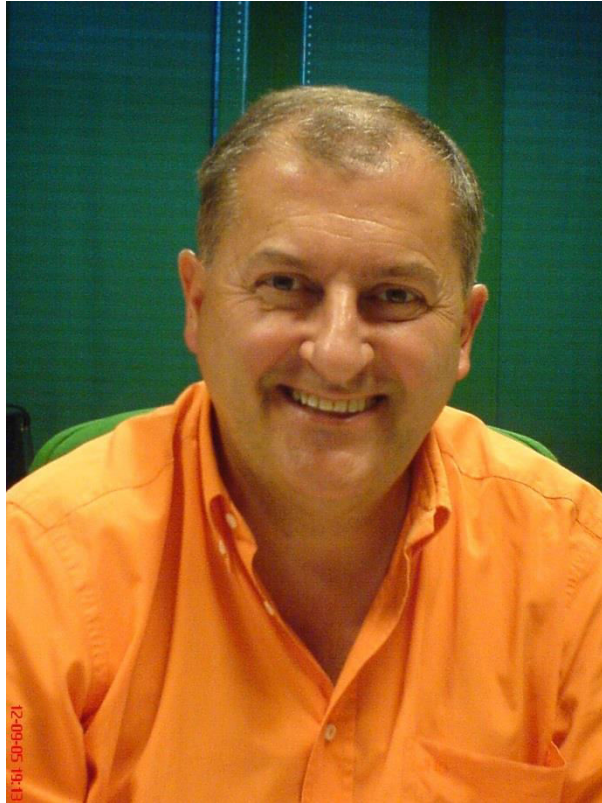




**Goat milk in infancy foods**

# Who I am?



## **EUGENIO PELOSI**

Consultant in food engineering since 1984, specialist in planning and making processing plants and new dairy factories to produce a wide range of products.

My job begins from the specifications fixed by R&D dept. to realize on industrial scale advanced factories to get the clients targets about quantity, quality, industrial costs and profitability.

# What about today's subject?



Composition of goat milk

Products available on the market

Products for infancy

Examples of goat milk processing plants

# Composition of goat milk



	ASINA	VACCA	PECORA	CAPRA	DONNA
<b>Acqua (%)</b>	90,39	87,5	81,3	86,9	87,57
<b>Grasso (%)</b>	1,21	3,6 – 4,5	4,5 – 7,5	3,7 – 4,3	3,38
<b>Proteine (%)</b>	1,63	2,8 – 3,3	4,6 – 6	3,1 – 4,5	1,64
<b>Caseina (%)</b>	0,80	2,6 – 3	4,5	2,7	0,46
<b>Albumine (%)</b>	0,83	0,7 – 0,8	1,5	1,2	1,18
<b>Lattosio (%)</b>	6,23	4,9	3,0	4,3	6,69
<b>pH</b>	7,22	6,65	6,65	6,70	7,0- 7,6
<b>Val.energ. (kcal/kg)</b>	463,3	712,6	1263,6	812,1	682,2

# Composition of goat milk



## Composizione Chimica (%) del Latte di Alcune Razze Caprine

Razza	Sostanza Secca	Grasso	Proteine	Caseine	Lattosio
Maltese	14,56	3,92	3,23	2,67	4,74
Derivata di Siria	14,21	5,35	3,28	2,58	4,63
Sarda	14,44	5,21	3,75	2,81	4,69
Saanen	11,31	3,05	2,71	2,28	4,49
Alpine	10,06	2,92	2,78	2,14	4,44

# Composition of goat milk

razze	Latte (l)	Grasso (%)	Proteina(%)
Saanen	603±240	3,10	3,02
Camosciata delle Alpi	528±225	3,22	3,10
Frisa	389±173	2,97	3,02
Girgentana	374±149	3,83	3,39
Maltese	324±146	3,80	-
Bionda dell'Adamello	314±109	2,84	2,77
Sarda	223±104	4,60	-

# Products available on the market

Goat milk can be transformed in a wide range of products, practically the 90% of the products obtained from cow milk.



## LIQUIDS

- Pasteurized milk - whole
- Pasteurized milk - low fat
- Pasteurized milk - skimmed
- Pasteurized milk - formula & fortified
- UHT milk - whole
- UHT milk - low fat
- UHT milk – formula & fortified

# Products available on the market

## POWDER

- Powder milk – whole
- Powder milk – low fat
- Powder milk - skimmed
- Powder milk – formula





# Products available on the market



## FLUID

- yogurt - natural
- yogurt - fruit
- dessert (fruit, cocoa, vanilla)
- dessert UHT
- kefir - natural
- kefir - fruit
- ricotta cheese
- butter

# Products available on the market



## CHEESE

- Cheese - soft
- Cheese - spreadable
- Cheese - semi-hard
- Cheese - hard



# Products for infancy

<b>Human Breast Milk</b>	
Calories	172
Fat	11 grams
Protein	3 grams
Carbohydrates	17 grams

<b>Goat Milk Formula</b>	
Calories	173
Fat	11 grams
Protein	3.5 grams
Carbohydrates	17 grams

# Products for infancy

## CHILD DEVELOPMENT PERIODS

PERIODS	newborn	infancy	toddlerhood
AGE			
weeks	1 2 3 4		
months		2 3 4 5 6 7 8 9 10 11 12	13 14 15 16 17 18 19 20 21 22 23 24 25 - 36 months
years		year 1	year 2 year 3

## BABY NUTRITION CHART

birth to 6 months	6 to 12 months	12 to 36 months
breast milk or formula 1 only	breast milk or formula 2	breast milk or formula 3 or home made "moms formula"
	vegetables & fruit puréed and mixed	vegetables & fruits & proteins foods & dairy & grains/bread puréed, mashed or cut into small pieces
infant milk lait pour nourisson	follow on lait de suite	toddler milk - growth milk lait de croissance

# Products for infancy



## POWDER FORMULA MILK

- Type 1 0 – 6 months
- Type 2 6 – 10/12 months
- Type 3 10/12 – 24/36 months



# Requirements for infancy foods



- **SAFE**
- **HEALTHY**
- **EASY TO USE**
- **TASTY**

# Processing plants - Yogurt



# Processing plants - Yogurt

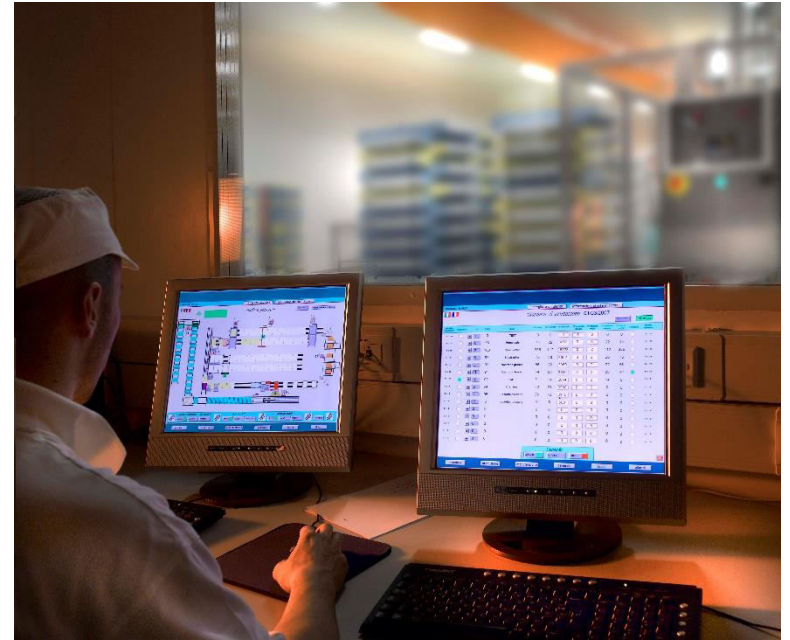




# Processing plants - Yogurt



# Processing plants – fresh soft cheese



# Processing plants – fresh soft cheese



# Processing plants – soft & spreadable cow & goat cheese



# Processing plants – soft & spreadable cow & goat cheese



# Processing plants – soft & spreadable cow & goat cheese





**Thank you for your attention!**