CAMEL MILK: COMPOSITION, TECHNO-FUNCTIONAL PROPERTIES AND HEALTH BENEFITS

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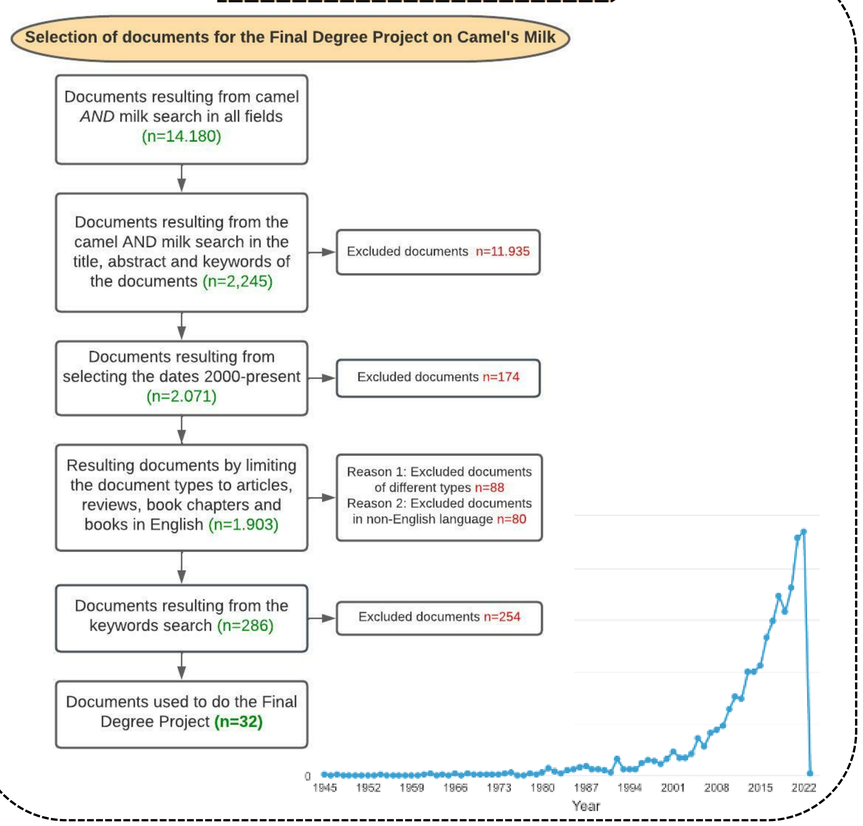
Introduction

In parts of Africa and Asia, camel milk is consumed as an important part of their staple diet and is assumed to play an important role in promoting good health.
Despite its marginal contribution to human consumption (0.37%), interest in camel milk is spreading globally due to its beneficial properties, as well as contributing significantly to sustainability, development and food security in drylands.

Objective

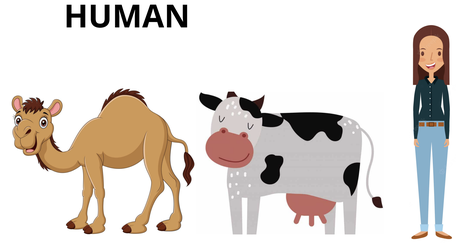
The main objective is to carry out a bibliographical review of camel milk in order to know the composition, nutritional value, techno-functional properties and heath benefits of camel milk.

Material and Methods



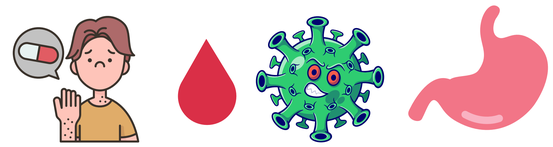
Results

COMPOSITION: CAMEL MILK VS COW AND HUMAN



Water	88,19	86,47	86,70
Protein	3,10	3,30	1,20
Protein nitrogen	2,74	3,13	0,90
Non-protein nitrogen	0,36	0,17	0,30
Fat	3,28	3,60	4,40
Monounsaturated fat	1,25	0,93	1,91
Polyunsaturated fat	0,09	0,90	0,63
Saturated fat	1,84	1,95	1,78
Lactose	88,19	86,47	86,70
Vitamin C	34,16	8,60	5,0
Vitamin B3	0,77	0,08	0,17
Vitamin B6	0,55	0,04	0,01
Zinc	560,0	530,0	380,0
Iron	260,0	80,0	200,0

HEALTH BENEFITS



1) Helpful for those with food allergies.
2) Supports healthy blood sugar and insulin levels.
3) Prevents diseases associated with oxidative stress.
4) Lowers high blood pressure and cholesterol level.
5) Supplies beneficial bacteria.
6) Fights infections.
7) Higher digestibility and absorption than cow's mik.

TECHNO-FUNCTIONAL PROPERTIES

- Low heat coagulation time.
- Serum proteins with higher heat resistance than cow's milk.
- Long enzymatic coagulation time.
- Low curd hardness.
- Hinders the fermentation process in fermented milk

Conclusions

Camel milk is rich in beneficial substances to human health and has high interest to be use in infant formulae. It has different physico-chemical and techno-functional properties than cow's milk, which has implications in dairy derivatives and their production processes. Although research has increased in recent years, more studies are needed on this product of high nutritional and functional value.

Main references

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