

UNIVERSIDADE FEDERAL DE VIÇOSA
CENTRO DE CIÊNCIAS EXATAS E TECNOLÓGICAS
DEPARTAMENTO DE TECNOLOGIA DE ALIMENTOS

Secretaria da Pós-Graduação em Ciência e Tecnologia de Alimentos

Campus Universitário – Viçosa, MG – 36570-900 – Telefone (31)3612-6705/6760 – E-mail: tca@ufv.br

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THE IMPACT OF MILK AND DAIRY CONSUMPTION ON HEALTH

Graduate student: Letícia Bruni de Souza

Advisor: Prof. ^a Dr. ^a Ana Clarissa dos Santos Pires (Food Technology Department)

Milk and dairy products are recognized for their nutritional richness, which includes high-quality proteins, essential vitamins, minerals, and healthy fats. Over the years, many studies have investigated the effects of these product's consumption on human health, revealing a series of benefits. As milk and dairy products are a source of calcium and vitamin D, their consumption is associated with the reduction of the risk of osteoporosis. Furthermore, milk fat has more than 400 types of fatty acids, some of them being essential in many body functions, from the construction of cellular membranes to the synthesis of hormones and immune system regulation. Milk proteins also have a crucial role in promoting health as they provide essential amino acids that the body cannot synthesize, being important for muscular growth and neurotransmitters. Additionally, fermented dairy products carry microorganisms that promote the healthy equilibrium of the intestinal microbiota, improve lactose digestion, and strengthen the immune system. Although they possess health benefits, some people are allergic or intolerant to certain milk constituents, which makes it a great challenge for the industry. Lactose intolerance arises from the poor digestion of the carbohydrate, due to its inability to synthesize the lactase, or to synthesize a reduced enzyme quantity. Without adequate lactase, lactose remains undigested and can lead to digestive discomfort. Conversely, protein allergies involve an immune system reaction directed against specific proteins. These proteins, considered antigens by the body, trigger an immune

response that can range from mild to severe, causing various allergic symptoms. A balanced consumption of milk and dairy products may have a significant role in human health promotion. However, it is important to consider personal needs and preferences and integrate them in a balanced and diverse diet.

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Advisor

Graduate student