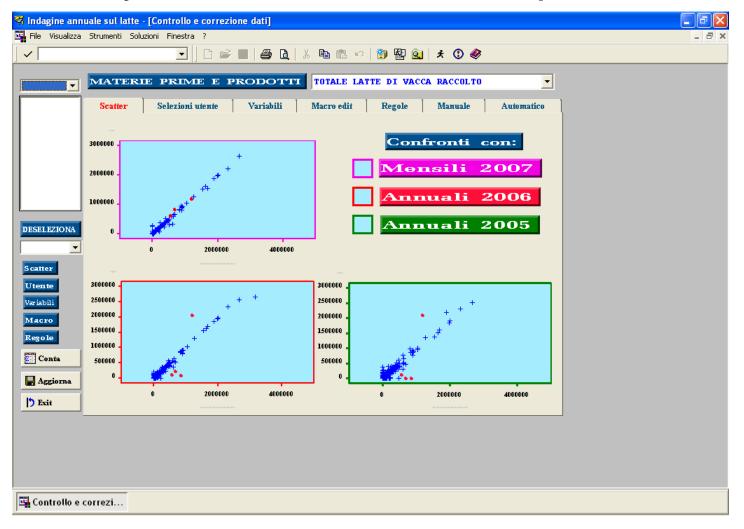


AGAIN System: Interactive editing of a single record



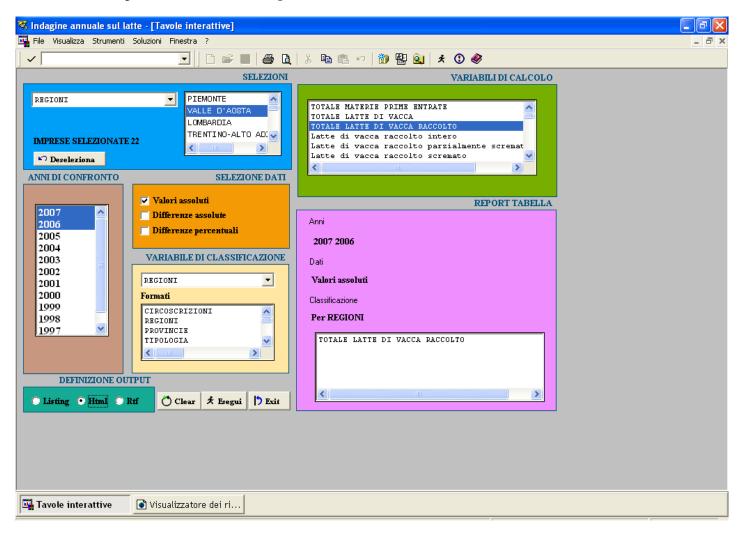


AGAIN System: Outliers screen – Scatter plot

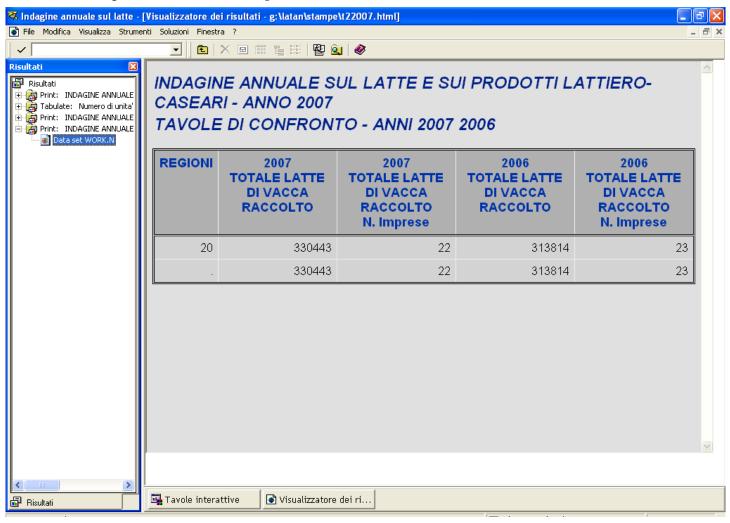




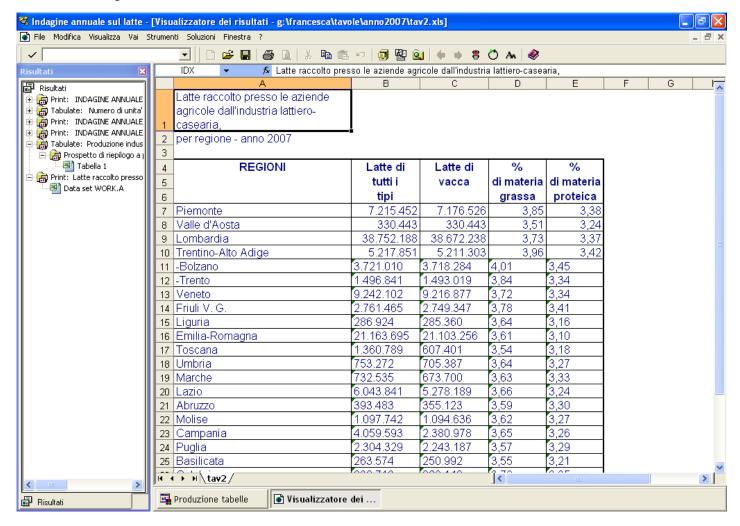
AGAIN System: Comparison screen



AGAIN System: Comparison screen - Results

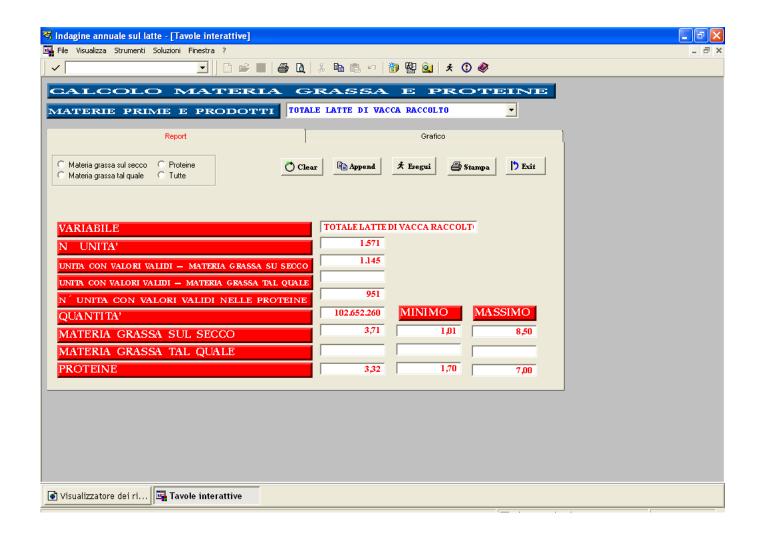


AGAIN System: Tables screen - Results



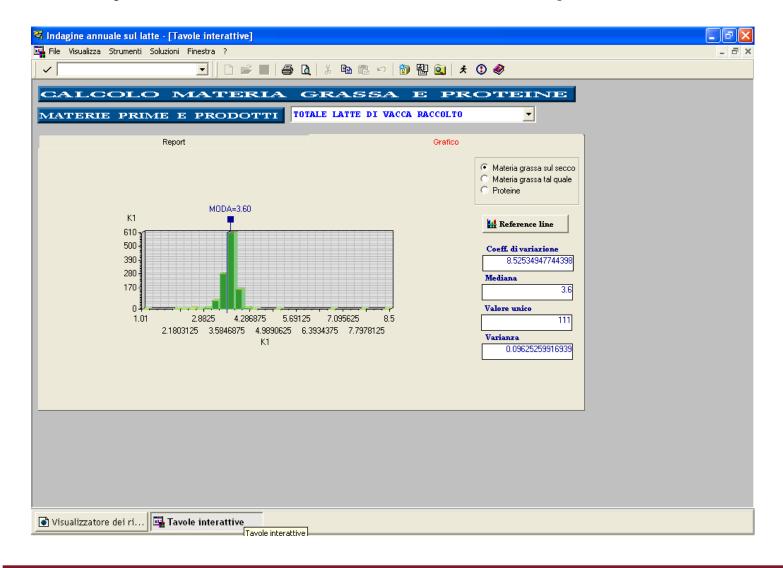


AGAIN System: Fat and Protein screen- Results



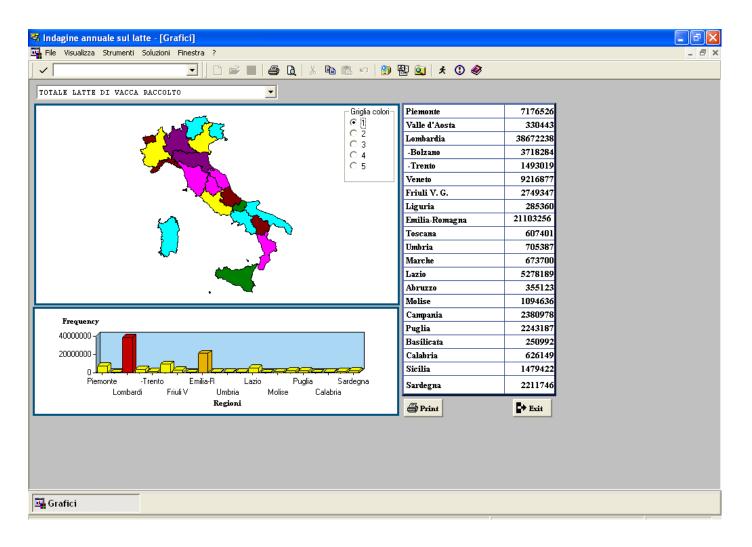


AGAIN System: Fat and Protein screen- Graph





AGAIN System: Maps screen





THANK YOU FOR YOUR ATTENTION!



